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Preface

The Oxford Handbook of Evidentiality
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(p. ix) Preface

EVIDENTIALITY—or grammatical encoding of information source—is a topic which fascinates linguists, anthropologists, and even journalists and the general public. This volume aims at providing a framework and state-of-the art view of evidentiality in its various guises, in the light of recent achievements and current developments in the field of linguistics. We place special focus on the analysis of evidentiality systems in the world's languages within a typological perspective, thus contributing to the appreciation of linguistic diversity. The majority of contributors are experts in inductively based linguistic analysis of grammatical structures of individual languages. This empirical focus is one of the highlights of the volume.

I owe the idea of putting this book together to Julia Steer, of Oxford University Press. Without her unfailing support and assistance at every stage, this project would not have been possible. Vicki Sunter and Karen Morgan, of OUP, have also been immensely helpful at every stage. I am grateful to all the contributors to this volume, for their chapters, comments, and scholarly interaction throughout the creation of this volume. R. M. W. Dixon provided comments and on-going support (in addition to insights on various languages of his expertise). Many thanks go to Professor Nola Alloway, Dean of the College of Arts, Society, and Education at James Cook University, and the Division of Tropical Environment and Society, for their moral and financial support. The work on this volume was partially supported by the Australian Research Council Discovery Project 'How languages differ and why', and my Australian Laureate Fellowship 'How gender shapes the world: a linguistic perspective'. We all owe a special debt of gratitude to Brigitta Flick, Angela Lansdown, and Jolene Overall, for meticulous editorial assistance, checking the manuscripts, and formatting them. Adella Edwards did a remarkable job helping many contributors prepare their maps. The JCU library, under the leadership of Heather Gordon, provided all the necessary resources. Special thanks go to Bronwen Forster and Carolyn Tredrea. The efficient interlibrary loan system worked like clockwork—many many thanks indeed to Lyn Clarke, Janine Meakins, Bridie Soo, and many other friends and col-

leagues at JCU library. A very big ‘thank you’ goes to Jolene Overall for her assistance and support at the Language and Culture Research Centre. And last but not least—our eternal debt is to speakers of languages with evidentials who shared their remarkable knowledge and insights with us, linguists, and fieldworkers. This volume is a homage to them all.

Alexandra Y. Aikhenvald

Language and Culture Research Centre,

James Cook University, Australia (p. x)

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Abbreviations and Conventions

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(p. xix) Abbreviations and Conventions

1	1st person
2	2nd person
3	3rd person
A	transitive subject
ABIL	abilitative
ABL	ablative
ABS	absolutive
ABSENT	absential
ACC	accusative
ACT	active
ADD	additive
ADJ	adjective
ADJZ	adjectivizer

Abbreviations and Conventions

ADN	adnominal
ADV	adverb, adverbial
ADVR	adverbial
AFFECT	affected
AG	agentive
AGNMLZ	agentive nominalization
AH	addressee honorific
ALL	allative case
ALTER	alterphoric (non-ego)
AN	animate
ANIM	animate
ANPH	anaphoric
ANT	anterior past, anteriority
AOBL	attributive oblique
AOR	aorist
APASS	antipassive
APPLIC	applicative
APPR	apprehensive
APRX	approximative
ART	article
ASP	aspect

Abbreviations and Conventions

ASS	assertive
ASSERT	assertion, assertative
ASSOC	associative
ASSUM	assumed
AT	localization ‘at, by’
AUD	auditory, auditive
AUGMENT	augment
AUTH	authoritative
AUX	auxiliary
AV	Actor voice
AVS	adversative
B	gender b
BC	Buryat Corpus (source)
BEN	benefactive
BEST.SENS	best sensory
BOU	boulomaic modality
BPG	best possible ground
C	conjunct order
CARD	cardinal numeral
CAUS	causative
CAUT	caution

CC	copula complement
CERT	certainty
CIRC	circumstantial modal
CL	classifier
CM	specific class marker
CML	Corpus of Mari language
CN	connegative
CND	common noun determiner
CNJ	conjunct
COH	coherence
COLL	collective
COMIT	comitative
COMP	complementiser
COMPL	completive
CON	continuative
CONC	concessive
COND	conditional
CONJ	conjunction
(p. xx) CONN	connective
CONQ	consequence
CONS	consecutive

CONTACT	localization with contact
CONT	continuous
CONTR	contrast(ive)
CONVB	converb
COP	copula
COR	coreference
CORE	core argument, core case
COREF	coreferential
COS	change of state
CRST	certainty marker
CS	copula subject
CURR	current (for timing of perception event)
CYC	cyclic
D	gender d
DAT	dative
DEC	declarative
DEF	definite
DEIC	deictic
DEM	demonstrative
DEO	deontic modality
DEP	dependent

DESID	desiderative
DET	determiner
DIF	diffuse
DIM	diminutive
DIR	directional
DIR.EVID	direct evidential
DIR.INDIV	direct evidential individual knowledge
DIR.MUTUAL	direct evidential mutual knowledge
DIS	disjunct
DIST	distal, distant
DISTR	distributive
DM	discourse marker
DN	downtoner
DR	nominal animate classifier
DRC	direct
DRT	(unmarked) direct evidential
DS	different subject
du, DU	dual
DUB	dubitative
DUB.PT	dubitative particle
DUR	durative

DX	deixis
DYN	dynamic modality
E	extension to core
EA	Eastern Algonquian
E.V.	echo vowel
EGO	egophoric
ELA	elative case
EMPH	emphasis
EP	evidential particle
EPI	epistemic modality
EQUA	equational copula
ERG	ergative
EST	established past
EVID	evidential
exc, EXCL	exclusive
EXCLM	exclamation
EXIST	existential
EXP	experiential
EXPER	experienced
EXPECT	expectative
FACT	factual

FEM, F, f	feminine
FIN	finite
FNS	final nominal suffix
FOC	focus
FP	far past
FPe	far past eyewitness
FPn	far past non-eyewitness
FUT	future
FUTIMP	future imperative
GEN	genitive
GEN.KNOW	General Knowledge evidential
GEO.LOC	fixed geographic location
GER	gerund
GV	goal voice
HAB	habitual
HON	honorific
HPL	human plural
HSAY	hearsay evidential
HT	honorific title
HUM	human
(p. xxi) IC	initial change

ICVB	imperfective converb
IDEO	ideophone
ILL	illative case
ILL.M	illocutionary modification
IMMED	immediate
IMP	imperative
IMPER	imperfect
IMPERS	impersonal
IMPERV	imperfective
IN	localization ‘in’
INAN, INANIM	inanimate
INC, inc	inclusive
INCEPT	inceptive
INCH	inchoative
INCL, incl	inclusive
INCOM	incompletive
INDCAUS	indirect causative
INDEF	indefinite
INDEP	independent
INDEP.PR	independent (free) pronoun
INDEVID	indirect evidentiality

INDIC	indicative
INDIR	indirect
INDOBJ	indirect object
INDV	individual perspective (speaker only)
INE	inessive case
INFIN	infinitive
INFER	inferred
INS	instantaneous
INST	instrumental
INTENS	intensifier
INTER	interrogative
INTER.LOC	localization ‘inter’
INTER.PAST	intermediate past
INTERJ	interjection
INTR	intransitive
INV	inverse
IP	instrumental prefix
IPNM	immediate past non-eyewitness
IRR	irrealis
ITER	iterative
i-v	gender agreement markers

JOINT.VIS	joint vision
KNC	Kalmyk National Corpus (source)
LAT	lative
LIM	limitative
LINK	linker
LOC	locative
LOG	logophoric pronoun
LV	locative voice
MASC, M, m	masculine
MASS	mass noun
MED	medial
MID	middle marker
MIR	mirative
MM	Middle Mongolian
MOD	modal
N	neuter
N-	non-
N.1	non-first person
N.EVID	non-evidential
N.S/A.TOP	topical non-subject
NARR	narrative

NAV	non-Actor voice
NCERT	non-certainty
NCL	noun class
NEG	negation
NEUT, N, n	neuter
NEUTRAL	neutrality
NEXP	non-experiential
nf	non-feminine
NF	nonfinal
NFUT	non-future
NOM	nominative
NOMZ	nominalizer
NON.A/S	non-Subject
NP	near past
NPARTI	non-participatory evidence
NPAST	non-past
NPL	neuter plural
NPN	non-possessed noun
NPOT	non-potential
NRPAST	non-recent past
nsg, NSG	non-singular

(p. xxii) NUMB	number
NVIS	non-visual
NW	nonwitnessed
O	transitive object
OBJ	object, objective case
OBL	oblique
OBSERV.REC.PST	observed recent past
OBV	obviative
OMT	onomatopoeic
OPT	optative
OR	orientation
ord	ordinal
ORD	ordinal number
OS	object over subject in Person Prefix Hierarchy, ‘inverse voice’
OT	Old Tibetan
OTHER	Other person or non-egophoric
P	P-evidential form
PART	particle
PARTI	participatory evidence
PARTIC	participle
PARTIT	partitive case

PASS	passive
PAST.DIR	past tense direct evidential
PAST.INDIR	past tense indirect evidential
PAT	patient
PCL	particle
PDUB	preterit dubitative
PEJ	pejorative
PER	perfect
PERS	personal marking (finite verbs)
PERS.N	personal name
PERSIST	persistive
PERV	perfective
PF	pause filler
pl, PL	plural
PLN	place name
PN	proper noun
PNC	punctual
PND	proper noun determiner
PQ	Pastaza Quichua
POL	politeness
POSS	possessive

POST	posterior
POT	potential
PP	past participle
PQ	polar question
PR	pronominal animate classifier
PR	polite request
PREDICT	predictive
PREP	preposition
PRES	present
PRET	preterit
PREV	previous (timing of perception event)
PREVB	preverb
PROB	probability, probabilitive
PROG	progressive
PROLAT	prolative case
PROP	proper name
PROPR	proprietive
PROSP	prospective evidential
PROX	proximal, proximate
PT	particle
PURP	purposive

PV	patient voice
Q	interrogative, question marker
QT	quotative particle
QUAL	qualitative
QUANT	quantifier
QUOT	quotative
R/R/M	reflexive/reciprocal/middle
REAL	realis
REAS	reasoning
REC	recent
REC.P	recent past
RECIP	reciprocal
REDUP	reduplicated
REF	referential
REFL	reflexive
REL	relative
REM	remote
REM.P	remote past
RENARR	renarrative evidential
(p. xxiii) REP	reported
RES	resultative

REST	restrictive
RETRO	retrospective
RPAST	recent past
RS	reported speech
RSP	reported speech particle
S	intransitive subject
S	S-evidential form
S/A.FOC	focussed subject
SAP	speech act participant
SBD	subordinative mode
SBJN	subject marker
SENS	sensory evidential; non-visual sensory evidential
SEQ	sequential
sg, SG, S	singular
SGNF	singular non-feminine
SGVE	singulative
SH	Secret History of the Mongols (source) (Chapter 26)
SH	subject honorific (Chapter 33)
SIMIL	similative
SIMULT	simultaneous
SMLF	semelfactive

SNV	inferred on the basis of any, except visual, perceptual input
SOC	sociative voice
SOU	source
Sp	Spanish loanword
SP	SP-evidential (Deferential Evidential)
SPEC	specifier
SPR	superessive, location ‘on’
SPR	localization ‘on’
SS	same subject
STAB	stabilizer
STAT	stative
SU	subject
SUB	subordinator
SUBJ	subjunctive
SUBORD	subordinate
SUP	supine
SUPP	supposition
SUPPOS	suppositional
SURP	surprise
TAM	tense-aspect-mood
TEMP	temporal

ThV	verbal thematic vowel
TOP	topic
TOP.NON.A/S	topical non-subject
TR	transitive
TRANSL	translative case
UNW	unwitnessed
UT	utterance time
UWPST	unwitnessed past
V	verb
VBZ	verbalizer
VCC	verbless clause complement
VCS	verbless clause subject
VEN	ventive
VERS	versative
VIS	visual
VN	verbal noun
VOC	vocative
VS	verbal suffix
WH	question word
WIT	witnessed
WPST	witnessed past

Abbreviations and Conventions

YESTP	yesterday’s past
YNQ	yes no question

Further conventions

=	clitic break
-	affix boundary
:	vowel lengthening

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The Contributors

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(p. xxv) The Contributors

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Evidentiality: The Framework

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Abstract and Keywords

This chapter sets out semantic and analytic parameters for understanding evidentials—closed grammatical sets whose main meaning is information source. A noun phrase may have its own evidentiality specification, different from that of a verb. Other means of expressing information source offer open-ended options in terms of their semantics, and can be more flexible in their scope. Evidentiality is distinct from tense, aspect, modality, mirativity, and egophoricity. An evidential can be questioned or be within the scope of negation. The concept of evidentiality is different from the lay person's notion of 'evidence'. Evidentiality involves numerous semantic parameters and cannot be reduced to a simplistic 'direct' versus 'indirect' opposition. Evidentiality needs to be worked out inductively, based on painstaking work with primary materials on a language, rather than on translation and elicitation. Guidelines for fieldworkers investigating evidentials are offered in the Appendix, alongside a glossary of terms.

Keywords: evidentiality, information source, scope, negation, mirativity, egophoricity, noun phrase

1.1. Evidentiality: the basics

There are, in every language, means for saying how one knows what one is talking about, and what one thinks about what one knows or has learnt. Every language has some means of phrasing inferences and assumptions, evaluating probability and possibility, and expressing belief or disbelief. The source of knowledge can be expressed in a variety of ways.

In quite a few languages one has to specify the information source on which a statement is based—whether the speaker saw the event happen, didn't see it but heard it (or smelt it), made an inference about it based on visual traces or reasoning or general knowledge, or was told about it. This is the essence of evidentiality, or *grammatical marking of information source*—rather an exciting phenomenon loved by journalists and the general pub-

lic. This is how Franz Boas (1938: 133) put it: ‘while for us definiteness, number, and time are obligatory aspects, we find in another language location near the speaker or somewhere else, source of information—whether seen, heard, or inferred—as obligatory aspects’.

A summary of the revealing features of evidentiality systems is provided in §1.6.

Having to always express information source in one’s language is often viewed as an enviable feature. Speakers of languages without evidentials wish they had been compelled to always be specific about how they know what they are talking about. Franz Boas (1942: 182) suggests that ‘we could read our newspapers with much greater satisfaction if our language would compel them to say whether their reports are based on self-experience, inference, or hearsay!’. And in Palmer’s (1996: 200) words, ‘what a lot of breath and ink this might save us in English if we had evidential suffixes that we could use in the courtroom. Using the Wintun suffix, we might say, for example, “The defendant shoplift-*be* [*be* is a visual evidential] the compact disc”, thereby eliminating the need to ask the inevitable question: “Did you actually see her take it?” ’

Those who speak languages with evidentials complain that the absence of grammatical evidentiality leaves a ‘gap’. Victor Friedman, a fluent speaker of Macedonian, mentioned that he himself had felt the absence of evidentiality in his native English after having spent several (p. 2) months in Macedonia (Friedman 2003: 210). Martha Hardman and her colleagues had to ‘adjust’ their English and always specify how they know things, so as not to upset their Jaqi (Aymara)-speaking friends, for whom specifying information source is a ‘must’ (Hardman 1986: 133; and §7.6 of this volume, for further examples). Speakers of languages with evidentials are prepared to comment on them and explain their usage (see Chapter 23, on Ingush; and Aikhenvald 2004a: 339–43).

The expression—and the scope—of evidentiality, are discussed in §1.2. Recurrent semantic features of evidentials are the topic of §1.3. In §1.4, we turn to the ways evidentials interrelate with other categories. Evidentiality in communication and discourse is the topic of §1.5. Special traits of evidentials are summarized in §1.6. The last section, §1.7, offers an overview of this volume.

We now turn to a few general issues, and pitfalls, of evidentiality.

1.1.1. Recognizing evidentiality

Evidentiality as grammaticalized marking of information source is a relatively recent arrival on the linguistic scene. Originally recognized by Boas (1911a: 43) and other scholars of North American Indian languages, the term, and the concept, of evidentiality have been gradually making their way into standard outlines of informed grammatical descriptions (see a survey in Jacobsen 1986: 3–7; Aikhenvald 2004a: 11–17, 2015b: 139–40; and §13.2 of this volume). Terms used to refer to evidentials are listed in the glossary at the end of this chapter.

Up until the late nineteenth century, only the linguistic categories prominent in classical Indo-European languages were, by and large, accorded a due status and investigated in some depth. Grammaticalized information source was not among these. And so, the studies of evidentiality have been lagging behind other categories such as gender and tense. In one of the earliest grammars of Quechua, a language with obligatory evidentials, Santo Tomás (1560: 142–8) treats evidential markers, together with other morphemes which 'do not fit into the model of Romance languages' as 'ornate particles with no meaning of their own' (more on this in Dedenbach-Salazar 1997a: 297 and Aikhenvald 2004a: 12). A brief sketch of Shilluk, by Westermann (1911), does not mention evidentials. As demonstrated by Miller and Gilley (2007), the language in fact has three—direct, inferred, and reported—(see also Chapter 29). Well into the twentieth century, Brüzzi (1967) did not mention grammatical evidentiality in Tukano, an East Tukanoan language with four or five evidentials (see Chapter 18)—resorting to notions such as 'extralocal', 'narrative', and 'dubitative'.

Some languages fared better. The existence of witnessed and non-witnessed verbal forms were identified by Pāṇini for Sanskrit as far back as c.500 BCE, and by al-Kāšγarī for Turkic in the eleventh century CE (see §6.1; see also Guéntchéva 1996a: 14–15).

In many instances, students of languages didn't know what to look for and failed to notice evidentiality distinctions or else discussed them only fleetingly. This has been a recurrent problem with many underdocumented languages, especially in New Guinea (see Chapter 30), and various regions in Amazonia: in Chapter 19, Katarzyna Wojtylak addresses difficulties in understanding evidential systems of Boran and Witotoan languages due to gaps in the existing descriptions. In §33.1, Ho-min Sohn points out the recent introduction of evidentiality as a grammatical concept into the linguistics of Korean—something that might explain the 'disparity' in the application of the term.

(p. 3) Quality and reliability of descriptions is another matter. Sketch grammars and grammatical descriptions cast in prescriptive frameworks do not have a place for evidentiality. Migliazza's (1972) study of Yanomami in Venezuela, with no mention of evidentiality, is a prime example: his concern was to fit the language into a transformationalist framework, rather that to see what distinctions were expressed. However, in-depth investigations of Yanomami languages (such as Ramirez 1994; Borgman 1990; and Gomez 1990) uncovered the existence of multi-term evidential systems. Carlin's (2004) study of Trio, a Cariban language from Suriname, discusses evidentiality in some depth; this is also addressed in Chapter 16. In contrast, Meira's (1999) grammar of the same language (called Tiriyó) does not mention it. A comprehensive study of evidentiality worldwide is impaired by the deficiencies in language analysis—an issue raised by many authors within this volume (see also Holton and Lovick 2008: 320).

Separating the wheat from the chaff—that is, emancipating evidentiality from the tenets of English-oriented linguistics and deliberate misunderstandings, and according it the status it deserves—is a further issue.

1.1.2. Evidentiality and information source

It is not uncommon for a linguistic term to have a counterpart in the real world. Figure 1.1 summarizes a few such correlations.

The idea of ‘time’ in the real world translates into ‘tense’ when expressed in grammar. ‘Time’ is what our watch shows and what may ‘fly’ so rapidly. ‘Tense’ is a grammaticalized set of forms we have to use in a particular language. Not every time distinction acquires grammatical expression in the language: the possibilities for time are unlimited, and for tense they are rather limited. Some languages do not have tense as a grammatical category (see, for instance, Dixon 2012: 9; and Bertinetto 2009, 2013). Time words—such as ‘today’ or ‘yesterday’—can also help show what the time is. Similarly, an ‘imperative’ is a category in the language, while a command is a parameter in the real world. Every language has a way of phrasing commands; but special imperative paradigms are not ubiquitous. Along similar lines, information source can be expressed in every language. But not every language has grammatical evidentials.[1]

GRAMMATICAL CATEGORY	ITS COUNTERPART IN THE REAL WORLD
tense	time
imperative	command
evidential	**information source**

Figure 1.1. Grammatical categories and their ‘real world’ counterparts

(p. 4) Information source can be manifested in a variety of ways. One of these—the main topic of this handbook—is a closed system of grammatical forms whose primary meaning is information source, which cover a recurrent and limited set of semantic parameters (see §1.3).[2]

Other means—conditional modality, perfect, perfective, or different kinds of complement clauses—may be co-opted to express similar meanings, as what is known as ‘evidentiality strategies’. One of the oft-quoted examples is the French conditional—known as *conditionnel de l'information incertaine* used to express non-firsthand information whose validity is doubtful (see Dendale 1993; Aikhenvald 2004a: 106–7; and §35.4.3 of this volume, on other Romance languages). There are many further examples of evidentiality strategies throughout this volume.

Figure 1.2 summarizes the means of expressing information source.

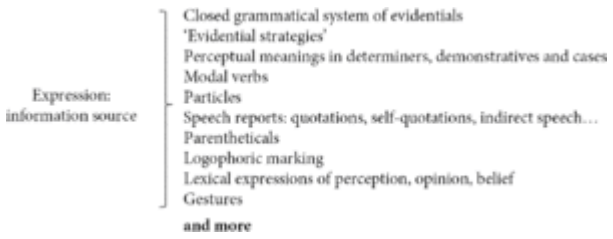

Figure 1.2. Information source and its expression

Over time, an information source as a semantic extension may become the main meaning of a form: for instance, a perfect or a resultative with an overtone of 'inference' or 'non-firsthand information' becomes a marker of non-witnessed information (a non-witnessed evidential). An evidential strategy will develop into an evidentiality system (see a comprehensive discussion in Chapter 6).

A lexical verb of speech combined with a complementizer is gradually developing into a marker of reported evidentiality, *diz que* or *dizque*, in numerous varieties of South American (p. 5) Spanish, and also in Brazilian Portuguese (the topic of Chapter 35). Grammaticalization is a gradual process; incomplete grammaticalization of lexical items expressing information source allows us to talk about 'incipient' evidentials.[3]

Further means of expressing information source may include lexical means, including verbs of perception ('see', 'hear', 'smell') and cognition ('know', 'understand', and so on) (see, for instance, §21.2, on the plethora of lexical means for expressing information source in Algonquian languages). Modal verbs, particles, parentheticals of various sorts, and even facial expressions, can express inference, assumption, and attitude to information—whether the event is considered probable, possible, or downright unlikely. Intonation in Pastaza Quichua marks epistemic modality and 'attitude' to what one knows (but not how one knows things; see §10.1).

In every language, there is a way of reporting what someone has said. Direct quotations and indirect speech reports may interrelate with attitude to the information quoted or cited. For example, a verbatim quote in Arizona Tewa implies that the speaker does not vouch for the information quoted (Kroskrity 1993: 146). To sound neutral a speaker would prefer an indirect speech report.[4] Similar overtones of 'doubt and lack of reliability' for direct quotations have been described for Karawari, a Papuan language (Telban 2014: 268).

The means employed depend on mode (or 'modality') of communication—see Chapter 36 on 'facial grammar' as exponent of epistemic modality in signed languages. In §29.4, Anne Storch comments on how users of social media in rural East Africa 'incorporate screen shots of maps into their text messages in order to present particular propositions as having been eye-witnessed'. The ways of expressing information source appear to be open-ended. Evidentiality is not.

1.1.3. Evidentiality, ‘evidence’, and knowledge

Evidentiality as a linguistic category expresses information source—of the speaker and possibly of addressee (we return to this in §4.3)—and thus the means of acquiring knowledge. In Janis Nuckolls’s words (§10.6, this volume), ‘evidentiality is not about evidence or empirically valid observations’. Nor is it about justification of what one says.

The idea of ‘evidentiality’—extended from Boasian ‘information source’ to the expression of attitude to knowledge, reliability, belief, and, misleadingly, to ‘evidence’ and ‘justification’ of what one says—has now become the ‘flavour of the month’ (see Chapter 13 for a survey). And with this growing popularity—and the desire to find a ‘cool’ category of evidentiality in any language no matter what—come misconceptions.

‘Evidential’ and ‘evidentiality’ as a linguistic category does not imply ‘evidence’, as used in common parlance. ‘Evidence’ covers facts, circumstances, and objects which prove the validity or the existence of something. Evidence also covers ‘statement of proof’ admissible as testimony in a law court. Whatever has to do with providing this kind of ‘evidence’ is ‘evidential’ or ‘evidentiary’ (the two adjectives derived from *evidence*). Confusion between evidentiality (p. 6) and types of ‘evidence’ is especially pervasive and persistent among formal semanticists (see, for instance, McCready 2010; Krawczyk 2012; and Kalsang et al. 2013; and Chapter 11 of this volume for a clear distinction between evidentiality and evidence).[5]

The linguistic notion of evidentiality—as articulated by Boas (1938) and exemplified throughout this handbook—differs drastically from this conventional usage of ‘evidence’. Linguistic evidentiality has nothing to do with providing proof in court or in argument, or indicating what is true and what is not, or indicating one’s belief. All evidentiality does is supply the information source. In Hardman’s (1986: 121) words, marking data source and concomitant categories is ‘not a function of truth or falsity’. The truth value of an utterance is not affected by an evidential (cf. Donabédian 2001: 432). And, in fact, an evidential can have a truth value of its own. It can be negated and questioned, without negating or questioning the predicate. An evidential can acquire its own time reference, distinct from that of the clause (see §1.6 of this volume and §3.8 of Aikhenvald 2004a).

As Margaret Speas (§15.5 of this volume) puts it, ‘the speaker’s level of certainty depends crucially on the reliability of evidence, but neither level of certainty nor reliability is encoded directly as a core part of an evidential meaning. […] Reliability of evidence is pragmatically determined, and as such is not specified as part of the denotation of an evidential’ (see also §§4.2.3–4 of this volume; and Brugman and Macaulay 2015: 211).

Evidence can be strong—and persuasive enough to get one convicted of murder. With weaker evidence, a criminal will walk free. The notion of ‘strength’ does not apply to information source expressed by evidentiality. And so, there is no ‘weaker’ or ‘stronger’ evidentiality (just like there is no ‘weaker’ or ‘stronger’ tense, nor ‘weaker’ or ‘stronger’ gender). And if the information source is not as ‘clear’ as need be, languages find a way of expressing it. A spectacular example comes from Tatuyo, an Eastern Tukanoan lan-

guage: here a visual distal evidential or a nonvisual evidential (see Table 18.2, example (5c), and further discussion in Chapter 18, this volume) can be used if the speaker can see what they are talking about from a distance or cannot see it properly.

Failure to recognize the difference between ‘evidentiality’ and ‘evidence’ has resulted in conceptual and terminological confusion between information source, and validity or reliability of knowledge or information (e.g. Hassler 2002: 157; or Hoff 1986, on Carib). Evidentiality has come to be defined by some as a ‘kind of justification for a factual claim’ (e.g. Anderson 1986: 274–6), or a ‘kind of warrant’ (e.g. De Haan 1998, 1999; Plungian 2001; Kratzer 2012; and a number of other authors quoted in §15.3, this volume), or treated as ‘indication of evidence’ (Anderson 1986: 274–6).[6] Evidentiality is—arbitrarily—set apart from other categories: no one has ever treated tense as ‘justification’ of when the event (p. 7) occurred, or ‘aspect’ as justification of whether the event was completed (let alone ‘gender’ as justification of male or female properties of an entity). By a wilful misuse of terms, evidentiality is treated differently from other categories—especially those with which it often interrelates.

IN A NUTSHELL: Evidentiality marks information source. Evidence provides support for it. Evidence can be reliable or not. The notion of reliability or ‘truth’ only marginally applies to information source, and thus to evidentiality.

How to collect materials on evidentials? This is what we turn to now.

1.1.4. Working on linguistic evidentials

Evidentiality—like any other grammatical or lexical category—needs to be worked out inductively, based on painstaking work with primary materials on a given language. Proponents of deductive approaches to any feature of the language—grounded not in empirical study but in ad hoc ideas of what a language should have—run the danger of imposing intuitions or facts of their native language onto other languages. One of the reasons for mistakenly conflating the notions of evidentiality with reliability, possibility, probability, and epistemic modality lies in the English-centric approach to those languages which have evidentials, and the pitfalls of translation.

As Dixon (2016: 187) puts it, ‘thousands of […] instances could be provided showing the difficulties of translation between languages which relate to markedly different cultures’, demonstrating the ‘false nature of the adage “Everything can be said in every language” ’. In many familiar Indo-European languages, including English, meanings related to ‘information source’ can be expressed through lexical means—including verbs of perception or cognition—and a closed class of modal verbs, such as *may, might* or *must.* Can —but don’t have to. And when they are, one may get an impression that evidentials are ‘epistemic modals’ because this is how they are translated into English (as has been recently claimed by Matthewson et al. 2007; and earlier by Palmer 1986; and a few others).

Translating a reported marker in an Eastern Tukanoan language, or Tariana (from the Arawak family), into English as ‘they say’ will add unwanted connotations of lack of reliability and doubt—that is, the connotations from a translation language. One may also get the impression that evidentials involve ‘embedding’ a clause (see Chapter 22).

As a consequence, scholars who rely on analysing translations into English (or whatever metalanguage is available) rather than trying to understand the languages themselves are bound to present a skewed picture of categories absent from the metalanguage.

A further issue is how to work with a language which might have evidentiality. As will be seen throughout this volume, the use of evidentials is highly context-bound and can only be profitably understood in the context of discourse and/or participant observation (see Nuckolls and Swanson 2014 for special importance of context in understanding Quichua discourse and evidential use within it, and Chapters 10 and 11 in this volume).

Elicitation and translation from a lingua franca (be it English, Spanish, Portuguese, or Mandarin Chinese) will not produce sensible results. Grammatical elicitation—‘going through a battery of sentences in the lingua franca and asking for their translations into the native language’ … ‘should play *no role whatsoever* in linguistic fieldwork’—a statement by R. M. W. Dixon (2010a: 323), to which any linguist who has ever professionally worked on a (p. 8) language in its entirety will subscribe. As Marianne Mithun, another inveterate fieldworker and a scholar of Native American Indian languages, puts it (2007: 52),

> The elicitation of sentences translated from a contact language can facilitate direct comparison of languages, but we might ask whether they capture the essence of the target language. Spontaneous, unscripted speech, both monologue and conversation, can show distinctions and patterns that never appear in elicited translations, but that are nonetheless fundamental and pervasive.

Elicitation is likely to produce unnatural, artificial results. And the researcher runs the danger of imposing the categories we think should be there onto a language which may not have them. Or reinterpret them to fit in with the lingua franca.[7]

By using artificially constructed examples, translations, and tests imposed on speakers, one can hardly capture the essence of a category which does not have a ready-made translational equivalent. The Appendix to this chapter contains suggestions for fieldworkers.

1.2. Evidentiality, its expression, and scope

In many languages with grammatical evidentials, the scope of evidentiality is a clause or a sentence (§1.2.1). Or it can be a noun phrase (§1.2.2).

1.2.1. Evidentiality with clausal or sentential scope

Just like many other categories, evidentials whose scope is a clause may have a special marker with no other meanings; evidentiality is then expressed AUTONOMOUSLY. The reported evidential particle *paá* in Nheêngatú, a Tupí-Guaraní lingua franca of north-west Amazonia, or the reported clitic =*pida* in Baniwa of Içana, an Arawak language from the same area, are a case in point: they have just that one meaning—marking a speech report with no authorship stated.

Alternatively, marking of evidentiality can be FUSED with another category—usually tense or aspect. Jarawara, an Arawá language from Brazil, distinguishes a firsthand and a non-firsthand information source whose expression is fused with each of the past tenses—immediate, recent, and far (system A1, as per conventions in Aikhenvald 2004a: see Table 1.1). A typical conversation in Jarawara is as follows. One speaker asks the other:

(1)

jomee	tiwa	na-tafi-**no**	awa?
dog(masc:A)	2sgO	CAUS-wake-IMM.PAST.noneyewitness.masc	seem.masc

Did the dog wake you up?

(p. 9) He uses the non-firsthand evidential in his question: he didn't himself see or hear the dog; but he was just told about this. The other speaker—who had indeed been woken by the dog and thus saw it or heard it or both—answers using the firsthand evidential fused with immediate past:

(2)

owa	na-tafi-**are**-ka
1sgO	CAUS-wake-IMM.PAST.eyewitness.masc-DECL.masc

It did wake me up. (I saw it or heard it)

Similar examples are found in many Nakh-Daghestanian languages (see, for instance, Forker 2014 on Hinuq; and Chapter 23). Terms in an evidential system of any size may have autonomous realization. Ersu, a Tibeto-Burman language, marks four information sources (Zhang 2014: 134–7). If information is acquired directly, that is, through seeing, hearing, feeling, or smelling, the verb is formally unmarked. There is a special marker (=*pà*) for inferred and assumed information. A reported evidential (a particle *dɜe* or *dɜigə*) is used if the speaker's statement is based on something someone else had told them (but without specifying the exact authorship). A quotative particle *dɜà* (with a number of variants) is employed if the author of a speech report is explicitly stated.

In contrast, in Lakondê, a Nambikwara language (§17.5, this volume), the reported and the quotative evidentials are expressed autonomously. The expression of visual, non-visual, and inferred evidentials is fused with tense and aspect.

Such disparities in the expression of evidentiality are known as ‘scattered’ coding of evidentiality. In quite a few languages, evidential meanings are expressed through different grammatical systems. An evidentiality specification in Jarawara can be made in three places in the predicate: (a) fused with each of the three past tenses within the tense-modal slot (examples (1)–(2)), (b) as a special reported marker which may follow the far-past or the recent-past non-eyewitness tense suffixes, and (c) a further slot in the predicate structure with a secondary verb (Dixon 2003: 185–6).[8]

In many instances, the reported evidential stands apart from the other evidential meanings, in terms of its grammatical status and properties. In languages which allow evidentiality to be marked more than once in a clause, the combinations overwhelmingly include the reported evidential (see Aikhenvald 2014). A reported evidential is, not infrequently, transparently grammaticalized from a speech verb, and is the most likely candidate for autonomous expression (see examples in Saxena 1988; Munro 1978; and further instances throughout this volume).

Fused expression of evidentiality creates the basis for dependencies between the grammatical systems of tense, aspect, and mood (or sentence type) with evidentials. Evidentials in many languages, including Jarawara and in Hinuq, are distinguished in the past tense only, and the expression of evidentiality is FUSED with tense. This is the case in many languages with evidentials: source of information is easiest to gather for what has already occurred (see Chapter 3).

(p. 10) In many languages, the locus of marking clausal evidentiality is the verb. Or it can be marked with a clitic or a particle whose scope is the clause. This surface realization appears to correlate with typical origins of evidentials (see Chapter 6): ‘verbal’ evidentials are more likely to develop out of reinterpretation of tense, aspect, nominalizations (and more rarely, epistemic modality) used as evidentiality strategies, while evidentials expressed with particles or clitics are likely to have lexical origins (see also Aikhenvald 2004a: 287).

The clausal, or sentential, scope of evidentials—no matter what their realization is—is reflected in correlations between clause types and evidentiality: there are typically fewer options in questions and commands than in statements, and the meanings of evidentials may change depending on clause types.[9]

Clausal evidentials can be expressed by clitics (as in Quechuan languages), affixes, auxiliary, and light verb constructions (as in Tukanoan and some Nakh-Daghestanian languages), or copulas (as in Bodic and Tibetic languages). The surface realization of evidentials may correlate with their additional functions—evidential clitics in Quechua attach to a focussed constituent and thus can be used as ‘focus markers’ (see §10.2.3, this volume). Evidential markers may develop out of independent verbs within serial verbs constructions (see Chapter 6 and §18.2.3.2).

In many languages (see §1.4.1) non-main clauses cannot acquire an evidential specification distinct from that of a main clause. Evidential marking within a main clause may then have a whole sentence within its scope.

Evidentials vary in how obligatory they are. In some highly synthetic languages—such as Jarawara—all verbal suffixes, including tense/evidentiality-aspect markers, are optional. They are used as judged appropriate by the speaker. But if the speaker chooses to mark tense, they have to express evidentiality, as the two are fused together. And in some languages, it may suffice to include an evidential once in a paragraph, or stretch of discourse.

In Tariana and in neighbouring Eastern Tukanoan languages, omitting evidentials produces an ungrammatical and unnatural sentence (see also Chapter 18). Leaving out an evidential in Shipibo-Konibo, a Panoan language from Peru, results in a grammatically 'incomplete' sentence (Valenzuela 2003: 34). But an evidential does not have to appear in every clause or every sentence—if recoverable from the context it may be omitted (Valenzuela 2003: 39). The reportative evidential in many languages of the Philippines is not required syntactically (see §32.4.4). Faller (2002: 23) mentions that a sentence without an evidential in Cuzco Quechua can be understood as having the same evidentiality value as the other sentences in the same text. Speakers of Huallaga Quechua vary in how easily they omit evidentials which are recoverable from the context (Weber 1989: 324). This does not preclude evidentials from being an essential part of grammar. (p. 11)

1.2.2. A noun phrase within the scope of evidentiality

In a number of languages, a noun phrase may have its own information source, independent from that of a clause. This is 'non-propositional' evidentiality—or evidentiality with a noun phrase as its scope (discussed in some detail in Chapter 5). In Jarawara (Dixon 2004, and p.c.) different information sources can be marked in one sentence, one on the verb and one on a noun phrase. They are expressed using the same set of evidentiality markers fused with tense (as shown in (1)–(2) in §1.2.1).[10] A speaker was talking about what had happened to him and his companions, using far past tense (referring to what had happened more than two years ago); they had seen a place which had been reported to be another group's old village:

(3)

[[mee	tabori	botee]-**mete-moneha**]$_{NP:O}$	otaa$_A$	awa-**hamaro**	ama-ke
3nsg	home:f	old-	FPnf-REPf	nsg.exc	see-FPef	EXTENT-DECf

We were seeing in the far past what was reported to be their old camp from far past.
(This is far past with respect to the far past of seeing)

The speaker used the far past (to reflect that it was some time ago) and a firsthand (or 'eyewitness') evidential (to reflect that he had been there and had seen everything himself). And he used the non-firsthand version of far past tense plus the reported evidential

suffix with the name of the location—‘reportedly’ known to have been another group’s old village. This is why the ‘old village’ is marked with reported evidential.

If I were to attempt translating this word for word, I would come up with a tortured and clumsy sentence, like what one reads in English newspapers now and again—*The reported killer was allegedly seen to be captured by the police*. Unlike English, the Jarawara sentence is compact, and not restricted to any particular genre.

Along similar lines, the reported evidential in Ilonggo, a Philippine language, can have a Noun Phrase (NP) as its scope (§32.3.3), and so can the reported marker *dizque* in Colombian Spanish (§35.3.3). Interestingly, in both languages the reported evidential with an NP scope has the meaning of ‘doubt’ and can be translated as ‘purported’ or ‘so-called’. The reported evidential with a clausal scope only refers to a speech report and has no such overtones—a minimal pair is in (17)–(18) of Chapter 32, for Ilonggo; see also §35.2.1 on *dizque*, and a similar phenomenon in Tsou, a Formosan language in §31.7.5.

A special set of evidentials with just a non-propositional scope has been described for numerous languages—including Dyirbal, an Australian language (Dixon 2014), and a number of Nambikwara languages (Lowe 1999: 282–3; and §17.5, this volume). The expression of non-propositional evidentiality can be autonomous, as in Maaka (Storch and Coly 2014 and Chapter 29). Or it can be fused with distance, as in Lakondê, a Nambikwara language, or with case (that is, the marking of grammatical function), as in Tsou (Chapter 31). Having different systems of evidentiality expressed on a clausal level, and on an NP level, is reminiscent of how tense can be expressed independently within an NP, and within a clause (see Nordlinger and Sadler 2004).

Guillaume Jacques (example (30) in Chapter 5) suggests that an overwhelming majority of non-propositional evidential markers reflect sensory information sources. Non-propositional (p. 12) evidentials with non-sensory meanings (inferred, reported, etc.) have only been attested in languages with visual or non-visual sensory non-propositional evidentials. This tentative dependency sets non-propositional evidentials apart from evidentials with clausal scope whose semantics shows substantially more options. This is what we turn to now.

1.3. Evidentials and their meanings

Evidential systems vary in their complexity, and in their organization. Some distinguish just two terms. An eyewitness versus non-eyewitness distinction is found in Turkic and Iranian languages. Larger systems may involve visual, non-visual sensory, inferred, assumed, and reported. This is what we find in a number of Eastern Tukanoan languages from northwest Amazonia (Chapter 18). What are the recurrent semantic parameters employed in grammatical systems of evidentials?

1.3.1. Semantic parameters in grammatical evidentiality

The semantic parameters employed in languages with grammatical evidentiality cover physical senses, several types of inference, and of report. The recurrent terms—found to be grammaticalized as evidential terms—are shown in Figure 1.3.[11]

I. VISUAL covers information acquired through seeing.
II. NON-VISUAL SENSORY covers information through hearing, is typically extended to smell and taste, and sometimes also touch.
III. INFERENCE based on visible or tangible result.
IV. ASSUMPTION based on information other than visible results: this may include logical reasoning, assumption or simply general knowledge.
V. REPORTED, for reported information with no reference to who it was reported by.
VI. QUOTATIVE, for reported information with an overt reference to the authorship of the quoted source.

Figure 1.3. Recurrent terms in languages with grammatical evidentiality systems

A few further terms have been attested. 'Common'—or 'general'—knowledge may be expressed with a special evidential marker: this is the case in Mamaindê (§17.7), Kalmyk (Skribnik and Seesing 2014; and §26.4, this volume), and possibly Buryat (§26.5). Yongning Na (Mosuo), a Tibeto-Burman language (Lidz 2007), has a direct (or sensory), an inferential, a reported, and a quotative evidential, and a further term which covers 'general' knowledge. In other systems, a reported or an assumed evidential may cover 'general knowledge'—covering something known to the whole community, or an habitual event, or facts known from mythology. Or a non-evidential, 'factual' form can be employed, as in Tibetic where it (p. 13) is mutually exclusive with markers of information source (evidentiality) and mode of access to knowledge (egophoricity) (see Chapter 27).

A reported evidential may refer to the information the speaker learnt from someone else. Mamaindê, a Nambikwara language, distinguishes an evidential used for a secondhand report from a thirdhand reported evidential: this indicates that the speaker heard the information from a third party who in turn heard it from someone else (§17.7 and examples (24)–(25) in Chapter 17). This is in addition to visual, non-visual, inferred, and 'general knowledge' evidentials.

What about further distinctions? An alluring one is the 'internal support', or 'gut feeling', evidential in Southern Nambikwara (Lowe 1999: 274–6; and Table 17.1 in Chapter 17, this volume). Its meaning is remarkably similar to the 'general intuition' verb in Ashéninka, a Kampa (Arawak) language, *yoshiry* 'sense, intuit' used to report 'gut feelings' (Mihas 2014: 221). However, in the absence of clear examples, the question of the status of this term remains open (see note 8 in Chapter 17). 'Revelative' evidential—used just to talk about what one learnt from a dream (Jakobson 1957)—remains equally elusive (see §12.1 on evidentials in dreams, and Boas 1911b: 496 on Kwakiutl).

No spoken language has a special evidential to cover just smell, or just taste, or just touch: this complex of meanings is typically covered by a non-visual sensory, a 'non-firsthand', or an experiential evidential. The Catalan Sign Language—or Lengua de Señas

Catalana—has a number of signs 'which derive from a lexical source in the sensory domain'. These can be considered inferential evidentials with inference based on a sensory information source (e.g. AMBIENT 'touch', CLAR 'visual image', VEURE 'sight', OLORAR 'smell') (see §36.3.1). Special expression of means of perception other than 'seeing' sets the Catalan Sign Language apart from what we know about spoken languages—however, more studies are needed to clearly understand the grammatical status of manual signs with meanings related to information source across signed languages.

Languages vary in how they group the recurrent semantic parameters within their evidential systems. The most straightforward grouping is found in three-term systems—where sensory parameters (I and II), inference and assumption (III and IV), and reported and quotative (V and VI) are each grouped together. This is what we find in Quechua, Shilluk, Bora, Matses (Aikhenvald 2004a: 145–6, 159–66; Fleck 2007; and Aikhenvald 2012a: 254–5), and Korean (Chapter 33). Sensory parameters can be subsumed under one 'experiential' (or 'direct') marker, with a special form expressing each of inferred, assumed, and reported evidentiality, as in Shipibo-Konibo (Valenzuela 2003).

Numerous languages of Eurasia group parameters (II–VI) under a catch-all non-firsthand evidential. We find this in Hinuq and numerous other Daghestanian languages (Chapter 23) and in many Uralic languages (Chapter 25). The prominence of evidentiality systems with an 'indirect' or 'non-firsthand' specification in the languages of Eurasia is reflected in Haarmann's early discussion of the form of 'indirect experience', *indirekte Erlebnisform* (see also Chapter 25). Similar small systems are found elsewhere—including Nukna and Nungon, two languages from the Finisterre grouping in New Guinea (§30.3, this volume).

Two—witnessed and unwitnessed—evidentials are distinguished in Cariban languages Trio and Wayana (Chapter 16; in addition to a further reported evidential in Wayana). Alternatively, an evidentiality system may allow one to specify—or not—the exact information source (in line with Aikhenvald 2003a: 3; Johanson 2003; and Chapter 24, this volume). (p. 14) Kalmyk, a Mongolic language (Chapter 26), distinguishes direct and indirect evidentials. The 'direct' term combines reference to sensory parameters (I and II). The general 'indirect' term covers the rest. In addition, the speaker may choose to be more specific within 'indirect' evidentiality by making a further choice between inferred, assumed, reported, 'common knowledge', and prospective evidentials.

A two-term system may consist of just a reported evidential versus 'everything else' as, for instance, in Ocaina and Witoto (Chapter 19), a number of Uto-Aztecan languages (Chapter 20); Philippine languages (Chapter 32), and a few languages of New Guinea: (§30.2). In §1.3.2 we briefly turn to the notion of an 'everything else', or an 'evidentiality-neutral' term.

An evidential may combine reference to more than one of the semantic parameters listed in Figure 1.3. An inferred evidential may combine reference to previously 'seen' information (this is the case in many Eastern Tukanoan languages and in Tariana). Hannah Sarvasy (§30.2, this volume) mentions the existence of several reported evidentials in Samo

(an East Strickland language from Papua New Guinea) including *-lu* ‘report’ and *=dạlo* ‘reported but not seen’.

Table 1.1 (adapted and expanded from Table 2.1 in Aikhenvald 2004a: 65) shows and summarizes the evidentiality systems attested so far for which there are a number of well-attested examples. Larger systems of six, seven, or even eight evidentials are discussed in Chapters 17, 18, and 26.).[12] Following the numbering conventions in Aikhenvald (2004a: xxiv and 2015a), systems with two choices are referred to with the letter A and a number; systems with three choices are referred to with letter B and a number, and so on.

If there is no evidential term for a particular meaning, that meaning can be expressed with other means. Matses (Fleck 2007) has a direct (or experiential), an inferred, and an assumed evidential (B7). There is no reported evidential—a speech report construction with a reporting verb ‘say’ is used to quote what someone else had said, or what is ‘said’ in general.

And now a word of warning. In Janis Nuckolls’s words (§10.1, this volume), ‘the assumed contrast between direct and indirect experience is an imperfect heuristic for the study of evidential systems’. The prominence of two-term firsthand/non-firsthand evidential systems in Eurasian languages has led some to a sweeping assumption that the basic semantic distinction for all evidential systems is between direct and indirect, or firsthand and non-firsthand information sources.[13] The facts of most languages show that there is much more to the meanings of evidentials than an easy-to-manage binary distinction. And each term in an evidential system may be semantically complex—the topic of §1.3.3. (p. 15)

Table 1.1. The grouping of semantic parameters in evidentiality systems

		I. Visual	II. Sensory	III. Inference	IV. Assumption	V. Reported	VI. Quotative	
2 choices	A1	firsthand		non-firsthand				
	A1	firsthand	non-firsthand					
	A2	<no term>		non-firsthand				
	A3	<no term>				reported		
	A4	<no term>	auditory	<no term>				
3 choices	B1	direct		inferred		reported		
	B2	visual	non-visual	inferred				
	B3	visual	non-visual	<no term>		reported		
	B4	<no term>	non-visual	inferred		reported		
	B5	<no term>				reported	quotative	

	B6	<no term>	non-visual	<no term>		reported				
4 choices	C1	visual	non-visual	inferred		reported				
	C2	direct (or experiential)		inferred	assumed	reported				
	C3	direct (or experiential)		inferred		reported	quotative			
	C4	visual	non-visual	inferred		<no term>				
	C5	direct	inferred	assumed		<no term>				
	C6	<no term>		inferred		reported	quotative			
	5 choices	D1	visual	non-visual	inferred	assumed	reported			

1.3.2. ‘Evidentiality-neutral’ forms and markedness in evidentiality systems

Small evidential systems may involve having a marker for information acquired through speech report (A3) or through a non-firsthand source (A2) (which can cover inference, reasoning, or speech report) leaving an option for a source-neutral, and formally unmarked, choice. This option has been described for a number of Northeast Caucasian, Turkic, and Finno-Ugric languages (Chapters 23, 24, and 25; and also Forker 2014; and Greed 2014).

An information-source-neutral form may be the one used in translations (and elicitation), as a ‘default’ choice (as in Hinuq: Forker 2014: 55–6). As pointed out by Lars Johanson (§24.6, this volume), ‘indirective’ evidentially marked forms in Turkic languages express the speaker’s ‘conscious reception’ and the existence of an information source; ‘evidentially unmarked forms may suggest that the source of information is direct experience’—but not always. In fact, they may be used whenever the information source ‘seems unessential’. The information-source-neutral form in Tatar often acquires a first-hand reading (see Greed 2014: 84; also Forker 2014: 55).

(p. 16) This takes us to the general markedness relations between different evidentials. In many languages, the least formally marked verb in a language with evidentiality tends to acquire a visual, or a firsthand reading (depending on the system). In Ersu, if a clause contains a verb without an evidential, the information source is understood to be ‘direct perception as information source’ (Zhang 2014: 134–5). Along similar lines, visual evidentials are formally unmarked in Desano (Chapter 18) and Innu (Chapter 21) (a few further examples are in Aikhenvald 2004a: 72–3). In Bora, information acquired through vision or other senses is zero-marked (§19.4.1). An unmarked verb in Yukaghir (Maslova 2003) and in Archi (a Northeast Caucasian language: Kibrik 1977: 89) implies that the speaker witnessed the action with an appropriate sense—be it vision, or hearing.

The tendency to mark direct, or visual, or sensory evidentials less than others may reflect the primacy of vision as an information source. As Ünal and Papafragou point out in §8.4, ‘linguistic categories of evidentiality have cognitive consequences’. But their exact nature is still to be ascertained.

The exact status of zero-marked forms can only be established within the context of the system. Indicative forms in Nganasan appear to be information-source-neutral: they are used if the information was witnessed, or the speaker is sure of it. Or they can be used if the source is not relevant to the speaker (§25.3.4.3, and references there, and also Usenkova 2015: 177). Zero-marked verbs in Mỹky, an isolate from Central Brazil, have no positive information-source value—consequently, they can be considered evidentially neutral (Monserrat and Dixon 2003; a similar point can be made for Gitksan; see §22.2.1). This is different from ‘zero’ as a marker of visual or direct evidentiality in Ersu or Bora, and akin to a ‘zero’ as a part of a grammatical paradigm and ‘nothing’ as an absence of a category (in the spirit of Dixon 2009). In practice, distinguishing between omission of evi-

dentials (if optional, or recoverable from the context), zero-marked and evidentiality-neutral forms requires an analytic effort where nothing is taken for granted.

1.3.3. Semantic complexity of evidentials

The main denotation of an evidential is information source. Depending on the number, and the meanings, of terms in each particular system, evidentials may and do develop additional overtones. In two-term systems (A), the firsthand evidential may have overtones of speaker's control and participation, and the non-firsthand term may imply the opposite (Aikhenvald 2004a: 188 for a summary; see also Forker 2014, for an example). The non-firsthand, or non-witnessed, evidential may extend to cover unreliable information (as in Algonquian, some Turkic and Uralic languages—see Chapters 21, 24, and 25). But it does not have to—for instance, evidentials in Jarawara (examples (1)–(2) in §1.2.1) have no epistemic overtones.

In larger systems, the visual (or direct—covering other senses) evidential marker may acquire overtones of certainty and refer to 'generally observable facts'. The visual evidential in Mamaindê (a language with six evidentials altogether: see §17.7) refers to what was seen by a speaker. It is also used for factual statements known to all, and something the speaker is 'certain' of (see Aikhenvald 2004a: 171–2 for similar extensions of visual, or direct (visual and non-visual sensory) evidentials to generally known and observable facts in a number of other languages, including Tariana and Quechua).

(p. 17) The inferential evidential may acquire overtones of doubt or speculation—this is the case in Saaroa and Kanakanavu, two Formosan languages (Chapter 31). In contrast, inferred and assumed evidentials in Eastern Tukanoan languages and in Tariana do not imply doubt (see Chapter 18; and Aikhenvald 2003d, and 2004a: 191).

In a system of any size and structure, a reported evidential, just like speech report, may express the simple fact that the speaker knows the information because someone else had told them. As Valenzuela (2003: 57) puts it, the selection of *-ronki*, the reported evidential in Shipibo-Konibo, over *-ra,* 'direct (sensory) evidential', 'does not indicate uncertainty or a lesser degree of reliability but simply reported information'. The reported markers in Hinuq, Tatar, or Maaka have no overtones of disbelief or doubt. Neither does the reported clitic *=ri* in Kurtöp (Hyslop 2014b and Chapter 28), nor the reported *-dhan* in Ngiyambaa, an Australian language (Donaldson 1980: 277). A reported evidential can express general or common knowledge, as in Mi'kmaw, an Algonquian language (§21.4.1.3; similar examples from Mongolic languages are in §26.1.3, and §26.5).

Alternatively, a reported evidential may have overtones of doubt. Saying 'he is reported evidential a doctor' in Estonian would mean that I doubt the person's qualifications or abilities. Along similar lines, speakers of Mamaindê 'will use the reported evidential to indicate that the information did not originate with them, and thus distance themselves from responsibility. To the hearer this comes across as information that is unreliable or less trustworthy. Thus, if the speaker actually did witness an event, but wishes instead to conceal that information, or to cast doubt on it, or avoid being held responsible for it, he

can choose to employ the secondhand reported evidential' (§17.7, this volume). The reported evidential in Saaroa, a Formosan language (Pan 2014: 97) may be used if the information is not reliable. This is akin to how the ubiquitous *diz que* has overtones of doubt and unreliable information in many varieties of South American Spanish (see Chapter 35).

The languages of the Philippines have just one reported evidential. It can have a variety of overtones—among them 'conveying tentativeness, signalling caution', expressing doubt, criticism, rebuke, and also as a means of expressing politeness and modesty (Chapter 32).

Trustworthiness of information is a concomitant feature of some evidentials in some systems, but by no means is it a definitional trait of evidentials (*pace* Matthewson 2015: see §15.5). Apart from having additional, non-information source-related meanings, evidentials interrelate with other categories—the topic of the following section.

1.4. Evidentiality and other categories

The past decade has seen new data, new languages, and new evidential systems analysed and recognized—thanks to a growing interest in documenting and analysing previously undescribed languages. A better understanding of the grammatical expression of information source (and thus evidentiality) has resulted in its gradual emancipation from other categories. The days when evidentiality was erroneously confused with epistemic modality, related to probability, possibility, and speaker's attitude to information, and reliability (propagated by scholars with no firsthand experience of working on languages with evidentiality, such as Plungian 2001; or Palmer 1986) are all but gone.

(p. 18) Additional factors may obfuscate the status of evidentiality as a category in its own right. In synthetic languages, evidentials may form paradigmatic oppositions with other categories and thus be mutually exclusive with them. In Yukaghir, Abkhaz, Eastern Pomo, and many Uralic languages evidentiality markers occupy the mood and modality slot in the verbal word, thus being mutually exclusive with conditional, imperative, interrogative, and other markers (see Maslova 2003; Chirikba 2003; McLendon 2003; and Chapter 25). This does not make evidentiality a type of 'mood' or 'modality'.

The expression of evidentiality interrelates with polarity. Evidentiality contrasts can be neutralized under negation—see the discussion in §3.5. Evidentials cannot be used in negative clauses in Mỹky (Monserrat and Dixon 2003). The direct evidential is not used in negative clauses in non-past tense in the Luchuan dialect of Ryukyuan (Arakaki 2013: 159; see §23.3 on restrictions on evidentials in negated clauses in Khalkha, and Skribnik and Seesing 2014: 163 on Kalmyk). Contrary to unfounded statements, an evidential can be within the scope of negation (examples from Akha, a Tibeto-Burman language, are in Hansson 1994: 6, 2003; see also Egerod 1985; and the discussion in Aikhenvald 2004a: 256–7).

'Mirativity', or expectation of knowledge, refers to sudden discovery, unprepared mind, surprise (by the speaker, the addressee, or a third person). In many languages, this is a category in its own right (e.g. Chapters 28 and 31; Hyslop 2014c; and also DeLancey 2012; and Aikhenvald 2012b). In small systems, mirative extensions of non-firsthand evidentials may occur in the context of a first person subject (as in (11b), from Khwarshi, in §23.2.3).

The immediate past non-firsthand marker in Jarawara expresses something unexpected and surprising (Dixon 2003: 172). An inferred evidential in a larger system may express surprise as a consequence of 'deferred realization' and interpretation of the event (de Reuse 2003)—this is what we find in Mamaindê ((31) in §17.7, and further examples in Eberhard 2009: 466–7), in Kotiria (or Wanano), an Eastern Tukanoan language (§18.2.3.6, and also §20.2.1, on Northern Paiute).

Evidentiality interrelates with aspect—the internal composition of the event. The choice of evidential may depend on the choices made in the aspectual system, and the other way around (see §3.3, Aikhenvald 2015b: 252–4; 2004a: 262–3; §29.1, and examples of fused expression of evidentiality with tense and aspect in Eastern Tukanoan languages in Chapter 18, and Chapter 24, for the place of evidentials within the aspectual system in Turkic languages). In many languages with two-term systems, including Northeast Caucasian and Finno-Ugric, evidentiality correlates with perfect, perfective, and resultative aspects. Chapter 6 provides numerous illustrations of how these aspectual categories have given rise to non-firsthand evidentials.

In an overwhelming majority of languages evidentials are used in main clauses only (this is the case in Abkhaz, Eastern Pomo, Matses, Turkic, Tukanoan, and most Uralic and Nakh-Daghestanian languages). The possibility of having evidentials in a non-main clause correlates with the categories which such clauses express. In Jarawara, only relative clauses can take a full set of tense-cum-evidentiality markers, and thus express the evidentiality distinctions fused with past tense (see further examples, and discussion in Aikhenvald 2004a: 253–6).

In a few languages, evidentials may occur in non-main clauses with the clause in its scope. A reported evidential in relative and complement clauses in Estonian appears in (18)–(19) of Chapter 25; further examples within this volume from Dargwa, Korean, and the languages (p. 19) of the Philippines in Chapters 23, 32, and 33. There are never more evidential distinctions in non-main clauses than in main clauses (see §3.8).

The choices in the evidential systems may depend on choices made within another category, and especially mood—that is, sentence type (statement, command, or question)—see §1.4.1. Not only may the choice of an evidential depend on a choice made in the tense system; an evidential may have its own time reference—see §1.4.2. In §1.4.3, we turn to relationships between evidentiality, person, and egophoricity, or access to knowledge.

1.4.1. Evidentiality and sentence types

The maximum number of evidential specifications is found in declarative clauses. In many languages (including Arawá, Cariban, Mongolic, Quechua, among many other languages) evidentials are not used in either interrogative or in imperative clauses. The use of evidentials in exclamatory clauses remains a moot point. In some languages, such as Tariana, evidentials are not used in exclamations. An evidential with a mirative connotation may have an exclamatory force. The firsthand evidential *-ney* in Korean refers to the speaker's instantaneous perception of the event and is often interpreted as a 'mild exclamation' (§33.2.1). A study of evidentials in exclamations hinges upon the status of exclamatory clauses in individual languages—an issue yet to be fully explored.

1.4.1.1. Evidentials in imperatives

In imperative clauses, the most ubiquitous evidential is the reported (see §3.7). Its typical meaning is a command by proxy 'do what someone else told you', as in (18), from Kanakanavu and (31), from Saaroa, two Formosan languages (Chapter 31) (further examples are in Aikhenvald and Dixon 2014; Aikhenvald 2004a: 31–4). A special form of a reported evidential—different from the one in statements—can be used to quote a command. Nganasan, a Samoyedic language, has a special form for a 'renarrative imperative' used to report a command (example (64) of Chapter 25; cf. a special form for reported commands in Estonian: §25.3.1).

Using a reported evidential in commands may have further overtones. In Ilonggo, it is a way of urging the addressee to obey, making it sound more authoritative (§32.4.2). A reported evidential in command in Cebuano may function as a warning—it is then spoken with a 'threatening' intonation. Or it may have an opposite mitigating effect. In Cebuano (example (25) in Chapter 32) adding a reported evidential to an imperative makes it sound more polite and less 'face-threatening'. This imperative-specific extension of evidentials to express politeness—avoiding the directness of a simple command—could be associated with 'distancing' and thus saving 'face' (in the sense of Brown and Levinson 1987).

A non-firsthand evidential in a command may have an 'absentive meaning'—implying that the order is to be carried out in the absence of the speaker, as in Chechen, a Nakh-Daghestanian language ((14b) in Chapter 23), and Meithei, a Tibeto-Burman language (Chelliah 1997: 223).[14] (p. 20)

Declarative sentences used as commands, or 'command strategies', can contain evidentials, with additional, command-specific, overtones. In Ayacucho Quechua, the combination of the 'direct' evidential *-mi* with future tense marks a stern command (Adelaar 2017b: §4; and Floyd 1996a: 84 on Wanka Quechua).

1.4.1.2. Evidentials in questions

The use, and the meanings, of evidentials in questions have been the object of some discussion (see §3.7; Aikhenvald 2004a: 242–9; San Roque et al. 2017). The same set of evidentials may occur in questions and in statements, or questions may afford fewer options. In Bora, of the three evidentials used in statements, only the reported evidential occurs in

questions (Thiesen and Weber 2012: 321; and §19.4.1, this volume). In Tariana and in most Eastern Tukanoan languages (with the exception of Tatuyo and Barasana), there is no reported evidential in questions (see Aikhenvald 2004a: 242–3; and §18.3, this volume for discussion). In contrast, in Eastern Pomo (McLendon 2003: 114–16) the reported evidential is the only one not to be used in questions. In some languages, evidentials may not be used in questions at all—this is the case in Abkhaz, Jarawara, and Mỹky.

The meanings of evidentials in questions interact with the person of the speaker and of the addressee (something we return to in §1.4.3). Figure 1.4 summarizes the options (see also §3.7).

Figure 1.4. Information source and evidentials in questions

Option **I**, the speaker's information source in questions, is a feature of Yukaghir (Maslova 2003: 228) and Eastern Pomo (McLendon 2003: 114–16).

Option **II** has been described in quite a few instances (many more examples have come to light since Aikhenvald 2004a: 245–7; see also §2.5.1, this volume). The evidentiality category used in the question conforms to the category of the anticipated response in Foe, a Papuan language (Rule 1977: 86) and §30.11.1), in the majority of Nakh-Daghestanian languages (§23.1), and in Gitksan (§22.5). The addressee's information source is presupposed in questions in Middle Mongolian, in Khalkha, Kalmyk, and Monguor (§§26.2, 26.3, 26.4.1, and 26.6.2). The perceptual evidential *-te* in Korean (§33.2.1, and examples (17a–b) in Chapter 3) indicates the information source of the speaker in statements and of the addressee in questions (see §1.4.3).

Option **III**, where evidentials in questions reflect the information source of a third party—someone other than Speech Act Participants (see Aikhenvald 2004a: 248)—is a feature of Murui, a Witotoan language (§19.3.2), some Turkic languages (§24.8), and Tsou (§31.7).

A further alternative is available only for reported evidentials in questions. A polar or a content question can be repeated if a question is asked on behalf of someone else (much like a reported command discussed in §1.4.1.1), as in (4), from Baniwa, an Arawak language from northwest Amazonia. During my stay in the village of Santa Terezinha in 2012, my adopted brother asked a shy little girl (4a). (p. 21)

(4)

a.	kwaka	pi:pitana?
	what	2sg+name
	What's your name?	

The girl demured. Her mother repeated the question using the reported evidential =*pida*:

(4)

b. kwaka pi:pitana=pida?
what 2sg+name=REP
What's your name?-reported (meaning: he asked you what your name is)

We find similar examples in Bora (§19.4.1), Isbukun Bunun and Saaroa (§§31.3 and 31.6), and Ilonggo (§32.3.2.1, examples (7) and (12)).

An evidential in a question may refer to a combination of sources—disambiguated by context. The reported evidential in the languages of the Philippines can be used in polar questions to seek confirmation of the information known to the speaker (Option **I**), or to learn something that the addressee (but not the speaker) knows about (§32.4.3.1) (Option **II**). The reported evidential in a content question in Boi'nun may imply a question on behalf of someone else (**III**) ((30) in Chapter 32), or a question seeking information available to the addressee (**II**) ((31) from Northern Kankanay).

A reported evidential in a question in Quechua implies that the addressee is expected to provide secondhand information, as in (5) (Faller 2002: 230; cf. also Floyd 1999: 127).

(5)

pi-ta-s	Inés-qa	watuku-sqa	Cuzco Quechua
who-ACC-REP	Inés-TOP	visit-PAST2	

Who is Inés said to have visited? (speaker expects hearer to have reportative evidence for his or her answer)

According to Faller (2002: 230), this same example also can be interpreted as a question on behalf of someone else (Option **III**). No evidential other than reported can be used this way in a question—one does not ask about something which a third party (not the speaker or the addressee) had seen, or heard, or inferred.

Nganasan, a Samoyedic language, has a special 'reported interrogative' form which can be used to report someone else's question (similar to Baniwa, (4a–b)). Or it may reflect the addressee's information source (§25.3.4.3).

Content questions and polar questions may differ as to whose information source the evidentials express. Evidentials in a content question in Mari (examples (25)–(26) in Chapter 25) reflect the information source of the addressee; those in a polar question reflect the information source of the speaker (see also §26.6.2 on Qinghai Bonan, and Donabédian 1996: 103–4 on Western Armenian). In questions, as in commands, evidentials may acquire overtones of politeness (see Valenzuela 2003: 47–9 on the use of the assumed evidential *-mein* in Shipibo-Konibo content questions making them into polite requests).

An evidential cannot be within the scope of command. But it can be questioned, as in Japanese (example (17) of §34.3.2) and in Wanka Quechua (Floyd 1999: 132). As Thiesen and Weber (2012: 306) put it, 'if a speaker fails to include an evidential clitic when report-

ing an event he or she did not witness, they may be challenged by the hearer' (§19.4.1). (p. 22)

The ways in which speaker's and addressee's information source can be manipulated in the evidentials in questions is reminiscent of egophoricity—or access to knowledge (see Chapter 28). We return to this in §1.4.3.

Rhetorical questions do not seek information. Evidentials within them may have special overtones. As stated in §26.2 (following Street 2009), firsthand evidentials in Middle Mongolian are based on the information source of the speaker (not the addressee as in information questions). Reported evidentials in rhetorical questions in Kagayanen, Ilonggo, Cebuano, and Tagalog express surprise, criticism, or rebuke as well as to 'drive home a point' in a discussion. The reported evidential *-shi* in Paztaza Quichua (§10.3.3) in questions can express 'feelings of puzzlement, wondering, or perplexity' (see further examples in Aikhenvald 2004a: 249).

1.4.2. Evidentiality, tense, and time

The expression of information source correlates with grammatical tense. As Diana Forker puts it in §3.2, 'past tenses are more likely to express evidentiality and to distinguish a higher number of evidential values than non-past tenses'. This is what we saw in (1)–(2), for Jarawara where evidentials are distinguished just in the three past tenses. Present tense forms for inferred and assumed evidentials may be lacking altogether, as is the case in Tariana (Aikhenvald 2003a), Tukano and a number of Eastern Tukanoan languages (Ramirez 1997a: 120; Chapter 18). This is understandable as inference and assumption are based on interpreting information existent prior to the moment of speech, and may thus be conceived as mutually exclusive with the present moment.

Many languages do not express future in evidentials. In those that do, evidentials in future forms may have epistemic overtones of uncertainty, as in Wanka Quechua (Floyd 1999: 75), Ersu (Zhang 2016), and further examples in §3.2. In Sabanê, a Nambikwara language (§17.6), a future form of a sensory evidential (which can refer to something seen or perceived by another sense) has overtones of certainty and can be used when 'one is dealing with sensory evidence of an imminent event'. Foe, an East Kutubuan language from Papua New Guinea (§30.11.2), has future forms just for a visual evidential, an inferred evidential based on previously visible results, and an inferred evidential based on currently visible results. In Tariana, information reported to be planned for the future is expressed through a combination of a reported evidential and a purposive marker ((8) this chapter and Aikhenvald 2003c: 293).[15]

Future projection based on inference or assumption is expressed with a 'prospective' evidential described for a few languages on the Eurasian continent. In Yukaghir (Maslova 2003: 225), a prospective evidential encodes a situation in the future based on an inference or an assumption by the speaker. An example from Yukaghir is at (6).

(6)

met	qollume	tiŋ	lebie-get	kewe-j-mozi:-je	*Yukaghir*
I	soon	this	earth-ABL	go-PERV-PROSP-INTR:1SG	

I am to leave this earth soon (inferred or assumed based on the fact I am very old)

(p. 23) Prospective evidentials may be more complex. Kalmyk has three prospective evidentials (Skribnik and Seesing 2014: 160–1; and §26.4, this volume), marking (a) future prediction based on current inference, (b) prediction based on previous inference, and (c) prediction based on the expected state of affairs. See also §26.5.2 on Buryat, and §25.3.4.2 on Tundra Nenets. Each of these evidentials contains additional reference to the *time* of the speaker's access to the information source.

Time of 'access' to information may find its expression in most evidential specifications. Kalmyk has several inferred evidentials whose choice depends on whether the inference was made based on what happened at the moment of speech, or before it (Skribnik and Seesing 2014: 153; §26.7, this volume; see also Table 26.2 on Khalkha Mongolian). Foe, an East Kutubuan language (§30.11.2) has an inferred evidential based on previously visible results, and an inferred evidential based on results which are currently visible.

Perceptual evidentials in Korean (Chapter 33) contrast 'prior perception' (the marker *-te*) and 'instantaneous perception' (the marker *-ney*). The 'prior perception' (or 'retrospective') evidential has the semantic feature of 'past time' of speaker's perception.[16]

Or a reported evidential may distinguish different forms depending on when the speaker received the information. Kaluli, a Bosavi language from New Guinea (§30.7.1; Grosh and Grosh 2004: 27–8), employs the 'past reported action' form if the information was acquired some time ago. If the reported information was acquired only recently, the present reported form is used (see §25.3.4.2 on a similar distinction between reported past and reported present in Tundra Nenets, a Samoyedic language). 'Reported past' and 'reported future' evidential markers are distinguished in Kamula, an isolate of the Western Province in Papua New Guinea (§30.2; and Routamaa 1994: 26–7, 29–30).

The tense forms of evidentials in Eastern Tukanoan languages point to 'how and when the speaker accessed information from a particular source and whether that access is still available' (§18.2.4; and the discussion of Tukano in Ramirez 1997a: 125–6). That is, an evidential refers to the time of the source. In (7), from Tukano, the speaker saw Pedro at school a few minutes before the moment of speech. A literal translation could be '(I saw in the recent past) (Pedro) being at school' (Ramirez 1997a: 125–6; similar examples from Tariana are in Aikhenvald 2003a: 289, 2004a: 101–2).

(7)

buʔê-dó-pɨ	diî-abi	*Tukano*
study-LOCATIVE.NOMINALISATION-FOC	be- VIS.REC.P	
(Pedro) is/was at school. (I saw him a few minutes ago)		

Alternatively, the timing of information source and the timing of the event can be marked separately. In Tariana this option is available for events reported to be planned for the future (this is the only instance in the language where one of the five evidentials is used in the future context). In (8), the speaker has only recently learnt about a person's intentions to come in the future. The reported evidential *-pida* is within the scope of tense—shown by brackets:

(8)

du-nu-karu-[pida-ka]	*Tariana*
3sgf-come-PURP-REP-REC.P	
She will come reportedly. (The speaker learnt the information recently, e.g. a few days ago)	

(p. 24) Grammatical distinction between the timing of an event and the timing of information source is one of the features that make evidentials 'special', and account for further complexities in evidential systems.

Two information sources, each with its own time reference, can be marked in one clause. This is an option described for Matses, a Panoan language (Fleck 2007; see also §3.2). We briefly return to using an evidential more than once in one sentence in §1.6.

1.4.3. Evidentiality, egophoricity, and person

Egophoricity (alternatively known as conjunct–disjunct marking) denotes access to knowledge, distinguishing information accessible to the speaker ('egophoric') from that accessible to another person ('alterphoric': Post 2013: 111; and §27.3, §28.3, §28.4, and especially Chapter 2). In many Tibeto-Burman languages, the egophoric markers are employed in declarative sentences with first person subjects and interrogative sentences with second person subjects. The non-egophoric, or 'alterphoric', set is found in other contexts. An egophoric marker is not compatible with an evidential and may not be used with non-volitional actions and states (see §2.3.1, Table 27.1 in Chapter 27, and examples (2)–(4) therein). Statements about others can contain an egophoric marker and thus be marked as 'personal knowledge' if the speaker is emotionally close to the third person (see example in §27.5.1). Along similar lines, 'performative' in Kashaya, a Pomoan language (Oswalt

1986: 34–8) is mutually exclusive with evidentials; it indicates that the speaker performed or is performing the action themselves.

A confusion between access to information (egophoricity) and information source (evidentiality) has resulted in the creation of quasi-evidential terms such as ‘participatory’ or ‘performative’ evidential referring to one’s ‘own’ access to information (Loughnane 2009; San Roque and Loughnane 2012a; see also Faller 2002: 46).

Egophoricity is a prominent feature in Tibeto-Burman languages (see §28.3 and Chapter 2). Similar phenomena have been attested in a number of Nakh-Daghestanian languages, e.g. Akhvakh, Mehweb Dargwa, and Zakatal Avar (see §23.4), and Oksapmin, Foe, Fasu, and perhaps a few other languages in New Guinea, including Ekari (Doble 1987: 90, 93; see the discussion in §§30.2 and 30.12). Egophoric distinctions developed in Southern Mongolic and other Mongolic varieties of the Amdo region in China under the influence of Tibetic (§26.4.2).

The use of evidentials in questions involves an interplay between Speech Act Participants —the speaker and the addressee. In a number of languages (see §1.4.1.2), questions reflect the addressee’s ‘access to knowledge’, and are thus reminiscent of an egophoric pattern.

Recent studies have shown the existence of further, egophoric-like systems sensitive to ‘access to knowledge’. Dena’ina, an Athabaskan language, has three markers of access to information—that of the speaker (*sh-*), of the addressee *(d-*), and of third person *(y-).* Of these, *d-* is most frequently used in questions of all sorts (Holton and Lovick 2008: 317). A system of ‘epistemic perspective’—encoding ‘speaker perspective’, ‘addressee perspective’, and ‘non-speech act participant’ perspective—has been described for Kogi (an Arwako-Chibchan language from Colombia: Bergqvist 2016); also see the discussion of (p. 25) marking speaker’s access to information alongside other categories in Urama, a Kiwaian language from New Guinea (Brown, Peterson, and Craig 2016). Special markers of information available to speaker and to addressee, apparently distinct from evidentiality, have been described in Andoke, an isolate from Colombia (Landaburu 2007: 30–1, 1979: 119–26). In Ayacucho Quechua, the evidential markers can occur with a marker *-iki* indicating that the addressee is believed to have access to the same sources of information as the speaker him/herself (cf. Soto Ruiz 1979: 199–201; Adelaar 2017a). The place of egophoric distinctions, and their interaction with the expression of information source are a matter for further investigation.

The addressee’s access to information may be fused with the expression of evidentiality as information source. Southeastern Tepehuan (or O’dam) distinguishes two reported evidentials. The evidential *-sap* marks reported information which is not known to the addressee (García Salido 2014a: 25–6), and may have overtones of unreliability (§20.6.2, this volume and García Salido 2014b: 101). The evidential *-sak* marks reported information which is either already known to the addressee, or reflects experience shared with the addressee (García Salido 2014a: 28–9; this was misleadingly called ‘thirdhand evidence’ by Willett 1988: 69). This evidential has no epistemic overtones. Along similar

lines, the ‘general knowledge’ evidential in Mamaindê (§§17.7 and 17.8) expresses the communal ‘perspective’ shared by the speaker, the addressee, and the world at large; information acquired through ‘general knowledge’ is considered the most trustworthy.

‘Access to knowledge’ is fused with evidentials in South Conchucos Quechua. ‘Individual’ and ‘mutual’ access to knowledge is distinguished for all evidential terms except the reported evidential (see Hintz and Hintz 2017; Hintz 2007: 71, 2014: 473–4)—this is shown in Table 1.2.

Table 1.2 Evidentials and ‘individual’ versus ‘mutual’ knowledge in Southern Conchucos Quechua

individual knowledge	direct evidential *-mi*
mutual knowledge	direct evidential *-cha:*
individual knowledge	conjecture *-chi*
mutual knowledge	conjecture *-cher*
reported information	*-shi*

In (9), from South Conchucos Quechua (Hintz and Hintz 2017), *-mi* marks individual knowledge acquired through direct observation (the latter consistent with the semantics of *-mi* across Quechuan languages: see Adelaar 2017a):

(9)

Tsay-pa-**mi**	qati-ya-ra-n	*South Conchucos Quechua*
that-GEN-DIR.INDIV	follow-PL-PAST-3	
mama-yki-kuna		
mother-2-PL		

By that route your ancestors pastured animals. (Individual knowledge)

(p. 26) In (10), using *-cha:* implies that the speaker states her knowledge shared with a community of face-to-face interactants:

(10)

Tsay-pa-**cha:**	qati-ya-ra-n	*South Conchucos Quechua*
that-GEN-DIR.MUTUAL	follow-PL-PAST-3	
mama-yki-kuna		
mother-2-PL		

By that route your ancestors pastured animals (as we all know). (Shared knowledge)

A speaker can manipulate evidentials, depending on the effect they wish to achieve. Thus *-cha:* can be used to frame individual knowledge as if it were shared knowledge. The

speaker, Celestina (*Shilli*), answered the question ‘what is your name?’ with the mutual knowledge evidential *-cha:*, inviting the interlocutor ‘to become an insider, to join her “mutual knowledge” community’.

(11)

Question	Ima-ta:	huti-ki?	*South Conchucos Quechua*
	what-POLAR.QUESTION	name-2	
	What’s your name?		
Answer	Shilli-**cha:**		
	Celestina-DIR.MUTUAL		
	Celestina (as we both now know).		

According to a consultant, a response *Shilli-**mi*** (Celestina-DIR.INDIV) would have signalled that ‘the personal information is simply being supplied as requested, not freely shared as a mutual knowledge building ability’ (Hintz and Hintz 2017). Evidentials can thus be manipulated to express social inclusion—we return to this in §1.5.

Interrelations between evidentials and person can be more elaborate. Sihuas Quechua, spoken in an area northwest of South Conchucos, also differentiates individual and mutual knowledge for direct and conjectural evidentials (Hintz and Hintz 2017; see also Table 2.4 in Chapter 2, this volume). There is an additional distinction between two reported evidentials, *-shi* ‘reported information’ and *-sha* ‘generalized knowledge from reported information’. This evidential marks access to knowledge by a ‘third person’, or a communal perspective (in the spirit of the ‘general knowledge evidential in Mamaindê, §17.7), and is considered the most reliable (Hintz and Hintz 2017) (see also Gipper 2014, on how the addressee’s knowledge is relevant for the use of reported and inferential evidentials in Yurakaré, an isolate from Bolivia).

Markers of evidentiality may acquire specific meanings depending on the person of the speaker. In many languages, the visual evidential (or a firsthand evidential, depending on the system) may acquire overtones of certainty, especially with first person subject. But it cannot be used to talk about my own internal states (or ‘endophoric’ expressions)—or instance, things one cannot directly observe. A non-visual, inferred, or non-firsthand evidential with first person may imply something beyond my control, or conscious realization. In Lars Johanson’s words (§24.7), ‘the use of indirectives when speaking of oneself would then necessarily imply lack of awareness, consciousness or control due to inattention, sleep, drunkenness, coma, etc.’. This is the essence of ‘first person effect’ in evidentials addressed in §2.4 and in numerous chapters throughout this volume.[17] (p. 27)

Evidentials tend to be most frequently used with third person subjects (see Chapter 2). In Trio and Wayana (§16.3.1) ‘it is unusual to make assertions about a second person’: one avoids making an assertion on behalf of the addressee. Instead, the action of a second person is framed as a question. A similar technique has been described for Murui Witoto (§19.3.2).

In Paztaza Quichua (PQ; §10.2.2), the direct evidential *-mi* is common with first and third person forms, and 'is found only sporadically with second person': its use with second person is plainly face-threatening. As Janis Nuckolls puts it, 'it is possible to understand this pattern as related at least in part, to a cultural reluctance on the part of PQ speakers, to assume the perspective of another individual by presuming to make claims about their thoughts and intentions. This reluctance can be understood as a type of negative politeness because it is characterized by restraint, and the desire to not impose one's views, evaluations, judgements, and suspicions on others'. This takes us to the role of evidentials in communication and their interaction with cultural practices.

1.5. Evidentiality in communication and discourse

Evidentials allow speakers to state the information source of what they are talking about and frame knowledge patterns. When relating an event in a language with grammatical evidentials, the speaker may have to choose the information source. What if the event was seen, and heard, and can also be inferred from some visible traces? In many languages, what one has seen takes preference. This is reflected in preferred evidential options described for Tuyuka by Barnes (1984: 262): no matter what other information source the speaker has, 'if, at any point, he [the speaker] saw or is seeing the state or event he reports it using a visual evidential'. The empirically proven preferences in evidential choices when one has access to multiple sources of information in a multi-term system is summed up in Figure 1.5 (see Aikhenvald 2004a: 307).

Visual < Non-visual < Inferred (based on visual traces) < Reported < Assumed

Figure 1.5. Preferred evidential choices

The preference for visual information source—if it is available—goes together with its being formally less marked (as we saw in §1.3.2), and, in a few systems, considered more 'reliable'.[18]

(p. 28) What are evidentials good for? As Janis Nuckolls puts it in §10.1.1, 'speakers of Pastaza Quichua are careful to clarify the sources of their statements, *not* because they wish to be empirically accountable to objective facts that are verified by means of evidence. Rather, they exercise such care because there is a cultural preference for contextualizing statements within what Nuckolls and Swanson have termed a 'concrete perspective'—a perspective 'which involves specifying the details that make any statement intelligible, such as speakers' personal experiences and memories of specific places, activities, and knowledge about people in their social networks' (Nuckolls 2010; Nuckolls and Swanson 2014).

Manipulating evidentials in a narrative allows a speaker to be versatile (as highlighted by Anne Storch in §29.2.1) creating multiple perspectives by highlighting multiple information sources. In Quechua narrative discourse, evidentials are a key grammatical resource for signalling the emergence of a story line (see, for instance, §11.1). Manipulating evidentials, egophoric, and factual markers in a Lhasa Tibetan autobiographical narrative (§27.6) allows the speaker to present a story from different angles. An aside comment in Abkhaz can be cast in non-firsthand evidential—no matter what evidential the story itself is cast in (Chirikba 2003: 247–8).

Alternating firsthand and non-firsthand evidentials is a prominent stylistic device in Macedonian. The non-firsthand past tense is the unmarked choice for a Macedonian folktale. The narrator may switch into the firsthand form to make it sound more vivid. The firsthand past can also be used for well-established historical facts. Overusing it may produce a negative reaction. A striking example of how the choice of an evidential affects the perception of the text by the readers comes from comments on a book about Alexander the Great by Vasil Tupurkovski, a Macedonian politician. Friedman (2003: 207) reports that many Macedonians 'saw the book as a nationalist ploy' and criticized the excessive use of the firsthand (confirmative) past. The effect of an 'overuse' of these forms 'was felt to be bombastic, as if he were trying to present himself as the direct heir of Alexander the Great'.

These instances highlight the importance of the discourse context for evidential use, and their meanings and functions. In child language acquisition, context is essential to 'transparently identify for the young learner the situations to which different evidentials apply', within language socialization processes (see §9.8.4).

Established, or 'conventionalized', evidential choices may come to be associated with particular genres. In many languages, a reported evidential is used for folk tales and myths (see, for instance, §29.3.2 on Maaka, a Chadic language; and Ramirez 1997b: 246; §18.4, this volume on Tukano, an Eastern Tukanoan language; and Chapter 20 on Uto-Aztecan languages). The use of different evidentials may correlate with different kinds of tales: according to Kaye (1970: 33–5), traditional oral tales in Desano, an Eastern Tukanoan language, are told using the reported evidential, while non-traditional stories introduced from other cultures are marked with inferred evidential (Kaye 1970: 33–5). In Tariana, autobiographies are cast in visual evidential. Traditional legends and myths about ancestors' travels are cast in assumed evidential (similarly to Desano, as described by Miller 1999: 66–7; Aikhenvald 2003a: 300–1). Tales and also gossip are cast in reported evidential. The non-visual evidential is used in texts relating shamanic experience.

Unusual kinds of experience may be encoded with a special evidential choice. Speakers of Trio and Wayana talk about shamanic attacks on them using a non-witnessed evidential. Being attacked by a shaman generally 'brings on' or 'causes' an altered state of consciousness (p. 29) in the victim (Chapter 16). Shamanic predictions in Nganasan are cast in the reported evidential (or 'renarrative': see §25.3.4.3), since a shaman receives them from a spirit. In contrast, in Trio and Wayana shamans talk about their supernatural expe-

rience using a witnessed evidential, since what they report 'entails being in an alternate reality whereby the shaman is an active agent' (§16.3.2.1). A speaker of Dyirbal would use a non-visible marker to talk about spirits (Dixon 2014).

In Kracke's (2009: 73) words, 'the knowledge in a dream is received as a communication from beyond. Hence it cannot be coded as personal experience'. Indeed, in quite a few languages dreams are treated as 'unconsciously acquired experience', and then told using a reported evidential. This is what happens in Kanakanavu, Saaroa, and Tsou (see Chapter 31) and Kankanaey, a Philippine language (§32.4.1). Both Kalmyk (§26.4) and Tsakhur (§23.2.2) employ an indirect evidential.

Experience acquired in a dream may be marked differently depending on the person's status. In Shipibo-Konibo, dreams experienced by ordinary humans are not part of reality —and so they are recounted using the reported evidential =*ronki*. However, if a shaman has a dream or a vision induced by the hallucinogenous *ayahuasca* he will retell this experience using direct evidential (see also §18.4 and §12.3). The use of evidentials is linked to the speaker's 'epistemic authority', rights of access to knowledge and hence power.

Evidentials are part of expressing knowledge as a form of social action reflecting social relations between people (in the spirit of Hill and Irvine 1993a: 17)—an issue pursued in detail in Chapters 11 and 29 (and see also §12.1). We saw in example (11), from South Conchucos Quechua, how evidentials can be used to mark social inclusion. Incorrect or incompetent use of an evidential may produce an opposite result.

The accurate use of information source markers is, in Hardman's (1986: 131) words, 'highly esteemed by the Jaqi people; minimum competent use is a prerequisite to a claim to human status'. David Weber (1986: 142) describes a speaker who was over-using the direct evidential *-mi* in Quechua. To many, this sounded 'incautious with respect to the information' conveyed; the man was judged to be 'not a member of a Quechua speaking community which values his stature'. The man who over-used the direct evidential was dismissed as someone who 'always speaks as though he had witnessed what he is telling about. At best he is an argumentative braggart'. Weber concludes that the man must have been mentally ill. The correct use of evidentials is the 'token' of a good speaker and a competent person among the Mamaindê (Eberhard 2009: 468). As Eberhard (2009: 469) puts it,

> The avoidance of being wrong is intrinsically related to the avoidance of losing face. The entire Mamaindê evidentiality system, then, may have the larger social function of providing the speaker with a way to avoid losing face within a society where one's words are connected to one's character.

How does the presence of an evidential correlate with written or oral forms of the language? The introduction of written texts into the Bosavi (or Kaluli) language from Papua New Guinea has resulted in the creation of a new evidential and epistemic marker referring to something known from this source and not known before (see §30.7.1, and §12.1).

Philippine languages tell us a somewhat different story. As Josephine Daguman (§32.6.2) puts it, 'the formulaic and other discourse functions of the reportative in traditional oral storytelling is disappearing as fast as the verbal arts are falling out of use'; the reported (p. 30) evidential is hardly used in written collections of traditional stories. But it is very much alive in literary pieces—the presence of an evidential 'contributes to making the written material sound natural rather than staid'. The interdependencies between evidentiality systems and the oral versus written modes await further investigation.

A linguistic category of evidentiality has 'cognitive consequences' (§8.4)—there appear to be daunting correlations between the presence of evidentiality and the speaker's ability to remember the information source (also known as 'source monitoring').

Speakers of many languages with evidentials—including the Paztaza Quichua—value precision when claiming knowledge about anything. In Anne Storch's words (§29.2.2), clarity and transparency in information source, one's right to knowledge and attitude to it may be seen as a 'strategy to avoid conflicts arising from claiming undue authority over knowledge and information'. The sociolinguistic context, correlations with authority and societal structures, social inclusion, and exclusion are just some of the factors behind the *raison d'être* of linguistic evidentials.

1.6. Summing up: How evidentials are special

I. Evidential systems are closed grammatical sets whose main meaning is information source. They cover a limited set of semantic parameters—visual, non-visual sensory, inference, assumption, speech report, and quotation (see Figure 1.3). The recurrent types of linguistic systems which group the parameters together is shown in Table 1.1.
II. The scope of grammatical evidentials is usually the clause, or the sentence. A noun phrase may have its own evidentiality specification, different from that of a verb. Other means of expressing information source (see Figure 1.2) offer open-ended options in terms of their semantics, and can be more flexible in their scope.
III. The expression of knowledge with any means available—as a phenomenon within a given social context—may reflect speakers' reliability, attitude to information and epistemic stance, speakers' 'control over knowledge' together with the relevant sociolinguistic setting and interpersonal relations. The choice of information source may depend on speaker's view of the situation: this is reminiscent of Jakobson's (1957: 135) characterization of evidentials as 'shifters' reflecting its essence as a deictic category (see, for instance, Joseph 2003b: 308; and §10.1, this volume).
IV. Evidentials do not reflect truth or reliability of a proposition, nor do they offer a 'justification' or a warrant for knowledge, or 'evidence'. One can tell a lie purposefully using a wrong evidential (see examples in König 2013 and Aikhenvald 2003d).
V. Depending on the system, evidentials may or may not have additional meanings of epistemic nature, having to do with probability or possibility.

VI. The maximum number of evidentials is distinguished in declarative main clauses. The choice of an evidential may depend on that made in the tense, aspect, mood, or person, system. The evidential—that is, the information source—can have its own time reference (§1.4.2).
VII. An evidential can be questioned (see §1.4.1.2). It can be within the scope of negation: this has been described for Akha, a Tibeto-Burman language (Hansson 1994: 6, 2003: 249; Egerod 1985).
(p. 31) **VIII.** Information source covered by an evidential is typically that of the speaker—but it may also include the addressee, and even a third person (§1.4.3).
IX. Unlike many other grammatical categories, an evidential can occur more than once in a clause, reflecting the same observer, or different observers, perceiving the information through different albeit compatible avenues (as in Bora, example (36) in §19.4.1; cf. Aikhenvald 2004a: 85–96, 2014: 12). The same evidential used more than once in a clause may have emphatic connotations, as in Kanakanavu (§31.5.1).
X. Evidentials easily spread in language contact. They are a feature of numerous established linguistic areas.
XI. The use of evidentials correlates with clarity and transparency in how one knows things. The requirement to be precise, and the importance of expressing oneself well, appear to be a major motivation for having evidentials in one's language. Speech genres and types of experience may acquire their own conventionalized evidential marking.
XII. Evidentials reflect social relations, the speaker's stance, and position within the community—which is a reason for special importance of their study in natural discourse and interaction.

1.7. About this volume

The focus is evidentiality and information source within the context of the expression of knowledge through grammatical and lexical means—a topic attractive to linguists, anthropologists, cognitive scientists, and even lay people. The past few years have seen an exponential growth in discoveries of new evidential systems in previously little-known languages. And there has been a veritable surge in new attempts to understand, and reinterpret, evidentials and other means of expressing knowledge from many a perspective. This volume offers a state-of-the art view of evidentials and related notions, their role in communication, cognition, and child language acquisition, together with cultural conventions of evidential use and their possible correlations with societal parameters.

Our special focus is on evidentiality systems across the world's languages—both well-known and previously undescribed. Only through these foundational studies can we progress towards better understanding of what information sources can be expressed, how languages come to express them, and how much remains to be done. The overwhelming majority of contributions are based on in-depth firsthand experience with rele-

vant languages, language families, and grammatical phenomena. The volume is divided into three parts.

Part I, ‘Evidentiality: its expression, scope, and history’, consists of six contributions. The first three focus on how evidentiality interacts with other categories and meanings. In Chapter 2, Jackson Sun discusses the relationship between evidentiality and person, including egophoricity and special meanings of ‘me’ and ‘you’ in the context of different evidential terms. Correlations between person and evidentials are analysed in terms of control, observability, and access to knowledge. Special attention is given to the addressee’s perspective and addressee’s knowledge in the choice of an evidential. In Chapter 3, Diana Forker offers a comprehensive view of the ways in which evidentiality—when expressed on verbs—interrelates (p. 32) with a plethora of other categories. These include tense, aspect, modality, polarity, person agreement, mood/speech act type, finiteness, aktionsart/semantically defined verb classes, and mirativity. Björn Wiemer, in Chapter 4, discusses the interactions between the notional domains of information source and epistemic modality. He surveys various approaches to these, together with the distribution of epistemic and evidential extensions of various forms and categories. Epistemic extensions can often be interpreted as Generalized Conversational Implicatures which correlate with reliability and discourse expectations.

The topic of Chapter 5, by Guillaume Jacques, is non-propositional evidentiality; that is, evidential-like distinctions with a noun phrase in its scope. The chapter starts with a discussion of different types of non-propositional evidential markers (the most common of which are demonstrative pronouns and determiners). It then turns to correlations between markers of non-propositional evidentiality and other categories, and offers generalizations as to their semantics, and commonalities, and differences between propositional and non-propositional evidentiality.

The last two chapters of Part I take a historical angle. Chapter 6, by Victor Friedman, examines the origins of evidential marking, with a focus on the languages of the Eurasian continent, especially on those of the Balkans—an area particularly well-known for its evidentiality systems. Evidentials may develop through contact, or by grammaticalization of evidential strategies and lexical items. Reinterpreted past tenses, subordinate clauses, and nominalizations are major sources for the development of evidentials. Chapter 7, by Alexandra Aikhenvald, examines contact-induced change in evidentials, and their exceptional diffusability across languages in contact, with special attention to established linguistic areas, such as the Balkans, the Caucasus, the Baltic, and the Vaupés River Basin. Evidentials can be easily gained and lost in language contact, and they make their ways into contact languages including Spanish and Portuguese.

Part II, ‘Evidentiality in cognition, communication, and society’, features five contributions. Chapter 8, by Ercenur Ünal and Anna Papafragou, investigates how conceptual representations of sources of knowledge relate to linguistic evidentiality. Which aspects of cognition are shared by speakers of different languages with and without evidentials? Which aspects may be susceptible to linguistic influences? The recent findings suggest

that linguistic categories of evidentiality build on conceptual representations of sources of knowledge that are shared across speakers of different languages. How do children learn the evidential system of their language? Chapter 9, by Stanka Fitneva, reviews the existing research on this topic, providing insights into the contributions of cognitive processes to children's learning of evidentials and the importance of socialization processes in helping children break the code of evidentials.

The next two chapters focus on the use of evidentials in discourse and interaction, based on firsthand examination of two Quechuan languages. Chapter 10, 'The interactional and cultural pragmatics of evidentiality in Pastaza Quichua', by Janis Nuckolls, analyses the interactional and pragmatic effects of two evidential enclitics in the language, with a view to a better understanding of how the use of evidential markers may clarify speakers' understanding of their relationships with each other, and the general nature and the role of evidentials in articulating concepts of sociability, and politeness principles. Chapter 11, 'Evidence and evidentiality in Quechua narrative discourse', by Rosaleen Howard, addresses ways in which evidentiality operates in the context of narrative performance in a variety of Quechua spoken in the central highlands of Peru. The grammatical marking of source and status of (p. 33) knowledge expressed through evidentials, and discursive ways of expressing evidence for knowing what is known, vary according to factors related to the situation of performance—demonstrating the importance of evidentiality, tense, epistemic modality, deixis, and reported speech in constructing discourse.

How can evidentials correlate with social stereotypes and perhaps social structures? In Chapter 12, Michael Wood outlines the history of conceptual relationship between evidentials and stereotyping, as distinct and productive concepts that have recently generated interesting research agendas in anthropology—notwithstanding a certain indeterminacy concerning the key terms—and recent investigations in this emerging area.

Part III, 'Evidentiality and information sources: further issues and approaches', consists of three chapters. In Chapter 13, 'Evidentiality: the notion and the term', Kasper Boye surveys the ways in which evidentiality is conceived of and referred to, with an outline of the history of the terms, and the role of epistemic notions, intersubjectivity, grammatical versus lexical encoding, and discourse prominence in alternative approaches to evidentials and related notions. Chapter 14, 'Extragrammatical expression of information source', by Mario Squartini, analyses a number of lexical items connected to the expression of information source (focussing on verbs of direct perception and of appearance), so as to ascertain to what extent a comprehensive treatment of lexical and grammatical expressions of information source might shed additional light on both lexicon and grammar.

In the recent decades, evidentiality has been the focus of formalist linguistics, in particular, formal semantics. Chapter 15, by Margaret Speas, addresses recent proposals about how the meanings of evidentials should be captured within formal semantic theories, which attempt to model compositional meaning in a way that gives insight into possible semantic variation, focussing on what can be captured with the existing formal tools, and

whether a limit to the range of possible evidential meanings can be constrained by formal approaches.

Typological research expected to produce substantive and meaningful generalizations about languages has to be based on the analysis of languages themselves. The heart of the matter in any typological study is the analysis of the systems attested in the world's languages. Not every linguistic area or language family is of the same relevance to the study of evidentiality. Grammatical evidentials are a feature of many languages of South America (both the Andes and the Lowland Amazonia), Eurasia, the Pacific, New Guinea, and a few regions within Australia (see Aikhenvald 2015a, 2014: 14–16). Quite a few evidential systems have now been described for a variety of African languages (see Chapter 29; an overview in Botne forthcoming; and Aikhenvald 2004a, and 2014: 43).[19] Some genetic groups, such as the Semitic or the Cushitic families within Afroasiatic, Tai-Kadai or Hmong-Mien languages, have hardly any evidentials in their grammar. Part IV, 'Evidentiality across the world', is the centrepiece of this volume. It offers twenty-two in-depth empirical studies of evidentials, spread across linguistic families and areas, and modes of communication.

(p. 34) Part IV covers a selection of language families, linguistic isolates, and linguistic regions with evidentials (and evidentiality strategies) of particular interest, most of which have never before been comprehensively analysed. We have not included those families for which evidentiality has already been described in some depth (such as Northwest Caucasian languages: see Chirikba 2003, South Caucasian languages: see, for instance, Hewitt 1995; and Boeder 2000, Australian Aboriginal languages: see a summary in Aikhenvald 2004a, 2014: 14–16, Panoan languages: see Valenzuela 2003; Fleck 2007, and a few families in North America: see, for instance, McLendon 2003 on Pomoan languages; de Reuse 2003 on Athabaskan languages; and an overview by Mithun 1999). Languages of the Andean domain—Quechuan and Aymaran—have intricate systems of evidentials described in a variety of sources (including Adelaar 2004 and 2017a). Chapters 10 and 11 in Part II focus on discourse and interactional functions of evidentials in two different Quechuan languages.

We start with a selection of languages of Amazonia—a region known for its diverse evidentiality systems (see Aikhenvald 2012a: 248–78). A two-term system of witnessed versus non-witnessed evidentiality in two North Cariban languages, Trio and Wayana, is discussed by Eithne Carlin in Chapter 16. Wayana has an additional reportative marker. The statement of information source permeates the cultures of these Cariban peoples. This chapter looks into the use of evidentials in everyday speech as well as in oral traditions.

In Chapter 17, David Eberhard offers a comprehensive analysis of evidentials in Nambikwara languages of Southern Amazonia. Members of this small family boast one of the most complex systems of evidentials in the world. Four to eight evidential terms cover visual, non-visual, inference, assumption, and secondhand and thirdhand report, coupled with the distinction between individual and multiple perspective in some of the languages. Non-propositional evidentiality may be expressed in a different way.

Tukanoan languages of Northwest Amazonia are renowned for their complex systems of obligatory source-of-information marking, with the number of terms ranging from two to five or six. Evidentials in the Eastern Tukanoan branch are particularly complex, interacting with numerous other categories. In Chapter 18, Kristine Stenzel and Elsa Gomez-Imbert offer a pioneering overview of evidentiality across the Tukanoan family, and its historical development. Evidentiality in Boran and Witotoan languages, spoken close to each other in northwest Amazonia, is the topic of Chapter 19, by Katarzyna I. Wojtylak. Bora has three evidential choices, while Witotoan languages have just a two-term evidential system, in addition to a plethora of epistemic markers.

Evidentiality systems in the native languages of North America are highly diverse (see Mithun 1999). In Chapter 20, Tim Thornes offers an in-depth analysis of the expression of evidentiality among the languages of the Uto-Aztecan family, one of the largest on the continent. All the languages surveyed in this chapter mark, at a minimum, reported information, and most of them also carry some means for marking inference. Just a few languages express perceptual information source, either visual or auditory. The chapter offers a historical perspective on the development of evidentials across the family.

Chapter 21, by Marie-Odile Junker, Randolph Valentine, and Conor Quinn, offers a detailed and comprehensive account of three representative branches of the Algonquian family—the Cree-Innu-Naskapi continuum, Ojibwe, and Eastern Algonquian. These dauntingly complicated languages distinguish direct and indirect evidentiality, in addition to special inferential forms and a number of uninflected particles expressing reported information. (p. 35) Evidentiality has traditionally been overlooked in many a grammatical description of Algonquian due to the treatment of relevant phenomena as essentially epistemic.

Tsimshianic languages are a small family spoken in the north of Canada. In Chapter 22, Tyler Peterson addresses what can be analysed as a two- or three-term evidentiality system in the critically endangered Gitksan, one of the four members of the family. The meanings related to information source appear to have very strong epistemic overtones, in all likelihood enhanced by the author’s reliance on modal verbs used as translational equivalents of the Gitksan morphemes in the course of his translation-oriented fieldwork (which may have been all that was possible in a situation of language obsolescence).

We now turn to the Eurasian continent, starting with relatively small evidentiality systems in Nakh-Daghestanian languages described by Diana Forker in Chapter 23. The vast majority of Nakh-Daghestanian languages express evidentiality—mostly indirect evidentiality, including hearsay and inference. The chapter also presents a short overview of related constructions covering egophoricity and epistemic modality. Chapter 24, by Lars Johanson, offers an illuminating in-depth account of various Turkic evidential categories, which typically express the notion of indirectivity—indicating that a narrated event is stated in an indirect way by reference to its reception by a conscious subject. Some more elaborate Turkic systems distinguish between reported and non-reported information source.

Chapter 25, by Elena Skribnik and Petar Kehayov, gives an overview of evidential systems in Uralic languages, with smaller two-term systems in Finnic, Mari, Permic, and Ob-Ugric, and larger—three- to four-term systems—in Samoyedic languages. Grammatical evidentiality cannot be considered an inherited feature of Uralic languages: its origins are due to areal diffusion and independent innovations within the subbranches. Chapter 26, by Benjamin Brosig and Elena Skribnik, focuses on evidentiality in another large family within the Eurasian continent—Mongolic languages, from Middle Mongolian (attested from the thirteenth century) with three evidential markers, to larger systems in Khalkha and Kalmyk (with seven evidential specifications).

Tibeto-Burman languages have highly complex systems of evidentials, interlinked with egophoricity (access to knowledge). Chapter 27, by Scott DeLancey, offers an exemplary account of evidentiality, factuality, and egophoricity as distinct categories related to the expression of knowledge in Tibetic languages, concentrating on the Lhasa variety. The Bodic group of Tibeto-Burman languages code a wide range of epistemological categories, including evidentiality (source of knowledge), mirativity (expectations of knowledge), and egophoricity (access to knowledge). Chapter 28, by Gwendolyn Hyslop, differentiates these interrelated categories with remarkable clarity, and systematically addresses their expression in a range of Bodic languages. Bodic languages commonly encode oral source of knowledge and less commonly encode indirectly acquired information.

Evidentials in African languages—the topic of Chapter 29, by Anne Storch—are quite diverse. The attested systems range from a distinction between firsthand and non-firsthand information to extensive repertoires of markers which express information source intertwined with control over knowledge and reliability of inferred information. Focussing on Jukun and Maaka, from Nigeria, and Luwo, from South Sudan, the chapter explores the sociolinguistic context of evidentials and other means of expressing knowledge and speakers' attitude to it.

The island of New Guinea—a locus of great linguistic diversity—remains the 'last unknown' in many ways. Chapter 30, by Hannah Sarvasy, offers a comprehensive survey (p. 36) of evidentials across several score languages of New Guinea. Most languages spoken on the island lack grammatical evidentiality. The systems appear to be as diverse as the languages, ranging from small systems with only one marked evidentiality category to systems in which five or more categories are marked. Most languages with well-developed grammatical evidentiality are found in a region of Papua New Guinea known as the Highlands Evidentiality Area.

Evidentiality is hardly a prominent feature of most languages within the large Austronesian family, and it has never been explored in detail. Chapter 31, by Chia-jung Pan, investigates evidentiality in five Formosan languages within Austronesian—Bunun, Paiwan, Kanakanavu, Saaroa, and Tsou. The languages vary as to how many information sources are marked. Tsou has the richest system of grammatical evidentials, with an additional distinction between propositional and non-propositional evidentiality (fused with case). Over two-dozen Austronesian languages of the Philippines have just one, reported, evi-

dential. In Chapter 32, Josephine Daguman offers a detailed discussion of grammatical and semantic features, and pragmatic and discourse overtones of the versatile reported evidential together with its use in oral and written discourse, and diffusion due to social changes.

The grammatical phenomenon of evidentiality in Korean and the expression of information source is the topic of Chapter 33, by Ho-min Sohn. After discussing various proposals concerning the status of evidentials in the language, the chapter offers a definitive analyses of the Korean evidential system as consisting of three grammatically and semantically distinct subclasses: perceptual, quotative/reported, and inferential, each of which has two or more member evidentials. As inflectional suffixes, all evidentials occur optionally in pre-final or final slots in predicate constructions. All Korean evidentials have developed from non-evidential suffixes, phrases, or bi-clausal constructions via grammaticalization.

Chapter 34, by Heiko Narrog and Wenjiang Yang, provides an overview of the structure, meaning, and use of evidential markers in Modern Japanese and a brief summary of evidential markers through Japanese language history. Inferential evidentials and reportative markers in Japanese are realized as suffixes on a variety of (mainly verbal) predicates, and as grammaticalized nouns. The chapter discusses the issue of 'direct' evidential uses, the distinction between reportatives and quotatives, and the interaction of evidentials with tense, aspect and modality, and their use in questions.

Many Romance languages—especially Latin American Spanish and Portuguese varieties—have an emergent evidential form *dizque,* or *diz que* 'says that'. Chapter 35, by Asier Alcázar, offers an overview of diachronic and synchronic investigations of this and other new evidential markers (complementizer *que* 'that', *digamos* 'let's say') and *dizque* variants (*que dizque, quesque*). The form *dizque* may be a reportative and/or quotative evidential, with or without epistemic and mirative extensions. Contact with Quechua is thought to have accelerated its grammaticalization in some dialects.

Signed languages stand apart from spoken languages in how they are produced—using manual signs and facial expressions. Chapter 36, by Sherman Wilcox and Barbara Shaffer, examines the expression of perceptual information, inference, and reported speech in a selection of signed languages—American Sign Language, Brazilian Sign Language, and Catalan Sign Language. The intertwined meanings of evidentiality, epistemic modality, and mirativity in signed languages are primarily expressed through grammaticalized facial markers, which allow for simultaneous expression of grammatical meanings rather than by means of manual signs.

(p. 37) This handbook presents the results of investigating evidentiality within various subfields of linguistics and also anthropology, and in focal areas across the world. It is our hope that it will strengthen the conceptual base of research on evidentials, and provide an impetus for better understanding evidentials in human languages (especially those poorly documented) and for discovering new, hitherto undocumented evidential systems across the world. In spite of differences along many parameters, evidentials reflect a unified phenomenon—the ways of knowing things coupled with underlying cognitive mecha-

nisms and patterns of social interaction. We hope that this handbook will provide the basis and the inspiration for further exciting insights.

Appendix A Fieldworker guide to evidentiality systems: Checklist of points

This checklist is intended for a field linguist working on a previously undescribed or insufficiently documented language with orientation to the questions which should be addressed in order to establish a complete picture of how an evidential system and/or evidential strategies are organized in the language.[20] Ideally, a grammar ought to deal with as many as possible of the topics listed here. Questions relevant for establishing and analysing evidentials are divided into nine broad areas. After each question, a brief explanation is given; relevant chapters of this book are indicated in parentheses. As outlined in §1.1.4, working on evidentiality should be based on naturally occurring texts and conversations, avoiding elicitation and translating sentences from a metalanguage (see also Dixon 2010a: 309–30, Aikhenvald 2015c: 20–9 on fieldwork methodology).

I. Organization of the evidential system

1. Is evidentiality in the language an obligatory grammatical category? Or does the language have an evidentiality strategy? Or a combination of these?
2. If the language has obligatory evidentiality, how many terms are there in the system? What type of system is there (see Table 1.1 in Chapter 1 for the recurrent parameters)? Could you give as full a description as possible, providing good examples from texts or conversations (not from elicitation)?

II. Expression and scope of evidentials

1. What are the grammatical means employed for expressing evidentiality?
2. Is there a functionally unmarked term in the system? Is one term formally unmarked, or less marked than others?
(p. 38) **3.** Is a choice from an evidentiality system obligatory? Does the system have an evidentially neutral option?
4. Does the language have evidentials as one grammatical system? Or are evidentiality distinctions ‘scattered’ across various parts of the grammar? Is there more than one subsystem of evidentials?
5. Can an evidential occur more than once in a clause?
6. Can more than one information source be marked within a clause? If so, does it reflect different perception by multiple recipients, or do the two sources confirm and reinforce each other? (See the range of possibilities in Table 3.3 of Aikhenvald 2004a.)

7. Can an evidential be within the scope of negation? Can an evidential be questioned? Can the time-reference of an evidential be distinct from that of the clause's predicate? That is, can the reference to the time of the utterance be different from the reference to the time when the information was acquired from a particular source?
8. Can a noun phrase be marked with an evidential? What are semantic and grammatical properties of non-propositional evidentials?

III. Evidential extensions of non-evidential categories, or evidentiality strategies

1. Are there any non-evidential categories which acquire an additional meaning to refer to the source of information? Do any of the following acquire any evidential overtones: non-indicative moods; past tenses, resultatives, and perfects; modalities; passives; nominalizations (including participles and infinitives) as heads of predicates and as part of complex predicates; complementation strategies, and person marking? Are any perceptual meanings expressed in demonstratives, and if yes, how do they correlate with perceptual meanings in evidentials? Does the language have any modal expressions (for instance, modal verbs) with evidential extensions?
2. Does the language have more than one evidential strategy? If so, what are the semantic differences between these?
3. How does the language mark reported speech? Is there a special indirect speech construction? If the language also has a reported evidential, how does this compare with reported speech strategies? Do direct quotations have any epistemic overtones?

IV. Semantics of evidentials

1. What are the semantic parameters at work in the evidential system of the language? How do the parameters in §1.3 apply to the language (also see Table 1.1). If the language has an 'eyewitness' term, does this cover visual and non-visual sensory information? If there is a corresponding 'non-eyewitness' term, does this subsume reported and inferred information sources? What sorts of inference can be expressed (e.g. inference based on reasoning, inference based on observable results)? Is the 'reported' term used for secondhand and thirdhand? Is there a special quotative evidential?
2. Do any of the evidential terms have epistemic or hypothetical extensions? Does the 'reported' term have any connotation of 'unreliable' information?

V. Evidentiality and person

1. Are there any restrictions on using any evidential with first person?
2. Do any of the evidential terms have a 'first person' effect (see §1.4.3)?
(p. 39) **3.** Can you say anything on the semantics of evidentials with non-first person?
4. Are there any differences in how evidentials may or may not be used with second person?
5. If the language has egophoricity (see §1.4.3), how does it correlate with evidentiality?
6. How are evidentials used with verbs of internal state (feelings, emotions, physical conditions) depending on the person?

VI. Evidentiality and other grammatical categories

1. How are evidentials used in questions? Does the use of an evidential in a question presuppose the questioner's assumption about the answerer's source of information? Or does it presuppose the questioner's information source? Is there any evidential that implies information source of a third party? Are fewer evidentials used in questions than in indicative clauses?
2. How are evidentials used in commands (if used at all)?
3. Are evidentials used in dependent clauses of any type? What other clause types are evidentials used in, and how do these relate to the evidentials in statements?
4. How are evidentials used in negative clauses? Are there fewer evidential specifications in negative clauses than in positive clauses?
5. Are there any restrictions on the co-occurrence of evidentials with any tenses or aspects? Are there evidentiality distinctions in future tense?
6. Are there any dependencies between evidentials and other categories (such as politeness, grammatical relations, and gender)?
7. Do any of the evidentials have mirative extensions (to do with expectation of knowledge)?

VII. Evidentiality in discourse and lexicon

1. Are there any preferences for the use of evidentials in particular discourse genres (e.g. historical narratives or folklore)?
2. Can evidentials be manipulated as a stylistic device (e.g. to make the narrative more vivid)?
3. If there are competing information sources, which one is preferably marked with an evidential?
4. Are evidentials employed in any lexicalized speech formulae?

5. Are there different rules for evidentials depending on the semantic type of the verb used (e.g. verbs of feeling or of internal state)?
6. Does the tentative hierarchy of evidential choices formulated in Figure 1.4 apply to the language?

VIII. Origin of evidentials

1. What can you say about the origin of evidentials in the language? Did they develop from grammaticalized verbs, or as the result of grammaticalization of an evidentiality strategy, or from some other source (e.g. copula construction, lexical verb or noun)?
2. Is evidentiality inherited from a protolanguage, or is it diffused from neighbouring languages? Or a mixture of the two?
3. Is there any evidence of calquing evidentials into contact languages?

IX. Evidentials, and cultural attitudes and conventions

1. Do you have any examples of metalinguistic appraisal of evidentials by native speakers of the language? Are speakers of the language aware of the array of evidentials and, if this is the (p. 40) case, the lack of it in contact language(s)? Do the speakers rephrase evidentials with corresponding lexical items for the purposes of clarification?
2. How do evidentials correlate with conventionalized attitudes to information? For instance, does one have to use ‘visual’ evidentials to talk about shamanic revelations? Are dreams told using a ‘visual’ or another evidential? How are European innovations treated—can the visual evidential be used to describe what one had seen on TV? How do speakers retell what they have read, or heard on the radio? Or over the telephone? And so on.
3. Can any speculations be made concerning the correlations between evidentials and cultural requirements (such as being precise)? Do you have any examples of miscommunication due to misuse of evidentials?

Not all of the questions here will be applicable to every language. And there may be additional issues not included here. It is hoped, however, that this set of points to cover will provide a basis for further in-depth empirical studies of evidentials worldwide.

Appendix B Evidentiality and related concepts: Glossary of terms

This short glossary explicates the ways in which some core linguistic terms are used throughout this book, within the context of problems linked to evidentiality. Complementary terms are referred to by ‘Compl’. Synonyms are referred to as ‘Syn’. Chapters within this volume are referred to by their numbers.

Admirative:
a mood-type paradigm with surprise as its main meaning (as in Albanian: Friedman 2003: 192).
Assumed evidential:
information source based on conclusions drawn on the basis of logical conclusion and general knowledge and experience.
Auditive:
a term in Uralic linguistics used to refer to an evidential covering information acquired by hearing and sometimes also by hearsay.
Complement clause:
a special clause type whose exclusive function is to occupy the argument slot of a main verb.
Confirmative:
a term in Balkan linguistics referring to the eyewitness evidential. Compl: NON-CONFIRMATIVE. See Friedman (2003).
Conjunct/disjunct:
person-marking on the verb whereby first person subject in statements is expressed in the same way as second person in questions, and all other persons are marked in a different way. (Also used to describe cross-clausal co-reference). Syn: LOCUTOR/NON-LOCUTOR and CONGRUENT/NONCONGRUENT. See EGOPHORICITY.
Data-source:
same as INFORMATION SOURCE (term preferred by Hardman 1986 in her analysis of Aymara).
Deductive:
reasoning and investigations proceeding from general assumptions to generalizations. Compl: INDUCTIVE.
Deixis:
the ways in which the reference of an element is determined with respect to speaker, addressee, or temporal and spatial setting.
Deontic:
form or category expressing obligation or recommendation.
(p. 41) Desubordinated clause:
a non-main clause (e.g. a complement clause or a conditional clause) which has acquired the status of a main clause or is used as such, following the process of DESUBORDINATION.
Desubordination:

a process whereby a subordinate clause acquires the status of a main clause (sometimes misleadingly referred to as ‘insubordination’, a term referring to military disobedience).

Direct evidential:
an evidential which covers speakers’ or participants’ own sensory experience of any kind. Sometimes same as VISUAL EVIDENTIAL.

Direct speech:
verbatim quotation of what was said.

Direct speech complement:
verbatim quotation of what someone else had said as a COMPLEMENT CLAUSE of verb of speaking. See COMPLEMENT CLAUSE.

Egophoric:
pertaining to egophoricity.

Egophoricity:
access to knowledge presenting it as ‘personal knowledge’ accessible to speaker, or knowledge available to ‘other’ person (also known as ‘conjunct–disjunct’: see §27.2.2–3, §28.3, and §28.4.3).

Epistemic:
(a) as a philosophical term: relating to knowledge or the degree of its validation; (b) as a linguistic term: indicating necessity, probability, or possibility.

Epistemic authority:
speaker’s authority and rights over the information and knowledge.

Epistemic meanings:
meanings of (a) possibility or probability of an event or (b) of the reliability of information.

Epistemic modality:
modality associated with epistemic meanings.

Epistemic stance:
speaker’s attitude to the possibility or probability of an event or the reliability of information.

Epistemics:
the scientific study of knowledge, ‘as opposed to the philosophical study of knowledge, which is known as EPISTEMOLOGY’. A more extended definition of epistemics is ‘the construction of formal models of processes—perceptual, intellectual, and linguistic—by which knowledge and understanding are achieved and communicated’ (Bullock and Stallybrass 1988: 279).

Epistemology:
philosophical theory of knowledge which ‘seeks to define and distinguish its principal varieties, identify its sources and establish its limits’ (Bullock and Stallybrass 1988: 279); see §§1.1.2–3.

Evidence:
(a) the available facts, circumstances, etc. supporting or otherwise a belief, proposition, or indicating whether or not a thing is true or valid; statement or proof admissible in law as testimony; (b) a shortcut for EVIDENTIAL (sense (a)).

Evidential:
(a) a marker of information source as part of a closed grammatical system; (b) pertaining to EVIDENCE (sense (a)). Syn: EVIDENTIARY.
Evidential extension:
an extension for a non-evidential category (such as tense, aspect, or modality) to refer to an information source. Syn: EVIDENTIALITY STRATEGY.
Evidentiality:
grammatical marking of information source. Syn: INFORMATION SOURCE, DATA-SOURCE, VERIFICATIONAL, and VALIDATIONAL.
Evidentiality strategy:
use of a non-evidential category (such as tense, aspect or modality) to refer to an information source. Syn: EVIDENTIAL EXTENSION.
Experiential:
same as direct evidential.
Eyewitness evidential:
an evidential—typically in a small system with two choices—referring to something the speaker has seen or witnessed. The term FIRSTHAND is used throughout this book. Further synonyms: FIRSTHAND EVIDENTIAL and CONFIRMATIVE.
Factual:
a term in Tibetic linguistics referring to known facts (Chapter 27).
(p. 42) Firsthand evidential:
an evidential—typically in a small system with two choices—referring to something the speaker has seen, heard or otherwise experienced. Opposite of NON-FIRSTHAND EVIDENTIAL. Syn: EYEWITNESS EVIDENTIAL and CONFIRMATIVE.
Hearsay:
information known through verbal report. Syn: REPORTED.
Imperfect:
an event which began in the past and is still continuing. Compl: PERFECT.
Imperfective aspect:
a verbal form used to refer to actions extending over a period of time, or continuously, focussing on the temporal make-up of the event. Compl: PERFECTIVE ASPECT.
Indirect speech:
reporting of what someone else has said by adapting deictic categories (e.g. person) to the viewpoint of the reporter. Compl: DIRECT SPEECH.
Indirective:
a term predominantly used in Turkic linguistics for the non-firsthand or the non-eyewitness evidential. Syn: INDIRECTIVITY. See Johanson and Utas (2000) and Johanson (2003).
Inductive:
reasoning and investigations proceeding from empirical facts to generalizations. Compl: DEDUCTIVE.
Inferential:
(a) synonym for INFERRED EVIDENTIAL; (b) inference as part of the meaning of a non-firsthand evidential.

Inferred evidential:
information source based on conclusions drawn on the basis of what one can see, or the result of something happening.
Information source:
the way in which a speaker or participant has learnt the information. See: EVIDENTIAL, EVIDENTIALITY.
Intraterminal aspect:
a verbal form used to refer to an action or an event within its limits or in its course, 'be doing' (Johanson 2000a: 62), similar to imperfective. Syn: INTRATERMINATIVE ASPECT.
Irrealis:
verbal form referring to hypothetical events and something that has not happened. Compl: REALIS. See Elliott (2000).
Language obsolescence:
a process whereby a language gradually falls into disuse.
Latentive:
a term in Uralic linguistics to refer to an evidential with a non-firsthand meaning (see Kuznetsova et al. 1980: 240–2).
Linguistic area:
a geographically delimited area including languages from two or more language families sharing significant traits (most of which are not found in languages from these families spoken outside the area). Syn: SPRACHBUND.
Logophoric:
pronouns or markers employed in indirect speech to refer to the person whose speech is being reported. Logophoric pronouns indicate whether the speaker and the subject or another argument of the reported utterance are the same person, or not (see Chapter 29).
Logophoricity:
the phenomenon associated with having LOGOPHORIC markers.
Mediative:
a term in French linguistics referring to non-firsthand, non-eyewitness, and reported evidentiality, akin to INDIRECTIVITY.
Mediativity:
a term in French linguistics used with a meaning similar to that of EVIDENTIALITY.
Mirative:
grammatical marking of 'unprepared mind', including unexpected and also surprising information (see DeLancey 1997, 2012; Aikhenvald 2012b).
Modal verb:
a verb with epistemic or deontic meaning.
Modality:
(a) grammatical category covering the degree of certainty, probability, and possibility of a statement (epistemic modality), obligation (deontic modality), and speaker's attitude; (b) synonymous to MODE (sense (a)), e.g. 'spoken modality' with reference to

spoken language and ‘signed modality’ with reference to signed language; (c) synonymous to speech act (see MOOD).

(p. 43) Mode:

(a) way of presentation, (b) a synonym of MODALITY or MOOD.

Mood:

grammatical category expressing a speech act (e.g. statement: indicative mood; question: interrogative mood; command: imperative mood).

Non-confirmative:

a term in Balkan linguistics covering non-firsthand or the non-eyewitness evidential. Compl: CONFIRMATIVE. See Friedman (2003).

Non-eyewitness evidential:

an evidential — typically in a small system with two choices—referring to something the speaker has not seen or witnessed. Compl. EYEWITNESS EVIDENTIAL. The term NON-FIRSTHAND is used throughout this book. Syn. INDIRECTIVE, MEDIATIVE, and NON-CONFIRMATIVE.

Non-firsthand evidential:

an evidential, typically in a small system with two choices, referring to something the speaker has not seen, heard, or otherwise experienced, and to something the speaker may have inferred, assumed, or (in some systems) learnt from someone else’s verbal report. Compl. FIRSTHAND EVIDENTIAL. Syn. NON-EYEWITNESS, INDIRECTIVE, MEDIATIVE, and NON-CONFIRMATIVE.

Non-visual evidential:

information source involving hearing, smelling, feeling, and sometimes also touching something.

Perfect:

a verbal form focussing on the results of an action or process, thus relating a past event to the present. An event or a process is viewed as completed in the past but still relevant for the present. Syn: ANTERIOR, POST-TERMINAL ASPECT, POST-TERMINATIVE ASPECT. Compl: IMPERFECT.

Perfective aspect:

a verbal form which specifies that the event is regarded as a whole, without regard for its temporal constituency. Compl: IMPERFECTIVE ASPECT.

Performative:

a term indicating that the speaker performed or is performing the action themselves (Oswalt 1986: 34–7). This term can be mutually exclusive with an evidential and is similar to EGOPHORICITY as it indicates speaker’s access to knowledge rather than information source per se.

POST-TERMINAL ASPECT:

a verbal form used to refer to an action or an event ‘at a point where its relevant limit is transgressed, “having done” ’ (Johanson 2000a: 62). Syn: ANTERIOR, PERFECT, POST-TERMINATIVE ASPECT.

Quotative:

(a) verbal form or a particle introducing a verbatim quotation of what someone else has said; (b) in some grammars of North and South American languages, same as REPORTED.

Reported:
an evidential whose main meaning is marking what has been learnt from someone else's verbal report. Syn: REPORTATIVE, REPORTIVE.

Resultative:
a verbal form referring to the results of an action or a process.

Secondhand:
(a) based on verbal reported from someone who said it (as opposed to THIRDHAND); (b) same as REPORTED.

Sensory:
referring to perception by physical senses.

Thirdhand:
based on verbal report from someone else who in their turn acquired the information through another verbal report.

Validational:
alternative term for DATA-SOURCE and for VERIFICATIONAL used in studies of Andean languages (see Adelaar 1997, 2017a). Syn: EVIDENTIAL.

Validator:
alternative term to VALIDATIONAL, also used in studies of Andean languages.

Verbs of internal state:
verbs covering emotions, feelings, and internal physical and psychological states; these may have evidential preferences of their own.

Verificational:
term used for grammatical marking of information source in some descriptions of North American languages (see Jacobsen 1986). Syn: EVIDENTIAL.

Visual evidential:
information source involving seeing something.

(p. 44)

Notes:

([1]) Chapters within this volume are referred to by their numbers. Further discussion of evidentiality as a grammatical category, its meanings and developments is in Aikhenvald (2004a,b, 2006c, 2012a, 2014, 2015b). Grammaticalization of evidentials is discussed in Aikhenvald (2011a). Evidentials and other means of expression of information source are contrasted in Aikhenvald (2007a, 2014). An up-to-date bibliography on evidentials in every part of the world is in Aikhenvald (2015a); see also papers in Aikhenvald and Dixon (2003), Johanson and Utas (2000), and some in Chafe and Nichols (1986). Earlier approaches to evidentiality, which are strongly recommended, include Boas (1938), Jakobson (1957); and especially Jacobsen (1986). On the opposite side of the coin, a warning should be noted that Willett (1988) and De Haan (2013b) are limited in their coverage, and their generalizations should be treated with caution. Many of the papers in Diewald

and Smirnova (2010a) are of decidedly mixed quality, with a basic approach of 'everything-goes-as-evidentiality' (see Aikhenvald 2012c). The range of meanings that can be linked to evidentiality have given rise to what is known as 'broad' definition of evidentiality in Chafe (1986) which covers speaker's attitude and reliability. This all-embracing definition confuses evidentiality proper with related, but different, notions and categories, creating an obstacle for its investigation as a distinct category and obfuscating its cross-linguistic status.

([2]) The notion of evidentiality as a grammatical category is linked to the basic differentiation between grammar—consisting of a number of closed systems, e.g. tenses, genders, and numbers—and lexicon, which is potentially open-ended (see a graphic description of the interaction between grammar and lexicon in Dixon 2010a: 47–54; and the special application of this distinction to grammar writing in Aikhenvald 2015c: 5–7, 282–3). Closed subclasses of words—such as verbs of speech, perception, and cognition, or modal verbs—can be said to 'straddle' the boundary between the grammatical and the lexical (see the discussion in Chapter 14, this volume). Modal verbs and 'secondary verbs' (such as 'seem') extend to mark information source as 'evidentiality strategies' and, historically, give rise to evidentials—Eastern Tukanoan languages (see Chapter 18) offer a number of examples.

([3]) See, for instance, Travis (2006) for a systematic application of established criteria for grammaticalization to the reported *dizque* in Colombian Spanish.

([4]) See Kroskrity (1993: 146); Aikhenvald (2004a: 139); Aikhenvald (2011b: 322) for typological features of speech reports.

([5]) The word 'evidence' is sometimes employed as a short-cut synonym for 'evidentiality' and 'evidential'; this usage is found in some of the chapters within this volume.

([6]) Further criticism of Anderson's confusing definition of evidentials is in Aikhenvald (2004a: 16). Defining evidentials in terms of 'not showing agreement with the speaker' and not being within the scope of negation (De Haan 1997, 1999) is equally confusing. Plungian (2010) confuses evidentiality with related notions, including egophoricity (see also Aikhenvald 2012c). Wierzbicka's (1994, 1996: 427–58) treatment of evidentiality is a prime example of English-inspired deductive approach: she interprets English translations of the examples containing evidentials, from Chafe and Nichols (1986) in terms of speculative 'semantic primitives' based on her Polish and English-based 'intuition'. What these scholars have in common is self-assurance of ignorance and a deductive approach in the absence of firsthand knowledge of any language with an established system of evidentials.

([7]) Recently, the importance of direct translation from a lingua franca into a target language and 'a variety of elicitation techniques' as a fieldwork methodology (typically, centred on just one aspect of a language) has been advocated by Matthewson (2004) under the disguise of 'semantic fieldwork'. And not surprisingly, St'át'imcets (or Lillooet, an endangered Salish language)—to some of which her 'methodology' was applied—has what

she calls ‘epistemic evidentials’. These appear remarkably similar to English modal verbs, with which they are routinely translated into English (see also examples from Gitksan, Chapter 22**).**

([8]) See also Greed (2014) on Tatar and Chapter 24 on other Turkic languages; further discussion of scattered coding is in Aikhenvald (2004a: 80–1, 2014: 14); and Fortescue (2003) on West Greenlandic.

([9]) See also Bruil (2014, 2015) for another attempt to capture this. Terminologically, the idea of a clausal scope of evidentiality can be captured in many ways. The Tukanoan linguistic tradition (see Chapter 18) opts for a term ‘clause modality’ as a means of marking information source on a clause level. The linguistic term ‘modality’ is polysemous. It normally refers to a grammatical category covering probability, possibility, obligation, and speaker’s attitude to information (see Matthews 2007, van der Auwera and Aguilar 2016). In a different usage, ‘modality’ is synonymous with ‘mode’ of presentation (the criticism of this usage is in Bullock and Stallybrass 1988: 536). For instance, ‘spoken language’ and ‘sign language’ are said to represent different ‘modalities’: the term ‘modality’ ‘reflects differences between signed and spoken languages due to the way they are produced and perceived’ (Zeshan and Palfreyman 2017: 178).

([10]) See also §21.3.1.2, on pronouns within the scope of evidentials in Innu, an Algonquian language.

([11]) The exact terms may vary. For instance, in early Americanist literature ‘quotative’ used to be employed in lieu of reported (covering reported information with no specified authorship: see Jacobsen 1986 for the history of terminology). Reported evidential can also be referred to as ‘secondhand’ or ‘hearsay’.

([12]) Matthewson et al. (2007) ‘doubt that evidentials have a uniform denotation across languages’ (see also note 2 in Chapter 15). This claim is based on superficial and truth-value-oriented treatment of the limited sources used by the authors, with a deductive and formalist orientation, and an unjustified assumption of the modal (that is, epistemic) character of evidentials across the world which bears an imprint of an English-language bias.

([13]) This delusion goes back (in part) to incomplete and biased studies by some, e.g. Willett (1988) and De Haan (1999). Arbitrarily—and wrongly—reducing all evidential systems to a binary distinction reflects more than just a bias in favour of languages of Eurasia. This false assumption reeks of the ‘insidious fad of binarism’—religiously ‘satisfying the strictures of a theoretical model which demands that all oppositions must be binary, thus making the language structure appear homogenous’ (as Dixon 2010a: 71 put it).

([14]) ‘Absentive’ imperatives can have their own marking, as in Innu, an Algonquian language (example (12) in Chapter 21), and Maidu, an isolate from California (Shipley 1964: 45, 51).

([15]) *Pace* Visser (2015) who claims that future and reported do not combine based on an artificially limited ‘sample’ of just thirty-six languages.

([16]) Also see §2.3.2 on the interaction between the timing of information source, the focus on the event, within the direct (sensory) evidential and the egophoric system in Taku, a Tibetic (Tibeto-Burman) language.

([17]) Also see Aikhenvald (2004a: 219–30; 2014: 30–1; 2015b: 258–9). Curnow's work (2002a, 2003) points to a similar direction without taking account of the semantics of each evidential within the relevant system. Using non-visual or non-firsthand evidential with regard to one's own 'unseen' experience is akin to the philosophical notion of 'immunity to error through misidentification' (Jaszczolt and Witek 2018).

([18]) The hierarchy of preferred evidential choice has been sometimes interpreted as 'best evidence' (for instance, by Matthewson 2004 and similar). Such terminology has to be taken with a grain of salt: it implies an intrinsic evaluation of sources stemming from a deductive stance taken by a formalist researcher. A hierarchy in Faller (2002: 70) and Oswalt (1986: 43) includes a 'performative' marker—which denotes speaker's access to information rather than the type of source—into a hierarchy of preferred evidential choices, confusing 'access' and 'information source'.

([19]) Surveys based on artificially created 'samples' of languages are notoriously unreliable (see Aikhenvald and Dixon 2017 for a critique of sampling). A typological overview by De Haan (2013a) based on a limited set of languages and an erroneous binary approach to the semantics of evidentials fails to give justice to the world's evidentiality systems and is to be treated with caution (see also §29.1). An overview of various verbal categories in Amazonian languages by Müller (2013) contains numerous errors and misinterpretations.

([20]) This is based on the author's own field experience in different parts of the world, student supervision in Brazil and Australia, reading of grammars and talking to other linguists about their field experiences. See also Aikhenvald (2004a: 385–90).

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Evidentials and Person

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Abstract and Keywords

This chapter presents an overview of salient issues regarding the correlation between evidentiality and person. A synthesis of research findings is provided and illustrated by empirical data. The person category relevant for evidentiality is shown to be the 'speaking person', which translates into various grammatical persons depending on the grammatical construction. The person-sensitive distribution of evidential forms is attributable to features like control, observability, and access to knowledge, and may be creatively manipulated along an evidential directness cline, such that an evidential value reserved for the speaking person may be employed to assert intimate knowledge about another person, and conversely, a reduced evidential value may be selected in self-reports to tone down first-person involvement, exhibiting 'first-person effects'. Also elucidated herein is how the addressee's perspective, another critical person factor in evidentiality, shapes evidential formation and selection.

Keywords: speaking person, grammatical person, evidential directness cline, first-person effects, addressee's perspective

2.1. Introduction

Speakers of a language with grammaticalized evidentiality are usually required to back up the statements they make with evidential marking that supplies a source of information. Selecting an appropriate evidential value for a given context is not easy, as it 'has to do with various competing factors, depending on which aspect of the situation the speaker wishes to highlight' (Aikhenvald 2004a: 331). One major factor that determines evidential choice is person.

This chapter provides a general overview of prominent issues regarding the person factor in the morpho-syntactic marking of evidentiality.[1] It is structured as follows. Evidentiality and grammatical person are intricately connected, yet distinct, deictic categories. Their

important differences are discussed in §2.2. Evidential choices typically vary depending on whether the speaker is involved in the reported event. Semantic accounts of the apparent person-based constraints are offered in §2.3. The 'marked' evidential usages that appear to violate these restrictions are explored next in §2.4. For clarity of exposition, illustrative examples in §2.3 and §2.4 are drawn mainly from primary data on Taku, a Tibetic language with a particularly illuminating evidential system.[2] The second person or addressee, hardly an independent person category in evidential marking, nevertheless plays a vital role in determining evidential selection, at times even evidential forms. This is examined in §2.5. The main points discussed in this survey are summarized in the concluding section.

(p. 48) 2.2. Evidential marking versus person marking

Evidential marking differs in fundamental ways from person marking. Instead of the 'speaker-addressee-other' triad relevant for person marking (Bickel and Nichols 2007: §7.1), the critical person distinction for evidential marking is the 'speaker' versus the 'non-speaker'. The logophoric person in quoted clauses (the original speaker) and often the second person in interrogatives (the speaker of the expected response) take the same evidentials as the first person in declaratives, the three of them constituting a single person category—the *speaking person*.[3] On the other hand, the second and third persons in declaratives and the first person in self-directed, introspective interrogatives usually call for non-speaker evidential marking.

Evidential and person marking are also functionally incongruous. Person marking typically indexes one or more core arguments to signal their grammatical relations or pragmatic salience (as in hierarchical person-marking systems and 'conjunct' person-marking systems of the Awa Pit type[4]), or a non-participant associated with the proposition in some manner,[5] whereas evidential marking serves a *semantic* function, supplying validation for assertions irrespective of argument structure. Weather verbs, for instance, often take dummy arguments or no arguments at all, but combine freely with evidentials. The two types of verbal marking may co-exist and yet diverge in person reference. In the following example from Sastod Rgyalrong (Sino-Tibetan family, Sichuan),[6] the verb *ndzo* 'to look for' indexes (or 'agrees with') a second-person object but takes an evidential that marks the information source as personal knowledge from the first-person agent:

	ŋɐ	no	**ko-tɐ-ndzo-n**
(1)	1SG	2SG	**EGO:IMPERV-1>2-look.for-2**
	I am looking for you.		

(p. 49) The speaking person, even when outside of the narrated event, may be directly registered on the verb in a language like Qiang (Sino-Tibetan family, Sichuan). In example

(2), person marking is not of the 3SG actor argument (zero-marked in this language) but of the non-argument speaker, a direct eyewitness to the event (LaPolla 2003: 66; see Aikhenvald 2004a: 229, 235 for further discussion on this structure):

(2)

$t^he:$	jimi	de-se-ji-w-a
3SG	fertilizer	ORIENTATION-spread-CHANGE.OF.STATE-VISUAL-**1SG**

She spread the fertilizer (I saw her spread it).

Though notionally distinct from person marking, evidential marking may help track person reference in a sentence otherwise unmarked for person. A Tukano or Tariana speaker, for example, uses a *non-visual* evidential to report her own internal states (e.g. 'to be drunk'), and a *visual* evidential for another person. The Tariana utterance *amiri-mha* (be-drunk-PRES.NONVIS) can therefore only mean '*I am* drunk', even in the absence of overt person-marking (Aikhenvald 2004a: §7.4). Likewise, in the following Amdo (a major Tibetic language) sentence, the reported information cannot hail from the protagonist (Uncle) himself who, having lost consciousness during the 'passing out' event, would have used an *indirect* evidential instead (adapted from Sun 1993: 984):

(3)

adæ	təb-wə-$t^hæ$=se
uncle	pass.out-away-**DIRECT**=REP

Uncle reportedly passed out (the reporter saw this happen).

2.3. Skewed distribution of evidential forms according to person

2.3.1. Evidential choices when the speaker talks about herself

A self-reporting speaker can base assertions about herself on private information she has unique access to, including awareness of her intent and volition as an instigator of the event, and awareness of her mental and physical states and processes as an experiencer of the event.

In Taku, an *egophoric*[7] evidential *-lə* must occur when one describes one's volitional acts in the past or present, claiming thorough knowledge of the event:

(4)

a.	ŋiː	teː	ⁿdʒãːʰtʃaʔ=tsə	dʒoʔ-**lə**
	1SG:ERG	3SG:DAT	slap=INDEF	do:PERV-**EGO**
	I gave him a slap in the face.			

b.	ŋiː	ʃɐ	zɐ-wuʔ-**lə**
	1SG:ERG	meat	eat-PROG-**EGO**
	I am eating meat.		

(p. 50) Self-reports of *controllable* states or conditions also go with the egophoric evidential. Notably, 'to have children' and 'to have money' are construed as situations under one's control, hence requiring the egophoric evidential:[8]

(5)

a.	ŋaː	ɐlə	ʁɲiː=mẽː	meʔ-**lə**
	1SG:DAT	child	two=except	not.exist-**EGO**
	I have only two children.			

b.	ŋaː	ʃoʁo	tseːtʃiʔ	juʔ-**lə**
	1SG:DAT	money	some	exist-**EGO**
	I have some money.			

Uncontrollable states, actions, and inner processes, on the other hand, call for a direct[9] evidential (present *-jiː*,[10] past *-wɒ*[11]):

(6)

a. ŋaː ʃoʁo mətsʰɪː-**jiː**
1SG:DAT money need-**DIRECT:PRES**
I need money.

b. ŋɐ ⁿtʃʰaʔ-**jiː**
1SG be.cold-**DIRECT:PRES**
I feel cold.

c. təɹɛ̃ː ŋɐ toⁿdaʔ ŋotsʰɐɹe=tseː tʰɯʔ-**wɐ**
today 1SG thing be.strange=INDEF:DAT encounter-**DIRECT:PAST**
I encountered something strange today.

d. ŋɐ teː dɛ̃ːŋɐɹeʔ-**wɐ**
1SG 3SG:DAT believe-**DIRECT:PAST**
I believed him.

If the speaker unwittingly underwent a situation, and found out about it at a later time through inference or report, an indirect evidential *-tsə* occurs. This is a 'source-neutral' (p. 51) evidential (Aikhenvald 2014: 5) covering hearsay evidence, logical assumption, and perceptual inference, as in:[12]

(7) ŋiː ⁿdãː ʁɲiʔχtãː jiː-**tsə**
1SG:ERG last.night sleep.talk do:PERV-**INDIR**
I talked in my sleep last night.

The Taku evidential choices in sentences involving a first-person participant are tabulated as shown in Table 2.1.

Table 2.1 Taku evidentials in sentences involving a first person

EGOPHORIC	**DIRECT**		**INDIRECT**
	PRESENT	**PAST**	
lə	jiː	wɐ	tsə

Cross-linguistically, evidential choices are more limited in first-person contexts, and some small evidential systems are said to disallow all evidential marking in first-person contexts (Guentchéva et al. 1994: 147; Aikhenvald 2004a: §7.2.2). This is quite understand-

able on pragmatic grounds, as one hardly needs to evidentially justify a remark about one's own actions and inner states—one is simply *expected to know* what one does and feels. And, in many evidential systems, such utterances are unmarked for evidentiality. The 'how do you know?' challenge more typically arises when one talks about another person.

2.3.2. Evidential choices when the speaker talks about others

In claiming a fact about others, the speaker normally relies on information gathered directly from sensory perception of the described event or indirectly from hearsay, inference, and logical deduction.

Evidential systems worldwide are known to exhibit fine-tuned discriminations here, such as different sensory channels (e.g. visual versus non-visual in Tariana, Aikhenvald 2003d: §14.2.3; visual versus auditory in Kashaya, Oswalt 1986: §3.3), types of inference (e.g. 'assumed' versus 'apparent' in Tuyuka, Barnes 1984; 'generic' versus 'specific' in Tariana, Aikhenvald 2003b: 135), degrees of reported evidence (e.g. Amdo Tibetan, Sun 1993: §7), whether the speaker participated in the reported event or not (i.e. the 'participatory evidential' in Pomo languages and languages of Highlands Papua New Guinea, Plungian 2010: 34; San Roque and Loughnane 2012a) and whether the perceived event is (p. 52) stative or not (e.g. Duna, San Roque, and Loughnane 2012a: 125). Some languages draw further distinctions with respect to the quality of observation. In Taku, for example, there are two ways to assert the occurrence of an ongoing event, such as raining:

(8)

a. ʁnãː ⁿboʔ-**wuʔ**
rain fall:IMPERV-**IMMED**
It is raining (the speaker takes a look out the window and notices the rain outside).

b. ʁnãː ⁿboʔ-**jiː**
rain fall:IMPERV-**DIRECT:PRES**
It is raining (the speaker has been aware of the rain for some time).

The minimal pair in (8) has to do with knowledge integration.[13] While both sentences describe a currently ongoing event, they differ as to whether the report is based on brief observation made at the immediate moment (hence the label: *immediate evidential*; cf. Nichols 1986: 248; Sun 1993: 976–80)[14] or a substantial observation period leading to assured knowledge of the event.

Furthermore, Taku allows at least four evidential choices to describe the past event 'a cat jumped onto the table':[15]

(9)

a. me:lə tʃoχtsi: tʰo: ⁿtʃʰõ:-**wɐ**
cat table:GEN top:DAT jump-**DIRECT:PAST**
The cat jumped onto the table (I witnessed the act. The cat is not on the table now).

b. me:lə tʃoχtsi: tʰo: ⁿtʃʰõ:-**tsə**
cat table:GEN top:DAT jump-**INDIR**
The cat jumped onto the table (I did not witness the act. The cat is not on the table now).

c. me:lə tʃoχtsi: tʰo: ⁿtʃʰõ:-**wuʔ**
cat table:GEN top:DAT jump-**IMMED**
The cat has jumped onto the table (I did not witness the act. The cat is still on the table).

d. me:lə tʃoχtsi: tʰo: ⁿtʃʰõ:-**tʰe**
cat table:GEN top:DAT jump-**DIRECT:PAST:ONSET**
The cat has jumped onto the table (I just witnessed the act. The cat is still on the table).

(p. 53) (9a–b) exemplify the familiar direct and indirect evidentials used respectively in objective reports of past events (cf. examples (6) and (7), §2.3.1, in first-person contexts). The immediate evidential in (9c) (cf. example (8a), marked on a present imperfective verb) denotes immediate perception of a lingering effect (the cat's presence on the table) of a past event (the cat's jumping onto the table). Of particular interest is the evidential *-tʰe* in (9d), which forms a minimal pair with *-wɒ* in (9a). While both mark the speaker as a sensory witness to an event, they differ in the highlighted *progression stage* of the event. The evidential *-tʰe* focuses on the *onset* of the event, often conveying recency of the reported event (hence the implication that the cat is still on the table).[16] On the other hand, *-wɒ* is used for an event observed in full and reported after considerable time elapse, with the implication that the situation no longer holds at the moment of speaking (hence the reading that the cat is not on the table any more).

The Taku evidential paradigm for reporting about another person is summarized in Table 2.2.

Evidentials and Person

Table 2.2 Taku evidentials in sentences reporting about another person

DIRECT (SENSORY)				**INDIRECT**
PRESENT		PAST		-tsə
NON-IMMEDIATE	IMMEDIATE	ENTIRE EVENT IN FOCUS	ONSET IN FOCUS	
-jiː	-wuʔ	-wɐ	-tʰe	

A comparison of Tables 2.1 and 2.2 reveals the essential similarities and differences of evidential marking in self-person and other-person contexts. The egophoric evidential *-lə* applies to situations of which the self-reporting participant can exercise volitional control. With situations in which she is/was only a passive undergoer, direct and indirect evidentials are used to denote direct sensory experiences (e.g. getting stung by a bee) or indirectly acquired knowledge (e.g. fainting). In asserting about others the direct and indirect categories, with further evidential subdivisions, canonically occur.

The apparently person-based distribution of evidential categories can be fruitfully correlated with links in an event causal chain (following DeLancey 1985, 1986), as shown in Table 2.3.

Table 2.3 Causal chain and corresponding evidential categories

INTENTION/CONTROL	**ACT**	**RESULT**
EGOPHORIC	DIRECT (SENSORY)	INDIRECT

(p. 54) Table 2.3 makes it clear that the egophoric category (in languages where this receives explicit marking on a par with other evidentials) represents the speaker's full access of the entire causal chain, and is therefore reserved for one's controllable actions and conditions. The direct and indirect evidentials are appropriate for both self-reports of uncontrolled situations and reports about others, since in both cases the knowledge base is connected to the ACT and RESULT links in the causal chain. As seen in Table 2, direct evidence yields subdivisions in terms of duration ([±IMMEDIATE]) and thoroughness ([±ONSET FOCUS]) of observation. With immediate and onset-focus evidential marking, the speaker acknowledges lack of full access to another person's internal conditions, or inability to observe an event from beginning to end. Therefore, these evidentials usually do not appear in reports made in the first person, as under normal circumstances one is fully aware of one's cognitive experiences, emotions, and sensations, even though these are beyond control.

2.4. Fluidity in evidential marking

It has been amply shown (e.g. Curnow 2002a, 2003; Aikhenvald 2004a: §7.2; Lazard 1999: 99–100; Hill 2013) that the ostensible person-sensitive evidential constraints are not always adhered to, and functionally marked uses do occur, owing to semantic reasons.

The speaker's awareness of her own intents and controllable conditions is personal knowledge of the most direct kind,[17] and a firm basis for authoritative assertions. This (self-evident!) knowledge base, though unrepresented in many evidential systems, is found to be encoded by dedicated evidential material, paradigmatically opposed to other markers of information source, in a growing number of languages such as Kashaya (Oswalt 1986), Guambiano (Norcliffe forthcoming), Oksapmin (Loughnane 2009), Japhug

Rgyalrong (Jacques Ms.), and Tibetic languages (DeLancey 2012; Tournadre 2008; Sun, this chapter).[18] Awareness (or endophoric knowledge) of one's own internal states and processes, such as 'to be hungry' and 'to miss someone', is now generally acknowledged as an information source, cast for instance in a non-visual (as in Tuyuka, Tariana, Pomoan languages, etc.) evidential. (p. 55) On grounds of consistency, then, awareness of one's intents and controllable conditions should also count as a source of evidence the speaker may adduce to vindicate an assertion.[19] Egophoric, direct and indirect may thus be construed as points along a cline of directness of evidence presented in Table 2.3,[20] and the speaker has the liberty to move evidential markings up or down the cline, as circumstances require.

2.4.1. 'Upgraded' evidential marking: intimate knowledge about others

In one type of marked usages, the evidentials typically used in the speaker's self-reports occur in assertions about another person.

The immediate evidential *-wuʔ* is the unmarked choice for reporting immediate perception of another person's ongoing actions or states in Taku, as in (10a). But if the report is grounded in prolonged on-the-scene observation, the non-immediate evidential occurs to mark an enhanced degree of personal knowledge (10b), the same evidential the speaker uses to describe her own physical state (10c):

(10)

a. ti: ɐlə=tə ^{h}tuʔ-**wuʔ**
that:GEN child=DET be.hungry-**IMMED**
That child looks hungry.

b. ti: ɐlə=tə ^{h}tuʔ-**jiː**
that:GEN child=DET be.hungry-**DIRECT:PRES**
That child is hungry (I have been with the child for a while).

c. ŋɐ ^{h}tuʔ-**jiː**
1SG be.hungry-**DIRECT:PRES**
I am hungry.

Likewise, in describing another person's mental and physical states in Tariana, one uses a visual or an inferential evidential depending on whether one can observe visible signs of these states or not. However, the non-visual evidential normally reserved for the speaker's own internal states can occasionally be extended to a non-first person the speaker is 'closely observing' (Aikhenvald 2003a: 149–51).

Even the egophoric evidential at the leftmost end of the cline may apply to the non-speaker under strict conditions, namely when narrating about states and habitual behaviour (p. 56) of a person or animal (e.g. a family member or a household cat) well-known to the speaker, as in (11a–b).[21] The egophoric evidential is however unacceptable with ongoing non-stative events, as it is epistemologically more plausible to claim intimate personal knowledge about habits and permanent states of others than about their specific acts and transitory states; contrast (11c–d):

(11)

a. ŋə gepoː ⁿpʰuʔdʒə juʔ-**lə**
1SG:GEN husband:DAT epilepsy exist-**EGO**
My husband suffers from epilepsy.

b. ŋə gepiː ʃa zɐ-**lə**
1SG:GEN husband:ERG meat eat-**EGO**
My husband eats meat.

c. ŋə gepiː ʃa zɐ-wuʔ-***lə**
1SG:GEN husband:ERG meat eat-PROG-**EGO**
My husband is eating meat.

d. ŋiː ʃa zɐ-wuʔ-**lə**
1SG:ERG meat eat-PROG-**EGO**
I am eating meat.

A comparable use of egophoric marking for claiming personal knowledge about others is seen also in Japhug Rgyalrong (adapted from Jacques Ms.):

(12)

tɕeme	nɯ	kɯ	ʻwuma	ʐo	**ku**-scit-i				rɟɤlpu	ri
girl	DEM	ERG	really	EMPH	**PRES:EGO**-be.happy-1PL				king	also
a-taʁ	wuma	**ku**-sna			ʁjoʁ	ra	ri	wuma	ʐo	
1SG-on	really	**PRES:EGO**-be.kind			servant	PL	also	really	EMPH	
ku-pe-nɯʼ		to-ti								
PRES:EGO-be.good-3PL		INFER-say								

The girl said: ‘We are very happy, the king is very kind to me, the servants are very nice’.

The egophoric marking occurs in this example because the girl, the protagonist in the story, is describing behavioural patterns of people in her family she knows well—her husband the king and the servants in the household.

2.4.2. 'Downgraded' evidential marking: reduced information access

The opposite type of marked evidential usage is more abundantly discussed in the literature under the rubric of 'first-person effects' (see Curnow 2002a; Aikhenvald 2004a: §7.2.1; Plungian 2010: §4.1; San Roque and Loughnane 2012a: §4.3; Aikhenvald 2014: 30, §4.1.1 for (p. 57) further discussion and exemplification; a useful summary of such effects with various evidential systems is provided in Aikhenvald 2004a: Table 7.1), referring to the connotations of non-volitionality and non-consciousness[22] which arise when evidentials reserved for the non-first person apply to speaker's assertions about herself.[23] There are straightforward semantic reasons for this, as aptly phrased by Curnow (2003: 45; emphasis added):

> *A speaker can only truly know that an action was unintended if they performed the event; that is, if the subject is first person*. Thus the restriction of a device for showing non-volitionality to first person contexts is not unexpected.

The 'first-person effects' may be plausibly linked to the evidential directness cline discussed above. We have seen (Table 2.1) that a volitional act performed by the speaker requires the egophoric evidential in Taku, as in (13):

(13)

ŋi:	tʃɐnə	tʃʷaʔ-**lə**
1SG:ERG	bowl	smash:PERF-**EGO**

I smashed the bowl (intentionally).

If the speaker wishes to disengage herself from responsibility in the act, she may move the level of evidence one notch down, and use the direct evidential as if she was just an innocent eyewitness to what happened:

(14)

ŋi:	tʃɐnə	tʃʷaʔ-**wɐ**
1SG:ERG	bowl	smash:PERF-**DIRECT:PAST**

I smashed the bowl (by accident).

As noted earlier, if the speaker did not *consciously* participate in an event, and acquired information about it retrospectively through indirect channels, she has to report it with the indirect evidential. But if the speaker has a revelation about a past situation she was previously unaware of, even as a volitional instigator or conscious participant, she may downgrade the evidential value further to the indirect evidential:

(15)

ŋi:	tʃɐnə	tʃʷaʔ-**tsə**
1SG:ERG	bowl	smash:PERV-**INDIR**

So I broke the bowl (I see now that I have damaged the bowl. But I did not notice this at the time I dropped it)!

Calibrating the evidential marking this way allows the speaker to convey sudden awareness of a previously unforeseen effect of a conscious act. This 'hindsight' reading may sometimes carry an overtone of regret: (p. 58)

	ŋɐ	teː	^{h}po	k^{h}uː-**tsə**
(16)	1SG:ERG	3SG:DAT	anger	rise-**INDIR**

I got angry with him (I wasn't myself at that time).

These 'first-person effects' are cross-linguistically widely attested. In Jarawara (Arawá family, Brazil), for example, past-tense verbs distinguish two evidential values: eyewitness and non-eyewitness, the former occurring when 'anything that the speaker witnessed (in real life or in a dream)' (Dixon 2004: 203). In the following sentence, uttered by a speaker who did not notice the passage of time and suddenly realizes it is already dusk, the non-eyewitness immediate past evidential *-hino* is used to indicate surprise, despite the fact that he must have unwittingly experienced the coming of dusk (Dixon 2004: 206):

(17)

bahi	to-ke-**hino**
sun(M)	AWAY-in.motion-**IPNM**

The sun is (surprisingly to me) going away (i.e. setting).

Another telling example is this Hinuq (Nakh-Daghestanian family, Daghestan) speaker's account of his experience of losing consciousness from a fall and regaining breathing after mouth-to-mouth resuscitation, using a reported evidential on the predicate 'take a breath', as 'he probably learned about this event from other people's reports'(Forker 2014: 60):

(18)

hoboži	Aytalo-y	hut-ƛ'o	hut=no	gor-no	ħuħel
now	Aytalo-ERG	mouth-SPR	mouth=and	put-CONVB	breath
ƛeše-n,	hibagoƛ'o	kur-iš=e**ƛ**	de	muši	
tear-CONVB	at.that.time	throw-PAST=**REP**	1SG:ERG	breath	

Now Aytalo put his mouth on my mouth, breathed and at that time I (also) breathed (they say).

First-person effect of a different sort is detected in evidential marking of present situations, as demonstrated by another example from Taku. Although the non-immediate evidential is the unmarked choice for depicting one's current feelings and physical conditions (10c), §2.4.1, the speaker may go for the immediate evidential—a downgraded evidential value denying thorough endophoric knowledge—to express sudden awareness of an internal state:

(19)

ŋɐ	ʰtuʔ-wuʔ	
1SG	be.hungry-IMMED	
I (suddenly) feel hungry!		

In summary, the majority of person-based evidential constraints are not iron-clad rules. The speaker may construe a given situation in alternate ways and, when the need calls for it, avail herself of a range of non-typical evidential choices to convey additional semantic effects beyond the simple provision of information source. (p. 59)

2.5. The role of the addressee in evidential marking

It has been long noted that the second person, the addressee, does not constitute an independent person category for the purpose of evidential marking. On the contrary, the second person is often treated in a similar manner as the first person in true questions, and as the third person in statements.

Evidentiality is nevertheless critically linked with speaker–addressee interactions in verbal communication. To respect the Gricean principle of cooperation (Grice 1989), a reliable and informative speaker must provide the addressee with appropriately chosen evidentials. In doing so, the addressee's perspective and knowledge base must be taken into regard, and several ways to manifest this concern for one's conversation partner can be recognized.

2.5.1. The addressee's perspective in questions

In directing a (non-rhetorical) question to the addressee, the speaker requests the addressee to provide some needed information, effectively inviting the latter to take charge of the assertion (Creissels 2008a: 2). Some languages allow the speaker's perspective even in interrogative sentences,[24] as seen in the following examples from Eastern Pomo (McLendon 2003: 116; cited in Aikhenvald 2004a: 244) and Qiang (LaPolla 2003: 73):

Eastern Pomo

(20)

kʼe·héy=tʼa	mí·	ka·dá-k-kʼ-**ine**
self=INTER	2SG:PAT	cut-PUNCTUAL-REFL-**INFER**

Did you cut yourself (When seeing bandages, or a bloody knife, etc.)?

Qiang

(21)

ʔũ	ʐdʐytɑ:	ɦɑ-qə-**k**-ən	dʐɑ
2SG	Chengdu+LOC	ORIENTATION-go-**INFER**-2SG	Q

Did you go down to Chengdu?

The predicates in examples (20) and (21) denote volitional acts (‘cut’ and ‘go’), so the inferential evidential marking cannot felicitously reflect the addressee’s perspective. Instead, both sentences convey *the speaker’s inference* of what must have happened. But such cases seem somewhat rarer (Aikhenvald 2004a: 244) and found mostly in content questions (San Roque et al. 2017). (p. 60)

Another possibility is *neutral* perspective in questions, as attested in:

Guambiano (Barbacoan family, Colombia)

(22)

chi	mar-ku/*-ar/*-an	
what	do-PARTIC	

What are you (sg.) doing?

Instead of the ego evidential *-ar* (which would indicate the addressee’s self-knowledge) or direct evidential *-an* (which would indicate the speaker’s sensory evidence), the interrogative sentence (22) is marked with a special particle *-ku*, taking neither speech-act participant’s evidential perspective (Norcliffe forthcoming).

Cross-linguistically, it seems more common for evidential marking in questions to be geared to the addressee’s perspective, bespeaking the latter’s ‘epistemic authority’ (Hargreaves 2005). Indeed, the question ‘Did you cut yourself?’ in (20) would be rendered in Taku with a *direct evidential*, reflecting the perspective of the addressee who the speaker assumes must have performed the act by accident. To properly present the addressee’s point of view, it behoves the speaker to assess the addressee’s knowledge status, as formulated by Aikhenvald with reference to Tariana (2003b: 145):

> A visual evidential presupposes that the addressee has had direct experience … A non-visual evidential presupposes less direct access to information, while an inferred evidential—which in fact covers any kind of indirect experience—implies

that the questioner assumes that the addressee can hardly give an informed answer.

The speaker's assumption may however be challenged, or turn out to be mistaken. For example, a Jarawara speaker who did not hear or see the dog barking during the night asks another person: 'Did the dog wake you up?' using a non-eyewitness evidential, probably assuming that this was also the case with the addressee. The addressee's reply 'It did wake me', taking an eyewitness evidential, came as a contradiction to the speaker's assumption (Dixon 2004: 203).

2.5.2. The addressee's perspective in assertions

In Archi (Nakh-Daghestanian family, southern Dagestan) and Meithei (Sino-Tibetan family, northeastern India), the speaker may show empathy with the addressee by using an indirect evidential to report a state or action known to herself, but unknown to the addressee. For example, an Archi speaker may say to the addressee 'I hate you (for your information)', using a non-firsthand evidential. Since the speaker in this case clearly has firsthand information about her own mental state, the evidential is intended to mark the novelty of the information from the perspective of the addressee (Aikhenvald 2004a: 233).

The addressee perspective may also be directly incorporated into the semantics of evidential forms, yielding *collective* (Willett 1988: 73) or *intersubjective* (Hintz and Hintz 2017) evidentials which code information shared with the interlocutor. Cases where individual and shared knowledge sources are in paradigmatic contrast within the same (p. 61) evidential types have been reported from South America, the Himalayas, and Papua New Guinea.[25] The following Southern Nambikwara (Nambikwara family, Brazil) minimal pair (adapted from Kroeker 2001: 64–5) illustrates:

(23)

a. wa³kon³-Ø-**ta¹hẽ¹**-la²
work-3SG-**INDIVIDUAL.VERIFICATION:PAST:REPORTED**-IMPERV
I was told that he worked.

b. wa³kon³- Ø- **ta¹tẽx¹ti²tu³**-wa²
work-3SG-**COLLECTIVE.VERIFICATION:PAST:REPORTED**-IMPERV
We were both told that he worked.

Another exquisitely analysed case is Kurtöp (Eastern Bodic, Bhutan), where the two perfective evidential suffixes exhibit a two-way distinction in 'speaker expectation of interlocutor knowledge': *-shang* (speaker's exclusive knowledge) versus *-pala* (shared knowledge), as illustrated by (adapted from Hyslop forthcoming):

(24)

a. da wit boi-**shang** ge-lu
now 2:ABS recover-**PERV:DIR:INDIVIDUAL.KNOWLEDGE** go-IMP
Now you are recovered; go.

b. dutshot ma-tshang-**pala**
time NEG-be.complete-**PERV:DIR:SHARED.KNOWLEDGE**
The time wasn't up.

(24a) was said by a doctor to a patient he had successfully treated, giving medical advice based on his privileged professional knowledge about the patient's health; the speaker in (24b) was engaging in storytelling, where the use of the shared knowledge evidential *-pala* is canonical.

The evidential system in Sihuas Quechua (Quechuan family; Peru; adapted from Hintz and Hintz 2017: §7) presents a more elaborate paradigm, marking a two-way distinction in both direct and inferential (or conjecture) evidentials—see Table 2.4.

Table 2.4 Sihuas Quechua individual and collective evidential forms

	INDIVIDUAL	**COLLECTIVE**
DIRECT	-mi	-ma
INFERENTIAL	-chri	-chra

Even more striking examples of evidential systems that register intricate patterns of knowledge sharing with the addressee is provided by languages like Wola (a.k.a Angal Heneng, (p. 62) Engan family, Papua New Guinea), where several distinct multi-personal perspectives are coded in the verb; a small excerpt from the recent-past paradigm of the verb 'to do' is shown here (adapted from Sillitoe 2010: 17–19)—see Table 2.5.

Table 2.5 Wola multi-personal evidential forms meaning ‘s/he did it recently’

WITNESSED BY BOTH SAP	WITNESSED BY EITHER SAP	NOT WITNESSED BY ADDRESSEE	NOT WITNESSED BY SPEAKER	NOT WITNESSED BY EITHER SAP
baenda	bono	benaysaenda	benaysol	benaysa

In Wola society, information that both speaker and addressee can personally verify is judged most trustworthy (Sillitoe 2010: 17).[26] This explains why the addressee's knowledge state is so highly rated and plays such a salient role in some evidential systems.

2.6. Conclusions

This chapter presents a synthesis of research findings, as well as new empirical data, bearing on the correlations between evidentiality and person. Accumulated insights from the vast literature on evidentiality affirm that the essential person category for evidential marking is the 'speaking person' or 'evidential origo' 'from whose perspective an evidential is evaluated' (Garrett 2001: 4). And this may be the first, second, or third person, depending on the construction type.

A close examination of the case of Taku evidential encoding, augmented by a range of data from other sources, indicates that the long-noted person-sensitive distribution of evidential forms is largely attributable to lexical semantic features (especially control and observability) and above all, to unbalanced access to knowledge. One can assert knowledge about one's own intents and internal states, but reliably claim only directly witnessed perceptual knowledge or indirectly acquired secondhand knowledge about others. Therefore, an evidential indicating intimate personal knowledge (e.g. direct or non-visual evidential with verbs denoting internal states; egophoric evidential with verbs denoting controllable actions) signals the involvement of a speaking person in the assertion, yielding an implicit person-marking effect.

Even this fluid construal of 'person' is subject to creative manipulation. One may, within limits set by the language, use an intimate evidential value typically reserved for the 'speaking person' to claim some degree of personal knowledge about another person, or opt for a lessened evidential value in self-reports to tone down first-person involvement, portraying oneself as a non-volitional or even non-sentient undergoer in the event.

Evidentiality is ultimately about knowledge packaging and sharing, as the speech-act participants cooperate to achieve effective verbal communication. The addressee is thus also a critical person factor in shaping evidential formation and selection. In evidentially marked (p. 63) interrogatives, one may couch a question in the addressee's perspective, presupposing an information source likely to be available to the latter. Aside from deferring the authority of assertion to the addressee in questions, one's perspective in assertions may also be shifted to, or combined with, the addressee's perspective to reflect the latter's sources of knowledge, or adduce shared evidence to support one's verbal claims.[27] Evidently, then, evidentiality is deeply grounded in discourse-interpersonal pragmatics, perhaps more so than any other grammatical category. (p. 64)

Notes:

([1]) This research was funded in part by a Taiwanese Ministry of Science and Technology grant (MOST 104-2410-H-001-067-MY3). The Taku primary materials were gathered during fieldwork undertaken by the author in the last five years. Transcription of the data is phonemic. I am grateful to the editor of this volume, as well as to Bettina Zeisler, Benjamin Brosig, Nathan Hill, and Guillaume Jacques for their insightful criticism and suggestions. They are of course not responsible for any flaws of this article.

([2]) Taku is an obscure Tibetic variety spoken in Khrochu County, Ngaba Prefecture in northern Sichuan. The Taku evidential system is selected for illustrative purposes here, as it involves a straightforward suffixal paradigm not entangled with lexical copula and auxiliary choices (for a full account of the latter type of Tibetic evidential paradigms, see DeLancey's chapter, this volume).

([3]) Comparable labels include 'self person' (Sun 1993), 'assertor' (Creissels 2008a), 'locutor' (Aikhenvald 2004a), 'epistemic source' (Hargreaves 2005), and 'informant' (Bickel 2008; San Roque 2008). The binary distinction between the speaking person ('self') and 'others' also echoes terminology used by certain native grammarians, such as the Sanskrit-based terms *ātmā* 'self' versus *para* 'other' in Newar (Hargreaves 2005: 5), and *rang ngos* 'self' and *gzhan ngos* 'other' in Tibetan (Gesang and Gesang 2004: 415).

([4]) In Awa Pit (Barbacoan family, Equador and Columbia), 'if a statement contains a first person element, the verb will be marked conjunct; if a (true) question contains a second person element, the verb will be marked conjunct; otherwise the verb will be marked disjunct' (Curnow 2002b: 616). Even a zero-valent weather verb may be marked with an 'affected' conjunct person. The system thus encodes a pragmatically salient 'speaking person' and does not involve evidentiality, unlike in the related Barbacoan language Tsafiki (Aikhenvald 2004a: 126–7). Incidentally, the misleading, structurally based label 'conjunct–disjunct' should best be avoided, as abundantly demonstrated in Tournadre (2008), Creissels (2008a), and Jacques (Ms).

([5]) As seen in Sino-Tibetan languages with an 'associative' grammar design, where verbs exhibit 'non-identificational agreement' in an appositional ('as NP'), partitional ('NP of') or relational ('NP with regard to') structure (Bickel 2000).

([6]) Sastod (Khrochu County in Sichuan) is a distinct dialect of Situ Rgyalrong, a major member in the Rgyalrong language group (personal fieldwork data). For a fully described Rgyalrong evidential system, see Jacques (Ms).

([7]) This term in this sense goes back to Tournadre (2008). For a different sense of the term, see Dahl (2008).

([8]) In the words of my consultant, 'It's up to you whether to keep or spend the money, or to have children or not'! 'Knowing about something' is treated as another controllable state in the Taku system, since one can refuse to seek knowledge about something un-

pleasant or traumatizing. In contrast, ‘resemble someone’ is an uncontrollable state disallowing egophoric marking.

([9]) Another label used for this category is *sensory* (Aikhenvald 2004a). As evidenced by the Taku example (6d), awareness of mental activities also falls under this category. As pointed out by San Roque (2008), vision-related evidential categories differ cross-linguistically with regard to whether the speaker is an active, volitional participant in the described event (a ‘do-er’; e.g. Qiang, Tibetic, Highland New Guinea languages) or not (a ‘see-er’; e.g. Tariana).

([10]) This morpheme is phonologically realized as *-ⁿgə* after nasal rhymes and *-ʰkə* after long non-nasal rhymes reflecting Old Tibetan syllables with the **-r* coda.

([11]) This morpheme is phonologically realized as *-ɒ* after a glottal stop, *-ŋɒ* after nasal rhymes, and *-jɒ* after vowel *i*.

([12]) Taku also has an explicit reported evidential *ze* (grammaticalized from an earlier speech verb *zer*) that co-occurs freely with evidentially marked quoted clauses, suggesting that it sits outside of the evidential paradigm. This and the factive *-le?* (marking common knowledge) are excluded from the present discussion.

([13]) Alternative labels include ‘new versus assimilated knowledge’ (DeLancey 1986), and ‘time of acquisition’ (Tournadre 2008; Tournadre and LaPolla 2014). The immediate evidential does not always imply an import of surprise. Therefore, *-wu?* (like the Lhasa Tibetan immediate evidential *‘dug*; Hill 2012, DeLancey 2012: 554) is not a dedicated marker of mirativity.

([14]) As Nichols puts it: ‘… the speaker uses it (the immediate evidential) in a more or less spontaneous reaction to a new, salient, often surprising event just as it happens …’ (Nichols 1986: 248). Woodbury uses the term in a slightly different sense, to include not just ‘evidence obtained at the moment of utterance’ but also ‘evidence obtained in the past but continuing to be available in the present, or expected still to be available in the future’ (Woodbury 1986: 195). We will see that Taku maintains a distinction between the two situations.

([15]) An interesting comparison can be made with the Kamaiurá (Tupí-Guaraní family; Brazil) data discussed in Aikhenvald (2004a: 94), where some of these distinctions are expressed via *double marking* of evidentials, for example a firsthand evidential plus a direct evidential for the meaning ‘previously existent but now gone’.

([16]) As an immediate response to feeling her pen drop to the ground, the speaker must use *-tʰe* in the remark ‘I dropped my pen’. This evidential is also obligatory in eyewitness reports of non-durable, irreversible processes (e.g. dying, a balloon popping, a light or a fire going off).

([17]) Faller (2002: 46) points out, with reference to the Kashaya 'performative', that 'Performative might also be said to indicate a subtype of direct evidence, in fact it might be said to be the most direct evidence possible, since the speaker knows something because (s)he is doing it'.

([18]) Many evidential systems mark an evidential space covering the left end of the event causal chain, bearing various labels including 'personal knowledge' (Hardman 1986), 'personal agency' (Mithun 1999: 181), 'personal experience' (Willett 1988; Speas 2004a), 'performative' (Oswalt 1986), 'participatory evidence' (San Roque and Loughnane 2012a), 'personal-factual evidence' (Loughnane 2009: §8.2.1.4.1), 'privileged access' (Widmer 2014), and 'ego evidence' (Garrett 2001; Norcliffe forthcoming). Although the conceptual core is *speaker's personal knowledge*, the exact semantic breadth differs case by case, ranging from knowledge of one's own volitional acts and controllable states in Tibetic languages, Kathmandu Newar (Hargreaves 2005) and Northern Akhvakh (Nakh-Dagestanian family, Creissels 2008a), 'internal experiential knowledge' in Galo (Tani branch, Sin-Tibetan, Post 2013), 'direct knowledge' in Eastern Pomo (Pomoan family, California, McLendon 2003: §4), which marks an event as 'actually happening or has just happened and that the speaker has direct knowledge of it, primarily because the speaker performed or experienced the action, process, or state', 'speaker's exclusive knowledge' in Kurtöp (Hyslop forthcoming), and contrastive agentive and affected personal knowledge in Guambiano (Norcliffe forthcoming).

([19]) Further elucidation of self-knowledge marking as a valid evidential category is provided by Norcliffe (forthcoming). 'Ego evidence' (a term suggested in Garrett 2001; see also Tournadre 2008) should appear under the endophoric subtype of direct evidence in Plungian's (2001: 354; 2010: §3) classification of evidentials. The speaker's subjective presentation of information access, including access to endophoric knowledge of all kinds, is also central to Tournadre and Lapolla (2014)'s conception of evidentiality.

([20]) Consider Faller (2002: 70)'s more elaborate 'personal evidence cline' (performative > visual > auditory > other sensory > inference from results > reasoning > assumption) couched in terms of directness measured by the amount of reasoning needed.

([21]) This is the 'wide-scope' or habitual egophoric usage in Tournadre (2008: 297) and Widmer (2014: §13.3).

([22]) Other contextual interpretations have been attested. Consider the Uighur example discussed by Johanson (Chapter 18 of this volume) where the indirective evidential marking in the self-statement 'I have always done my duty (*as it appears*)' conveys the speaker's modesty.

([23]) Interestingly, 'first-person effects' are achieved in Dolakha Newar by applying third-person verb agreement to first/second subjects, paralleling non-egophoric evidential marking in Kathmandu Newar (Genetti 2007: 174).

([24]) Not all languages permit evidential marking in interrogative sentences; see Aikhenvald (2004a: §8.1.1) and San Roque et al. (2017) for a typological survey of language-specific restrictions on interrogative evidentials.

([25]) Another variety of shared-information marking is embodied in the so-called ‘impersonal evidentials’ in the Highland New Guinea language Duna, which denote ‘generally available’ information sources without specifying who the perceiver is (San Roque 2008: §9.2.2.2; San Roque and Loughnane 2012a: 127; San Roque et al. 2017: §2.2).

([26]) See Storch and Coly (2014: 196) for a similar value placed on ‘joint perception’ in an African society.

([27]) There has recently been a surge of research interest on intersubjectivity and expression of complex perspectives in evidential and epistemic marking. For broad overviews, see Evans (2005) and Bergqvist (2015a).

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Evidentiality and Its Relations With Other Verbal Categories

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Abstract and Keywords

This chapter focuses on languages that mark evidentiality within the verbal complex. It provides an overview of the interrelations between evidentiality and other categories expressed on verbs. The categories investigated are tense, aspect, modality, polarity, person agreement, mood/speech act type, finiteness, Aktionsart/semantically defined verb classes, and mirativity. Languages worldwide exhibit many peculiarities both with respect to the semantic as well as the formal relations between these categories and evidentiality. Furthermore, the relationships are multivaried and often include more than two categories, which leads to even more intricate interactions. Therefore, it is often impossible to arrive at cross-linguistically valid generalizations, especially with respect to the categories aspect, finiteness, and also tense.

Keywords: verbal evidentiality, aspect, modality, polarity, person agreement, mood/speech act type, mirativity

3.1. Introduction

Evidentiality, like all linguistic categories, is quite diverse and comes in many different formal and functional guises that pose challenges for its analysis. However, the majority of approaches agree on two points that will form the basis for this chapter: (i) semantically, evidentiality states the information source, and (ii) formally, it is a grammatical category in a great number of languages (De Haan 1999; Aikhenvald 2004a: 3; Plungian 2010: 17; Brugman and Macaulay 2015). I follow the commonly assumed subdivisions within the realm of evidentiality: direct versus indirect and further subdivisions of direct evidentiality into visual and other sensory evidence, and indirect into inferred versus hearsay (Willett 1988; Faller 2002: 90; Plungian 2010).

Frequently, grammaticalized evidentiality is a verbal category, which is to be expected since it is verbs that encode information about events and situations. Information about the referents of participants encoded by nominals can also have an evidential flavour. For instance, this is the case in those languages in which deictic elements such as demonstratives express (non)-visibility or even audibility (De Haan 2001b; Aikhenvald 2004a: 130–1; Dixon 2014; Aikhenvald 2015b; Jacques, Chapter 5 of his volume).

This chapter will focus on evidentiality expressed on verbs or verb phrases. Auxiliaries and copulas with evidential meaning such as the ones found in Tibetan are included, provided they form part of a larger class of auxiliaries/copulas. The following verbal categories are examined in this study:

– tense (Section 3.2)
– aspect (Section 3.3)
– modality (Section 3.4)
– polarity (Section 3.5)
(p. 66) – person/gender/number agreement (Section 3.6)
– mood/speech act type (Section 3.7)
– clause type (finiteness) (Section 3.8)
– *Aktionsart*/or semantically defined verb classes (Section 3.9)
– other categories expressed in verbs (e.g. mirativity) (Section 3.10)

Synchronically, these categories can interact with evidentiality at various levels. It is necessary to distinguish between the level of form, i.e. the morphosyntactic expression, and the level of meaning. Morphosyntactic exponents of evidentiality can be formally and/or semantically independent of other categories or they can interact. The interaction can be manifold. First, the evidentials may take the form of portmanteau morphemes that express more than one meaning. Second, the use of evidential morphemes can be restricted for morphosyntactic reasons because they occupy the same slot as other categories and are thus not able to co-occur. Third, their use can be restricted for semantic reasons because their meaning is incompatible with the meaning of another category. Fourth, they can acquire additional meanings in the presence of another category.

Diachronically, there is often a relation between evidentiality and other verbal categories, most notably tense/aspect, modality, and finiteness. Evidential morphemes can be shown to originate from verbs, from one or the other verbal category such as the perfect, participles, or nominalized verb forms or to develop additional uses that are typical for verbs. This paper focuses on synchronic interactions. For an investigation of the origin of evidentials see Friedman (Chapter 6 of this volume).

3.2. Evidentiality and tense

The category of information source and the category of temporal reference are, in principle, independent of each other. The temporal orientation of evidentials is usually indeterminate and cannot take its time reference from tense. With respect to direct evidentiality,

we can have direct access to the information about events and situations that take place at the present moment or that took place in the past. This can be reflected in languages that have (verbal) particles that freely combine with different tense forms. With respect to future events a direct access to the knowledge about the information would presuppose a participation in a yet to come event, which seems, conceptually, to be impossible. In the case of indirect information source the information about situations can be achieved a posteriori, simultaneously (e.g. seeing a person and inferring her/his feelings), and a priori if the evidence temporally precedes the event, e.g. in speculation about future events from present causes, prerequisites or precursors. In the latter case we cannot have secure knowledge. We can expect to find a correlation between evidentiality and non-future tenses to the extent that future tenses and evidentiality should be a typological rarity, especially in systems in which evidentials are fused with tense morphemes. This past tense bias has been reported in typological studies: past tenses are more likely to express evidentiality and to distinguish a higher number of evidential values than non-past tenses (Aikhenvald 2004a: 266, 2015; De Haan 2013a; Visser 2015). There are numerous frequently cited examples of languages (p. 67) falling into this group, e.g. Georgian, Nakh-Daghestanian languages, Turkish, Komi-Zyrian, Haida, Ika, Jarawara, Matses, Okspamin (see De Haan 2016; San Roque and Loughnane 2012a; Visser 2015; Aikhenvald 2015b; Forker, Chapter 23 of this volume). However, there are also languages that have evidentials in present tenses in addition to past tenses but not in future tenses, such as Tuyuka (Tukanoan), Tukano (Tukanoan), Tariana (Arawak), and Mamaindê (Nambikwara). Other languages have evidentials in the present, past, and future, e.g. Foe (Trans-New Guinea, Southern Highlands province of Papua New Guinea), Sabanê (Nambikwara), and Bulgarian (1).

(1)

Bulgarian (Kehayov 2002)

Stojan	sega	govor-el	na	s'branieto
Stoyan	now	speak-IMPER.PARTIC.M	at	meeting

Now Stoyan speaks [reportedly] at the meeting.

Based on data discussed in Aikhenvald (2004a: 261–3) we notice that the combination of evidentials with futures always leads to meaning extensions that carry epistemic overtones, which may be due to the meanings of the future tenses themselves. For languages that can combine the expression of future with the expression of direct evidence the resulting meaning is certainty, definite intention or strong directive (Sabanê, Foe: see Visser 2015) depending on person (2).

(2)

Sabanê (Araujo 2004: 146)
amayl-i-telon
rain-VS-FUT.DRC
It is going to rain. [the speaker is certain about the event]

When indirect evidentials and future co-occur, they mostly express hypotheses, inferences, or conjectures about future events (Kolyma Yukaghir, Kalmyk, Kayardild, Foe, Sanuma) or predictions of future events (Chinese Pidgin Russian, Meithei, Foe) (see Aikhenvald 2004a; Visser 2015). This is to be expected: the direct evidentials indicate epistemic certainty about future events (2), whereas the indirect evidentials do not indicate certainty, but rather possibility or probability (3). Furthermore, Visser (2015) notes that in her sample of thirty-six languages with tensed evidentials there were no instances of the combinations direct sensory (non-visual) evidence + future and hearsay + future.

(3)

Kalmyk (Skribnik and Seesing 2014: 158)
[The rain is drizzling everywhere.]

ör	zää-tl	gii-x	bäädl	uga
dawn	glimmer-CONVB	hold-PARTIC.FUT	INFER	NEG

Probably it will not hold until sunrise.

It is common for languages with evidential distinctions but no grammaticalized past tense to express evidentiality not by means of verbal suffixes, but clitics or particles. A notable exception is Kolyma Yukaghir, which has independent suffixes for evidentiality (direct versus indirect) that precede the suffix for future tense and generally lacks past tenses (Maslova 2003). (p. 68)

Visser (2015) discusses another phenomenon concerning fused tense/inferred evidentiality morphemes. Inferred evidentials introduce a further reference point into the discourse because in addition to the time when the reported event took place and the utterance time there is a moment at which the results of the event were inferred or detected by the speaker. Inferred evidentials normally refer to the event time, not to the moment when the inference was drawn. Fleck's (2007) study of evidentials in Matses (Panoan) shows

that there are languages that can refer to both the event time and the inference time (4a,b).

(4)

a. Matses (Fleck 2007: 589)
[a recently made hut was discovered by the speaker a long time ago]
mayu-n bëste-wa-ak-onda-şh
non.Matses.Indian-ERG hut-make-RECPST.INFER-REMPST.EXPER-3
Non-Matses Indians (had) made a hut.

(4)

b. Matses (Fleck 2007: 590)
[an old hut was discovered by the speaker a short time ago]
mayu-n bëste-wa-nëdak-o-şh
non.Matses.Indian-ERG hut-make-REMPST.INFER-RECPST.EXPER-3
Non-Matses Indians (had) made a hut.

Visser (2015) arrives at some generalizations regarding the relationship of evidentiality and temporal reference in those languages in which the two categories are expressed by portmanteau morphemes. Direct evidentials expressing visual or non-evidence are about equally fused with present and past tenses because logically direct evidence can be gathered in the past as well as in the present. The past tense bias is found first of all with indirect evidentials, 'because there often has to be a finished event in the past before one can deduce, assume, or be reported about it' (Visser 2015: 308). Finally, hearsay evidentiality is the least likely evidential subtype to be fused with tenses, which comes as no surprise given the frequently attested origin of hearsay markers from verbs of speech (Aikhenvald 2004a: 271–3).

3.3. Evidentiality and aspect

I follow Comrie's (1976: 3) general characterization of aspect as expressing 'different ways of viewing the internal temporal constituency of a situation.' A basic distinction can be made between perfective and imperfective aspect. The former is used when the situation is viewed as a single whole, whereas the latter indicates that attention is paid to the internal structure of the situation. The definitions of both imperfective and perfective aspect seem to be compatible with direct and indirect evidentiality. In fact, it is possible to find various combinations of aspectual values and evidential distinctions in languages with grammaticalized evidentiality and aspect if we only look at the two major aspectual subcategories. However, this does not mean that languages possess all logically possible combinations; normally they choose only a subset. Thus, in Oksapmin (Ok) evidentiality is independently expressed from aspect and can be combined with it. Oksapmin distinguishes perfective and imperfective aspect and has grammaticalized direct evidentiality expressed by verbal suffixes used with various (p. 69) past tenses (5a, b). The direct eviden-

tials distinguish two subcategories: visual evidentiality and participatory evidentiality (the latter usually presupposes the conscious participation of the speaker).[1]

(5)

a. Oksapmin (San Roque and Loughnane 2012a: 124)

ap	tit	tux	ml-pat-gop=li
house	INDEF	smoke	come.up-IMPERV.SG-VIS/SENS.FP.SG=REP

There was smoke coming up from a house [he saw, I was told].

(5)

b. Oksapmin (San Roque and Loughnane 2012a: 117)

jəxe	jə-xən	mədəp	ku	tit	it
then	DEM.DIST-ACROSS	from	woman	INDEF	again

əpli-n-gwel

come-PERV-VIS/SENS.YESTP

Then, another woman came from over that way [I saw].

In Wanano (Eastern Tukanoan, Stenzel 2008a) aspect and evidentiality are fused, occurring as verbal suffixes and distinguishing the semantic values visual+perfective, visual+imperfective, internal evidence+perfective, and internal evidence+imperfective. All other evidentials (hearsay, non-visual sensory experience, inference) do not express aspect. Within the first two combinations the aspectual value has scope over the evidential meaning. This means that with imperfective visual evidentials the access to the source of information is unbounded whereas with perfective visual evidentials the access is no longer available or has ceased because it is bounded. Example (6a) was spoken by somebody who saw an evil creature taking away his mother into a log, but because the mother is still in the log and thus not visible to the speaker, he uses the perfective aspect in combination with the visual evidential (*-re*). By contrast, (6b) was spoken by an evil creature chasing a woman, and since at the moment of speaking the creature can see the mother, it uses the imperfective visual evidential (*-ra*).

(6)

a. Wanano (Stenzel 2008a: 414)

~o-i	hi-re	~di-a
DEIC.PROX-LOC	COP-VIS.PERV.2/3	say-ASSERT.PERV

'Here she is,' (the son) answered.

(6)

b.

~waku-~basi-ko	~bʉ'ʉ	~ya-ka	du'ti-ra
think-know-F	2SG	be.bad-emph	escape-VIS.IMPERV.2/3

You escaped, clever evil woman.

In Kashaya Pomo (Pomoan, De Haan 2016), the expression of perfective and imperfective aspect by means of suffixes is combined with the meaning of visual evidentiality. In Shuri (Northern Rukyuan, Shimoji 2012) the imperfective aspect expresses direct visual evidentiality, whereas the perfective aspect does not have any evidential meaning at all. The language has separate suffixes for aspect and for evidentiality. (p. 70)

These few examples might suggest that direct evidentiality, mostly when based on visual perception, expresses more aspectual distinctions or can be combined with more aspectual distinctions than indirect evidentiality. However, the opposite situation is also common. In Japhug, the perfective is not specified for evidentiality (but it mostly implies direct evidentiality due to its paradigmatic opposition with the inferential) and the same is true for the past imperfective, but both forms have perfective and imperfective counterparts that express indirect evidentiality, most notably inferences (Jacques ms.). In Nungon (Sarvasy 2014: 371–5), the form labelled 'inferred imperfective aspect' combines the meaning of indirect evidentiality and of imperfective aspect and occurs only in the present tense. It is expressed via a specialized periphrastic construction with the auxiliary *to-* 'do'. In Chechen (Nakh-Daghestanian, Molochieva 2010), evidentiality is restricted to the past tenses. Imperfective past tenses can only express indirect evidentiality, whereas the perfective past tenses can express both direct and indirect evidentiality. Thus, merely the perfective aspect features the full range of evidential meanings. Similar observations have been made for Sanzhi Dargwa from the same language family. In this language, only indirect evidentiality has been grammaticalized as a verbal category whose expression is restricted to a past tense form resembling pluperfects. This verb form can almost exclusively be obtained from perfective stems. By contrast, in Ashti Dargwa it is imperfective verbs that preferably express non-firsthand evidentiality (see Forker, Chapter 23 of this volume for an explanation and references). Desano (East Tukanoan, Silva 2012) has two verbal suffixes for perfective and imperfective aspect (*-a* and *-di*), and distinguishes six evidential values that are, except for one, also verbal suffixes (Silva 2012: 250, 255). The expression of aspect and evidentiality is thus formally independent and, in fact, evidential suffixes can occur without aspectual suffixes and with evidential suffixes (7a, b). However, it seems that only the perfective aspect suffix co-occurs at all with the evidential markers. The grammar does not contain any examples of the imperfective suffix being followed by an evidential suffix. Along the same lines, Lhasa Tibetan expresses evidentiality (direct versus indirect) only within the perfective aspect (DeLancey 1986).

(7)

a. Desano (Silva 2012: 257)
[speaker is inside home and feels a heat (from a fire) and hears noise of things burning. He does not see the fire.]
~eda soe-ku-~ba
3PL burn-NVIS-3PL.ANIM.IMPER
They are burning (something).

(7)

b. Desano (Silva 2012: 258)
[The speaker has not seen the school in a nearby village, but was told from someone who had seen it and told him about it.]

yuhu	eskola	iayõrã	ĩrã
yuu	eskola	i-a-~yo-~da	~ida
one	school	do-PERV-HSAY-3PL.ANIM.PER	3PL

They built a school.

In sum, although evidential constructions in individual languages are often restricted to one or the other aspectual value, it remains a task for future research to establish whether there (p. 71) are really typologically valid tendencies for specific combinations as opposed to others. This concerns especially the claim that the perfective aspect correlates with indirect evidentiality (e.g. Speas 2010: 142). The only hypothesis that seems relatively robust suggests a (diachronic) link between perfects or resultative aspect and indirect evidentiality, most notably inferentials as it is found in Turkic, Bulgarian, or Georgian (see, e.g. Slobin and Aksu 1982; Bybee and Dahl 1989; Izvorski 1997; Aikhenvald 2004a: 297–81; Tatevosov 2001a, 2007a). Comrie (1976: 110) explains this link by ‘the fact that both categories present an event not in itself, but via its results’.

3.4. Evidentiality and modality

Following Nuyts (2001a, 2006), among others, we can distinguish three semantic subdomains of modality: (i) dynamic modality that is concerned with capacities/ability/potential and needs/necessity/inevitability, (ii) deontic modality that is concerned with permission and obligation, or right and wrong according to some system of rules (Portner 2009: 2), and (iii) epistemic modality that has to do with knowledge, belief, certainty, epistemic necessity, and possibility. For the present investigation it is epistemic modality that is especially relevant since it touches upon concepts that also play a role for evidentiality.

Epistemic modality is often defined in terms of degree of certainty, degree of speaker commitment (De Haan 1999), degree of confidence, or degree of epistemic support (see reference in Boye 2012: 2, 21; 2010d). I prefer the more general definition provided by Nuyts (2001: 21) as ‘evaluation of the chances that a certain hypothetical state of affairs under consideration (or some aspect of it) will occur, is occurring, or has occurred in a possible world’. The possible world is in the default case the real world. The evaluator is often the speaker, since epistemic modality is typically entirely speaker-oriented (in contrast to other subtypes of modality, e.g. dynamic modality is agent-oriented). Thus, epistemic modality involves an estimation of the likelihood that a situation is/has been/will be true or false which may include an evaluation of the evidence for the situation. The estimation occurs within a probability continuum ranging from absolute certainty that the state of affairs is real to absolute certainty that it is not real. Boye (2012) distinguishes

three basic degrees of epistemic support: full (=certain), partial (probability, likelihood, epistemic necessity), and neutral (epistemic possibility, ignorance, lack of knowledge).

One can find different approaches to the relation of evidentiality and epistemic modality in the literature (Brugman and Macaulay 2015; Wiemer, Chapter 4 of this volume, and a general overview in Chapter 1 of this volume). That evidentiality and epistemic modality are distinct categories has been advocated by numerous scholars (e.g. De Haan 1999; DeLancey 1986; Plungian 2001; Aikhenvald 2004a, 2015b; see also Chapter 1 of this volume). Schenner (2010) argues that at the conceptual level the two categories are distinct but related because the type of evidence will normally have some influence on the strength of belief in the truth of the proposition.

Another view suggests that there is a partial or a full overlap between the two semantic domains. For instance, Garrett (2001) and Faller (2002) have proposed that modality is part of the meaning of indirect (inferential) evidentials. Others treat evidentials as epistemic modals. The latter approach has predominantly been taken by formal semanticists (p. 72) (e.g. Rooryck 2001; Matthewson et al. 2007; Peterson 2010; McCready and Ogata 2007), but also by other scholars (Palmer 1986; Willett 1988).

Epistemic modals are normally assumed to operate at the propositional level. If evidentials are epistemic modals, they are consequently expected to operate at the same level as the modals. In the literature, one can find two basic test types for exploring whether evidentials and epistemic modals behave alike, the challengeability test and the 'Evidential Moor's paradox' test that will be discussed briefly.

Following Faller (2006) we assume that if an element can be questioned, doubted, rejected, or (dis)agreed with, it contributes to the truth conditions of the proposition expressed. Otherwise it does not (or it is inscrutable). In other words, illocutionary markers and other operators above the propositional level cannot be explicitly denied, but the propositional content can be denied. When we look at epistemic modals, we normally notice that they can be denied or challenged (8).

(8)

Peter muss zu Hause sein um diese Uhrzeit.
Peter must be at home at this time.

Nein, das ist nicht wahr. Er kann zu Hause sein, muss aber nicht.
No, that's not true. He might be at home, but does not need to be.

By contrast, in most languages evidentials cannot be denied or challenged (9), i.e. they do not pass the challengeability test (De Haan 1997; Faller 2002; Fasola 2007; Matthewson 2011; Kalsang et al. 2013).[2]

Tibetan (Kalsang et al. 2013: 526)
Tashi:

(9)

sGrol mas	mog.mog	zas	song
Dolma	momo	ate	DRC.EVID

Dolma ate all momos (South-Asian dumplings).

Dorje:

#ma	song.	khyed	rang	gis mo	mthong	med	pa
NEG	DRC.EVID	you	HON	she	see	NEG	PERV

That's not true. You did not see her do this.

The second test is called 'Evidential Moor's paradox' or felicity under known truth/falsehood (cf. Faller 2002; Peterson 2010; Matthewson 2011; Arakaki 2013; Kalsang et al. 2013). The use of evidentials is felicitous even in cases where the proposition is known by the speaker to be false (10a,b).

(10)

a. Sťát'imcets (Matthewson 2011: 337)

ťéc=t'u7	lákw7a	ku=páoy,	t'u7	áoz=t'u7	kw=a=s
sweet=just	NVIS	DET=pie	but	NEG=just	DET-IMPERV=3S

The pie seemed good, but it wasn't good.

(p. 73) **(10)**

b. Ryukyuan (Arakaki 2013: 148)

ʔami	hut-oo-N	Ndi.	jasiga	ʔaN	ʔumu-raN
rain	rain-CON-DRC	REP	but	so	think-NEG

It is raining (I heard). But I don't think so.

This is in contrast to certain epistemic modals and to simple assertions for which a denial is impossible.

(11) a. *Peter must be a good swimmer, but he is not.

(11)

b. Sťát'imcets (Matthewson 2011: 337)

*ťéc=k'a=t'u7	ku=páoy,	t'u7	áoz=t'u7	kw=a=s		áma
sweet=INFER=just	DET=pie	but	NEG=just	DET=IMPERV=3SG.POSS		good

The pie might/must have been good, but it wasn't good.

Further tests that lead in the same direction can be found in Matthewson (2011: 337–8, 341). Judging from the literature it seems that most of the evidentials to which these tests have been applied behave like the reportative in Ryukyuan and the evidential in St'át'imcets[3] (e.g. evidentials in Tibetan, see Kalsang et al. 2013; the Gitskan evidential *n'akw*, see Peterson 2010). These evidentials confirm Oswalt's (1986: 43) observation on the Pomoan language Kashaya that all propositions with the various types of evidentials are presented by the speaker as certain and true, not as possibly or probably true. This means that these evidentials do not weaken the proposition they attach to. An assertion of a proposition with such an evidential equals the assertion of the same proposition without the evidential with respect to the truth-propositional content. In contrast, modals weaken assertions in the sense that they imply that the unmodalized assertion would not be felicitous, i.e. saying *Peter must be a good swimmer* is a weaker assertion than saying *Peter is a good swimmer*.

However, there are also a few examples of evidentials that behave in the opposite way, e.g. the inferential in St'át'imcets (11b) and the reportative evidential in Gitskan (Peterson 2010). Consequently, these evidentials have been analysed as modals.

To sum up, there is an obvious semantic proximity between evidentiality (= information source) and epistemic modality (degree of certainty or speaker commitment). We may expect that in cases of indirect information source the speaker might be less committed to the utterance. In fact, evidentiality and epistemic modality may very often be formally fused in the languages of the world, i.e. one and the same morphological exponent expresses both meanings. For some subcategories of evidentiality (e.g. inference based on pure reasoning) the changes might be greater than for others where it is expressed together with epistemic modality. And epistemic modals often acquire evidential meaning extensions (e.g. English *must*). Conversely, evidentials may acquire epistemic overtones. However, on a conceptual level we can clearly differentiate between the two notions, and there are languages in which the categories are also formally distinct from each other (e.g. Tuyuka, De Haan 1999; Nakh-Daghestanian languages, see Forker, Chapter 23 of this volume). For a detailed discussion of the relationship between evidentiality and modality see Wiemer (Chapter 5 of this volume).

(p. 74) 3.5. Evidentiality and polarity

The notions of evidentiality and polarity are conceptually independent. The observed interaction can, as proposed by Aikhenvald (2004a: 257), be analysed as the general tendency to have fewer grammatical categories in clauses with negative polarity. This means that it is not specific to evidential marking, but occurs also in clauses without any evidential meaning. Aikhenvald (2004a: 264, 2015) lists languages such as Udmurt and Komi (Uralic), Kalmyk (Mongolic), Mỹky (isolate), and Luchuan Ryukyuan as examples of languages with fewer evidential distinctions in negative clauses, which is normally due to a reduced number of TAM forms for negated verbs.

Another debated topic is the scope properties of both categories. The question is whether evidentiality has scope over polarity—which means that in negative clauses not the evidential meaning, but the propositional meaning is negated—or whether the opposite holds true and the polarity operator has the evidential meaning in its scope. The first constellation seems to be more common cross-linguistically (De Haan 1999), and as discussed in §3.4 has been used as a test to distinguish epistemic modality and evidentiality. Aikhenvald (2004a: 256) cites the Sino-Tibetan language Akha as an exception. However, in this language evidentiality is not a verbal category, but expressed by means of an independent particle and thus falls outside the scope of this paper.

3.6. Evidentiality and person/gender/number

The relations between evidentiality and person/gender/number are multiple and diverse. One possibility for interactions is morphosyntactic restrictions on agreement. Gender/number agreement on verbs is not a cross-linguistically universal category. Nakh-Daghestanian languages belong to the relatively few language families in which gender agreement on verbs is a prominent and ubiquitous category that, however, does not show any interactions with grammaticalized verbal evidentiality in these languages (see Forker, Chapter 23 of this volume). In contrast, in Jarawara the firsthand evidential suffixes are fused with past tenses and also express gender (Dixon 2003).

Morphosyntactic constraints on person agreement with evidentials are typical for those languages in which evidentiality is expressed by portmanteau morphemes that also convey tense and person. Aikhenvald (2004a: Chapter 7, 2015b) mentions Estonian and Trio as having neutralized person agreement in reported (Estonian) and indirect evidentials (Trio). For both languages it seems that there is a diachronic explanation for the suppression of person marking because the evidentials originate from nominalized verbs forms/participles. By contrast, in the Algonquian language Cheyenne evidentials also express person independently of the normal person prefixes. Cheyenne evidentials and markers of illocutionary mood such as imperative and interrogative suffixes form a single morphological paradigm and are therefore in complementary distribution. Person agreement of hearsay evidentials is regulated by a hierarchy that differs from the hierarchy used (p. 75) for the person prefixes such that the verb can have two diverging person markers (12). The same language has two more evidentials that show restricted person agreement: the narrative evidential lacks forms for first and second person, and the conjectural (or inferential) evidential agrees only in animacy without exhibiting person distinctions (Murray 2010a: 25–6).

(12) Cheyenne (Murray 2010a: 24)
Né-vóom-aé-sesto
2-see[ANIM]-OS-REP.3PL
They saw you, I hear.

A second possibility is semanto-pragmatically based restricted person marking with some evidentials compared to non-evidential forms which leads us to the first-person effect. Non-firsthand evidentials can either not be used with first person at all or if they are used then the interpretation is adjusted resulting in non-volitionality, i.e. the first person referent is not described as a conscious agent, but as being involuntary and unintentionally involved in the situation in question or as acting without control or full knowledge (Curnow 2003). This means that s/he got to know about his/her actions only post factum (e.g. via inference or hearsay). The following example from the Turkic language Tatar (13) occurs in a context in which the speaker is aware of his actions, but not aware about the person he caught.

(13)
Tatar (Tatevosov 2007a: 416)
min karak tʏt-kan-mʏn
1SG thief catch-PER-1SG
I've caught a thief. [But I did not know he was a thief and I let him go.]

The adjustment effect has been claimed to be restricted to sentences with past time reference in which the first person pronoun functions as a subject (Curnow 2002a), but this

does not seem to be the case for all languages. In Sanzhi Dargwa (Nakh-Daghestanian), a first person singular pronoun in the comitative case can trigger the first-person effect (Forker, Chapter 23 of this volume).

A third way for evidentiality and person to interact within verbal paradigms is egophoricity (also called conjunct/disjunct marking). San Roque et al. (2012c) define egophoric marking as reflecting 'the coincidence of argument roles and the epistemic authority of a given speech act.' This characterization has been broadened in San Roque, Floyd, and Norcliffe (forthcoming) as to involve not only personal knowledge and participation in the situation, but also volition and agency to some degree. Thus, there is a certain overlap between the first-person effect and egophoricity.

The epistemic authority is the speaker in assertions and the addressee in questions, (and the author of the speech report in embedded speech acts). This means that egophoric marking cross-cuts the person categories through identical marking of first person in declaratives and second person in interrogatives. In most of the cases this marking encodes the subject argument. And since egophoric marking involves the perspective shift between the speaker in statements and the addressee in questions, not only person but also illocutionary force as a further linguistic category is included (14a–d). (p. 76)

(14)

a. Galo (Post 2013: 114–15)

ŋó ʔacín dó-tó-bá

1SG cooked.rice eat-EGO-PERV.DRC

I have just had my meal. [I know, because I experienced it.]

(14)

b. nó ʔacín dó-tó-bá=rèe?

2SG cooked.rice eat-EGO-PERV.DRC=PQ

Have you had your meal? [I believe you must know because you would have experienced it.]

(14)

c. nó ʔacín dó-gée-bá

2SG cooked.rice eat-ALTER-PERV.DRC

You have had your meal. [I have seen you doing it.]

(14)

d. bɨɨ ʔacín dó-gée-bá

3SG cooked.rice eat-ALTER-PERV.DRC

He has had his meal. [I have seen him doing it.]

Conceptually, egophoricity is not identical to evidentiality, although egophoricity has been frequently categorized as evidentiality, for instance in Tibetan (San Roque, Floyd, and Norcliffe forthcoming; see also DeLancey, Chapter 27 of this volume; and Hyslop, Chapter

28 of this volume). To be the epistemic authority does not equal having direct access to information about the respective situation. However, if egophoric marking is analysed as evidentiality, then the non-egophoric form that encodes the addressee in assertions and the speaker in questions marks information sources other than the personal embodied experience. This comprises indirect information sources, but also visual direct evidentiality when the speaker has observed the action of another person. Within this approach, egophoric marking is viewed as a special subcategory of direct evidentiality, sometimes called 'participatory evidentiality' (Loughnane 2009) that indicates that the speaker is directly involved in the event in question.

In their overview of egophoricity San Roque, Floyd, and Norcliffe (forthcoming) show that at the formal level there are languages such as Wutun or Guambiano in which egophoric marking stands in a paradigmatic relationship with evidential morphemes, i.e. they belong to the same formal category (paradigm) and are in complementary distribution. In some languages there is also a diachronic relationship and it seems that the natural path of development is from some form of direct evidentials to egophoric marking. For instance, in Oksapmin, Fasu, and Foe participatory evidentials developed into egophoric markers (San Roque and Loughnane 2012a), and in Manghuer and other Mongolic varieties egophoric markers evolved from a direct evidential marker that, in turn, goes back to an old perfective aspect marker (San Roque, Floyd, and Norcliffe forthcoming). As San Roque, Floyd, and Norcliffe (forthcoming) further argue, there are languages that have only egophoricity or only evidentiality, and in other languages both categories co-occur but are formally independent, such that the precise nature of the interaction between the two categories needs to be investigated at a language-particular basis. A more detailed discussion of the interplay between evidentiality and person can be found in Sun (Chapter 2 of this volume). (p. 77)

3.7. Evidentiality and mood in main clauses

Non-indicative moods such as imperatives, subjunctives, interrogatives, and the concomitant speech act types other than assertions (e.g. commands, questions) provide various possibilities for interaction with evidentiality.

It has been noted that the expression of evidentiality in imperatives is cross-linguistically rather reduced and that this is in line with a general reduction of grammatical categories in commands (Aikhenvald 2004a: 250–3, 2015). According to Aikhenvald (2015b), most evidentials found in imperatives are hearsay markers, and since hearsay is frequently expressed by non-verbal evidentials we can conclude that only very few languages overtly mark evidentials on verbs in clauses with imperative mood (see Aikhenvald 2004a: 250 for an example and further references).

Evidentiality and its interplay with interrogativity has been investigated in detail by San Roque et al. (2017) (see also Aikhenvald 2004a: 242–9). The overt expression of verbal evidentiality in questions is far more common than in commands, probably because the interrogative mood is frequently marked by intonation or particles/clitics, which do not au-

tomatically lead to morphosyntactic interactions between the two categories or constraints on their co-occurrence (e.g. Qiang, Duna, Tsafiki, see San Roque et al. 2017 for further references). In the Tsezic languages Khwarshi, Hinuq, and Tsez the evidential categories that can occur in questions are the same as those found in declarative clauses, but the direct evidential (which corresponds to the simple past in Hinuq) occurs in the same slot as the verbal interrogative suffix (Comrie and Polinsky 2007; Khalilova 2011; Forker 2014). Therefore, there exists an alternation between the tense/evidentiality suffixes and the interrogative suffix in clauses denoting direct evidentiality that is not found when expressing indirect evidentiality (15), (16).

(15)
a. Tsez (Comrie and Polinsky 2007: 341)
kidb-ā t'ek t'et'er-n-ā?
girl-ERG book read-PAST.UNW-INTER
Did the girl read the book? [The speaker assumes that the hearer did not see the event.]

(15)
b. kidb-ā t'ek t'et'er-iyā?
girl-ERG book read-PAST.WIT.INTER
Did the girl read the book? [The speaker assumes that the hearer saw the event.]

(16)
a. Tsez (Arsen Abdulaev, p.c.)
kidb-ā t'ek t'et'er-no
girl-ERG book read-PAST.UNW
The girl read the book. [the speaker did not see the event]

(16)
b. kidb-ā t'ek t'et'er-si
girl-erg book read-PAST.WIT
The girl read the book. [the speaker saw the event]

(p. 78)

In other languages (e.g. Tariana, Cheyenne) interrogative clauses have a reduced set of evidentials compared with their declarative counterparts, and there are also languages that prohibit evidentials in questions (San Roque et al. 2017; see also Aikhenvald 2004a: 242).

Evidentials indicate a relation between an individual, the evidence holder (also called 'evidential origo'), and a proposition. In declarative clauses, the evidence holder is the speaker. It is his/her evidence that is marked by the use of evidential morphemes. In questions, the evidential origo is typically the addressee—that is, we have a perspective

shift from the speaker perspective to the addressee perspective as illustrated by the following examples from Korean (17a, b).

(17) a. Korean (Lim 2012)

John-i na-lul po-te-la
John-NOM 1SG-ACC see-DRC.EVID-DEC
[Given my perceptual evidence] John saw me.

(17) b. John-i na-lul po-te-nya
John-NOM 1SG-ACC see-DRC.EVID-INTER
[Given your perceptual evidence] Did John see me?

Evidentials that do not undergo a perspective shift can also be found, e.g. in Yukaghir and Eastern Pomo (Aikhenvald 2004a: 244). On the basis of the often observed functional overlap between interrogative pronouns and indefinite pronouns (i.e. interrogative pronouns can be used as specific indefinite pronouns), Korotkova (2015) claims that examples of polar questions in which there is no perspective shift and that thus have the speaker as information source merely illustrate ignorance readings. This would mean that they are at most conjectural questions that invite but do not require an answer and are used when the speaker is wondering about something. However, the claim by Korotkova (2015) requires further investigation since not all examples of evidentials without perspective shift provided by Aikhenvald (2004a) and San Roque et al. (2017) have conjectural readings. Other possibilities of perspective shifts with evidentials are also mentioned by Aikhenvald (2004a) and San Roque et al. (2017), but most of these are non-verbal evidentials.

In terms of their combinability with other modalities within the domain or irrealis, we find situations similar to those described for imperative and interrogative. In many languages there are restrictions due to morphosyntactic reasons such as the occurrence in the same verbal slot, but in Jamul Tiipay, Yukaghir, Turkic languages, and Abkhaz at least some non-indicative modalities co-occur with evidentials (Aikhenvald 2004a: 257–8).

3.8. Evidentiality and finiteness

In principle, one might expect that it should be possible for evidentiality to be expressed not only in main clauses, but also in subordinate clauses. In subordinate clauses generally fewer verbal categories can be expressed than in main clauses (Cristofaro 2003), but we have to distinguish between syntactic and semantic subordination, which do not always go hand in hand. In many languages with verbal evidentials, these are restricted to main clauses and (p. 79) cannot occur in syntactically subordinate clauses headed by non-finite verb forms such as participles or converbs. This is normally due to morphosyntactic constraints because evidential markers and the morphemes marking non-finite verb forms

may occur in the same slot or may be incompatible with each other (see, e.g. Murray 2016 on Cheyenne; Forker 2014 on Hinuq; and Aikhenvald 2004a: 253–6 for more examples and references).

We might expect differences between the three basic types of subordinate clauses, i.e. complement clauses (including reported speech), adverbial clauses and relative clauses. Thus, reported speech constructions might show no indications of syntactic subordination and simply consist of a quote and the verb of speech with its arguments. There are a number of languages that allow the use of evidentials in reported speech constructions. Often such a use triggers a shift in the evidential ego similar to what has been described for the use of evidentials in questions (in Section 6; see San Roque et al. forthcoming for examples and discussion). By contrast, indirect evidentials in Bulgarian complement clauses of verbs of speech and cognition have been analysed as not undergoing a perspective shift (Sauerland and Schenner 2007).

There are a number of languages in which certain subtypes of subordinate clauses admit the presence of evidential markers, but often the evidential semantics is absent. For instance, the Turkish indirect evidential *-miş* occurs in finite complement clauses with evidential meaning and certain non-finite complement clauses, but in the latter it has only counterfactual meaning (Coşkun 2010; Schenner 2010). Similarly, the Korean direct evidential marker *-te* (see also example (17a, b), §3.7) can occur in *irrealis* conditional clauses, but does not convey evidential meaning. Thus, the semantics of (18b) is not 'if I saw that he had found her yesterday, … ', but it is simply an *irrealis* conditional clause (see also Kwon 2013 for the full account of evidentials in Korean conditional clauses).

(18)

a. Korean (Kwon 2010)

ecey	ku-ka	kunye-lul	chac-ass-te-la
yesterday	he-NOM	he-ACC	look.for-ANT-DRC.EVID-DEC

[I saw that] he found her yesterday.

(18)

b.

[ecey	ku-ka	kunye-lul	chac-ass-te-la-myen]	motunkes-i
yesterday	he-NOM	she-ACC	look.for-ANT-DRC.EVID-DEC-IF	everything-NOM

cal-toy-ess-ul-thentey
well-get-ANT-FUT-ending
If he had found her yesterday, everything would have been fine.

Schenner (2010) provides guidelines for the investigation of evidentials in complement clauses, and lists Estonian, Qiang, Tibetan, and Bulgarian as languages that allow for embedded verbal evidentials. But occasionally evidentials can also be found in other types of subordinate clauses. Aikhenvald (2004a: 253–6) mentions Tukano and Tariana as examples of languages with evidentials in purposive and apprehensive clauses and also notes the lack of evidentials in other types of subordinate clauses in Tariana (e.g. relative clauses, complement clauses). Though, as mentioned above, non-finite complement clauses in

Turkish cannot convey evidential semantics, Turkish evidentials can occur in certain types of relative clauses and adverbial clauses with their full evidential meaning (Schenner 2010) (19). (p. 80)

(19)

Turkish (Schenner 2010: 205)

[ev-i	beğen-miş-se]	hemen	kirala-r
house-ACC	like-INDIR-COND.3SG	immediately	rent-AOR.3SG

If he likes the house [as I heard/infer], he will immediately rent it.

In Qiang, evidentials occur in some embedded clauses (20), direct speech complements and other complex clause constructions, but not in relative clauses and not in conditional clauses (LaPolla 2003: 74–5). It might, however, be the case that not all the examples show syntactic subordination.

(20)

Qiang (LaPolla 2003: 75)

[the:	ʁu-q-ta	ha-qə-k-əi	tu]	tɕi	ke:
3SG	mountain-TOP-LOC	OR-go-HSAY	LINK	bear	INDEF.CL

tu-tsu-k-əi

OR-meet-INFER-HSAY

When he went up on the mountain, he ran into a bear. [I heard but I am not sure]

There are also a few languages that allow for evidentials in realis or irrealis conditional clauses, e.g. Yukaghir (Maslova 2003: 227), Ashti Dargwa (see Forker, Chapter 23 of this volume) and Chechen (Molochieva 2010: 231–6). The latter language also has some other subordinate clause types that can be marked for evidentiality, e.g. relative clauses (21).

(21)

Chechen (Molochieva 2010: 235)

[ca:ra	top	toex-na	xilla-rg]	di:na	v-isi-na
3PL.ERG	gun	hit.PERV-CONVB	be.PER-NOMZ	alive	M-stay.PERV-PER

The one that they shot was alive. [The speaker did not see the shooting]

To sum up, evidentiality is not frequent in subordinate clauses, but there are languages that can express this category in non-main clauses. It seems that complement clauses with verbs of speech and cognition are the most probable candidates for inferential marking and relative clauses are the least probable candidates. As for the type of evidentiality expressed, this seems to be entirely a language-specific matter and no generalizations could be made so far. Diachronically, non-finite forms such as participles or other nominalized verb forms may be used as or may develop into markers of indirect information source. For instance, in Estonian and Livonian (Finno-Ugric), as well as in Latvian and

Lithuanian (Baltic) participles, infinitives, and action nominals are used for the expression of evidentiality (Wälchli 2000).

3.9. Evidentiality and semantically defined verb classes

At a language-individual basis semantically defined verb classes such as *Aktionsart* classes (dynamic versus stative verbs, telic versus atelic verbs) but also other classes such as experiencer verbs often show differences in the way in which they can be used in clauses (p. 81) expressing evidentiality (Aikhenvald 2004a: 324–9). In the latter case the interaction also involves person because what is relevant here is the difference between how one knows about her/his own emotions and cognitive activities (first person) versus how one gets to know about the emotions and thoughts of others. Thus, we find a perspective shift between speaker and addressee/other (in assertions) that resembles the way egophoric systems work and it is therefore not surprising that egophoric constructions can be sensitive to semantic verb classes. For instance, Standard Tibetan is commonly analysed as having egophoricity (see §3.6, see also the analysis by DeLancey (Chapter 27 of this volume) who stresses that evidentiality and egophoricity are different categories). It has a copula *'dug* expressing direct (visual, other sensory, or testimonial) evidence when used with second and third person subjects, as in (22a). The same copula can be used with first person subjects, but only if the subject has the semantic role of an experiencer and the predicate expresses inner sensations or emotions that only the experiencer herself/himself can have direct access to (22b).

(22) a. Standard Tibetan (Tournadre and LaPolla 2014)

mi 'dug
person EXIST.SENS
There is somebody.

(22) b. nga mgo na-gi.'dug
1SG.ABS head be.sick-STAT.EXIST.SENS
I have a headache.

Aikhenvald (2004a: 325) mentions that in Tariana (Arawak), Tukano, and Tuyuka (Eastern Tukanoan) non-visual evidentials are used to describe one's own feelings or states. When speakers talk about other people's feelings they typically use inferentials or visual evidentials. In Eastern Pomo, the non-visual sensory evidential is used to refer to sensations, feelings, and emotions (McLendon 2003: 102–3).

In the case of inferential evidentiality the speaker has direct access to the evidence, i.e. to a situation that is distinct from the original event and concludes from the resulting second situation that a certain event took place, takes place, or will take place. Based on

Nikolaeva (1999a), we can distinguish trivial from non-trivial results and define a trivial result as 'a component of the lexicographical description of the verb.' Verbs referring to events with trivial results are mostly telic, e.g. *open, come, arrive, put, stand up*, etc. The events expressed by atelic verbs (*stand, sing, hang, walk, snore*) do not have trivial results. Trivial results are unique for each event and predictable from it, and the resulting states share at least one participant with the preceding event. Non-trivial results are context-dependent and not part of the semantics of the verbs. They are highly dependent on subjective factors, they are not associated with certain verb classes, an event can have more than one non-trivial result, and the result and the preceding event itself do not necessarily involve the same set of participants. The distinction can be partially reflected in evidential systems. For example, in Nakh-Daghestanian, the perfect frequently has indirect evidential readings, but their availability depends on the semantics of the verbs used. Thus, with stative verbs such as *like* or *know* the perfect often conveys only present time reference. With verbs denoting changes of state (e.g. *sit down, get sick*) it only has a resultative meaning and refers to present states (Forker, (p. 82) Chapter 23 of this volume). Similarly, in Komi-Zyrian non-firsthand past forms of telic verbs have resultative meaning with no additional evidential semantics (23a); with other verbs indirect evidential meaning is expressed (23b).

(23) a. Komi-Zyrian (Leinonen 2000: 424).

körtön	ežöma	ödzössö
iron.with	cover.INDRC.3SG	door.ACC

The door was covered with iron. [resultative]

(23) b.

Vera	köt'	abu	na	vunödöma	menö
Vera	at.least	not	yet	forget.INDRC.3SG	1SG.ACC

At least Vera hasn't forgotten me yet. [non-firsthand: inference]

In Qiang (LaPolla 2003: 67), stative verbs have a mirative meaning when they are used with the inferred evidential. The inferential meaning of the same verb forms is obtained with dynamic verbs. In Tibetan, only verbs denoting telic events can be used with the direct evidential *shag* (Kalsang et al. 2013: 541), whereas the direct evidential *'dug* can be used with verbs that express telic and atelic events (Kalsang et al. 2013: 538). Furthermore, inference based on trivial results can only be expressed by means of *shag* (Kalsang et al. 2013: 531). With stative verbs in Japhug, the inferential imperfective can be used without any restrictions, whereas with dynamic verbs its use is restricted to concessive and counterfactual clauses and to the co-occurrence with the progressive prefix (Jacques ms).

In sum, there is an interaction between evidentiality and the *Aktionsart* structure of the event or the access to information source (direct personal access to one's own feelings

versus access based on visual observation or inference when talking about the feelings and inner states of others).

3.10. Evidentiality and other verbal categories

Most other categories marked on verbs such as voice and valency change, location/direction, and politeness do not seem to show interactions with evidentiality. The only notable exception is mirativity. Mirativity can be defined as 'the grammatical marking of unexpected information' (DeLancey 1997). It is the linguistic reflex of surprise and unexpectedness, of not yet integrated information or information that cannot be easily assimilated (see DeLancey 1997; Hengeveld and Olbertz 2012; Aikhenvald 2012b; Peterson 2015 for definitions and discussions concerning the term mirativity). Aikhenvald (2012b) provides a list of different semantic aspects of mirativity such as sudden discovery, unprepared mind, and counterexpectation. What a mirative statement typically, though not necessarily, expresses is the surprise of the speaker. In some languages this is reflected through a connection between mirativity and first person, in the sense that only statements with first person participants have mirative readings.

There is an ongoing discussion about whether mirativity represents a linguistic category in its own right or whether it is part of other categories such as evidentiality or modality (see (p. 83) the papers in *Linguistic Typology* 16, 2012). I assume that mirativity is, from a semantic point of view, an independent category, though it is cross-linguistically not often grammaticalized (much rarer than evidentiality). In a number of languages mirativity is realized independently of evidentiality, but there are also many languages where it is epiphenomenal and can be considered a 'side-effect' of evidentiality. This brings us to the correlation between the two categories. In a range of languages, non-firsthand evidentials —typically those with an inferential meaning—have mirative extensions, i.e. can have mirative readings in certain contexts, though their basic meaning is non-firsthand evidentiality. This can be tested by means of the *witnessing test* (Peterson 2015), whereby a non-firsthand evidential is used to express surprise in a situation where the information source is clearly direct, e.g. the Turkish suffix *-miş* (Aksu-Koç and Slobin 1986: 159). Furthermore, mirativity and evidentiality frequently have a common origin and partly share grammaticalization paths (Hengeveld and Olbertz 2012).

3.11. Position of evidential morphemes within the verbal paradigm and combinations of verbal evidential markers

As cross-linguistically well attested, evidential morphemes adhere to the preference for suffixes. Evidential prefixes are rare, but see Jacques (ms.) for verbal evidential prefixes in Japhug. Within the verbal template evidential suffixes appear directly attached to the stem most often when they are fused with tense markers, as in the Tsez examples in (15)

and (16). If evidentiality and tense are expressed by separate morphemes, then tense can occur closer to the stem than evidentiality (e.g. Kayardild, Evans 1995: 525–6), but the opposite ordering is also found (e.g. Yukaghir, Maslova 2003; Karitiana, Everett 2006). For separated tense and polarity morphemes it is polarity that precedes evidentiality (e.g. Desano, Sabanê). The same can be said about the ordering of aspect versus polarity: the former precedes the latter (e.g. Yukaghir, Desano). By contrast, verbal categories that follow evidential suffixes are person markers (e.g. Desano, Qiang, Matses, Mapuche) and mood/speech act type markers (e.g. Mapuche, Korean, Mamaindê, but in the latter language person precedes evidentiality, see Visser 2015: 304). In a number of languages such as Abkhaz or Wanano the evidential suffixes occupy the right-most position. These generalizations largely confirm Cinque's (1999) remarks about the position of evidential morphemes within the verbal complex: they occur closer to the stem than affixes that mark speaker evaluations or speech act type, but all other TAM morphemes appear even closer to the verbal stem than evidential affixes.

Combinations of verbal evidential suffixes are rare, but Eastern Pomo (24) provides an example in which the sensory evidential is followed by the hearsay suffix.

(24)
Eastern Pomo (McLendon 2003: 110)
bá·=xa=k^{h}i xów=aqa-nk'e-·le
then=HSAY=3.AGENT outwards=move-SENS-HSAY
Then he (i.e. the hero) starts to walk out. [The old man villain, who is blind, heard the hero start to walk out]

(p. 84) 3.12. Summary and concluding remarks

This chapter focuses exclusively on languages that mark evidentiality within the verbal complex. It provides an overview of the interrelations between evidentiality and other categories expressed on verbs—namely tense, aspect, modality, polarity, person agreement, mood/speech act type, finiteness, *Aktionsart* (or semantically defined verb classes), and mirativity.

With respect to some of these categories such as aspect and finiteness and, to a lesser degree, tense, it is often impossible to arrive at cross-linguistically valid generalizations. Instead, languages exhibit many peculiarities both with respect to the semantic relations as well as the formal relations. Furthermore, the relationships are varied and often include more than two categories, leading to even more intricate interactions.

Notes:

([1]) The indirect evidentials come as particles and enclitics, combining with the direct evidentials (5a) and also with the aspectual distinctions.

([2]) But see Peterson (2010) for a critique of this test.

([3]) Matthewson (2011) nevertheless argues for a modal analysis of the St’át’imcets evidential *lákw7a*.

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Evidentials and Epistemic Modality

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Abstract and Keywords

This chapter deals with the relation between the notional domains of information source and epistemic modality. It surveys various approaches to this relation and the cross-linguistic patterns of the way in which linguistic units (of diverse formats) with evidential or epistemic meanings develop extensions whereby they encroach into each other's domains. Meaning extensions in either direction can adequately be captured, and confusion between both domains can be avoided, only if in the analysis of the meaning of such units (a) an onomasiological and semasiological perspective and (b) a coded-inferred divide are distinguished. Thus, epistemic extensions often arise as Generalized Conversational Implicatures (GCIs). Concomitantly, reliability functions as a mechanism that mediates between, but cannot be identified with, the contributions of evidential and epistemic meanings. Reliability, together with the predictability of specific markers and discourse expectations, is considered responsible for the rise of epistemic GCIs.

Keywords: information source, epistemic modality, reliability, Generalized Conversational Implicatures, coded-inferred divide, meaning extensions, onomasiological/semasiological analysis

Evidentiality comprises grammatical(ized) reference to an information source. In contrast, *epistemic modality* is a conceptual domain pertaining to the speaker's assessment of the truth concerning some propositional content *p* (in logical traditions) or to the speaker's subjective evaluation of the degree of certainty that *p* holds true (in functional-cognitive frameworks). In this chapter we face two complementary tasks. On the one hand, this chapter addresses the notional relation between evidential and epistemic functions conveyed by linguistic expressions of various formats (affixes, clitics, words, constructions) and syntactic classes (auxiliaries, adverbs, particles, complementizers, etc.). On the other hand, the chapter discusses the motives behind epistemic extensions ('overtones') of dedicated evidential markers and, vice versa, of evidential extensions of epistemic markers. Different frameworks of research are examined. Addressing the notional relation between evidential and epistemic functions entails looking at linguistic reality from an onomasiological perspective, while discussing the co-occurrence of evidential

and epistemic meanings in specific units implies a semasiological point of view. These complementary viewpoints must be clearly differentiated to address claims that evidential and epistemic meanings often co-occur (or are syncretic), in one way or other, in the meaning or usage of linguistic units; such observation cannot justify a conclusion that epistemic and evidential functions, or even whole domains, can be reduced, or subordinated, to one another (Wiemer and Stathi 2010b). Considering functional shifts in either (i.e. evidential ↔ epistemic) direction, or dubbing linguistic units as evidential or epistemic cannot be sensibly interpreted unless the notional background has been clarified. I will therefore start by delimitating the two domains (§4.1) before reviewing theoretical approaches and surveying types of extensions into epistemic modality or evidentiality (§4.2). I then make an original proposal based on Generalized Conversational Implicature, with additional considerations regarding the semantics–pragmatics divide (§4.3), and give a summary (§4.4). For reasons of space, some relevant issues like the use of evidentials in questions, the relation to mirativity, the effects of marked focus, or the chronology of epistemic versus evidential meanings in syntactic reanalysis (e.g. desubordination, also referred to as insubordination) will not be considered here.

(p. 86) 4.1. Setting the scene

From an onomasiological viewpoint, evidential and epistemic meanings are related to speakers' cognitive states (namely, to knowledge and belief); correspondingly, relevant markers take semantic scope over propositions, but not over states-of-affairs (henceforth SoAs) or 'illocutions'.[1] The fact that both types of meaning relate to knowledge and belief (sometimes subsumed under 'epistemology', as in Chafe and Nichols 1986) has resulted in recurrent discussions concerning the relation between evidentiality and epistemic modality (see §4.2.2). Their conceptual closeness has led Boye (2012) to classify epistemicity as an umbrella term: evidentiality gives justification to a speaker's assertion (by referring to the grounds for judgement), while epistemic modality indicates support of a speaker's claims and any kind of belief state (see Boye's (2012: 159) semantic map of epistemicity, in which the solid lines indicate linkages between particular subdomains, usually showing up as values in epistemic scales or in taxonomies of evidential meanings). Following Boye, epistemic modality can be divided into degrees of epistemic support, while epistemic justification can be understood as a synonym of information source (or of evidentiality, for that matter). I will use *epistemic support* and *epistemic justification* in Boye's sense.

Thus, while epistemic judgements evaluate propositions in terms of belief and knowledge, evidentiality 'stat[es] the existence of a source of evidence for some information; that includes stating that there is some evidence, and also specifying what type of evidence there is' (Aikhenvald 2003a: 1, also 2004a: 3). Aikhenvald's definition captures evidentiality as a notional domain. In practice, she has restricted evidentiality to grammatical means ('evidentials'), while she proposes calling the notional domain behind them 'information source': ' "Evidentiality" is grammaticalized marking of information source. […]

"evidentiality" is a linguistic category whose real-life counterpart is information source' (Aikhenvald 2014: 1–2).

Generally, linguistic units are considered grammatical if they enter into more or less closed paradigms whose members are mutually exclusive and can replace each other in clearly definable grammatical contexts; eventually, these expectations can turn into obligatory use.[2] Although a distinction between grammatical and lexical markers is undoubtedly useful (Squartini 2007b; and Chapters 13 and 14 of this volume), I will not strictly separate *evidentiality* and *information source*. There are two reasons for this, in addition to those given by Boye (§13.4 of this volume). First, the main issue of this contribution lies in the notional relation of the domains depicted in Boye's (2012: 159) semantic map of epistemicity. (p. 87) Empirical research suggests that the same notional distinctions between justification and support of judgement basically apply to units, regardless of their place on a grammar–lexicon cline, however it may be defined. This cline does not play a crucial role in formal semantic analyses either (see §4.2.3). Second, in many languages, alternative or even complementary choices of otherwise acknowledged evidentials have proven to be 'scattered' in the morphosyntax and do not make up paradigmatic systems (Boye 2012: 109–24; Aikhenvald 2014: 14; Brugman and Macaulay 2015: 223–5). All this makes the distinction between grammatical evidentials and evidential strategies less clear-cut. In other words, the likelihood that an evidential marker either occasionally (i.e. in actual discourse) or conventionally (i.e. as a result of diachronic change) acquires epistemic overtones probably depends, all things being equal, on the tightness of paradigmatic organization into which this marker enters with alternative evidential markers, as well as possibly also on the degree of fusion with lexical stems. This applies to evidential strategies as well, regardless of whether we are dealing with evidential extensions of paradigmatic forms (e.g. TAM grams) or with the evidential semantics of lexical items such as sentence adverbs like English *allegedly, apparently, obviously, visibly*, and *tangibly* (Lampert 2014). Thus, the real problem seems to be rather to determine how the degree of predictability of some marker M_i, and its paradigmatic and syntagmatic relation to other markers $M_{1\text{-}n}$, influence its own meaning (here: the evidential value) and evoke inferences that can cause extensions into related domains or, conversely, from contiguous domains into information source. Concomitantly, we are required to distinguish between coded and inferred meaning (see §4.3).[3]

4.2. Determining the relation between evidential and epistemic meanings

We may determine two interrelated reasons why evidential and epistemic functions (and the underlying notional domains) tend to be conflated. The first reason lies in research traditions that are deeply anchored in the description of 'classical' languages and Western philosophy, which has favoured a bias of subordinating evidentiality (= epistemic justification) to epistemic support (Boye 2012: 15–47; §14.4.1 of Squartini, this volume). This same bias has probably led scholars of familiar Indo-European languages—or grammari-

ans of less familiar languages guided by those more familiar ones—to include evidential distinctions by mood and to ascribe dominant epistemic meanings to forms (or constructions) whose primary function is to indicate information source.[4] Similarly, (p. 88) propositional modifiers like sentence adverbs or particles whose primary coded meaning can be shown to be reportive (i.e. indication of hearsay[5]), in the grammars of German, Polish, Serbian−Croatian, and other European languages, have customarily been described as a subcategory of markers that indicate distrust or a disclaimer of the speaker's responsibility for the veracity of the conveyed propositional content (Wiemer 2006a: 14–17; 2008a: 20–2; Wiemer/Vrdoljak 2011; Wiemer/Socka 2017: §2.1). A similar situation obtains for Turkic languages (Johanson 2000a: 70). Evidential meaning contributions inherent to propositional modifiers that had dominant epistemic meanings have been overlooked or downplayed; see, for instance, the Russian examples (2a–b) in §4.2.1.

This 'historical' reason intersects with a second, already mentioned one: that both epistemic and evidential modifiers operate on propositions. Although this has only recently been made fully explicit in a cognitive cross-linguistic framework (see §4.1), modal logic built on this premise earlier. Modal operators have been interpreted as quantifiers over possible worlds described as sets of propositions, and evidential requirements (also called 'restrictions') have been incorporated into the decomposition of modals. This approach heavily relies on truth-conditional tests and has been elaborated following Kratzer's influential theory of communicative backgrounds (German *Redehintergründe*; cf. Kratzer 1978, 1981, and subsequent work). Remarkably, in this framework the mutual relation between epistemic and evidential contributions to meaning has changed in favour of evidential contributions. This seems to correlate with a concomitant recent change in the evaluation of truth conditions (see §4.2.3).

Regardless of the adopted formalism, the relation between evidentiality and epistemic modality has been understood in various, sometimes diametrically opposed, ways. Practically all logically possible constellations have been advocated for: (i) the two domains are separated, although they may imply each other; (ii) both domains overlap each other in some of their parts; and (iii) one domain is included in the other.[6] An overlap relation (i.e. option (ii)), was argued for by van der Auwera and Plungian (1998), who claimed that inferential evidentiality coincides with ('amounts to') epistemic necessity, because 'for both categories we are dealing with the certainty of a judgement relative to other judgements' (1998: 86). This argument implied an asymmetry between the supported judgement and all other possible judgements; cf. Xrakovskij (2005: 91–4) for a similar point and the comments on example (7) in §4.2.3. At first glance, this position appears plausible and confirmed, for instance, by the analysis of MUST-auxiliaries in Germanic and Romance languages, or by the conditions on which perfect grams extend into indirect evidentiality, such as in Bagvalal (Nakh-Dagestanian, Tatevosov 2007b: 378), Agul (Nakh-Dagestanian, Majsak and Merdanova 2002: 110), or Bulgarian (Slavic, Indo-European, Izvorski 1997, among many others). However, many evidential extensions of perfects are void of stable epistemic overtones, such as Lithuanian non-agreeing participles as clausal nuclei (Wiemer 2006b), so-called (p. 89) 'indirectives' in Turkic and areally contiguous languages.[7] Epistemic overtones are quite typical of small systems (A1, A2) and evidential

strategies (like MUST-auxiliaries), but inferentials in larger systems usually lack them (see §4.2.2).

Option (iii), i.e. inclusion, opens up two opposing options: (iii.a) that evidentiality includes epistemic modality, or (iii.b) that epistemic modality includes evidentiality. Option (iii.b) for a long time dominated in the aforementioned tradition in Western linguistics and has persisted in many European national philologies. The opposite direction of inclusion, (iii.a), is tantamount to Plungian's (2001: 354) claim that 'an evidential supplement can always be seen in an epistemic marker, [while] the opposite does not always hold'. That is, all epistemic markers must also be inferential, because any epistemic state (conviction, assumption, doubt, etc.) is derived from some basis of reasoning, if only from the speaker's general, culturally conditioned knowledge background (i.e. without a sensory basis), or from endophatic processes like hunger or dreams (i.e. with a sensory basis, but with purely internal stimuli).

Plungian's generalization may be read to suggest a *conceptual* dominance of source-related meaning components over epistemic commitment, but it does not imply anything about whether, and how consistently, languages employ distinct markers to indicate specific sources, or how functions cluster for types of markers. Before turning to the empirical observations, let us establish the following: if an epistemic ⊃ evidential implication[8] universally (and trivially) holds true as sort of conceptual–pragmatic default, differences between languages might be ordered on a cline. On one end this default is often unspecified, simply because it is a default, and the evidential contribution can be determined from the context, unless there is some specific need for marking information source. What these languages highlight is the degree of epistemic support. On the other end are those languages for which specific values of this default implication are marked more or less consistently (i.e. the default is made distinct and placed in the foreground), because a speaker must be 'accurate' in the validational basis of their assertion to be considered a reliable person. The latter end would be typical of evidential-prominent languages, and the former of epistemic-prominent ones. This distinction was suggested by van der Auwera and Ammann (2005), cf. also Boye (2012). Certainly, this should not only be regarded as a typological continuum, but be extended to include extragrammatical marking. However, apart from this demand, we must ask what causes epistemic- or evidential-prominence in the first place.

At present it seems impossible to answer this question without circularity (Aikhenvald 2014: 41). But, regardless of how evidential systems arise, prominence relations between epistemic and evidential meaning contributions are substantially influenced by the system of evidentials (if a language has them in a stricter sense) and of evidential strategies, because both have an impact on both the range of information source meanings of individual markers and on their associations with epistemic (or further related) meanings. Aikhenvald (2004a: 192–3) generalized that '[t]he larger the evidential system, the less likely are the evidential terms to develop epistemic extensions'. An account of a system includes not only the number of participating grams, but also of predictability (which, at its most extreme, (p. 90) amounts to obligatoriness; see §4.1). Taking these considerations

as a reasonable point of departure, one may argue that one- or two-sided implications between evidential and epistemic meanings are more likely to cause covert complexity, the less paradigmatically tight and predictable is the use of evidentials, in general, and of specific evidentials, in particular. This said, we need to clearly distinguish between concepts on the semantics–pragmatics interface (= coded-inferred divide).

From a semasiological viewpoint, evidentials often show properties related to (a) illocutionary strength, (b) degree of informativity,[9] and (c) reliability of the source. While (a) and (b) have recently been surveyed by Brugman and Macaulay (2015), (c) will be brought into focus in §4.2.4. First, however, I will begin with the distributional behaviour of some evidential markers and show that features underlying the behaviour of dedicated evidentials can also be disclosed as evidential contributions in the meanings of extragrammatical markers (§4.2.1). I assume that these meaning contributions make such markers liable to becoming evidential strategies. §4.2.2 continues with a selective survey of epistemic extensions of evidential markers and evidential extensions of epistemic markers. §4.2.3 discusses the contribution made by formal semantics to better understand the evidential–epistemic relationship. In §4.2.4 I argue for reliability as a concept that mediates between evidential and epistemic meanings, but does not belong to either of them.

4.2.1. Grammatical distribution, system organization, and evidential contributions

Three circumstances are indicative of evidential and epistemic meanings not being reducible to one another. The first circumstance has to do with the distribution of relevant markers. In many languages evidential and epistemic markers can, but need not, be combined. For instance, evidentiality can be marked in conditionals, as in some Latvian and Lithuanian dialects (Holvoet 2001a: 111) or in Macedonian (Friedman 2003: 205). Evidential meanings can also be distinguished in other non-indicative moods (often called '*irrealis*') or for the future (e.g. in Cuzco Quechua); for a survey cf. Aikhenvald (2004a: 165, 257–60). The second circumstance has to do with the way linguists usually organize these functions into systems. Whereas epistemic functions can be arranged along a gradient from full certainty to a complete lack of certainty, or from full support to neutral support —and are therefore often conceived of as contiguous intervals on a scale—it makes no sense to present evidential functions in scalar terms. In fact, what might different degrees of hearsay or of inferences mean?[10] Instead, evidential functions are organized in taxonomies (Plungian 2001; (p. 91) Aikhenvald 2004) or networks (Anderson 1986; Squartini 2001, 2008). For the organization of meanings of evidentials cf. Chapter 1 of this volume.

The third circumstance lies in the observation that the distribution of many propositional markers differs because these markers narrow down the specific source used to justify a claim (how one knows *p*). This observation applies independently of any lexicon–grammar distinction. We find it for dedicated grammatical markers like those in Tariana (Aikhenvald 2004a: 3–4), Cuzco Quechua (Faller 2002, 2011), or St'át'imcets, with the latter dis-

tinguishing between the adverb-like marker *lákw7a* (which is used if inference is based on any—except visual—perceptual input) and *k'a* (which is used for inferences that exclude perceptual input). See the following example from Matthewson (2012a: 94); here # indicates inadequacy (glossing adapted):

(1)

Context: You are a teacher and you come into your classroom and find a nasty picture of you drawn on the blackboard. You know that Sylvia likes to draw that kind of picture.

nilh	k'a /	# lákw7a	s=Sylvia	ku=xílh-tal'i
FOC	ASSUM	SNV	NOMZ=PROP	DET=do(CAUS)-TOP

It must have been Sylvia who did it.

However, also in many languages without grammatical evidentials we observe a cross-linguistically recurrent 'cut' among evidential functions that results from a distinction between perceptually accessible information (2a) and claims for which, instead of perceptual information, the speaker rests on some specific sort of knowledge (2b). Compare the following Russian sentences with propositional modifiers that form a minimal pair concerning the [± perceivable] distinction:

(2)

a. Kažetsja, ėto zvonit redaktor.

(2)

b. Naverno,	ėto	zvonit	redaktor.
	PTC	ring[IMPERV]-PRES.3SG	editor-NOM.SG

(a) Apparently/It seems (b) Obviously/Probably, this is the editor ringing.

Kažetsja (originally 'seem[IMPERV].PRS.3SG') can be used only if the speaker has immediate access to pertinent perceptual stimuli—for instance, if they have lifted the receiver and heard the other person's voice (2a). The adverb *naverno* would not be appropriate in such a situation; instead, it would be suitable if the speaker has heard the phone ring, has not yet lifted the receiver, but knows that this was the time when the editor was supposed to call (2b). In this situation, in turn, *kažetsja* would be inappropriate. This distinction recurs time and again in languages,[11] and it applies regardless of whether any of these units can additionally be ascribed some specific epistemic value, indicating the speaker's commitment. One can therefore construct taxonomies (or networks) of evidential values regardless of whether (p. 92) these values interfere with epistemic support. In fact, Jakovleva (1988, 1994: 196–251) built up a cross-classification of Russian propositional markers consisting of an evidential [± perceivable] and epistemic feature of weak versus strong certainty.[12] A very similar [± perceivable] bifurcation of information source for inferentials was independently proposed by Squartini (2008) for Italian and French: 'circumstantials' versus 'generics'.

For inferences based not on perception but on deductive reasoning or on general knowledge,[13] as well as for non-specific markers of information source, the distinction between evidential and epistemic functions is easily blurred in epistemic-prominent languages, in which inferentials are not a part of a larger, paradigmatically tight system.[14] Consider, for instance, the Italian future tense, which Squartini (2008) assigns to his group of 'conjecturals'. The basic feature of this group is 'that any evidence, both external and based on general world knowledge, is lacking' (2008: 924). If the evidential basis for an inference is defined *ex negativo*, interlocutors may conclude that the speaker does not fully support their statement. As in other European languages, the default to mark full support is the (present) indicative, while the future tense is employed as a device to weaken assertiveness. If there is no concomitant specific source of evidence to justify the statement, the epistemic contribution to utterance meaning prevails. The situation differs in evidential-prominent languages. Here, conjectural evidentials need not imply any uncertainty, and epistemic markers are often organized into separate sets, as, for instance, in Matses (Panoan); cf. Aikhenvald (2014: 7), in line with Fleck (2007).

While overlap theories have mainly been discussed with regard to inferential markers, reportive markers have been connected to weak(ened) epistemic support for another reason, namely, that hearsay dissociates the source of information from the speaker using the reportive marker (henceforth the 'actual speaker'), as it presents information from some other person(s). This fundamental split within evidentiality coincides with the SELF–OTHER distinction (Frawley 1992), also dubbed [± personal] in Plungian (2001); cf. Squartini (§14.4.4.1 of this volume). Inferentiality, together with direct experience, is characterized as [+ personal SELF], while reportativity is characterized as [− personal OTHER]. According to Aikhenvald's (2004a) classification, the SELF–OTHER distinction is grammaticalized in A3 systems ('reportive' versus everything else), whereas oppositions of '(in)directivity' (Johanson 2000a; Chapter 24 of this volume) or '(non)confirmativity' (Friedman 2000a, 2003) are realized in A1 and A2 systems.

Now, why should hearsay necessarily weaken epistemic support? In the first place, by relating propositional content to another subject's utterance, the actual speaker can remain agnostic with regard to their own epistemic attitude. Correspondingly, reportive markers can be Janus-faced, in that either epistemic overtones arise or they are suppressed, but for different and even competing reasons. This is clearly demonstrated with the reportive enclitic *=ami* in Saaroa (Formosan, Austronesian) by Pan (2014: 97): 'In Saaroa, the reported evidential makes an implicit reference to the speaker's attitude towards the information acquired (p. 93) from someone else. There are two reasons that the Saaroa speaker may opt to employ the reported evidential. The first reason is to show his or her objectivity; that is, the speaker is not an eyewitness to the event and knows about it from someone else. The second reason is as a means of shifting responsibility for the information and implying that related facts may have a connotation of unreliable information.' In the first case, no epistemic overtones arise because the speaker simply accurately indicates information source. In the second case, the same device is used to safeguard the speaker against being accused of possibly conveying false propositional content.

Moreover, of the two competing motivations, one or the other may gain dominance depending on genre or other discourse factors. Competing motivations are no prerogative of grammatical evidentials, but can be observed among lexical reportive markers and evidential strategies as well (see §4.3). In general, languages demonstrate variation in the extent to which reported (as well as quoted) speech is associated with epistemic stance taking. Aikhenvald (2014: 26–7) shows that, in one kind of community, quoted or reported speech may be treated as a technique to downplay the reliability of the reported speaker, while in another community the same techniques are 'way[s] of stressing the veracity of what one is talking about' (2014: 27).

4.2.2. Extensions either way: A selective survey

From a diachronic viewpoint, evidential and epistemic functions develop from each other in either direction (Squartini 2009). The direction obviously depends not on the status of the marker on a lexicon–grammar cline, but rather on the semantics of the source expression in specific constructions, often mediated or triggered by (non-)factuality.

I start with epistemic extensions of evidential expressions. In general, if epistemic extensions take place, certainty is correlated with visual or firsthand evidentials, while uncertainty occurs with different types of markers of indirect (i.e. non-firsthand) evidentiality. However, visual or sensory evidentials of small systems (A1, A4) almost never show epistemic extensions, while visual or direct evidentials in larger systems have been observed to be associated with firm belief or certainty (e.g. Tariana =*naka*). Visual evidentials are often employed when referring to encyclopedic knowledge, such as information about the sun, or about a tribe's mythical provenance. Examples of this can be found in languages in the Vaupé area, in Shipibo-Konibo, Tsafiki, and Cora (C2 or C3); cf. Aikhenvald (2004a: 159–73, 2014: 29–30). By contrast, no epistemic extensions have been reported for non-visual evidentials, except for Maricopa (B3), whose non-visual evidential can mark certainty (Aikhenvald 2004a: 163, 171, 187).

In some languages (e.g. Bagvalal, Northeast Caucasian, A1), firsthand evidentials are used to refer to visible results if the verb describes something that cannot be seen (e.g. feelings or cognitive processes), but about which the speaker is certain (Aikhenvald 2004a: 155). In this case, the extension within evidentiality (from direct to inferred) was probably conditioned by a preceding epistemic extension. This is different in languages with larger systems, for which inferred evidentials can be used to describe somebody else's internal experience. For instance, Wanka Quechua =*chra* can weaken the speaker's epistemic support, possibly including doubt; this is particularly common if inferred evidentials are used to speak about other people's feelings (which the speaker cannot be certain about). However, the epistemic (p. 94) extension appears also to be conditioned by the paradigmatic opposition to =*mi* (Aikhenvald 2004a: 161, 165–6, after Floyd 1999). The Eastern Pomo inferred marker -*ine*, in turn, is used in opposition to the visual marker -*a* and the non-visual marker -*nk'e* if the speaker makes an inference based on something

other than visually accessible data. In this case, no epistemic overtones arise (Aikhenvald 2004a: 169–70).

In general, inferentials only rarely show epistemic overtones in languages with elaborate evidential systems. However, if these overtones are mentioned, it is assumed evidentials that show such extensions, not inferred evidentials (indicating sensory evidence). This applies, for example, in Shipibo-Konibo *-bira*, which is used if 'the speaker has a fairly well-sustained hypothesis for the proposition expressed', as well as for the speculative *-mein*. Either marker is employed if the basis on which inferences are drawn is poor (Valenzuela 2003: 44–9; cf. also Aikhenvald 2004a: 176, 192).

Within indirect evidentiality, epistemic overtones are commonplace for A2 systems, such as in the Eurasian 'evidential belt' (Balkan, Turkic, Iranian languages, and languages of the Caucasus), including Baltic and many Finno-Ugric languages (e.g. Komi, Mari, Northern Khanty), but we also encounter them in Algonquian languages (Aikhenvald 2004a: 279–80; 2011a: 611). All these systems arose as evidential strategies extended from resultative-perfect grams. That these systems are particularly prone to epistemic meanings that weaken assertiveness is to be expected in view of the frequently optional character of the non-firsthand term.[15] Any additional marking that need not generally be expected easily triggers Gricean implicatures (see §4.3.1).

A somewhat special grammatical condition can be observed in Jarawara (A1). If the non-eyewitnessed immediate past marker occurs in a slot after the declarative—normally it occurs before it—this implies uncertainty (Dixon 2003: 173).

The road into epistemic extensions is mediated by 'conceptual distance' if an inferred or indirect evidential is employed to emphasize that the speaker has nothing to do with, or does not approve of, the described state of affairs. This may then extend into uncertainty (as is the case in Cree, Aikhenvald 2004a: 157–8), but it can also 'end up' simply communicating distance. For instance, an inferred evidential is used instead of a visual evidential (as in Tsafiki, C2, Aikhenvald 2004a: 172–3); alternatively, Desano (Eastern Tukanoan) employs the assumed evidential in origin stories—for which there is no evidence—while the remote past visual is used in '[n]arratives involving narrators' personal experiences' (Aikhenvald 2004a: 312). Again, in these cases, paradigmatic contrasts prove important. However, the effects of non-participation also occur in less elaborate systems, for instance in Hinuq (Nakh-Daghestanian, A2). In this case, the speaker's personal knowledge sphere is associated with the neutral past as the unmarked term, which yields firsthand knowledge only as an implicature: 'It is not part of the meaning of these verbal forms and can therefore, under the appropriate circumstances, be cancelled' (Forker 2014: 56). Cf. Lazard (2000: 212) for an analogical point concerning Iranian. The cancellation of generalized implicatures will be discussed in §4.3.

With regard to reportive markers, the cross-linguistic occurrence of epistemic extensions varies considerably, making it almost impossible to predict which languages show them at (p. 95) all, and for which of their reportive markers. Epistemic extensions range from distancing or weakening a claim to outright rejection of the truth of the reported proposi-

tion. This range can be covered by a single marker in some languages (e.g. Warlpiri *ngan-ta*) or be more 'fixed'. For instance, in Mixtec languages (Oto-Manguean), hearsay markers regularly function as disclaimers (Aikhenvald 2004a: 136–7, 181–5, 193).[16] Unlike inferentials, in the case of reportive markers there is no good evidence that the specific epistemic value (distance, doubt, outright rejection) or the liability to epistemic overtones as such depends on the system of evidentials or on the predictability of the marker. Such extensions are also frequently encountered in small systems with a low degree of obligatoriness (e.g. in Saaroa; see §4.2.1), and they are commonplace in the case of evidential strategies and specialized reportive markers in European languages. The epistemic extension is usually highly context sensitive (see §4.3), with a well-known case being reportive particles derived from SAY-verbs (mostly with the agglutinated complementizer as a holistic unit) in Spanish and other Romance languages (Cruschina and Remberger 2008). For instance, consistent epistemic extensions are identified for *dizque* in Mexican Spanish (Olbertz 2007), but the situation differs among Spanish varieties in the Andean region (Dankel 2015 and Alcázar, Chapter 35 of this volume, the latter with remarks on the relative chronology of the development of evidential and epistemic meanings). In general, the heterogeneity observed particularly among reportive markers corresponds to what we observe with direct speech (or quotatives). For instance, epistemic overtones are associated with direct speech in Tewa, Gahuku, and Usan, but are lacking in Tariana (Aikhenvald 2004a: 138–40) and Tatar (Greed 2014: 75). This suggests that reportive (and quotative) markers behave like other techniques of reporting of other people's speech—namely, that they are more cross-linguistically variable and more context sensitive than inferentials, and that they depend on the general attitude toward reports of other people's speech.

Let us now look at evidential extensions of epistemic expressions. Non-indicative moods are well-known as a class of grams that are related to epistemic modality, and that often develop evidential extensions. Consider, for instance, conjunct dubitative forms in Algonquian languages, or conditionals/subjunctives in Romance and Germanic languages. Future grams can evolve into epistemic, and thence into evidential, markers (Aikhenvald 2011a: 610). In parallel to conditionals and subjunctives, evidential extensions of modal auxiliaries are frequent in European languages (Wiemer 2010b: 77–87), although the degree of conventionalization into markers of reportive or indirect evidentiality varies. Other examples of evidential extensions that conventionalized into dedicated evidentials are the West Greenlandic inferential affix *-gunar-* (< Proto-Eskimo 'probably') and, it is likely, the hearsay evidential (< 'maybe') in Wintu (Aikhenvald 2011a: 609).

Another frequent source of evidential extensions—first into inferential, thence often also into reportive evidentiality—is SEEM-verbs[17] and, at least in the Eastern part of Europe, markers of irreal comparison ('as if, as though'). Arguably, these units entered the propositional domain as epistemic modifiers before evidential functions could become more (p. 96) salient. Compare Polish *jakoby* 'as if' and *podobno* 'allegedly' (< 'be like, similar'), or Russian *(kak) budto* 'as if' and, more recently, *vrode* 'as though' (< 'sort of'). Available evidence suggests that such expressions move from irreal comparison first into perception-based inferentiality and thence into the reportive domain (Wiemer 2005, 2015a). The latter process seems to be supported by contexts that exclude firsthand experience as a

basis for inferences (Wiemer 2008b: 349–50 on possibly ongoing change in Russian). A similar case, although one that represents another etymological type, is Lithuanian *esą* (Holvoet 2010: 88–92; Wiemer 2010a). When such units start functioning as complementizers, they seem to inherit the epistemic load of 'their' complement-taking predicates, which denote either epistemic attitudes with different degrees of (usually negative) commitment (e.g. doubt, 'not true'), or speech acts from which the actual speaker can distance themselves ('assert'); cf., for instance, Zaitseva (1995: 20–7) and Letuchiy (2010: 359–62) on Russian *budto*. This may be the reason why Polish *jakoby* is preferred in polemic discourse, not only as a complementizer but also as a particle (Socka 2015: 127, 129). However, there also is a tendency for these units to lose epistemic overtones when they are used as particles and to become restricted to reportive use.

Thus, epistemic overtones often but not always remain as reflexes from source constructions. Apart from 'as if'-units, we encounter another type of modal source expression, at least in European languages. Reportive markers can arise from interpretive deontics, such as the German auxiliary *sollen* '1. should, ought to > 2. REP' (Zeman 2013) and its Polish equivalent *mieć* '1. have > 2. should, ought to > 3. REP' (Hansen 1999: 122–8), or the Latvian particle *lai* (< *laid*.SG.IMP of *laist* 'let') and its Slovene equivalent *naj* (< *nehaj*.SG.IMP of *nehati* 'let'). With all these markers (except Latvian *lai*) epistemic overtones can be suppressed (Wiemer 2010b: 81–3; Holvoet and Konickaja 2011; Holvoet 2012).

4.2.3. The contribution made by formal semantics

The relation between epistemic and evidential meanings has also been intensely discussed by formal semanticists (for a systematic survey cf. Speas, Chapter 15 of this volume). In the context of the present chapter, the relevant points are changes in the significance assigned to truth conditions, the relation between knowledge and belief states, the treatment of scopal properties and, most importantly, the way meanings are decomposed. Following Kratzer (1978, 1981), formal semanticists start from the premise that evidentials behave very much like epistemic modals, and that the latter can be described as quantifiers over (propositions stating assertions about) possible worlds. Certainty (i.e. full epistemic support), then, is decomposed with the universal quantifier, while possibility (i.e. partial or neutral epistemic support) implies the existential quantifier. Quantification over possible worlds is supplemented by the Modal Base and the Ordering Source.[18] The former is the set of propositions conveying contingent facts known to the speaker, while the latter is the set of the speaker's assumptions about how the world normally works, spelling out the stable knowledge background about causal relations. For instance, if the speaker notices that it is 5:00 pm (Modal Base) and knows that, at that time (p. 97) of the day, cows are habitually milked in their parents' farm (Ordering Source), they infer that, at the present moment, cows are almost certainly being milked. In English the speaker can say just (3a), but (3b), with a necessity modal, is an option, too. An equivalent to *must* in (3b) would be Russian *naverno* (see 2b) or the so-called 'expectative' (alternatively, assumed marker) in Wintu, see (4) cited from Schlichter (1986: 53):

(3) a. My parents are milking the cows now.

(3) b. My parents **must** be milking the cows now.

ʔimto·n	nuqa·	-ʔel
(4) berries	ripe	-EXPECT

The berries must be ripe (it's that time of year).

Apart from the fact that English *must* and Russian *naverno* are optional, while the Wintu *-ʔel* morpheme is considered obligatory in the type of context discussed here, Russian *naverno* is restricted to [− perceivable] triggers of inferences (which is compatible with knowledge about habits), while English *must* is insensitive to the [± perceivable] distinction, allowing its Modal Base to be left unspecified. With reportive evidence—i.e. {*p* was said by X/by someone else} in the Modal Base—the Ordering Source may be empty, or it may only be 'filled' with the assumption that the original speaker of *p* is reliable (and did not lie).[19] In this case, however, reliability introduces another dimension, which dilutes the notion of information source (see §4.2.4).

This 'sharework' of contributions to inferences confirms that inferences are no primitive notion; in fact, they are not even evidential as such, but products of mental processes. Modal Base and Ordering Source provide the evidential background, which must be stipulated item by item. Brugman and Macaulay (2015: 206) caught up with this insight and in actual practice reduced 'sources of evidence' to a division of sensory bases from which inferences can be drawn. This division is equivalent to what elsewhere has been dubbed 'Modes of Knowing' (Squartini 2008: 917).

If tests tailored according to truth-conditional premises are applied, they yield different results as for whether evidentials scope over presuppositions, additional propositions, or illocutions (Speas, §15.1 of this volume). While we will not enter into the discussion about scope here (for which see Boye 2010b: 296–8, 2012: 207; §15.5.4 of Speas, this volume), it is remarkable that the apparently heterogeneous scopal properties of evidentials have led to the conclusion 'that truth-conditionality (or non-truth-conditionality) cannot be considered a criterial property of evidential items' (Brugman and Macaulay 2015: 211). That is, 'truth' can no longer be considered as a concept that may be used to define evidentials. Truth may be entailed by some evidentials, namely if they mark direct evidence, but this is not a general property of evidentials as such. Modals differ in this respect inasmuch as any belief state requires the speaker to think that *p* is true in at least some possible world (M. Faller, p.c.).

In practice, divergent opinions as to what constitutes a genuine component in the meaning of an evidential marker have caused equally divergent, even contradictory views on the general relation of evidentials to epistemic modals. This situation reminds us of the diversity (p. 98) of views on overlaps, insertions, or mutual entailment between the domains of information source and epistemic modality that were surveyed at the beginning of this section. To understand how this has come about, we should realize two points made in the discussion. On the one hand, defining epistemic modals and evidentials via

truth conditions makes reliability (or 'assertion strength') and commitment (i.e. epistemic support) unnecessary semantic ingredients of evidential markers (San Roque 2008: 305; Matthewson 2012a: 88, among others). On the other hand, Kratzer (1981) emphasized not only the difference between knowledge and evidence—which supplies the basis for knowledge—but also between knowledge and belief, an opposition with roots in analytic philosophy. Eventually she concluded: 'There are two distinct semantic jobs to be done, then: classify evidence versus assess the truth of a proposition against possibilities projected from a body of evidence. The two jobs often end up being carried by a single portmanteau item that might then be arbitrarily catalogued as a modal or evidential' (2012: 23). The first sentence just re-affirms the basic notional distinction between epistemic and evidential values (see §4.1), while the second sentence re-formulates the fact that evidential and epistemic meanings can 'merge' in one syncretic expression. In addition, recent practice in the formal semantic analysis of propositional markers has created the impression that a given marker is indeed 'arbitrarily catalogued as a modal or evidential', a fact that we will demonstrate using concrete examples.

The possible dissociation of evidentials from the notion of truth makes them compatible with the speaker's knowledge that the reported or inferred proposition is false or, conversely, true. In this vein, Murray (2010a) concluded that the Cheyenne reportive was *not* to be considered a modal because speakers can use it if they know the proposition, in its scope, to be false (cited after Matthewson 2012a: 90, glossing slightly adapted):

(5)

é-hó'tåheva-**sėstse**	Floyd	naa	oha	é-sáa-hó'tåheva-he-Ø
3-win-REP.3SG	PROP	and	CRST	3-NEG-win-MOD$_A$-DRT

Floyd won, **I hear**, but I'm certain he didn't.

The inverse case applies if the speaker knows the reported proposition to be true. Modals are infelicitous in such contexts, because they weaken the assertion; thus, the Cheyenne reportive marker should not be classified as a modal. Compare further a well-known example from von Fintel and Gillies (2010: 353): if the speaker sees the rain pouring, it is felicitous to simply say *It's raining* (indicative declarative), while the insertion of a necessity modal (*# It must be raining*) would render the utterance infelicitous. If an inferential marker proves to be appropriate in a situation for which the speaker knows the proposition to be true, this marker can then be claimed to be void of epistemic overtones; an example of this is the St'át'imcets non-visual inferential marker *lákw7a* (cited in Matthewson 2012a: 96):

(6)

Context: You are blindfolded. I ask you to tell me which of these three cups the stone is in. You feel around and feel the stone.

nilh	**lákw7a**	lts7a
FOC	SNV	here

It's this one. (Consultant mimes putting hand on the stone)

Infelicitous English translation: # It **must** be in this one.[20]

20

(p. 99) Matthewson (2012a) objected that these observations are non-conclusive because 'knowing that the embedded proposition is true is not always sufficient to render modals infelicitous' (2012a: 98). One of Matthewson's arguments is based on examples like (7) cited, again, from von Fintel and Gillies (2010: 362). This example was designed to show that English *must* 'requires not that the speaker be less than certain, but that *the speaker's evidence be indirect*' (Matthewson 2012a: 98; emphasis added):

(7)

Chris has lost her ball, but she *knows* with full certainty that it is in either Box A or B or C. She says:

The ball is in A or B or C. It is not in A … It is not in B. So, it **must** be in C.

Therefore, what these observations show in the first place is that *must* has some evidential requirements that restrict the basis on which inferences can be drawn.

Remarkably, more recently, Matthewson took the opposite position concerning the relation of evidentials and epistemic modals. She provided an analysis—to a large extent revising von Fintel and Gillies' (2010) argument on MUST—from whose generalization it follows 'that all epistemic modals encode evidential information, as a matter of definition, since an 'epistemic modal' is a modal whose Modal Base relies on *evidence* (not on *knowledge*)' (Matthewson 2015: 142, emphasis original). While the first part of this generalization amounts to Plungian's (2001: 354) claim quoted in the beginning of this section, its second part results from the knowledge–belief opposition in formal semantics. However, the conclusions which different scholars drawn from these premises vary drastically.

4.2.4. Reliability as a mediating concept

Both in the formal semantic and the functional-typological literature on evidentiality the notion of reliability, or trustworthiness, has frequently been alluded to, but until recently no attempts have been undertaken to determine its relation to evidentiality and epistemic modality. For instance, Matthewson (2015) argued that trustworthiness 'is actually one of three dimensions of meaning which evidentials encode' (2015: 149):

(8)
'Dimensions of meaning encoded in evidential restrictions:
a. Evidence *type*: whether the evidence is visual, sensory, reported, etc.
b. Evidence *location*: whether the speaker witnessed the event itself or merely some of its results.
c. Evidence *strength*: the trustworthiness and reliability of the evidence.'

'Evidence type' rephrases known parameters of evidentiality; 'evidence location' is another name for the direct–indirect distinction, but excludes hearsay; and 'evidence strength', although coined by Givón (1982) and used by several authors, has hardly ever been articulated as a separate dimension. Evidence strength merges two dimensions and results from two fallacies. First, strong (or default) associations between evidential and epistemic values, recurring among many units across languages, are misunderstood as an indication either of mutual entailment or of identity (as in 'overlap theories'); in this case, the onomasiological and semasiological viewpoint (p. 100) are confused. Second, epistemic values, or, more precisely, certainty judgements, are conflated with assessments of reliability triggered by different evidence types (Wiemer 2013: 465). Evidence strength (or 'assertion strength'; cf. Speas, §15.4 of this volume) is also a hybrid notion in the sense that it covertly refers to the level of illocution. This is unfortunate, since no articulated theory of illocutionary strength seems to exist (Brugman and Macaulay 2015: 209, 214–15). In fact, the connection between specific sources of information and illocutionary commitment might turn out to be conditioned by implicatures mediated by reliability.

Reliability is a synonym of trustworthiness and has recently been highlighted, from a functional perspective, by Cornillie et al. (2015: 7–9), following Cornillie (2009). Although reliability is associated with evidentiality, this concept (*pace* Matthewson 2015 and many others) cannot be identified with it, nor with epistemic support; rather, it mediates between both. Reliability can vary independently from whatever is in the Modal Base, although it betrays a relation to Ordering Source. The degree of trust that a speaker lends to some information has an impact on their personal commitment to an assertion. This can be demonstrated even prior to any propositional marking. Consider a simple example:

(9) The victim was poisoned with arsenic.

If this utterance ends a report on the findings of forensic physicians who investigated the victim, we would most probably trust that this statement fits reality. If, however, (9) is uttered by an unknown pedestrian who saw the victim fall and die on the pathway, this ut-

terance would certainly raise surprise as a first reaction among those who heard it. They might ask ‘How do you know?’ or ‘Why are you so convinced?’, or other questions related to the evidential background, more precisely: to the Ordering Source (informally, something like {circumstantial pedestrians usually are not physicians}). That is, whether we give trust to somebody’s assertion depends to a certain extent on our knowledge, or assumptions, about that person’s competence in the matter they are making an assertion about.[21]

If, in contrast to (9), an utterance is marked as being reported, this may, as we saw in §4.2.1, carry different epistemic implicatures, although this variability is no prerogative of grammatical markers. Indeed, we can observe it with clausal complements of lexical verbs: *I hear (that) you have been awarded a prize* can imply—for either the speaker or the hearer, or both—that you take the information of the complement for granted; conversely, it can imply that you take the fact that this information was originally produced by someone else as an indication that you cannot wholly trust it. Again, this depends on how reliable you consider the original speaker—if you known him/her—or hearsay in general. We observe the same in languages with pervasive strategies contrasting direct versus indirect evidentiality, or in small evidential systems: a functionally unmarked form is used if the speaker reports from someone whom they judge to be sufficiently reliable. For instance, in Hinuq (p. 101) (Nakh-Daghestanian, A2) the neutral past is used if the speaker recounts from personal letters or utterances made by people with whom the speaker is in a close relationship (Forker 2014: 56–7; see §4.2.2).

In more elaborate systems, reliability can cause restrictions regarding who has the right to use a reported evidential. These social restrictions interfere with paradigmatic contrasts, with the latter influencing what counts as the ‘best choice’ to mark the most reliable source. For instance, in Nganasan (B4, i.e. without a visual evidential), the reportive is used in the speech of shamans ‘recounting what the spirits had told them’ (Aikhenvald 2004a: 180); here, access to the world of spirits is tied up with respectable persons of the community. By contrast, in Shipibo-Konibo (C2), where a reported is opposed to a direct evidential, dreams are recounted with the reported *=ronki* by ordinary people, but with the direct evidential by shamans (Aikhenvald 2014a: 33); as only shamans are considered persons with ‘reliable access’ to the unreal world, they are the only ones entitled to use a direct evidential. The use of the direct evidential for events that cannot normally be seen upgrades those recounted events, and this upgrade follows known hierarchies of preferred evidentials (for which cf. Aikhenvald 2004a: 307–8). The crucial point is that it is enhanced reliability assigned to shamans that yields the upgrade. In turn, in Eastern Pomo (C1), which has a paradigmatic contrast between visual and non-visual sensory evidential, the non-visual evidential (*-ine*) is used for stereotyped experience that cannot be seen; this is used, among other situations, to describe ‘the deeds of evil spirits and dreams by ordinary people’ (Aikhenvald 2004a: 170).[22] In this case, an upgrade is precluded and the choice of the evidential is motivated by the ‘physical’ nature of the source. Notably, this physical nature and the different esteem among members of a society (as with the shamans) can work as competing motivations.

Reliability becomes pivotal when direct evidentials acquire meanings of certainty (see §4.2.2). Reliability is at work when a marker crosses the border from direct to indirect evidentiality (Squartini, §§14.4.4.1–2 of this volume), in particular when SEE-verbs evolve a polysemy with ‘understand’ or ‘infer’ (*I see you’re right*). Reliability explains, conversely, why even in elaborate systems of evidentials, simultaneous visual evidence can remain unmarked (A4, B4 systems), and why visual evidence ranks highest in hierarchies of preferred evidentials. Likewise, reliability is at work when non-visual or non-firsthand evidentials are used in place of visual evidentials to mark a lack of control (Aikhenvald 2014: 30). The common denominator of these phenomena is, whether marked with an evidential (or an evidential strategy) or not, visual evidence counts as most reliable, if not as proof.

Furthermore, reliability is at stake when SEEM- and LOOK-verbs, or AS IF-units (see §4.2.2) move from external appearance into epistemic judgement based on (real or imagined) appearance. Here, epistemic implicatures can range widely between full and neutral support; markers derived from these source expressions are also compatible with doubt if the speaker realizes that there is a discrepancy between the proposition modified by SEEM, LOOK, or AS IF and the denoted situation. This is why SEEM can develop either way, and why in corpora one can find SEEM collocating, for example, with adverbs belonging to opposite ends of an epistemic scale (Lampert and Lampert 2010: 314–16 on *seem* in modern American English, Lampert 2009 for a case study on Shakespeare’s language).

(p. 102) Whatever the relation between evidential and epistemic or the direction of implicational shift in a particular case, the relation is mediated by reliability. In all of the widespread phenomena surveyed in this subsection, reliability is the crucial concept *mediating* between source reference and epistemic judgement; however, it cannot be equated with either of them. Only via (the degree of) reliability can epistemic overtones be associated with particular information sources, including a lack of marking. The specific association may shift depending on societal or discourse-conditioned norms and on the paradigmatic tightness of available markers, but only because shifts affect, first and foremost, reliability. Reliability also interacts with presumably universal pragmatic mechanisms (see §4.3.3).

4.3. Semantics versus pragmatics

In view of the fact that so many alleged epistemic overtones of evidentials—in particular, of reportive markers and of indirectives or general non-firsthand markers—prove cancellable or do not arise at all (even in epistemic-prominent languages), we seem well advised to search for a more economic and cross-linguistically applicable way to generalize across correlations between evidential and epistemic contributions to utterance meaning. In this section I will consider Generalized Conversational Implicatures (§4.3.1) and Perspective Shift (§4.3.2). The semantics–pragmatics divide at stake here does not quite coincide with the issue in Boye (§13.1.5 of this volume), which focuses on relative discourse prominence. It shares, however, the issue of coded versus inferred meaning.

4.3.1. Generalized Conversational Implicatures

Epistemic overtones can often be captured as Generalized Conversational Implicatures (GCIs). GCIs were established in Neo-Gricean pragmatics to account for implicatures that neither arise haphazardly from occasional ('particularized') discourse conditions nor are conventionalized (i.e. non-cancellable, coded) parts of meaning. Instead, GCIs represent 'a level of *systematic pragmatic inference* not based on direct computations about speaker-intentions but on *general expectations about how language is normally used*' (Levinson 2000: 20, emphasis added). For instance, many markers of reported or indirect evidentiality in European languages raise associations with epistemic overtones (usually of doubt), but these associations more often than not are not stable (= coded) parts of their meaning, since they can be suppressed. These associations are implicatures that can be cancelled (in the commonly accepted (Neo-)Gricean sense), and this property need not be established item by item.[23] Consider the following Polish example with the sentence adverb *jakoby* 'allegedly, reportedly':[24] (p. 103)

(10)

W lipcu hospitalizowano ją powtórnie, **jakoby** z powodu przegrzania organizmu i odwodnienia.

In July she was hospitalized for the second time, **allegedly** due to hyperthermia and dehydration. (NKJP; *Dziennik Zachodni*, 25 January 2007)

This context supplies no indication of the speaker's stance toward the veracity of the reported proposition. Any continuation would be possible, in which the speaker could take a neutral, supportive, or negative stance toward that proposition; *jakoby* itself does not imply any specific epistemic commitment.[25] This 'variability' appears natural in the light of GCIs: any of the German and Polish sentence adverbs considered translational equivalents of English *allegedly* (Polish *podobno, jakoby, rzekomo*; German *angeblich*) readily evokes epistemic overtones unless the context (or knowledge background) supplies cues that allow to cancel or to suppress them. The actual speaker can even explicitly reject possible overtones of doubt, or may simply remain agnostic regarding epistemic support (Wiemer 2006a; Wiemer and Socka 2017). As could be expected from the overview of extensions in §4.2.2, the cancellability of the epistemic component is not a universal feature, nor is the rise of such a component; even cognate markers can differ in this respect. Thus, Russian *jakoby*—often translated 'as if, as though'—frequently occurs in contexts of reported speech, but, unlike its Polish cognate, it does not 'lose' its strong connotation of doubt. See the following example:

(11)

Nikolaev i Golubovič obvinjalis' v tom, čto oni **jakoby** nanesli neskol'ko udarov drevkom flaga sotrudniku milicii.
Nikolaev and Golubovič were accused of having **as though** beaten up a representative of the police by hitting him several times with a flag shaft.
(NKRJa; Andrej Andreev: 'Buduščee prinadležit nam!' (2003) // «Zavtra», 22 August 2003)

In comparison to its Russian 'cousin', Polish *jakoby* presents us more or less with a reversal of the relation between epistemic and evidential prominence; the epistemic component can even be suppressed. Moreover, the aforementioned Polish adverbs differ among each other for specific conditions upon which the epistemic GCI is cancelled: they are most unspecific for *podobno*, which—like German *angeblich*—implies neutral epistemic support ('I don't know whether *p* is true or not'), while the cancellation of the epistemic GCI for *jakoby* and *rzekomo* can depend on rhetoric and genre-specific conditions (see §4.3.3). Similar differentiations have been made for particles in other languages, such as for Dukhan, a Turkic variety in Mongolia (Ragagnin 2011: 180–7), or for Basque *omen* (Korta and Zubeldia 2014).

GCIs can also be used to explain fluctuating epistemic overtones in the reportive use of subjunctives (as in German or French), or of modal auxiliaries as, for instance, in German *sollen* 'should, have to' and *wollen* 'want'. An example for the latter is: (p. 104)

(12)

Anna	**will**	ihr	Ziel	erreicht	haben.
Anna	want.PRS.3SG	her	goal	reached	have.INF

(a.) Anna **wants** to have reached her goal. (b.) Anna **claims** to have reached her goal.

Despite the fact that such auxiliary uses still show a layering of the diachronically earlier usage (volitional, deontic; see 12b) and the more recent evidential usage (see 12a), epistemic overtones of the evidential reading can readily be cancelled (Remberger 2010: 172–3).

Epistemic GCIs can correspond to epistemic (or other non-evidential) meaning components that were prominent in earlier stages of the given evidential marker. They, then, synchronically reflect diachronic shifts based on invited inferences (in Traugott's terms; Traugott 1989): under favourable discourse conditions, an epistemically prominent unit U 'invites' some more specific evidential background, which eventually becomes foregrounded. Concomitantly, the erstwhile foregrounded epistemic component may even disappear as part of U's meaning, and may surface only under favourable discourse conditions (and because of normalcy assumptions about 'how language works' in a given community).

Arguably, a change of prominence between epistemic and evidential contributions to meaning may be significantly influenced by the two competing motivations mentioned in §4.2.1 for Saaroan =*ami*: either the speaker wants to be accurate with regard to the information source, or they shift responsibility by dissociating themselves from the related event(s). However, apart from general discourse-based considerations, we should also account for reasons based in the system of evidential markers: the more elaborate the paradigmatic structure and the better an evidential marker—indicating, in particular, hearsay—is expected and can thus be predicted, the less likely this marker will raise implicatures (e.g. on the basis of Grice's quantity maxim). Saaroa has a small system (A3), and the reportive enclitic is not obligatory. Pan (2014: 95) considers this a consequence of language obsolescence. Likewise, Aikhenvald (2004a: 301) reported that, in recent stages of Wintu, 'the reported evidential was almost a disclaimer of the speaker's responsibility for the truth of the statement', whereas grammatical markers of reportive meanings in many other languages do not trigger epistemic overtones, or these can easily be cancelled. However, the typological and language-specific literature on evidentiality marking usually does not give enough reliable detail to figure out whether such overtones arise as the result of GCIs or represent coded components.

What about epistemic overtones of inferential markers? As mentioned in §4.2.2, if they occur at all in languages with larger evidential systems, they occur with markers of inferences that are not based on sensory input (i.e. with 'assumed' evidentials). For instance, the Wanka Quechuan inferential =*chra* can weaken the speaker's commitment and even acquire overtones of doubt; possibly, this only happens because it stands in opposition to =*mi*, which, in turn, implies strong commitment (Aikhenvald 2004a: 165, following Floyd 1999: 101–3). Moreover, in 'conjecturals'—which mark judgements made on no specific basis—one cannot really disentangle evidential and epistemic meaning components (see §4.2.1). These observations suggest that epistemic overtones arise more easily if a perceptual basis of inference is lacking. An additional factor can be the relative complexity of the inference process. This conclusion arose from an in-depth analysis of Bulgarian lexical and grammatical markers (sentence adverbs, particles, predicative *l*-participles) to be

regarded (p. 105) as evidential strategies: ‘The more complicated the reconstruction of the cognitive (or communicative) basis leading to an inference (intended by the speaker), the clearer the epistemic function emerges while the evidential function remains in the background, and vice versa’ (Wiemer and Kampf 2012 [2015: 187]). In the latter case, epistemic overtones arise as GCIs and can be cancelled.

To sum up, epistemic GCIs are not a property of any specific evidential marker, but apply for whole classes of markers. Under clearly definable conditions epistemic overtones appear (without overriding the evidential component), but these overtones can be defeated (without erasing the evidential component) under certain other discourse conditions. In a sense, epistemic GCIs are defaults that apply at least in epistemic-prominent languages. However, GCIs occur with markers with different statuses on a lexicon–grammar cline and can more conveniently be analysed with reportives than with inferentials.

4.3.2. Perspective shift in reportive evidentials

Among all of the evidential markers, reportives are exceptional, as ‘we find that cross-linguistically it is (at least) nearly universal that an evidential-marked claim can be felicitously denied by the same speaker only if its evidence type is *reportive*’ (AnderBois 2014: 240, emphasis original). AnderBois surveyed similar cases from a larger variety of languages and argued that it is implausible to explain ‘reportive exceptionality’ on the basis of conventional semantic contributions stipulated for each individual marker; instead, a pragmatically implemented perspective shift yields a much more elegant explanation. The crucial point is that only reportive evidentiality implies that the speaker is entirely dissociated from the situation about which they utter a proposition (compare this to Frawley’s SELF–OTHER distinction mentioned in §4.2.2). As a consequence, no conflict arises if the speaker refers to somebody else’s claim (with or without a reportive marker), but denies (in a subsequent sentence) that they believe in the truth of that claim (and may justify this by another source of evidence to which they have personal access). All other evidentials ‘explicitly invoke the perspective of the speaker’ (2014: 245) and do not allow for a perspective shift.

4.3.3. GCIs and discourse norms

As argued in §4.3.1, GCIs can be tested empirically to distinguish meaning components on the coded–inferred divide, but do they represent a universal mechanism? Since GCIs operate ‘on general expectations about how language is normally used’ (see §4.3.1), we wonder whether and to which extent such expectations depend on culturally conditioned habits of speech. It seems plausible to assume that GCIs are universal as a cognitive-communicative mechanism, but that the set of concrete expectations, or of their triggers, possibly differs (at least to some extent) from speech community to speech community, and can change.

Expectations often vary for discourse- or genre-specific reasons, but the relation with epistemic overtones is twofold. On the one hand, sentence adverbs like German *angeblich*

and Polish *rzekomo* ‘allegedly’ (see §4.3.1) are regularly used as reportive devices with (p. 106) a suppressed GCI of doubt or distance in journalistic texts for which the author bears legal responsibility (typically in news about purported violations of law); cf. Wiemer and Socka (2017) and Celle (2009: 285) for parallels in English. Here, the genre implies that the author does not take a personal stance toward the reported events, and that this expectation cancels epistemic GCIs. One could turn this reasoning upside down: a journalist will use only those reportive markers that allow epistemic overtones to be cancelled, otherwise the journalist could be accused of taking sides. On the other hand, certain markers of reportive or indirect evidentiality may be avoided because they easily evoke undesirable epistemic overtones. This seems to be the reason why, in the twentieth century translation of the Bible into Bulgarian, the *l*-perfect (used as indirect, or non-confirmative) does not occur in passages conveying acts of revelation or in narratives with a named author (Korytkowska 2000). It does, however, occur in textbooks on history—instances in which, evidently, no epistemic nuance is intended (V. Friedman, S. Slavkova, p.c.). Here they simply mark remoteness, or dissociation of the speaker from the related events.[26] It is possible that such contexts cause reportive markers to turn into mere tokens of genre (e.g. fairy tales or legends), upon which they usually lose any epistemic overtones that they may have had. This applies not only to grammatical evidentials,[27] but also to evidential strategies, regardless of whether these are based on tense-aspect grams (cf., e.g. Greed 2014: 82 on Tatar *-GAn*; Forker 2014: 54, 65–7 on both the unwitnessed past and the reportative enclitic *=eƛ’* in Hinuq, Nakh-Daghestanian), or on lexical markers. For instance, Ragagnin (2011: 185–6) characterizes the Dukhan particle *erɣen* as ‘a specific indirective reportive marker of the epic and folklore genre’ (cf. also Greed 2014: 78 on the Tatar particle *di*).

The big open question is to what extent reliability and predictability are involved in creating specific conditions that trigger GCIs, as well as whether or not these two factors are mutually dependent. If markers of information source are expected in, or are considered signs of, specific genres or discourse types, they increase in frequency, and a speaker ‘sounds strange’ and becomes unreliable if they do not follow these expectations. Conversely, the English example in (9) goes without any kind of propositional marking. The reliability of the person uttering it does not depend on the absence or presence of some marker, but on normalcy assumptions of the hearers. In particular, ‘[t]he conventionalized attitude to hearsay as a source of information determines whether or not a reported evidential, or a speech report in general, has epistemic extensions’ (Aikhenvald 2014: 14). If, all things being equal, markers of information source have become obligatory (i.e. predictable in well-defined contexts), their presence does not raise epistemic overtones or illocutionary effects of, for example, sincerity. In contrast, in languages in which these markers of information source are largely optional, their use can more easily (although not necessarily) evoke implicatures of epistemic commitment. This consideration is confirmed by observations on *dizque* and other evidential strategies derived from Spanish *decir* ‘say’ (see §4.2.2): in Ecuadorian Spanish these forms have become practically (p. 107) obligatory, and, concomitantly, overtones of doubt and discourse-pragmatic functions of distance have disappeared; in contrast, in Bolivian and Peruvian Spanish these forms are

less predictable, but they are also charged with a more salient epistemic load (Dankel 2015: 207).

4.4. Summary

This chapter presented a survey of how the relation between evidentiality and epistemic modality is treated in research. We discussed the theoretical and methodological backdrop of different approaches toward that relation, paying particular attention to the reasons why, in Western linguistics, evidentiality tended to be included under epistemic modality instead of being treated as a category of its own. In sum, empirical counterevidence to overlap and inclusion theories shows that one must not take recurrent extensional intersections of evidential and epistemic meaning components as proof for intensional identity. Moreover, inferences are not an evidential function themselves, rather they 'may represent reasoning processes based on [some specific type of] evidence' (Brugman and Macaulay 2015: 206; see also Speas, §15.5.1 of this volume). Remarkably, despite different arguments, functional-typological research (e.g. Aikhenvald 2004a; Boye 2012) and Kratzerian formal semantics have converged in agreeing that truth (and truth conditions) are not criterial for a description of evidentials, at least not in their entirety.

The survey also contained a summary of recurrent patterns of epistemic extensions from markers of information source and, vice versa, of evidential extensions (or strategies) from epistemic markers and TAM-grams. Overlaps between evidential and epistemic functions are not a universal—or even a language-specific—feature, but need to be established item by item. Furthermore, more scrutiny is required to distinguish between epistemic extensions that become part of coded meaning and extensions that arise on the basis of Generalized Conversational Implicatures (GCIs), i.e. standardly inferred but cancellable epistemic associations. GCIs are a pragmatic default mechanism that does not function *ad hoc*, but that arises from assumptions about 'how language is normally used'. This mechanism allows changes of focalized evidential or epistemic meaning contributions to be captured economically in the description of linguistic items. The set of expectations that triggers these normalcy assumptions about language use is influenced by the (degree of) reliability assigned to specific sources of information.

Reliability, in turn, is a notion that spells out attitudes to specific types of information source. These attitudes can be related to the sensory bases of inferences, the status of hearsay (or reported speech in general), or the trustworthiness of particular members of a speech community. These attitudes can vary depending on the discourse type or text genre, and can depend on the paradigmatic organization and the predictability of specific markers. In any case, however, it is these attitudes that cause different degrees of assertive strength to be assigned to different types of information source and their marking devices. Assertive strength is a hybrid concept that should not be confused with epistemic support, as the latter only results from the degree of reliability assigned to some

particular source. Reliability thus mediates between information source (evidentiality) and epistemic modality.

(p. 108) A task for further research is to establish the conditions and cross-linguistic patterns in the interaction between reliability and the systematic language-specific organization of evidentials, and to understand how these conditions influence epistemic GCIs.

Sources

NKJP *Narodowy korpus języka polskiego*, http://nkjp.pl/
NKRJa *Nacional'nyj korpus russkogo jazyka*, http://www.ruscorpora.ru/

Notes:

([1]) For the difference between propositions and SoAs cf. Boye (2012; Chapter 13 of this volume). Recently, evidential markers with non-propositional scope have been brought into focus by Aikhenvald (2014: 16–19, 2015) and Jacques (Chapter 5 of this volume), who admits that, in most languages, the distribution of non-propositional and propositional evidential markers is completely different. The systematic and empirical relation between both types of markers needs more research; here, this issue will not be pursued. Discussions as to whether some evidential markers might be ascribed scope over illocutions has been discussed primarily among formal semanticists (see §4.2.3).

([2]) Brugman and Macaulay (2015: 223–5) have suggested (following Speas 2008) that a paradigmatic opposition implies complementary distribution, but not vice versa (2015: 224, f. 35). Their notion of grammatical category ('evidentials') does not significantly depend on obligatoriness.

([3]) This distinction has been accepted by many representatives of post-Gricean pragmatics (e.g. Ariel 2008 for Relevance Theory, Levinson 2007 and Huang 2007 for Neo-Gricean approaches), but also of lexicography based on semantic theories (Cornillie et al. 2015: 4).

([4]) For instance, traditional grammars of the Baltic languages have treated evidential uses of participle constructions as 'modus obliquus' or 'modus relativus'. The Latvian reportive in the 1959 Latvian Academy Grammar (which was heavily influenced by Russian structuralism) was even characterized as a paradigm of forms used primarily to disclaim responsibility for the accuracy of information, while the reportive function was considered secondary. This represents an exact reversal of the relation between the dominant (coded) evidential meaning and epistemic overtones which are a pragmatic side effect (on which see §4.3.1); cf. Holvoet (2007: 81–2, f. 1).

([5]) Throughout, I use 'hearsay' as a general label of reportive marking, without necessarily connotating unverifiable information or similar judgements.

([6]) Partial surveys are given in De Haan (1999: 85–91; 2009: 263–5), Dendale and Tasmowski (2001b: 341–2), Kehayov (2008b: 184–5), Wiemer (2008a: 7–9), Brugman and Macaulay (2015: 205–8). Kronning (2003: 135) mentioned a fourth logical possibility, the absence of any relation; in practice, however, this boils down to position (i).

([7]) Cf., for instance, Johanson (2000a; Chapter 24 of this volume) on Turkic in general, Menz (2000) on Gagauz, Greed (2014) on Tatar. For adjacent languages cf., for instance, Lazard (2000: 212–13) on Iranian, Boeder (2000: 295) on Georgian.

([8]) This implicational relation is marked by the sign ⊃ (‘A implies B’).

([9]) This layer of meaning is related to the expectations of interlocutors and, thus, to mirativity. For a discussion cf. Aikhenvald (2004a: 195–209; 2014: 31–2), Pan (2014: 98), and Johanson (2000a: 70–2) for Turkic languages.

([10]) When Aikhenvald (2004a: 179) mentions ‘degree of hearsay,’ this wording does not refer to a scalar notion, but to the number of sources (= speakers) between the last reporting speaker and the original event. In other cases, the combination of two or three markers of reportive or indirect evidence emphasizes a disclaimer by which the speaker signals unreliability of the source (Aikhenvald 2004aa: 186). As will be argued in §4.2.4, reliability is by itself neither an evidential nor an epistemic notion.

([11]) This distinction corresponds to the ‘inferred–assumed’ distinction in Aikhenvald (2004a). As for extragrammatical markers, this distinction is not only supported by Slavic languages (e.g. Russian, Bulgarian, Polish; cf. Wiemer 2006a: 53–9; Wiemer 2008a; Kampf and Wiemer 2011a; 2011b), but also implied by the behaviour of markers derived from SEEM-verbs (see §4.2.2).

([12]) Jakovleva referred to it differently, at a time when evidentiality was still conceived of as a subdomain of epistemic modality. Cf. also Bulygina and Šmelev (1993 [1997]), the source of (2a–b).

([13]) Different labels have been used: ‘Reasoning’ or ‘Assumption’ (Palmer 2001), ‘Assumed’ (Aikhenvald 2004a; 2014: 9), and ‘Acquired knowledge’ (Tantucci 2013). In larger evidential systems encyclopedic knowledge is often treated differently from assumptions, namely by extensions of direct or visual evidentials (see §4.2.2).

([14]) For this argument cf. also Brugman and Macaulay (2015: 205–6).

([15]) It also appears difficult to distinguish A2 from A1 systems, with the latter having an equipollent opposition between firsthand and non-firsthand terms. Consider, for instance, Tatar (Greed 2014: 74).

([16]) Reportives often show extensions into pretence games or irony. These are probably pragmatic extensions of the epistemic extensions, not extensions of the reported meanings themselves (cf., however, Aikhenvald 2004a: 184 on Shipibo-Konibo *-ronki*).

([17]) Among others, cf. Cornillie (2007a) for Spanish *parecer*, Dixon (2005: 203–5) on English *seem*, Diewald (2001) and Diewald and Smirnova (2010b) for German *scheinen*, De Haan (2007) on several Germanic languages, Wiemer (2006a: 53–9) on Polish *zdawać się* and Wiemer (2010b: 104–6) for an overview of European languages.

([18]) These three components together make up the conversational background (Kratzer 1981).

([19]) This opens up questions regarding how the quantifier approach may be applied to direct and reportive evidence. Cf. Faller (2011) for a relevant discussion.

([20]) A more appropriate translation might be *Obviously, it's this one*.

([21]) In formal approaches, discourse-oriented accounts of evidentials have postulated a similar relation between semantics and pragmatics. According to these approaches, interlocutors continuously update their common ground with not-at-issue content; the speaker proposes, and the hearer either accepts or rejects the new information. This includes an assessment of information source, which is either made explicit or left implicit, as well as an assessment of the speaker's reliability. Information source and reliability jointly yield some degree of assertion strength, which is thereby no part of the semantics of the relevant propositional modifiers, but which is inferred "online" (Speas, §15.4 of this volume, and concluding paragraph, with references).

([22]) Generally, the social status of dreams differs among cultures. Consequently, we observe amazing variation as to whether a direct evidential can or has to be used, or when an indirect or reportive is instead required (Aikhenvald 2004a: 309; 2014: 33–4, and elsewhere).

([23]) Instead of cancellation or suppression, 'neutralization' is another way of saying the same thing (e.g. Remberger 2010: 172).

([24]) Currently, *jakoby* is almost restricted to hearsay; diachronically, it belongs to the 'as if'-comparison units mentioned in §4.2.2.

([25]) Replies by both 'naïve' and informed native speakers concerning epistemic overtones are as divergent as are descriptions in the linguistic literature. A similar picture arises for English *allegedly, reportedly* (Celle 2009), Czech *prý* (Hoffmannová 2008), and German *angeblich*. One wonders whether a tendency to ascribe epistemic overtones to hearsay markers (sentence adverbs, auxiliaries or tense-aspect grams, etc.) is due to an 'epistemic bias' in European grammaticography (see the remarks in §4.2) or due to the relative scarcity and optionality of grammatical evidentiality marking.

([26]) Cf. Wiemer and Kampf (2012 [2015: 177–81]) for a comprehensive evaluation of the facts. A very similar distribution of usage domains can be observed in the case of firsthand *-DY* versus non-firsthand *-GAn* in Tatar (Greed 2014: 82).

([27]) While this feature is common in A3 systems (‘reported’ versus everything else), it can also be found in A1 and A2 systems (e.g. in Turkic languages), as well as in larger systems (Aikhenvald 2004a: 310–14).

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Non-Propositional Evidentiality

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Abstract and Keywords

This chapter deals with non-propositional evidentiality, i.e. evidential-like distinctions on markers whose scope is limited to a noun phrase. First, it presents the different types of non-propositional evidential markers, the most common of which are demonstrative pronouns and determiners. Second, it shows how non-propositional evidential markers can encode morphosyntactic parameters such as case or topicality in addition to evidentiality. Then, it describes attested non-propositional evidential categories, focusing on sensory (visual, auditory, non-visual) evidentials, as non-sensory non-propositional evidentials are extremely rare. Finally, it discusses how non-propositional evidentiality and nominal tense can interact in some languages and presents some general observations on commonalities and differences between propositional and non-propositional evidential systems.

Keywords: demonstrative, determiner, visual evidential, auditory evidential, nominal tense

5.1. Introduction

In most languages of the world where evidentiality is grammaticalized, it is expressed either by verbal morphology, sentential markers or adverbs, which have scope over the entire proposition. A minority of languages have evidential-like distinctions on markers (mainly deictic, see Aikhenvald 2004a: 130) whose scope is limited to a noun phrase. The present study focuses on these non-propositional evidential markers[1].

Evidential markers present in relative clauses embedded within noun phrases are not considered in this study; although some languages have restrictions on the use of evidential markers in relative clauses and other non-main clauses,[2] many languages allow evidential markers on the verb in relative clauses (Aikhenvald 2004a: 253–6; see for instance Nivaĉle in §5.7). Such evidential markers, although their scope is limited to the

noun phrase that includes the relative clause are not strictly non-propositional, since they at the same time also have scope over the entire relative clause.

Excluded from this survey are likewise clitic evidential markers that can combine with nouns phonologically, but have scope over the whole sentence, such as the reportative *-si* in Quechua (on which see for instance Faller 2002).

This paper is divided into eight sections. First, I present the different types of non-propositional evidential markers, including demonstrative pronouns and adverbs, determiners or various types of affixes. Second, I show how non-propositional evidential markers can encode morphosyntactic parameters such as case or topicality in addition to evidentiality. Third, since most non-propositional evidential systems encode sensory evidential meanings, I provide a detailed account of non-propositional sensory evidential contrasts attested in the world's languages. Fourth, I briefly mention a few rare cases of non-propositional (p. 110) non-sensory evidentials. Fifth, I discuss how non-propositional evidentiality and nominal tense can interact in some languages. Finally, I present some general observations on propositional and non-propositional evidential systems.

5.2. Subtypes of non-propositional evidentials

In some languages with evidential marking on demonstratives, the non-propositional evidential sub-systems may be embedded within the proximal/distal system. This is particularly common in the case of sensory evidentials, especially those marking visibility, as exemplified by Lillooet (Salish) in Table 5.1 and Tsou (Austronesian) in Table 5.3 (Tung et al. 1964; Yang 2000b and discussion below; see also §§ 5.4.1.1, 5.4.2 and 5.4). Some languages combine visible/invisible and proximal/distal with other contrasts, such as elevation (Schapper 2014).

Table 5.1. Demonstrative pronouns in Lillooet (van Eijk 1997: 168–9)

	visible			**invisible**		
	PROX	**MID**	**DIST**	**PROX**	**MID**	**DIST**
SG	*cʔa*	*tiʔ*	*tʔu*	*kʷʔa*	*niʔ*	*kʷuʔ*
PL	*ʔizá*	*ʔizˀ*	*ʔizú*	*kʷɬa*	*nəɬ*	*kʷɬ*

Lillooet determiners, on the other hand, have a much more fine-grained system, which encodes two degrees of sensory evidential distinctions, but lacks the proximal/distal distinction. Table 5.2 presents van Eijk (1997)’s analysis of the system.

Table 5.2. Articles in Lillooet (van Eijk 1997: 192)

	known		unknown	
	present	absent	present	absent
SG	ti … a	ni … a	kʷu … a	kʷu
PL	ʔI … a	nəɬ … a	kʷɬ … a	kʷɬ

The determiner 'present, known' *ti … a* or its plural form is used to refer to persons or things visible to the speaker at utterance time (as in 1), or in specific cases to entities that the speaker saw in the past at an unspecified moment (van Eijk 1997: 193).[3] (p. 111)

(1)

pún-ɬkan	ti=n-ɬkʼʷálʼus=a
find-1SG.A	DET:VIS=1SG.POSS-basket=ASSERTION.OF.EXISTENCE

I found my basket. (when just mentioning the fact, or when showing the basket to the addressee)

The determiners 'unknown, present' (*kʷu … a and kʷɬ … a*) on the other hand are used for entities that are not visible but perceptible through another sense, in particular audition or smell (van Eijk 1997: 195), as in example (2).[4]

(2)

cʔas	lákʷʔa	ɬlákʷu
come	N.VIS	there:N.VIS
kʷu=sχ̓ʼaɬáləm=a		
DET:N.VIS.SENS=grizzly=ASSERTION.OF.EXISTENCE		

There is a grizzly coming from there (used by a person who hears a grizzly).

The other determiners *ni … a* and *kʷu* are used for referents that are not perceptible.

In some languages, noun modifiers can be derived from demonstrative adverbs by means of a nominalizing morpheme. In such systems, demonstrative determiners and demonstrative adverbs are completely parallel and show the same evidential contrasts. For instance, in Khaling (Sino-Tibetan, Kiranti, Nepal), the demonstrative determiner/pronoun *tikîm* 'this (audible)' is derived from the demonstrative adverb *tikí* 'there (audible)' by means of the all-purpose nominalizer *-m*.[5]

Cases of languages where nouns can directly take the same set of evidential markers as verbs (with semantic scope on the noun phrase) are extremely rare; Jarawara (Arawá, Aikhenvald 2004a: 88, ex 3.19) however offers such an example, as in (3) where the noun phrase *Banawaa batori* 'the mouth of the Banawá' takes the reported evidential suffix *-mone*.

(3)

Banawaa	batori-tee-mone	jaa	faja	otaa
Banawá	mouth-CUST-REP.F	at	then	1NSG.EXCL.S
ka-waha-ro				otaa-ke
APPL-become.dawn-REM.PAST.FIRSTHAND.F				1NSG-DEC.F

Then the day dawned on us (firsthand) (lit. we with-dawned) at the place reported to be (customarily) the mouth of the Banawá river.

5.3. Non-propositional evidentials and other morphosyntactic parameters

Non-propositional evidential markers can be combined with case marking and topicalization.

The Tsou data in Table 5.3 illustrate markers encoding both evidentiality and case. Note that the case markers in Tsou are portmanteau morphemes; it is not possible to (p. 112) decompose them into two morphemes (evidential marker and case marker), at least synchronically.

Table 5.3. Tsou case markers, adapted from Yang (2000b: 54)

		case markers	
		nominative	**oblique**
	proximal	*ʼe*	*ta*
visual	medial	*si*	*ta*
	distal	*ta*	*ta*
non-visual sensory		*co*	*nca/ninca*
hearsay		*ʼo*	*to*
belief/inference		*na*	*no*

In other languages where case and evidential markers interact, such as Dyirbal, morphological boundaries are more transparent. Note however that even in Dyirbal the case paradigms of the evidential demonstratives are not completely predictable (see Dixon 2014).

Aside from proximal/distal distinction and case, a third parameter has been shown to interact with non-propositional evidentiality: topicality. For instance, the Chadic language Maaka has three evidential markers *-mú* ‘eyewitnessed’, *-diỳ à* ‘joint-perception’, *-kà* ‘assumption’ occurring on noun phrases (see §5.4.3). They can be used with referents which are ‘hardly core participants, but rather topicalized peripheral participants that motivate an action or event’ (Storch and Coly 2014: 195–7).

Non-propositional evidential systems display a considerable diversity in terms of morphology, and it would not be surprising if future fieldwork brings to light previously unknown types of evidential markers in noun phrases.

5.4. Sensory evidentials

Nearly all non-propositional evidential systems described in the literature involve sensory evidential meanings, rather than other types of evidential such as hearsay or inferential.

This section first discusses the visual versus non-visual contrast, which has been described for almost all languages with non-propositional evidentials.

Secondly, it addresses the issue of non-visual sensory or auditory evidentials, which are considerably rarer. Thirdly, it mentions the existence of evidential markers encoding joint perception of speaker and addressee. Finally, it discusses the timeframe of sensory perception, in particular the distinction between utterance time sensory evidentials versus lifespan sensory evidentials.

(p. 113) 5.4.1. Visual evidentials

The first type of non-propositional evidential distinction to have been described is that between visible and non-visible demonstratives in Kwak'wala (Boas 1911b: 527–31).

System of demonstratives encoding a visible/invisible contrast are not particularly rare cross-linguistically, and are found on all continents. In the Sino-Tibetan family alone, for instance, visible/invisible contrasts on demonstratives have been reported for Kham (Watters 2002), some varieties of Wu Chinese (Yue 2003: 89) and Darma (Willis Oko 2015). The present paper does not attempt to systematically survey all systems of this type, but will mention some of their most conspicuous features.

5.4.1.1. Proximal/distal and visual evidentials

While in Kwak'wala (as well as other Wakashan and Salish languages), the visual/non-visual contrast is independent of the proximal/distal distinction, it is not the case of some languages with non-propositional evidentials.

For instance, in Dyirbal (Dixon 1972: 45, 2014) we find three series of demonstratives *ya-* 'here and visible', *ba-* 'there and visible', and *ŋa-* 'not visible'. In this system, the proximal/distal contrast is neutralized for non-visible referents.[6] The non-visible *ŋa-* demonstratives are used either when the referent is not perceivable, or perceivable through senses other than vision.[7]

It is of utmost importance, when dealing with systems where evidential distinctions are not independent from proximal/distal contrasts, not to rely exclusively on elicitation and to use data from traditional stories and conversations, as speakers can have unreliable intuitions. Khaling for instance has a three-degree proximal/distal contrast; the 'further distal' markers are spontaneously described as 'non-visible' by speakers (in Nepali *adṛśya* 'invisible') and proximal ones as 'visible', though clear examples of further distal demonstratives with visible referents, and of proximal demonstratives with invisible ones can be

found in stories (Jacques and Lahaussois 2014: 399). There is thus a potential for falsely interpreting proximal/distal contrasts as visible/invisible ones.

5.4.1.2. Extended meanings

In some languages, visual non-propositional evidentials have extended uses that depart from direct sensory access. For instance, in Tsou (Yang 2000b: 55–8) the visual evidential markers *'e, si, ta* can be used with a variety of non-sensory meanings.

First, the proximal visual marker *'e* can be used when 'a speaker is so involved in telling a story that he feels as if the narrated event or object were visible'. In addition the visual evidentials can be used to refer to words that the speaker has just heard, in which case the proximal visual evidential indicates high involvement (example (4)) whereas the medial visual (p. 114) evidential marks lesser involvement, when for instance the speaker is 'an outsider in the conversation' (5).

(4)

'e	knuyu
NOM:PROX:VIS	lie
That is a lie!	

(5)

si	knuyu
NOM:MED:VIS	lie
That is a lie!	

The proximal visual evidential can used be used to refer to express intimacy; when referring to a close friend, only the proximal visual marker can be used, regardless of the visibility of that person at the time of speaking.

Finally, the proximal visual evidential is used when the speaker takes responsibility for the reliability of information coming from dreams or visions. It is likely that non-propositional visual evidentials may have similar extended or metaphorical uses in other languages, though more descriptive work is needed to ascertain this.

5.4.1.3. Vision versus 'best' sensory evidence

Some languages have non-propositional evidentials that encode not specifically visual perception, but, to use Gutiérrez's (2011) terminology, *'best' sensory evidence* (see also Gutiérrez 2015 on the hierarchy of preferred evidentiality choice realized through Nivaĉle determiners). While best sensory evidence is nearly always equivalent with visual perception, it can also be used for non-visual perception in specific cases.

In Nivaĉle for instance, the 'best' sensory evidential, or 'firsthand' *na*, while mainly used to refer to visible entities, can also refer to tactile or gustatory perception. For instance if the speaker is blindfolded and asked to guess by touch or taste the nature of an object as in examples (6) and (7), it is still possible to use the determiner *na* rather than other de-

terminers such as *ja* or *pa*, which indicate non-best sensory evidence at utterance time (see §5.4.4 for an account of the determiner system of Nivaĉle).

	na	vat-qu'is-jayan-ach
(6)	DET:BEST.SENS:PRES	INDEF.POSS-WRITE-CAUS-NMLZ
	(It is) a book.	

	c'a-yôji	na	inôôt
(7)	1SG-drink	DET:BEST.SENS:PRES	water
	I am drinking water.		

In the case of blind persons, for whom touch is the best available sensory evidence, *na* is likewise used for tactile perception.

One case however where *na* in Nivaĉle can be used when the participant is not perceptible at utterance time is with nouns such as *jônshaja* 'night', *nalhu* 'world, sky, day' which refer to (p. 115) phenomena known to everybody (A. Fabre, p.c.). For instance, in example (8), even though *na* is used with *jônshaja* 'obscurity, night', the sentence is not uttered during the night (and the night is therefore not 'visible'). In such contexts, *pa* is also possible.

(8)

a-t'itan-jan	lhôn	na	jônshaja-clai
2SG.IRR-TWIST-APASS	REP	DET:BEST.SENS:PRES	obscurity-DUR

You draw (fibres from the *caraguatá* plant) during the night. (Fabre 2014: 292)

5.4.2. Non-visual sensory evidentials

In languages with non-propositional evidential, referents that are perceptible through senses other than vision are treated in some languages in the same way as referents that are absent or non-perceptible, for example with the marker *ŋa-* in Dyirbal (Dixon 2014).

Several languages, including Southern Pomo (Pomoan, Oswalt 1986: 37, ft), Santali (Austroasiatic, Neukom 2001: 42–4), Tsou Austronesian, (Yang 2000b, see Table 5.3), Nyelayu and Yuanga (Oceanic, Ozanne-Rivierre 1997; Bril 2013), Muna (Austronesian (Sulawesi), van den Berg 1997), Lillooet (van Eijk 1997: 192–6; see also §5.3) have been described as having demonstratives used to refer to participants that are invisible but perceptible through senses other than vision. Some of the descriptions cited above refer to these markers as *auditory* or *auditive* demonstratives.

In the case of Tsou, as shown by Yang (2000b: 50–1), the marker *co* is used with participants that are not visible but perceptible through hearing, touch, smell or any non-visual sensation, including endopathic feelings such as hunger:

(9)

mi-cu	tazvo'hi co	f'UsU-'u
AUX-PERV	be.longNOM:SENS:N.VIS	hair-1SG

My hair has grown long. (Not visible, since it is on my head.)

(10)

mo	mema'congo	co	poepe
AUX	fly:strong	NOM:SENS:N.VIS	wind

I felt the wind was strong.

Like visual evidentials in this language (see §5.4.1.2), the non-visual sensory marker *co* has extended uses. It can appear in sentences such as (11) in a situation where the money in question is not perceivable, but the speaker feels that the addressee has money.

(11)

tueafa	co	peisu-'mu
give	NOM:SENS:N.VIS	money-2SG:POSS

Give (me) your money.

It cannot be excluded that some of the markers described as auditory demonstratives should in fact be analysed as non-visual sensory; indeed, Neukom (2001: 42) explicitly states that what the 'auditive demonstratives' in Santali 'may also refer to taste, feeling, and smell'. The same is true of Yuanga; recent field data from Bril (2013) show that the (p. 116) non-visual marker *-ili* can be used to refer to a liquid only perceptible through its taste. This is possibly also the case in the closely related Nyelayu language whose non-visual marker *-ili* is cognate to that of Yuanga, and more research on the other languages with reported auditory demonstrative might reveal similar cases.

Table 5.4 summarizes all known cases of languages with non-visual sensory non-propositional evidential markers. Santali stands out in being the only language with a proximal/ distinction on non-visual sensory demonstratives; in all other languages, the proximal/distal contrast is neutralized with non-visual evidentials.

Table 5.4. Non-propositional evidential systems with non-visual sensory evidentials

	proximal/distal contrast	Indexation of visual perception	Indexation of auditory perception	References
Southern Pomo	unknown	unclear	no	Oswalt (1986: 37, ft)
Santali	yes	yes	no	Neukom (2001: 42–4)
Lillooet	yes	yes	no	van Eijk (1997: 171–96)
Tsou	no	yes	no	Yang (2000b)
Nyelayu	no	yes	no	Ozanne-Rivierre (1997: 98)
Muna	no	yes	no	van den Berg (1997)
Khaling	no	no	yes	Jacques and Lahaussois (2014)
Crow	no	no	yes	Graczyk (2007: 76)

The only languages for which we have positive evidence of the existence of an auditory demonstrative are Khaling (Kiranti, Nepal, Jacques and Lahaussois 2014), and Crow (Graczyk 2007: 76). Khaling has no visual demonstratives (see §5.4.1.1), but has a demonstrative adverb *tikí* 'there (audible)' used to refer to an entity that is perceivable by its sound. Its nominalized form *tikî-m* 'this (audible)' can be used either as a nominal modifier as in example (12) or occur on its own (13).

(12)

tikî-m	kə̂m-go-jo	ʤe-pɛ
there:AUD-NMLZ	cloud-INSIDE-LOC.LEVEL	speak-NMLZ:S/A

sɐ̄lpu-ʔɛ	ʔʌnə̂l-ni	mâŋ-go	blɛtt-ʉ	fiolʌ
bird-ERG	today-TOP	what-FOC	tell-3SG→3	maybe

The bird that is singing in the clouds, what might it be telling today?
(Excerpt from a song by the Khaling songwriter Urmila.)

(13)

mâŋ	tikî-m?
what	there:AUD-NMLZ

What is that? (of something making a sound in another room of the house, not visible at the time of utterance, overheard through participant-observation).

The determiner *tikî-m* is nearly always used to refer to objects, animals or persons that are audible but invisible; it cannot be used to refer to sensory access through other senses, (p. 117) including taste, touch or pain without auditory perception. Two native speakers independently explained the meaning of *tikî-m* as (14).[8]

(14)

mu-toɔç-pɛ,	ŋi-kî-m	tɅ̂ŋ
NEG-be.visible-NMLZ:S/A	hear-1PL:INCL-NMLZ:O	only

(It refers to something) invisible, which we only hear.

Yet, there are specific contexts where *tikî-m* can be used with visible referents, as in example (15), uttered by a person watching a song contest on the television, and commenting on the singing abilities of one of the participants.

The use of *tikî-m* highlights the fact that the speakers' perception of a referent is primarily or exclusively via the auditory channel.

(15)

tikî-m-kʌ	tsɐ̄i	ʔuŋʌ	tūŋ	kog-u
there:AUD-NMLZ-from	TOP	1SG:ERG	more	be.able-1SG→3SG

I can (sing) better than that one. (Overheard through participant-observation.)

5.4.3. Joint perception

While most sensory evidentials only encode the perception of the speaker, some languages have two degrees of sensory access, namely a contrast between single eyewitness and joint perception, as in Maaka (Storch and Coly 2014: 195–7, see also §5.3).

The joint-perception marker *-dìyà* in Maaka is used when both speaker and hearer see the referent in question, as in (16), while the eyewitness marker *-mú* occurs if only the speaker, not the hearer, has seen it (17).

(16)

làa	namàaá -dìyà	sáy	mìnè-pódí-ní
child	this-JOINT:VIS	must	1PL-remove:TEL-OBJ:3SG:MASC

gè-gòrkù-wà
LOC-village-DEF
This child (whom we can both see), we must chase him from the village.

(17)

tò	báayà-à-mú	mìnè-ʔakkó	6à	máy=ʔàŋgùwà
TOP	NAME-DEF-VIS	1PL-DO:PERV	CONJ	chief=<TITLE>

As for Baaye (eyewitnessed), we dealt with Mai Anguwa.

It is unclear if a language can have a joint perception sensory evidential without a corresponding single witness sensory evidential, as no such system has yet been reported.

(p. 118) 5.4.4. Sensory evidentials and utterance time

While most non-propositional sensory evidentials described in the literature indicate the sensory (visual or non-visual) perceptibility of a particular referent at utterance time (this is the case for instance for the evidentials in Khaling and Tsou in §5.4.2), some languages rather encode sensory observations having occurred at any point during the lifetime of the speaker (including the time of utterance).

The Nivaĉle language (Mataguayan) offers a clear example of a system with lifespan non-propositional evidentials. Nivaĉle has four determiners *na, ja, ca*, and *pa* encoding evidential meanings, as summarized in Table 5.5 taken from Gutiérrez (2015: 416).[9]

Non-Propositional Evidentiality

Table 5.5. Nivaĉle determiner system (Gutiérrez 2015: 416)

		Evidentiality distinctions		
		+firsthand		**- firsthand**
Deictic distinctions	Present at UT	*na*		*pa*
	Absent at UT	*ja*	*ca* (no longer existent)	

UT - UTTERANCE TIME

The determiner *pa* is used with referents that the speaker has never seen in his life and are not physically present at the moment of utterance, even if the speaker is sure of their existence (18) or even has talked to them on the phone without ever seeing them (19).

(18)

caaj	lhôn	lh-pa	ve'lha	chita'
have	REP	FEM-DET:N.BEST.SENS	one	elder.sister

I have an elder sister (I have been told, I never met her).

(19)

ja-yasinôy-esh	pa	León
1sg-talk.to-COM	DET:N.BEST.SENS	NAME

I talked to León (only on the phone, but I never met him).

If the speaker has seen the referent even once in his lifetime, *pa* cannot be used and one of the other determiner *na, ja, ca* must appear depending on whether the referent is spatially present, absent (or non-visible), or deceased. For instance, example (20) can be used if the speaker hears a baby crying if he has never seen it before.

(20)

yip-'in	pa	taôcl̂aj
cry-IMPERV	DET:N.BEST.SENS	baby

A baby is crying.

(p. 119) Example (21), on the other hand, implies that the speaker has seen the baby before in his life, and the determiner *ja* (rather than *na*) indicates the speaker can only hear the baby and not see it at utterance time.

(21)

ja	lh-ôôs	
DET:BEST.SENS:ABSENT	3SG.POSS-child	
lh-ja	Patricia	yip-'in
FEM-DET:BEST.SENS:ABSENT	NAME	cry-IMPERV

Patricia's child is crying.

The contrast between *na* 'spatially present' and *ja/ca* 'absent', judging from data in Gutiérrez (2015), is also a sensory evidential one, as *na* cannot be used if the referent is nearby but only audible and not visible (example (21)). It seems possible to provide the alternative interpretation of the Nivaĉle system in Table 5.6: the determiners *na* versus *ja/ca* encode whether the speaker has best sensory information at utterance time about a referent on which they had best sensory information at some point in their lifetime.[10] In this

view, Nivaĉle determiners encode the same sensory evidential contrast at two distinct timeframes.

Table 5.6. Nivaĉle determiner system (alternative interpretation)

	BSE at some point in lifetime		**no BSE**
BSE at UT	na		pa
no BSE at UT	ja	ca ceased to exist	

The nominal evidential markers of Maaka (see §§5.3 and 5.4.3) are also clearly encoding sensory (perhaps only visual) perception at some point in the lifetime, rather than at utterance time, as shown by example (22), about a person not present at the time, but whose life story had been witnessed by the speaker (Storch and Coly 2014: 196).

(22)

yáayà	ciròmà-mú	niń–nì	gùu=ɓálɓíyá
NAME	TITLE-VIS	mother-3SG:POSS:MASC	person=TOPONYM
tà-lòwó		gàamôɗí	bòŋcéttí
3SG:FEM-DELIVER:PERV		once	DEM:REF

Yaaya Ciroma [eyewitnessed]: her mother is from Balbiya town, she once gave birth there.

The Maaka example proves that a language can have lifespan non-propositional evidentials without corresponding utterance time evidentials.

(p. 120) 5.5. Non-sensory evidentials

Non-propositional evidential systems encoding non-sensory evidential meanings are extremely uncommon, and all known systems also include sensory evidentials.

Languages with non-sensory non-propositional evidentials include Tsou (Yang 2000b, see Table 5.3) and Nambikwara (Lowe 1999, see Table 5.7).[11]

Table 5.7. Nambikwara nominal evidential markers, Lowe (1999: 282)

-a^{2}	definite, unmarked
-ai^{2} na^{2}	definite, current
-in^{3} ti^{2}	observational, recent past, given

-ait^{3} ta^{3} li^{2}	observational, mid-past, given
-ait^{3} tã^{2}	observational, mid-past, new
-nũ^{1} tã	inferential, definite, unmarked
-nũ^{1} tai^{2} na^{2}	inferential, current
-au^{3} tẽʔ^{1} tã^{2}	quotative, mid-past, given

In addition to sensory evidentials, the rich non-propositional evidential systems of these two languages have distinct inferential and hearsay markers.

Detailed descriptions of the use of these markers are not yet available. By contrast with the rarity of non-sensory non-propositional evidentials, many languages without grammaticalized non-propositional evidentiality commonly present evidential strategies expressing reportative meaning in noun phrases, such as the adjectives *alleged* or *so-called* in English. Typically, adjectives of this type have dubitative overtones and are not pure evidentials, and occur in highly marked situations.

5.6. Non-propositional evidentiality and nominal tense

Non-propositional evidentiality is much rarer than nominal tense (on which see Nordlinger and Sadler 2004; Haude 2004; François 2005: 132), and is not incompatible with it. (p. 121)

Some languages, such as Nambikwara, combine nominal tense with evidentiality within the same paradigm (see Table 5.7). In Nambikwara, the observational (sensory evidential) distinguishes between recent past *-(i)n^{3}ti^{2}* and mid-past *-ait^{3}ta^{3}li^{2}/-ait^{3}tã^{2}*, as in example (23). Other evidentials, such as the inferential and the quotative, appear to lack this distinction.

(23)

hĩ^{1} na^{2}su^{2}	wa^{3}lin^{3}-su^{3}-nti^{2}
today	manioc-CL.BONE.LIKE-OBSERV.REC.PST.GIVEN
ĩ̲^{3}-a^{1}-ra^{2}	
plant-1SG-PFV	

Today I planted the manioc roots that we both saw earlier today. (Lowe 1999: 290, ex 62.)

Non-propositional evidential contrasts may in specific contexts have readings that may lead fieldwork to analyse them as nominal tense markings. For instance, Campbell and Grondona (2012: 631) (cited in Gutiérrez 2015) interpret the contrast between (24) and (25) as nominal tense rather than non-propositional evidentiality.

	tsej	na	tovôc
(24)	grow	DET:BEST.SENS:PRES	river
	The river is rising.		
	tsej	ja	tovôc
(25)	grow	DET:BEST.SENS:ABSENT	river
	The river rose.		

Gutiérrez (2015) points out that this is a contextual reading of the evidential distinction (visible versus non-visible, see §5.4.4) due to the lack of overt tense marking on the verb, which can be avoided if a temporal adverb is introduced. As shown by examples (26) and (27), *ja* is compatible with past or future contexts, and even with present contexts, as seen in §5.4.4, if no visual or other best possible sensory evidence is available.

	j-ovalh-ei	ja	tovôc
(26)	1SG-look.at-DIR	DET:BEST.SENS:ABSENT	river
	I looked at the river.		

(27)

j-ovalh-ei	jayu	ja	tovôc
1SG-look.at-DIR	PROSP	DET:BEST.SENS:ABSENT	river
I will observe the river.			

The existence of specific contexts where both non-propositional evidential and nominal tense would be compatible suggest that pathways of diachronic evolution linking the two might exist: minimal pairs such as (24) and (25) could become pivot construction through which reanalysis from non-propositional evidential to nominal tense would be possible.

(p. 122) 5.7. Non-propositional versus propositional evidentiality

All languages with non-propositional evidential markers discussed in this chapter also have propositional evidentials. To illustrate how propositional and non-propositional evidentials interact within a single language, I draw here on data from Nivaĉle.

Nivaĉle has several markers of propositional evidentiality, including the reportative *lhôn*, the inferential/dubitative *t'e* and the mirative *ma'lhan* (Fabre 2014: 256–7). Available sources on this language do not report the existence of a sensory propositional evidential.

As shown in example (28), the best sensory evidential determiner *na* and its feminine form *lha* are compatible with the propositional indirect evidential *lhôn* and *t'e* in a context where the referent is visible, but the property or ability ascribed to him has not been witnessed by the speaker. In this sentence, we have the marker *t'e* in the main clause (which however here rather has an epistemic modal meaning, expressing doubt) and the reportative *lhôn* in the complement clause, on a predicate whose sole argument is *lha cajôjô* 'the frog', marked with the best sensory evidence determiner.

(28)

y-ijô'	t'e	lha	cajôjô	ti
3SG-be.true	INFR	FEM:DET:BEST.SENS:PRES	frog	SUB
Ø-pôtsej	lhôn			
3SG-be.fast	REP			

Is it true that the frog (that I see now) (jumps) fast? (A. Fabre, p.c.)

Indirect propositional evidentials are also possible in relative clauses, as in (29). Relative clauses of this type are thus doubly marked for evidentiality.

(29)

[pa	[Ø-vaf-'e	lhôn]	
MASC:DET:N.BEST.SENS	3SG-die-APPL:PROX	REP	
yi-tsaat]	lh-ei	Utsichat	
INDEF.POSS-village	3SG.POSS-NAME	NAME	

The village where he died is called Utsichat. (Fabre 2014: 157)

These Nivaĉle data illustrate two important facts about evidential systems. First, completely distinct propositional and non-propositional evidential systems can co-occur in the same language; in the case of Nivaĉle, while propositional evidentials lack sensory markers, non-propositional evidentials all involve sensory meanings. Second, propositional and non-propositional evidentials can be combined in the same sentence and their meanings can complement each other, as in example (28).

Another important typological issue about non-propositional evidential systems is whether they may include categories that are not attested in propositional evidential systems among languages of the world.

The auditory demonstrative in Khaling (see §5.4.2) might provide such an example, as it attests a specifically auditory evidential (not non-visual sensory, as it is not compatible with sensory perceptions other than audition). (p. 123)

There is only one reported case of auditory evidential in verbal morphology, namely Yuchi as described by Linn (2001) (see also Aikhenvald 2004a: 37). However, the data in this source are not sufficient to exclude the possibility that the affix in question is a non-visual sensory evidential rather than a specifically auditory one, and the only other available source on this language (Wagner 1938) cannot settle this matter. Since Yuchi is no longer actively spoken and further fieldwork on the language is not possible, only a detailed investigation of Yuchi texts (Wagner 1931) might provide an answer to this question.

5.8. Conclusion

Though relatively marginal in the languages of the world, non-propositional evidentials are relatively widespread in the languages of the Northwest Coast of Northern America, in particular Wakashan and Salish, the Amazon basin, and also in the Austronesian language family.[12] In other areas of the world such as Australia, the Himalaya, and South India, their presence is more diffuse, though, as suggested in §5.6, one cannot exclude the possibility that some systems described as having nominal tense might be reanalysable as having non-propositional evidentiality in some cases.

Non-propositional evidentiality is much rarer than propositional evidentiality, but there are cases of languages, like Dyirbal and Santali, with non-propositional evidentiality without clausal evidential markers. In most languages, propositional and non-propositional evidentials form completely distinct systems; the only exception appears to be Jarawara.

Non-propositional evidential markers are overwhelming sensory evidentials. Non-sensory non-propositional evidentials, though not completely unattested, are fairly rare, and in view of the data available, we can propose the implicational universal tendency (30) can be proposed, as all the languages discussed in §5.5 also have non-propositional sensory evidentials.

(30)
NON-SENSORY NON-PROPOSITIONAL EVIDENTIAL => SENSORY NON-PROPOSITIONAL EVIDENTIAL

Notes:

([1]) I am grateful to Alexandra Y. Aikhenvald, Benjamin Brosig, Gong Xun, Zev Handel, Annie Montaut, Amos Teo, Don Killian, Françoise Rose, and Alice Vittrant for useful comments on previous versions of this paper.

([2]) For instance in Japhug Gyalrong, the inferential cannot be used in relative clauses with finite verb (Jacques 2016).

([3]) For glossing =*a*, I adopt Matthewson's (1998) analysis as an 'assertion of evidence'.

([4]) On the meaning of the propositional evidential marker *lákʷʔa* , see Matthewson (2010).

([5]) See Bickel (1999) on this type of nominalizers and their various uses in the syntax of most Sino-Tibetan languages.

([6]) This is a common phenomenon, see exactly the same neutralization in the Tsou paradigm, Table 5.3.

([7]) Dixon (2014) presents a detailed account of the non-visible marker *ŋa-* , which occurs in five distinct contexts: (1) audible but not visible; (2) previously visible but now just audible; (3) neither visible or audible (and not perceivable through other senses); (4) spirits (invisible beings) (5) remembered.

([8]) This native gloss for the meaning of *tikî-m* actually provides a possible hint as to its etymology; as pointed out by Aimée Lahaussois (p.c.), *tikî-m* could be derived from a fusion of the proximal demonstrative *tɛ* 'this' with the nominalized form of the verb 'hear' in the first inclusive plural/generic *ŋi-kî-m*, literally 'this one that we/people (can) hear'. In this hypothesis, the demonstrative adverb *tikí* 'there' would have been back-formed from *tikî-m*, not an impossible assumption given the fact that *tikî-m* occurs with considerably greater frequency in conversation that *tikí*.

([9]) The system was first described by Stell (1989: 363). All Nivaĉle examples in this section come from Gutiérrez (2011) and Gutiérrez (2015).

([10]) The determiner *ca* is not only used with referents that are deceased or have ceased to exist (Fabre 2014: 63–4), but a detailed account of this marker goes beyond the scope of this paper.

([11]) Note that Lakondê, a Nambikwara language, has been reported to have sensory non-propositional evidentials (Wetzels and Telles 2006: 248–9), but it is unclear whether it also has inferential or hearsay evidentials on nouns (this language may have lost non-propositional evidentiality markers, as it is known to have a simplified evidential system due to language obsolescence, see Aikhenvald 2012b: 274–5). Other Nambikwara varieties, such as Mamaindê, lack non-propositional evidentials (Eberhard 2009 and p.c. from D. Eberhard).

([12]) Since many of these languages are also omnipredicative (Launey 1994, François 2003), this raises the question whether a possible typological correlation can be drawn between the presence of non-propositional evidential and omnipredicativity.

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Abstract and Keywords

This chapter examines the origins of evidential marking, with a focus on the languages of the Eurasian continent. These languages display both transmission and diffusion. Moreover, a feature that diffuses from one system into another can then be elaborated by mechanisms of transmission, while a transmitted system can be affected by diffusion. With the exception of Turkic and Mongolic, historically centrally located in Eurasia, reconstructable evidential systems of the continent have relatively shallow time-depths and are not reconstructable for respective protolanguages. This also appears to be the case for some instances in Native America when reconstruction is possible. Reinterpreted past tenses, subordinate clauses, and nominalizations are major sources, reduced lexical items also occur, on rare occasions future marking, noun incorporation, and the reinterpretation of interrogative or emphatics is attested as relevant. Copying, calquing, and subsequent internal elaboration also play roles.

Keywords: transmission, diffusion, Eurasian continent, Turkic, Mongolic, copying, calquing, internal elaboration, Native America

6.1. Introduction

Evidentials arise via diffusion or transmission (cf. Labov 2007). For diffusion, *borrowing* is equivalent to Gołąb's (1976) and Johanson's (2002) *copying*, i.e. the importation of linguistic material from one language or dialect into another. *Calquing* means that the sense of the source language's linguistic material is copied, but the material itself is that of the copying language. *Systemic modification* from diffusion means the semantic impetus comes from another language, but the implementation is achieved by means internal to the linguistic system without calquing (*transformative copying*). With transmission, two processes can be identified: *grammatical shift* and *grammatical creation*. The former describes the accretion of new meanings to existing grammatical forms, while the latter refers to the reinterpretation of lexical or quasi-lexical items as grammatical markers.

Moreover, an evidential system of contact-induced origin can subsequently expand by means of transmissive mechanisms, while a transmitted system can undergo change in connection with contact.[1]

Here the focus will be on living languages in families with long written records, i.e. the Eurasian continent. Some typologically relevant examples from other areas will be adduced subsequently.[2] Although diffusion (contact) is the topic of Chapter 7 of this volume, this chapter's investigation, focusing on both transmission and diffusion and their interactions, will complement information given there as well as complementing and supplementing some other relevant chapters in this volume. The organization, detailed in §6.1.1, will combine the areal and the genetic, just as evidentials themselves arise via diffusion and transmission. The conclusion will sum up some answers to the question in the title.

(p. 125) 6.1.1. What does *evidential* mean?

Some aspects of the history of the study of evidentially are covered in Boye (Chapter 13 of this volume) but for the purposes of this chapter certain basic facts should be emphasized. The idea that some verbal forms express information source, specifically witnessed versus non-witnessed or reported events, was expressed many centuries ago by Pāṇini for Sanskrit (fourth century BCE, Cardona 1997), and al-Kāšγarī for Turkic (eleventh century CE, Dankoff 1982), and the concept is also present in many descriptions of Native American languages in Boas (1911d, 1922, 1933), where the meaning 'evidence' is associated with certain verbal affixes. The term *evidential*, as such, however, does not appear to be attested any earlier than Halperin (1946: 286), who used the term for Yuma (Quechan), a language of the North American southwest. It was Jakobson's (1957) seminal article that identified *evidential* as defining a verbal category on a par with voice, tense, aspect, mood, person, number, gender, taxis, and status. (cf. the discussion in Jacobsen 1986).[3] Jakobson illustrated the category using Andrejczin's (1938) account of Bulgarian with reference to Lunt's (1952) account of Macedonian.[4] Here it is worth noting that although Jakobson (1957: 5) defines *evidential* in terms of a narrated speech event in his table, in his description of the category (Jakobson 1957: 4), he admits various sources of evidence, and he notes that Lunt's (1952) terminology for Macedonian is that of 'vouched for' versus 'distanced'.[5] In the case of Russian, Jakobson (1957) cited only the quotative particles *de* and *mol*, both transparently derived from *verba dicendi* no longer current as such in the language. A decade after Jakobson (1957), Aronson (1967) demonstrated the point that literal source of information was not the basic opposition in Bulgarian, and Friedman (1977) did the same for Macedonian a decade after Aronson. In Macedonian and Bulgarian, the speaker chooses to vouch for (confirm) the statement or withhold such confirmation, and ordinarily (but not always) this stance is based on the nature of the evidence for the statement. Aronson (1967) uses *confirmative/non-confirmative* to describe the Bulgarian opposition traditionally described as witnessed/reported, and his terminology will be followed here (cf. Johanson's *indirectivity*, Chapter 14 of this volume). Although literal witnessing, reporting, and other types of evidence, are often implicated or even assumed, they are not invariantly requisite. Aikhenvald (2003a) proposed a useful heuristic difference between evidential strategies and dedicated evidentials which may also apply to

some languages with a distinction between confirmative and non-confirmative. The term *admirative*, which has been used in Balkan linguistics since the nineteenth century, refers to verb forms that can convey neutral reports, but also surprise and disbelief.

As Aikhenvald (2004b: 303) illustrates, evidentials as verbal categories have, for the most part, areal distributions, the major areas being the Eurasian continent, Native North America, and the Andes and Lowland Amazonia areas of South America, to which can now be potentially added the Engan contact zone of Highland New Guinea (Sarvasy, Chapter 30 (p. 126) of this volume). The continental macro-areas do not represent *Sprachbünde* in the classic Trubetzkoyan (1923, 1930) sense, but rather, in Hamp's (1989) terms, *differential bindings*, i.e. interlinked areas. At the same time, genetically related languages often (but not always) occupy contiguous geographic spaces. The organization of this chapter will therefore combine, in the formulation of Hamp (1977: 279), the 'twin faces of diachronic linguistics,' i.e. the areal and the genetic. The account begins with Central or Inner Asia, which in terms of the historical record is arguably the heartland of current Eurasian evidentiality regardless of whether via transmission or diffusion. The Balkans follow not only as an obvious contact zone but also as illustrative of a wide variety of mechanisms in the origins of evidentiality. The Caucasus and adjacent parts of Anatolia provide a useful next step, followed by Greater South Asia (including Iranian). Uralic Siberia and the Baltic provide the next zone, after which the East Asian zone is considered. Selected examples from the New World then are added for general typological comparison. The conclusion, taking Aikhenvald (2004a: 271–303) as its framework, summarizes what emerges from the historical record and reconstruction.

6.2. Central Asia: Altaic

The longest consistently attested documentation of evidentiality in Eurasia comes ultimately from Central or Inner Asia (for the situation in South Asia, see §6.5). In terms of the historical record, Central Asia can be defined as the region dominated by Altaic peoples who eventually came into contact with Indo-European (especially Iranian), Sino-Tibetan, and others. The question of whether Altaic is a *Sprachfamilie* or a *Sprachbund* in terms of Trubetzkoy's (1923, 1930) classic, and principled, distinction is not a problem here. Regardless of which type of relationship *Altaic* denotes, the available evidence indicates that evidentiality is a category shared among the various languages, but at the same time it does not have a reconstructable common origin. The timing of contacts from Central Asia westward are such that an areal explanation for evidentiality in these regions is clear.[6] While speakers from a number of languages competed for dominance in Central Asia in recorded and reconstructable history, Altaic, regardless of the nature of the grouping that it denotes, holds a central position in this continentally central region.

(p. 127) 6.2.1. Turkic

The second earliest formulation of an evidential distinction in the historical record (and the longest in terms of continuous attestation; the oldest is from Pāṇini, see §6.5.1), noted

by Aikhenvald (Chapter 1 of this volume), is for Turkic, in Maḥmūd al-Kāšγarī's *Dīwān Luγāt-at-Turk* (Dankoff 1982: 412) from 1077 CE, where, discussing the past tense in *-DI* and *-mIş*, he writes:

> The difference between these two forms is that D Y [-di] on preterite verbs indicate that the action occurred in the presence of the speaker. The action was verified by its occurrence in his presence. For example, if someone says *bardi* the meaning is, 'He went and I saw him go with my own eyes.' M Š [-miş] on the other hand, indicate that the action occurred in the absence of the speaker. Thus *ol barmiš* 'He went but I did not see him go'; *ol kälmiš* 'He came but I did not see him.' This is a general rule holding good for all preterite verbs …

This usage is already attested in the Orkhon inscriptions from the early eighth century CE in what is today Mongolia. The language of these inscriptions, the oldest Turkic documents known, is strikingly similar to Oghuz Turkic (Tekin 1968: 192–3). As explained by Johanson (Chapter 24 of this volume), the participle in *-mIş* originally had a resultative meaning, and it can still be so used in Modern Turkish, e.g. *gelmiş adam* 'the person who has come'. Johanson's explanation that the *-mIş* form results from the agglutination of an original converb construction, possibly *bïš-* 'ripen, mature, attain final state' is entirely consistent with Turkic historical processes of grammaticalization, cf. the Turkish progressive in *-yor* as well as the copulative/stative *-DIr*, both originating from agglutinated converbs of motion and state ('go', 'walk', and 'stand', respectively; Lewis 1967: 108, 96).

The replacement of *-mIş* by participles in *-GAn* and *-IP* appears to be a later development, thus leaving Turkish and Gagauz in the southwest and Yakut in the northeast as archaic outliers. While Orkhon Turkic uses of *-mIş* are almost identical to Modern Turkish, Old Uyghur *-mIş* resembles *-GAn* in non-Oghuz languages. Thus, hints of the transferal of evidentiality from older Turkic *-mIş* to *-GAn* in many Turkic languages is already foreshadowed in the earliest periods. Johanson (Chapter 24 of this volume) points out that -IP, which is already known as a converb in Old Turkic, combined with *tur-* 'stand' (Turkish *-DIr* in the preceding paragraph) to produce an additional set of evidentials in non-Oghuz languages. (See Erdal 1991: 383, 2004: 209–310, 320; and Friedman 2012a for additional discussion.)

An interesting feature of the easternmost Oghuz Turkic languages—Azeri and Turkmen—is the weakening of the evidential functions of the *mIş*-past and the rise of *-GAn* and *-Ip-tIr* (along with auxiliary *imiş* 'be-*mIş*') in such functions. For Azeri, the influence of Persian as the language of prestige has been adduced (see Johanson, Chapter 24 of this volume). For Turkmen, however, given the history of the region, it would appear that non-Oghuz Turkic has influenced Oghuz Turkic, and it is possible that non-Oghuz Turkic also played a role in the modern Azeri situation. (See Blacher 1997: 130–1, 140–1; Budagova 1982: 80; Mirzəzadə 1962: 236–7; Širaliev and Sevortjan 1971: 123–8; and Friedman 1978, 1986, 2012a, 2014 for detailed discussion.)

As noted in Johanson (§24.4.3 of this volume), Upper Chuvash, the only remnant of an ancient branch of Turkic that included many of the ancient and medieval languages that entered Europe prior to the Ottomans in the thirteenth–fourteenth centuries, also has an evidential marker {-*sA*} related to the Turkic hypothetical conditional.

(p. 128) 6.2.2. Mongolic

The Mongolic languages show a bifurcation between those that have developed evidentials from an inherited system and those that have (probably) developed evidentials in contact with non-Mongolic in the East Asian (Sino-Tibetan) area (see Brosig and Skribnik, Chapter 26 of this volume). Proto-Mongolic is reconstructed as having had a confirmative (present perfect), a deductive (present imperfective) and resultative (past perfect), and the origins of their markers are assumed to be deverbal nouns, although in some cases a form of the auxiliary stem *a-* 'be' may have been involved (Janhunen 2003a: 23–5; also Brosig and Skribnik, Chapter 26 of this volume on other complexities). It would appear that the original opposition was a marked confirmative and a resultative that doubled as a non-confirmative. Friedman (1986) argues that this is also the case for Turkish and Balkan Slavic. At issue is the question, for evidentially strategic languages (i.e. those employing evidential strategies as identified by Aikhenvald 2003a), of whether the direct evidential is marked, with indirectness being the unmarked implication of the unmarked term, or vice versa. For Buryat, according to Skribnik (2003: 119; see also Chapter 26 of this volume) the petrified futuritive participle of *ge-* 'say' functions as an evidential particle combining with the perfective participle of the main verb to produce a hearsay or dubitative evidential. Khalkha has direct and indirect evidentials that are homonymous with the confirmative and resultative, respectively (Svantesson 2003: 167; cf. Chapter 26 of this volume). It appears that the confirmative is inherited, while the resultative is the source of the indirect. Like Khalkha, Oirat uses the confirmative for witnessed events and the resultative for unwitnessed (Birtalan 2003: 223). Kalmyk, an outlier located just to the north of Daghestan, left greater Mongolia in the seventeenth century and has developed a complicated secondary system of evidentials in addition to a primary opposition between direct perception and information obtained indirectly (Chapter 26 of this volume; Bläsing 2003: 244 cited therein). For Shira Yughur, the Common Mongolic terminative is associated with witnessed pasts while the narrative perfect, used in tales, utilizes a perfect (= perfect participle + *bai* 'be') followed by *ginii*, the present non-progressive of *gi-* 'say (Nugteren 2003: 279–80). As Skribnik and Brosig (Chapter 26 of this volume) note, grammaticalizations of 'say' for quotative and reportative evidentials are found in various Mongolic languages.

6.2.3. Tungus-Manchu

For this third branch of the core of Altaic—be it *Spachfamilie* or *Sprachbund*—Malchukov (2000) gives a thorough account of evidentiality in the Tungusic sub-branch, including diachronic information and thoughts on the routes of grammatical and semantic change. In North Tungusic (Even, Evenki, Negidal, Solon) evidentials have their origins in the perfect in *-cA*. For Even, the increase in evidential usage moving westward appears to be in-

fluenced by a copying of semantics of Yakut *-byt* (Malchukov 2000: 445).[7] In Evenki, the *-cA* perfect can be perfect or general past but also tends to be non-confirmative in opposition to the aorist (in *-RA-*), which is often confirmative. According to Malchukov (2000: 447), the (p. 129) development resultative > perfect is shared by all of North Tungusic, with Evenki developing it into a past and Western Even into an evidential (past narrative). Negidal and Solon are midway between Even and Evenki in these developments (Malchukov 2000: 447). For East Tungusic (Udihe, Nanai, Orochi, Orok, Ulcha), the semantics and formal oppositions as reconstructed by Malchukov (2000: 454) begin with a posited stage during which a general past was opposed to a resultative perfect. In terms of attested languages, Udihe has developed these into a direct evidential (which can also function as a perfect) and an indirect evidential (which can also function as an imperfect), respectively. Nanai represents a further development: the direct evidential based on the imperfect becomes marked for what Malchukov (2000: 450, 452), calls 'affirmative' or 'validational' or 'confirmative', i.e. an assertive, and the indirect evidential based on the perfect becomes a general preterite.[8] Orok and Oroch represent a fourth stage, when the validational is lost and only the general past remains.[9]

6.3. The Balkans

The Balkans constitute a maximally informative sequel and contrast to (Altaic) Central Asia in an account concerning where evidentials come from. While evidentiality is attested in or reconstructed for the earliest stages of Turkic and Mongolic, with Tungusic as an apparently weak outlier (cf. Skribnik and Brosig, Chapter 26 of this volume), it is clearly not an inherited category in the Balkan languages (except for the Rumelian dialects of Turkish and Gagauz). The origins of evidentiality in the Balkan languages, however, range from overt copyings to typological parallels, and from widespread systemic changes to specific dialectal outcomes. Moreover, both diffusion and transmission are illustrated by the Balkan examples.

6.3.1. Balkan Slavic

The oldest Slavic documents (Old Church Slavonic) as well as subsequent medieval documents make it clear that, having entered the Balkans in the sixth and seventh centuries CE, Slavic had not developed any sort of evidential system prior to the fourteenth century, when contact with Ottoman Turkish began. To be sure, the perfect had typological similarities with Turkish *-mIş*, and the synthetic aorist and imperfect had typological similarities with Turkish past tenses in *-DI* before contact with Turkic began. Nonetheless, as Dejanova (1970: 129–35) and Bunina (1970: 167–219) make clear, the Old Church Slavonic perfect (p. 130) was a resultative, and this situation persisted throughout the Middle Ages.[10] As argued in Friedman (1986), the sequence of development for Balkan Slavic evidentials involved both diffusion and transmission, i.e. contact-induced change followed by independent developments. The stages can be identified as follows:

(1) As the old perfect using the resultative participle in *-l* increasingly competed with the synthetic aorist and imperfect for narrative dominance—a competition that occurred in all the Slavic languages and that resulted in the perfect becoming the unmarked past—the synthetic aorist/imperfect in Bulgarian and Macedonian were retained but became marked as confirmative.
(2) As a result of the marking of the synthetic pasts as confirmative, the old perfect took on nuances of, but was not positively marked for, non-confirmativity. These changes began in the Ottoman period (thirteenth century to early twentieth century in Macedonia and parts of Bulgaria).
(3a) No earlier than the fifteenth century, the perfect of 'be' (3sgM *bil e*) began to be used in Bulgarian as an auxiliary forming a pluperfect that competed with the old pluperfect formed with the imperfect of 'be' (3sg *beše*) plus the *l*-participle (Dejanova 1970: 28–9). Note that the use of the perfect of 'be' as a pluperfect auxiliary is attested in medieval Serbian/Croatian already in the fourteenth century (Dejanova 1970: 64–5).
(3b) In western Macedonian, a new perfect using *ima* 'have' plus the neuter verbal adjective (descended from the old past passive participle) developed. The relevant past tenses of *ima* (3sg imperfect *imaše* and 3sgM old perfect *imal*) developed into new pluperfect-forming auxiliaries that were and are marked evidentials (direct and indirect, respectively).
(4) In both Macedonian and Bulgarian the new auxiliaries in *-l* from stage (3) arose in the Ottoman period and were used to express marked non-confirmativity.
(5) The omission of the third person auxiliary in the old perfect, which is attested already in Old Church Slavonic but does not become widespread until the early modern period, is assigned the function of marking the *preizkazno naklonenie* 'reported mood' by Bulgarian grammarians in the late nineteenth and early twentieth centuries (Friedman 2002). This is not an option for Macedonian, where the third person auxiliary in the unmarked past and forms derived from it was completely lost and is never used.[11]
(6) At the extreme southwest of the Macedonian periphery (the Kostur-Korča region in what is now northwestern Greece [Kastoriá] and southeastern Albania [Korça]),

> Macedonian dialects completely replaced the old perfect in ‘be’ with the new perfect in ‘have’ and retained *l*-forms only as rare, marked non-confirmatives much like the Albanian admirative. The comparison with Albanian is appropriate because these Macedonian dialects were in direct and intimate contact with Albanian, as evidenced by many distinctive loanwords. Kostur-Korča Macedonian preservation of precisely and only those uses of the old perfect that correspond to the Albanian admirative is thus potentially a result of diffusion.

(p. 131) Thus, in Balkan Slavic the evidentials developed out of perfects and simple preterites during the period of contact with Turkish, and both Macedonian and Bulgarian continued these developments on their own thus transforming a diffusion into a transmission.

6.3.2. Albanian

As demonstrated in Friedman (2010b), the Albanian admirative had not yet achieved its current development in 1555, the date of the oldest extended Albanian text, the *Mëshari* ‘Missal’ of Gjon Buzuku. From the data in the *Mëshari*, it is clear that what Friedman (1981, 1986, 2012a) defines as the admirative complex, i.e. the constellation of meanings in a marked non-confirmative that can be felicitous (disbelief), infelicitous (surprise), or neutral (report, inference) was, at that time, only one of the possibilities assigned to an Albanian inverted perfect, i.e. a syntagm of the type participle+auxiliary rather than auxiliary+participle. The latter was and remains the ordinary Albanian perfect. In the sixteenth and into the seventeenth centuries, the inverted perfect was still a past tense, and could be used as an irreal conditional as well as an admirative, but this latter with past meaning. It was only and precisely during the period of the most intense contact with Turkish that the Albanian admirative developed its specific marking for non-confirmativity, involving surprise, felicitous disbelief (irony), and neutral report. It is this last usage that was of critical importance in Albanian-language news reports coming from Kosovo in the period leading up to, during, and after the 1999 NATO bombings (see Friedman 2010b). The data from the Albanian dialects of Ukraine, whose (Orthodox Christian) speakers left Albania within a century or so of Buzuku, attest to the transitional phase. In their narratives, forms that would be present admiratives in modern Albanian are narrative past tenses used for non-confirmative (indirect evidential) events (see Friedman 2010b). Again with Albanian we see how diffusion affects transmission, but the results of transmission are specific to Albanian as a historical development while at the same time being in line with general typological tendencies.

6.3.3. Romance

Romanian, Aromanian, and Meglenoromanian, each exhibit entirely different histories of evidential formation. Romanian arguably influenced the Bulgarian dialect of Novo Selo, Vidin region (§6.3.3.4).

6.3.3.1. Aromanian

The Frasheriote Aromanian dialect of Gorna Belica (Aromanian Bela di sus) originated from Myzeqe in Central Albania and was spoken by a second wave of immigrants to the village. Speakers of this dialect borrowed the third singular Albanian present admirative marker *-ka* as a particle, which was suffixed to a masculine plural imperfect participle (e.g. *vănets-ka* 'come' < *vănet* versus aorist *vănit*) and this form in turn was used as an auxiliary, to produce an entire admirative series parallel to the Albanian (see Friedman 2012b for details; also (p. 132) Aikhenvald, Chapter 7 of this volume). As with the Albanian admirative, the Aromanian admirative can be used for indirect evidence as well as surprise and disbelief.

6.3.3.2. Meglenoromanian

In Meglenoromanian, the inverted perfect (participle+auxiliary as opposed to auxiliary+ participle) is used much like the Macedonian unmarked past (the *l*-perfect) in its non-confirmative meanings: for reports and expressions of surprise or disbelief. The inverted perfect of 'have' can be used to form an auxiliary producing a non-confirmative pluperfect. For Meglenoromanian, the chief contact language has been Macedonian (see Friedman 2012b; cf. also Aikhenvald, Chapter 7 of this volume), and the origin of the Meglenoromanian non-confirmative seems to be a semantic calque on Macedonian assigned to an already existing collocation. The Meglenoromanian evidential is markedly past and can be used in connected narratives. It provides a clear instance of semantic calquing onto existing material.

6.3.3.3. Romanian

Romanian is almost unique in the Balkans in its use of a future marker for its marked non-confirmative, which is called *modul prezumtiv* 'the presumptive mood'. This is a dedicated non-confirmative evidential used only for reports, hearsay, surprise, and doubt. It is not obligatory, but neither is it an epistemic use of the Romanian future. There are several ways of forming the presumptive, but the most common is future marker + the bare infinitive *fi* 'be' + the gerund (present participle) as in example (3).[12]

(1)

-Îți	zice	lumea	'Niculăiță	Minciună?	-Mi-o	fi
you.DAT	they.say	the.world	Nicky	liar	me.DAT-FUT	be
zicînd						
say.PRES.GERUND						

Do they call you Nick the Liar? (They [supposedly] call me that).

The presumptive with the present gerund is unique and unambiguous. It can only be used for the admirative complex, i.e. as a hearsay evidential strategy with extensions to surprise and doubt. Although there is a millennium-long gap between the last Balkan Latin inscriptions (sixth century CE) and the first datable Romanian document (1521), it is clear from the oldest Romanian texts that the presumptive mood probably reached its

current state during the Ottoman period (1417–1859 for Wallachia, 1451–1859 for Moldavia, 1526–1711 for Transylvania).

6.3.3.4. Novo Selo, Vidinsko

The Bulgarian dialect of Novo Selo in the Vidin region (northwest corner of Bulgaria) is unique among Bulgarian dialects in having a *verjatnostno naklonenie* 'probabilitive mood' (p. 133) (see Mladenov 1969: 108; and also Aikhenvald, Chapter 7 of this volume) instead of the *preizkazno naklonenie* 'reported mood'.[13] The semantics of this paradigmatic set are precisely those of the admirative complex (report, inference, surprise, doubt: see Friedman 2012a; Mladenov 1969: 110–11). It comes from the BCSM (Bosnian/Croatian/Serbian/Montenegrin) type of future (infinitive fused with enclitic conjugated 'want') as opposed to the Balkan Slavic type (proclitic particle descended from 'want' + conjugated form). Novo Selo, located on the border of the two zones and across the Danube from Romania, has the Balkan type of future and has repurposed the BCSM type as an evidential and expanded it. The repurposing of the BCSM future occurred in the context of intense contact with Romanian.

6.3.4. Romani

In terms of evidential strategies, Romani has a small but diverse set of isolated phenomena. Those in the Balkans are all contact-related. Outside the Balkans, there is one instance (Matras 1995), apparently transmissive, with typological parallels to the Caucasus (see Forker, Chapter 24 of this volume and §6.4.3).

In the Balkans, Romani evidential strategies are based on particles, all but one borrowed. In the dialect of Sliven (northeast Bulgaria), the Slavic interrogative particle *li* is used for the admirative complex of meanings (report, surprise, disbelief), while in the Arli dialect of Kriva Palanka, this same marker is used only for dubitatives, i.e. an infelicitous (rejected) report (Igla 2006; Friedman 2012a). It is both interesting and diagnostic to note that in Skopje Barutči Arli, the Turkish interrogative marker *mi* is used in exactly the same type of dubitative context (Friedman 2012a). In some Romani dialects in eastern Bulgaria, *miš* occurs as an evidential particle, while other dialects in the same region use *miš*-pasts of Turkish verbs as in Turkish (Friedman 2013b). The dialect of Haskovo, in contact with Turkish and Bulgarian in southeast Bulgaria, uses *miš*-pasts for Turkish verbs and a clitic particle *berim* with native verbs, used where Turkish would have a *mIş*-past. It appears to be a reinterpretation of the postposition *berin* 'according to' (Friedman 2013b). If so, this is an example of an adposition becoming an evidential marker. Outside of the Balkans, in Kalderash Romani (Matras 1994: 101–2, 206–7), intransitive verbs of motion and change of state in the singular agree in gender (M *-o* F *-i*) when personal (exclusive) knowledge is deployed, but in person (3sg *-a*[*s*]) when shared (inclusive) knowledge is marked.[14] Example (2), from Matras (1995: 101–2) is illustrative of Kalderash usage.

(2)

Numa	jekh,	o	Jono	**arakhadžilo**	ando	Čexo,	aj	vov kothe
only	one	the	Jono	was.born.AOR.M	in	Czechia	and	he there
ande	temnica	**arakhadžilo**.	Ke	phari	sas	e	Katica, …	
in	prison	was.born.AOR.M	because	pregnant.F	was.3sg.PAST	the	Katica	
taj	phandade	la,	e	romni	phari.	Taj	**arakhadžilas**	o Jono
and	imprisoned.AOR.3pl	her	the	woman	pregnant	and	was.born.AOR.3sg	the Jono
ande	temnica,	no.						
in	prison	so						

Only one, Jono, was born in the Czech Republic, and there he was born in prison. For Katica was pregnant, … and they imprisoned her, a pregnant woman. And so Jono was born in prison.

(p. 134) In the first two instances of 'was born', the speaker presents personal knowledge unknown to the addressee. In the third occurrence, the speaker, having imparted the knowledge, treats it as shared with the addressee. The distinction between exclusive and inclusive knowledge is intimately connected to evidentiality as seen in manifestations of egophoricity or conjunct/disjunct in Tibeto-Burman (see Hyslop, Chapter 28 of this volume, DeLancey, Chapter 27 of this volume). Likewise, a form of evidential marking in Lak depends on whether the auxiliary agrees in gender with the actor or the patient (see §6.4.3; Friedman 2007; and Forker, Chapter 23 of this volume). Here, the source of the knowledge is the speaker in both instances, but the addressee's relationship to that source is distinctive. As such, the Kalderash usage involves the treatment of evidence in narrative in a manner that is best treated as a kind of evidential.

6.3.5. Judezmo

As reported in Varol (2001; Friedman 2003) and noted by Aikhenvald (Chapter 7 of this volume), Istanbul Judezmo has calqued the Turkish *mIş*-past by using a pluperfect in contexts where Spanish would not permit such usage. This same use of the pluperfect in Spanish is also reported for Quechua-dominant and some other Native South American Spanish speakers in South America (Hardman 1986; see also Alcázar, Chapter 35 of this volume).

6.4. Anatolia and the Caucasus

Unlike the Balkans, the Caucasus is a multilingual area that, as Tuite (1999) has argued, does not constitute a *Sprachbund* in the classic Trubetzkoyan sense. Like ergativity, evidentialty is widely present but differently manifested among the various languages. In this section, the most relevant developments in the three indigenous Caucasian language families as well as Armenian are considered in historical perspective.

6.4.1. Kartvelian (South Caucasian)

Kartvelian contains four languages: 1) Svan, which split off the earliest; 2) and 3) the Zan group consisting of Mingrelian and Laz; and 4) Georgian. As the oldest attested language in the group (fifth century), Georgian serves as the point of orientation. (p. 135)

Georgian has an aorist/perfect opposition that is traditionally described in terms of witnessed/non-witnessed: the aorist is referred to as *naxuli* 'witnessed' and the perfect as *turemobiti* from Georgian *turme* 'apparently'. The perfect-admirative complex of meanings apply to the *turmeobiti*, as shown in Boeder (2000), and, as Friedman (1999) has shown, the aorist can be used for unwitnessed events, as seen in the traditional equivalent of 'Once upon a time' that begins fairy tales as in example (3):

(3)

Iq'o		da	ara iq'o
was.3sg.AOR		and	not was.3sg.AOR
There was		and	there wasn't.

This is in contrast to Turkish and many Balkan and Nakh-Daghestanian languages, which use an indirect or non-confirmative evidential past as in the Turkish of example (4):

(4)

bir	varmış,	bir	yokmuş
one	exist.MIŞ	one	not.exist. MIŞ
Once there was,		once there	wasn't.

As shown by Pxak'adze (1984: 144) and Arabuli (1984: 174–5), the original basic meaning of the Old Georgian perfect was resultative (see also Harris 1985: 326).[15] Harris (1985: 286–306) serves as the basis of the account here.[16]

Proto-Kartvelian can be reconstructed as having had two series of paradigms. Each series (Georgian *mc'k'rivi*) consisted of a number of paradigmatic sets conjugated for person and expressing tense-aspect-mood. In Modern Georgian, the first series is subdivided into two groups: (1) present, imperfect, and present subjunctive, and (2) future, conditional, and future subjunctive.[17] The second series comprises the aorist, optative, and imperative. Modern Georgian has a third series comprising the perfect, pluperfect, and perfect subjunctive (this last obsolescent). Harris (1985: 300) argues that the third series, in which subjects are shifted into the dative, is of heterogeneous origin: the perfect developed from the first series while the pluperfect developed from the second series. On morphological grounds, Harris (1985: 286–325) argues that the third series began with a distancing strategy for the aorist, using dative subjects and appropriate person agreement, for anterior, negative past, and unseen past events. This strategy spread to the present. At this stage, each of the two series had a seen/unseen evidential opposition.[18] This appears to have been the morphological system in Old Georgian. During the Old Georgian period the present evidential became associated with the aorist evidential, they acquired perfect and pluperfect meanings respectively, and they developed into a third series. As Harris (1985: 305) observes, the shift of the present evidential to a third series left a vacuum in the first (present/imperfect/future) series, and in Laz, Mingrelian, Svan, and some western Georgian dialects, this gap was filled (p. 136) by the creation of a fourth, indirect evidential series based on the present (see also Harris 1991: 50–1). In eastern Georgian dialects, this same gap was filled analytically, either with a native formation or a calque. In Old Georgian, the particle *turme* 'apparently' was well established by the twelfth century and served as the native formation in some dialects. A particle derived from the 3sg perfect of 'be' is used in Xevsur (*q'opilam,* northeast Georgia) and Ingilo (*q'opila* Azerbaijan), and the parallel with Turkic *imiş* is striking. It thus appears that evidentiality in the Kartvelian languages has its origins in the medieval period. While a native source for the initial development is reconstructable, at least some subsequent elaborations might have been influenced by contact.

6.4.2. Abkhaz-Adyghe (Northwest Caucasian)

Northwest Caucasian originally constituted a group of language/dialect continua of three groups: Abkhaz-Abaza, Ubykh, and Circassian (Kabarda-Adyghe). According to Chirikba (2003), citing Hewitt (1979: 90–1), the Abkhaz-Abaza inferential markers *-zaap'/zaarən*, have their origins in two future markers, the former indicative, the latter conditional. Chirikba (2003: 257–8) also cites evidence that *za-* may have been a stative, participial, or deverbal nominal marker, and *-p'* may be from a copulative element.[19] For the other marker, *-rə-* comes from a future suffix and *-n* from a past stative ('anterior future' being a well attested path to 'conditional'). There are arguments, adduced by Chirikba, that *-a* became *-aa* at a later stage, as a contamination; cf. *zaa*, used in forming masdars (infinitive-like

deverbal nouns) and stative verbs. The Abkhaz-Abaza inferential system appears to exemplify the use of denominals or participials and futures as sources of evidentials.

The situation in the rest of Northwest Caucasian indicates that the Abkhaz-Abaza developments post-date the split of proto-Northwest Caucasian into its three branches. According to Colarusso (p.c. and Colarusso 1992) neither Ubykh (Aikenvald 2004a: 293) nor Circassian (Colarusso 1992) have evidentials, *sensu stricto*.[20]

Circassian has a verbal prefix glossed ‘in hand’, Adyghe /-q(a)-/, Kabarada /-q’(a)-/ that chiefly denotes the speaker’s involvement with a noun that is in the absolutive (Colarusso 1992: 92–3). One can only use it (outside of bardic use) if one is certain. So, in the remote past one cannot use it because, as Colarusso (p.c.) noted ‘my teacher once told me “you cannot vouch for events in the remote past”.’ While not isomorphic with a confirmative or direct evidential, the connection between body part and evidential strategy is apparent.

In sum, evidentiality in Northwest Caucasian is a category that developed in some of the languages after the split from the protolanguage. At the same time, the typologically unremarkable ties to futurity are areally specific, as they are in parts of the Romance Balkans. The lexical development of ‘in hand’ to a direct evidential strategy is noteworthy.
(p. 137)

6.4.3. Nakh-Daghestanian

Forker (Chapter 23 of this volume) gives an excellent account of Nakh-Daghestanian. As she notes, the perfect, or forms based on it, are frequently employed in evidential strategies, and sometimes as dedicated evidentials. She also refers to periphrastic light verb constructions with verbs meaning ‘find, discover, become, happen, stand, remain, get’, etc., as well as an evidential copular auxiliary (*xilla*, the perfect of ‘be’) in Chechen and a past participle in Avar. An evidential cannot be reconstructed for Proto-Nakh-Daghestanian. Compare here Indo-European vis-à-vis the various descendant languages, in which their independently developed analytical perfects (or perfects of analytical origin) sometimes did—and sometimes did not—develop into evidentials. The comparison of Icari and Ashti Dargwa in Forker (Chapter 23 of this volume and sources cited therein) is especially instructive. In Ashti perfective perfects can be either resultative or indirect evidential, while for imperfective perfects only indirect evidential meaning occurs. In Icari, it would appear that only imperfective perfects (and pluperfects) have this option, while the perfectives are pure resultatives. Forker (Chapter 23 of this volume) observes that this is typologically unusual, but it is worth noting that in other languages of Eurasia, it is sometimes the imperfect or imperfective that is in a position to specialize as an evidential, as in the case of Balkan Slavic or Mongolic. Kryz (Authier 2009: 278 cited by Forker, Chapter 23 of this volume) has borrowed Turkic *-miš*, which is also to be found in Udi (Schulze 2014). West Tsezic and Mehweb Dargwa have evidential enclitics that evolved from ‘say’ but can be used with quotatives. Forker (Chapter 23 of this volume) also points to evidential-like use of dative pronouns in Nakh and a conjunct/disjunct system using a perfective marker in Axəxdərə Akhvakh.

Like most of Nakh-Daghestanian, Lak uses the perfect as well as a number of other constructions to render evidential meaning. There is the quotative particle *t'ar*, which appears to be a third person present of 'say', and *kunu*, the past gerund of 'say', which also functions as a quotative marker. The present gerund *χ:aj* from *χ:an* 'appear' can be used for inferences, and the emphatic particle - *χ:a* also has evidential functions (Friedman 2007). Lak has an assertive which is used for general and objective truths but also for personal confirmation. The assertive in unmarked verbs is a synthetic form that derives from a fusion of present/past stem + participle marker + be (for imperfective/duratives, present gerund followed by assertive of 'be'). The synchronic analytic construction of present participle/past gerund plus finite copula (for imperfective/duratives, present gerund plus present participle/past gerund of 'be' plus finite present/past of 'be') is used for reported events, although quotative particles can be added to this to further distance the speaker from the statement. Apparently unique in Daghestanian (see Forker, Chapter 23 of this volume) is the fact that Lak can distinguish perfect from evidential in transitive reported analytic perfects by means of agreement as illustrated in examples (5) and (6) (see Friedman 2007; and Èldarova 1999).[21]

	Na	b-a-w-χ:-unu	b-ur	čwu.
(5)	I.ABS	3-sell-3-$-PAST.GERUND	3-is	horse.ABS
	[Apparently] I sold the horse.			

(p. 138)

(6)

Na	b-a-w-χ:-unu	Ø-ur-a	čwu.
I.ABS	3-sell-3-$- PAST.GERUND	1-am-1sg	horse.ABS
I have sold the horse.			

The construction of the type past gerund plus 'be'—where the gerund always agrees with the patient—will be indirect evidential if 'be' also agrees with the patient, but perfect if the auxiliary is treated as distinct and agrees with the agent.

6.4.4. Armenian

The Old Armenian verb system is comparable to that of Old Church Slavonic. The synthetic aorist and imperfect were the main narrative tenses, and together they were opposed to a perfect using the verb 'be' plus the resultative participle in *-l* (Kozintseva 2000: 401–7). Modern Western and Eastern Armenian have developed differently with regard to evidentiality, and Western Armenian, in contact with Turkish since the latter's arrival in Anatolia with an evidential system, has developed a more robust system than Eastern Armenian, which resembles Georgian (and Balkan Slavic). The modern aorist and imperfect function as marked confirmatives ('witnessed past' cf. Kozintseva 2000: 406), while the

various perfects can function either as perfects or as non-confirmatives (i.e. hearsay evidentials, including the admirative complex). The perfect is still formed using the *l*-participle + 'be', but there is an additional resultative (past passive) participle in *-ac'* that also forms resultative tenses.[22] The West Armenian perfect in *-er* (corresponding to East Armenian *-el*) is a dedicated non-confirmative evidential, and only the resultative in *-adz* (corresponding to East Armenian *-ac'*) functions as a plain perfect (Donabedian 2001).

6.5. Greater South Asia

For the purposes of this chapter, Greater South Asia includes Indo-Iranian space and Dravidian. This entails a geographic overlap with Central Asia, and the history of the region, particularly from the late middle ages onwards, reflects these contacts. There is also overlap with East Asia in the northeast.

6.5.1. Indo-Aryan

It would appear that the oldest reference to what we can call an evidential verbal category comes from Pāṇini (c. 500 BCE) who states that the Sanskrit perfect is a 'past excluding the day on which the speaker uses the utterance in question, provided also that the speaker has not witnessed the action spoken of' (Cardona 1997: 149–50). However, the distinction is absent from the oldest texts (Cardona 2002: 238; Lowe 2015: 26, 36, 213). Apparently (p. 139) Indo-Aryan inherited a three-way opposition of the type aorist–imperfect–perfect, in which the perfect and imperfect were in competition. The perfect and imperfect eventually fell together and then merged with the aorist to leave a single synthetic preterite. Thus Sanskrit, having inherited an Indo-European system without marking for evidentiality, went through a stage during which at least some regional variants had a perfect-based unwitnessed evidential (with the possibility but not certainty that the imperfect was marked as witnessed), which was subsequently lost. It is thus the case that none of the modern Indo-Aryan languages continue the original distinction as formulated by Pāṇini.

Evidentiality in modern Indo-Aryan languages shows diverse developments. In Nepali (Zograf and Mazurova 2011: 280), the particle *(a)re* marks reports (cf. Russian *de* and *mol* cited in §6.1.1, §6.4.4). Etymologically, however, *(a)re* is an emphatic particle and not derived from a verb of reporting. In Kalasha, a Dardic Indo-Aryan language, evidentiality is marked by the choice of auxiliary in the past, with 'become' opposed to 'be' as inferential (including 'reportedly', 'inadvertently') versus direct (Bashir 2006: 33).

6.5.2. Iranian

The situation in Iranian resembles that of other areas in contact with Turkic. Some of the languages have developed evidential strategies based on the perfect, while others have not. The Indo-European perfect was lost by the Old Persian period and the Middle Persian perfect (ninth–fifteenth centuries, past participle/gerund + short form copula, e.g. *didaast* 'he has seen') was a pure resultative (Rastorgueva and Kerimova 1964: 72–3; but cf. Utas

2000). It has remained a resultative in Modern Persian (Èdel'man 1975a: 351), and in Tajik, the cognate form can still function as a perfect for witnessed resultative actions. The newer, subsequently formed Tajik perfects, however, (durative *mikardaast,* pluperfect *karda budaast*, definite perfect *karda istoda budaast*) are all markedly non-confirmative evidentials (Èdel'man 1975b: 440) a situation exactly like that in Balkan Slavic at the other end of the Turkic-contact continuum.[23] The Dari perfect (Afghanistan, midway between Persian and Tajik) is basically resultative (Ostrogorskij 1994: 292–7). However, Hazaragi, part of the Dari continuum spoken by people who shifted from Mongolic, behaves like Tajik in this respect (Efimov 1997: 163). Some Iranian languages under the influence of Tajik, especially the Pamir languages, limit the perfect to results of unwitnessed actions (Èdel'man 1975a: 410, 2000: 220). The Wakhi perfect can be used as a resultative, inferential, or admirative (Bashir 2009: 839). The Yazguylam perfect is likewise a past resultative, an inferential, and the tense of folk tales (Èdel'man 1966: 55).

The situation in Kurmanji Kurdish and the closely related Zazaki in central and eastern Anatolia show important differences in the effects of contact with Turkish. In Zazaki, the preterite/perfect opposition is breaking down, with the perfect used where a preterite would be expected (Paul 2009: 561). Under the influence of the narrative use of the Turkish *-mIş* past, the Zazaki perfect now intrudes into non-confirmative narratives, where a simple preterite would have been expected. As such, it appears to be an evidential system *in statu* *(p. 140)* *nascendi.* By contrast, Kurmanji, although it does have a marked non-confirmative evidential formed by the durative prefix *di-* on the perfect (Bulut 2000: 166–7), is otherwise like Classical Persian with regard to evidentials (Bulut 2000: 163). Thus, for example the use of narrative perfects in fairy tales is rejected by 'less educated speakers' (Bulut 2000: 168), and while pluperfect + copular ending of perfect or preterite are presented in grammars (with explicit Turkish parallels), they are not recognized by the less educated speakers referred to above (Bulut 2000: 173–4). In the case of Zazaki, which does not have even the limited elite resources of Kurmanji, the breakdown in the tense system, which could lead to an evidential distinction of the direct/indirect type, seems to be occurring at the grass roots level. In Kurmanji, however, the formation of an evidential system under the influence of Turkish seems to be elite-driven.

For Caucasian Iranian, only Talysh has an evidential marker. In Tat, the perfect is purely aspectual (Èdel'man 1975a: 339) and is almost unchanged from Old Persian (Authier 2012: 171–2). In Ossetian, indirect evidentiality is rendered only by lexical items such as quotative *zæğgæ* (glossed in Russian as *mol, de*[*skat'*];Texov 1970: 148–51). Talysh, however, has a hearsay evidential particle, *ban,* illustrated by example (9) from Schulze (2000: 24):

(7)

zo-am	palang-əš	vind-a	ban
son-1sg.POSS	leopard-3sg.ACC	see-PAST.PER.AUX.3sg	INFER

My son has seen a leopard, they say.

This particle can attach to any indicative form, and with the present is a mirative, e.g. *əsat-əm zənay ki, rosišan* ***bamedaš ban*** Russian *teper' ja ponjal, čto ty dejstvitel'no* ***plačeš*** 'I've just realized you're **weeping**-*ban*' (Pirejko 1966: 312). The particle *ban* is based on *ba* 'be' (perfect stem) plus -*n*, which is either a third person plural perfect marker or a focal particle (Schulze 2000: 24). This origin is like that of hearsay evidentials in Xevsur and Ingilo Georgian (§6.4.1), and like them, Talysh is in intimate contact with Azeri.

6.5.3. Dravidian

Dravidian languages, which are very much a part of South Asia as a linguistic area (Masica 1976), are generally not included in accounts of evidentiality. Bashir (2006) adduces a variety of Dravidian phenomena that render evidential meanings, although not all are grammaticalized markers of evidentiality *per se*. Thus, for example, in Malayalam, the simple past is used for witnessed events, the verbal noun for hearsay, and the perfect for inference, but apparently these usages are not grammatically requisite (Bashir 2006: 32).

6.6. Uralic Siberia and the Baltic

Across from South Asia, on the other side of Turkic or Altaic, Uralic, and (Indo-European) Baltic languages stretch from the Baltic Sea to Siberia. (See Fortescu 2003 for the smaller languages of Siberia as well as Eskimo-Aleut.) Owing to the contact of Baltic with Uralic, these two groups are treated together in this section.

(p. 141) 6.6.1. Uralic

For Uralic, as Skribnik and Kehayov (Chapter 25 of this volume) note, and as Abondolo (1998: 28) makes clear, while evidentiality is widespread, its origins are different in the various languages or groups and cannot be attributed to Proto-Uralic. For the Fennic languages (specifically Livonian and Estonian, but not Votic [Chapter 25 of this volume]) the evidential comes from a quotative use of a present or past participle, which is the normal complement of a verb of reporting. When the verb of reporting is omitted, the effect of a reported is achieved. Such 'desubordination' (cf. Kehayov 2008a: 45; and Chapter 25 of this volume) can be compared with the use of the German subjunctive in *er sei krank* 'he [says he] is sick', where German requires a subjunctive after a verb of reporting and permits the deletion of the verb of reporting. In the case of German, such elliptical usage does not constitute grammaticalized evidentiality in the sense understood here. It is especially worthwhile to note Holvoet's (2007: 91–5) observation that for the Baltic languages to be discussed below, which resemble Estonian and Livonian in this respect, German translators of the Bible in the early modern period when the evidential system was firmly in place, were unable to use it correctly. The past participle can be used with the auxiliary 'be' to form a perfect, and if the auxiliary is omitted, the effect is the same as in the case of an omitted verb of reporting, which has led to some debate over the origins of the Fennic evidential (see Kehayov 2008a: 44–52 for discussion). The partitive of the present par-

ticiple (*-vat* in Estonian) also functions like a reportative marker (Kehayov 2008a: 129). The situation in Livonian is similar (Majtinskaja 1993: 28).

The Volga-Kama Uralic languages (Mari [Cheremis], and the Permic languages Udmurt [Votyak], and Komi [Komi-Permyak and Komi-Zyrian]) are or were in close contact with neighbouring Turkic languages (Chuvash, Bashkir, Tatar). The so-called inferential is derived from deverbal nominals in *=mA that evolved into participles. In Komi-Zyrian, the perfect has become a marked indirect evidential that occurs only in the second and third persons (Riese 1998: 271). In Udmurt, a periphrastic perfect using the invariant *-mA participle of 'be' (*vilëm*) provides the evidential (Riese 1998: 271). The inferentials in these languages are said to have arisen under the influence of Volga Turkic (Abondolo 1998: 28; see also Chapter 25 of this volume).[24]

Ugric is the protolanguage ancestral to Hungarian, Khanty [Ostyak], and Mansi [Vogul]. In Mansi, the so-called narrative is formed with *-n* in the present and *-m* in the preterite, and both of these suffixes formed nouns from verbs in Proto-Finno-Ugric (Keresztes 1998: 405–6). East Khanty, the easternmost of the languages, located between Nenets and Selkup, lacks evidentials as a grammatical category (see Chapter 25 of this volume, for additional observations).

Samoyedic languages (Nganasan, Enets, Nenets, Selkup), are or were in contact with Ob-Ugric, Tungusic, and Turkic. The *-nt-* marker of 'primary non-firsthand evidentials' (Chapter 25 of this volume) probably comes from a non-past participle (Helimski 1998). Nenets has inferential *-ky* (Cyrillic *-кы*) and a suppositional based on a dative-allative of a deverbal noun plus the suffix *-gabja* (Tereščenko 1993: 335–7).

(p. 142) Skribnik and Kehayov (Chapter 25 of this volume) note the heterogeneity of sources of evidentials in Samoyedic and in Uralic in general, with Volga-Kama utilizing past tenses and Ob-Ugric and Samoyedic reanalysing resultatives, employing desubordination (as in Baltic and some Fennic), and various forms of nominalization (see also Brosig and Skribnik, Chapter 26 of this volume for Mongolic), and particle-creation. The heterogeneity of Uralic evidentials, and the various contact influences identified by Skribnik and Kehayov (Chapter 25 of this volume) are arguably consistent with the language family's relatively peripheral position in Eurasia. Extensive ancient documentation is lacking, but, as with Proto-Indo-European, it appears that some millennia ago evidentiality was not encoded in the ancestral system.

6.6.2. Baltic

Holvoet (2007: 90–104) identifies the Latvian and Lithuanian participial evidentials as being of perfect origin, i.e. the reinterpretation of a perfect—formed with auxiliary + past active participle—with omitted auxiliary, followed by the extension of the usage of the participle as predicate to the present active participle (see also Aikhenvald, Chapter 7 of this volume). The same extension occurred with the passive perfect using the past passive participle, but the extension to a present passive participle occurred only in Lithuanian, not in Latvian. The original past active participle construction is attested as such in

the oldest texts (sixteenth and seventeenth centuries). As Holvoet observes, the Latvian situation, which is convergent with the Fennic, is purely quotative, whereas the more areally distant Lithuanian has the inferential/admirative complex including formal extensions not found in Latvian (to the present passive participle). The question thus arises, given that Lithuanian is more conservative than Latvian in many if not most respects, why Lithuanian has the more complex evidential system. Moreover, Holvoet (2007: 91) observes that Lithuanian evidentials occur in Lowland and western Highland Lithuanian, i.e. the dialects of the north and west (areally closer to Latvian) but not at all in the other dialects, i.e. those in the south and east. Evidential usage in Standard Lithuanian, which is based on the western Highland dialects, is rare in the colloquial and limited mainly to marking reported information in journalistic reports. Given that the dialects furthest from Latvian (and Fennic) lack the evidential usage of the participles, and given the primary usage as quotatives, one must wonder whether the quotative participial usage of Fennic was copied into adjacent Baltic and then subsequently expanded along well-worn typological paths at the margins, but not at the centre. Under such a scenario, Baltic and Fennic would have developed congruent quotative uses of the participles as predicates, and such usage in the most marginal region (Lowland and West Highland Lithuanian) developed further. It would thus be arguable that southeastern Lithuanian never developed the usage. Such a conclusion could be contradicted only if there were earlier records that could be localized to the relevant dialects. In the Baltic situation, those dialects closest to the non-evidential languages (Belarusan and Polish) evince no evidentials, and those in contact with Fennic look like Fennic. Here, it appears that the relative isolation of western Lithuanian resulted in a typological expansion of the quotative into other evidential domains, while Latvian remained more conservative in contact with Fennic, and southeast Lithuanian simply did not participate in the developments (but cf. Holvoet 2007: 95). Latgalian (eastern Latvia), resembles Latvian (Brejdak 2006: 204–6).

(p. 143) 6.7. East Asia

Sections §§6.2–6 were all concerned with regions where Central Asia played at least some role. For the purposes of the question posed by this chapter, East Asia constitutes a distinct region, although one not without connections to Central Asia. In terms of grammaticalized evidentiality, the languages in question are Tibeto-Burman, i.e. that branch of Sino-Tibetan in the most direct contact with Central Asia, at least to the north and west. Attestations of Tibetan date to the seventh century CE and for Burmese the twelfth century, but given the heterogeneity of evidentiality in Tibeto-Burman—and the absence of grammaticalized evidentials in some of the languages, including Classical Tibetan (DeLancey, Chapter 27 of this volume), it is clear, as DeLancey argues, that evidentiality is a relatively recent development in the relevant languages.

6.7.1. Tibetic

Tibetic evidentials are described by DeLancey (Chapter 27 of this volume) and Bodic in general by Hyslop (this volume). For the purposes here, the main foci are the marked egophoric or personal (known in earlier studies as conjunct/disjunct: see DeLancey, Chapter 27 of this volume; Hyslop, Chapter 28 of this volume) *yod* and the otherwise unmarked direct evidential (in earlier studies disjunct, DeLancey, Chapter 27 of this volume, Hyslop, Chapter 28 of this volume) *hdug* (Lhasa *'dug,* Old Tibetan *ḥdug*).[25] Both were copulas in Old Tibetan, the former being an existential and copular verb, the latter having a meaning more like 'stay, dwell, sit, exist, be there' (Zeisler 2014). This was the basic opposition out of which the system as described by DeLancey (Chapter 27 of this volume) arose. By the fifteenth century, these two main sources had achieved more or less their current state, but the other markers DeLancey describes have their origins in light verbs that were not yet in modern use as such in the fifteenth century (Zeisler 2014).[26] Zeisler (2014) locates the rise of the current system in the breakdown of the Tibetan empire in the eleventh century, the decline of Old Tibetan as a lingua franca, and the shift to local varieties. She sees the evidential system as having spread from east to west, but is agnostic regarding the location of the ultimate source of the innovation. Balti, the one Tibetic language without a Tibetic evidential system, was separated from the rest of Tibetic and converted to Islam by the late fifteenth–sixteenth centuries, precisely the time when the Tibetic evidential system was probably beginning to elaborate (Zeisler 2014). Zeisler (2014) notes, however, that Balti does have an inferential marker *suk* and adduces evidence to suggest that it may ultimately derive from a re-formed and reinterpreted *ḥdug*. Zeisler (2014) concludes by arguing that since *ḥdug* always had a semantic load beyond that of the existential linking verb *yod*, and that it was originally temporal, denoting limited duration, it shifted to limited epistemic value 'transitory truth: doubt, and inference' in Zeisler's terms, which in turn paved the way for the involvement of immediate (p. 144) (visual) evidence. The Tibetan path of evidentiality thus involved competing existentials, a reinterpretation of temporal as epistemic (but not modal), and then further elaboration with light verbs.

6.7.2. Mongolic in contact with Tibetic (Gansu-Qinghai region)

Georg (2003: 302–3) writing on Mongghol with references to Mangghuer and Bonan as well as neighbouring Amdo Tibetan (cf. also Slater 2003a: 307; Hugjiltu 2003: 340–1) describes a distinction between what he labels subjective {-*I*} and objective {-*A*} in terms of 'presence versus absence of complete knowledge'. In the first person, subjective is confirmative and objective is non-confirmative (including the admirative complex). Here, 'source of knowledge' is 'speaker' versus 'not-speaker' (*sensu largo*). The subjective could be from a Proto-Mongolic durative and the objective from a Proto-Mongolic resultative, plus copula, but other possible sources are modal and imperfective converb markers (Georg 2003: 302).[27] Here the Tibetic type of evidential system appears to have influenced the local Mongolic languages.

6.7.3. Lolo(Ngwi, Yi)-Burmese

In terms of both genetic relationships and areality, Lolo(Ngwi)-Burmese is in a very different branch of Tibeto-Burman from Bodic (which includes Tibetic). Bradley (2010), focusing on Lisu, gives the best up-to-date account of languages in this group, with data from Lahu, Akha, Burmese, and Proto-Ngwi reconstructions.[28] There are a variety of lexical and grammatical sources with a relatively shallow time-depth. Evidentials in these languages are marked by sentence final particles and vary from only a quotative marker derived from 'say' to six levels of epistemic certainty/uncertainty plus a quotative and/or various evidential markers that correspond to epistemic markers in other dialects. Some evidential/epistemic markers include an (etymological) question marker without being questions (cf. Romani in §6.3.4). Four illustrative examples follow:

(1) A verb /p^he^{33}/ 'be fitting, fit together' serves as the source for the lowest probability epistemic in Northern and Southern Lisu but the highest probability epistemic in Central Lisu and possibly the inferential future evidential in northeastern Central Lisu. Moreover, the verb /p^he^{33}/ can also be used as a post-head serial verb meaning 'fit to', and, unlike other epistemics, it can be followed by the perfective marker /o^{44}/, which, Bradley (2010: 78) argues, is evidence of its recent grammaticalization.
(2) The particle /do^{44}/ is a low level epistemic with meaning such as 'it appears to be/it might be' or 'I guess so' is homophonous with and probably derived from the verb /do^{44}/ 'come out' (Bradley 2010: 79).
(p. 145) **(3)** The verb /$nɑ^{33}$/ 'listen' serves as the source of a low probability or guessing epistemic in Central Lisu but an inferential evidential in Southern Lisu and possibly an inferential evidential in Northeastern Central Lisu (Bradley 2010: 79).
(4) A visual evidential in some varieties of Lisu, e.g. northern Central Lisu /mo^{55}/, is transparently derived from /mo^{33}/ 'see'. Moreover, the fusion of perfective or declarative markers to the bound verb meaning 'know' can produce non-visual sensory evidentials, and the verb 'listen' can produce an inferential evidential (Bradley 2010: 80).

Bradley (2010: 80) makes the point that Lisu speakers—whose dialects are mutually intelligible—are unaware that they have such different epistemic/evidential systems, and this can lead to miscommunication. The closely related Lahu has only a reported speech marker and Akha has a cognate quotative but an etymologically completely different evidential system. The Burmese quotative is not cognate with that in Proto-Ngwi/Lolo (Bradley (2010: 81–2). It would appear that the rich and varied Lisu epistemic and evidential systems have developed only in the past two centuries or so, as speakers migrated southward from Yunnan into what are now Burma and Thailand (Bradley 2010: 81). Approaches such as the epidemiological one used by Enfield (2005) for mainland southeast Asia might have relevance for Lolo/Ngwi.

6.8. Native America

This section presents historical data for selected languages organized typologically.

6.8.1. Tense/Aspect and evidentials

Goddard (1979: 88–91; see also Junker, Quinn, and Valentine, Chapter 21 of this volume) locates the development of some Algonquian evidentials in a perfective (or preterite)/imperfective (or present) opposition between *-(e)pan and *-(e)san, respectively. James, Clarke, and MacKenzie (2001: 246–7) speculate that the Cree/Montagnais (Innu)/Naskapi evidential affix for which they give the cover form *-shapan* might have arisen from *-(e)san+*-(e)pan, but acknowledge that the etymology is problematic, since Proto-Algonquian *n should not be lost except word finally. Dahlstrom (1995) discusses the development of the Meskwaki (Fox) reflex of *-(e)san, *-ehe*, arguing that its original meaning (in Meskwaki) was past tense, and from there it expanded to an evidential strategy. Fleck (2007: 614) states that the complex evidential system of Matses, a Panoan language of Peru and Brazil has 'its historical origin from a nominalizer that marked past tense.'

6.8.2. Lexical and derivational affixes > evidential markers

In his classic article on evidentials in Makah (Nootkan branch, Wakashan family), Jacobsen (1986: 13–17) demonstrates how a rich evidential system can arise from the reduction of lexical elements to affixes, the repurposing of derivational affixes, and other forms of reinterpretation. For example, an auditive evidential suffix comes from the verb 'hear', an affix denoting 'uncertain (p. 146) visual evidence' corresponds to the related Nootkan 'pay attention to' + momentaneous aspect, etc. Nominalization is a well-worn path to evidential constructions (see especially many of the articles in Yap, Grunow-Hårsta, and Wrona 2011), and Jacobsen (1986: 20–1) provides an interesting example of a nominal derivational affix that is deployed as an evidential marker. The nominal suffix *-ck^{w}i-* meaning 'debris, remains' can be evidential when applied to certain animals as in the following example: *bukwač* 'deer' *bukwačckʔi* 'it was a deer' (seeing tracks).

Wintu (Penutian, if it is a family) shows tendencies similar to Makah in terms of grammaticalizing verbs into evidential markers (three tokens) plus one particle (Schlichter 1986: 49–53), of recent origin as evidentials Schlichter (1986: 58):

(a) *-nt^{h}Er* 'direct evidential' < *mut-* 'hear, feel, sense, perceive' + passive marker *-her*
(b) *-ke* 'hearsay evidential' < *-kEl* 'probably, maybe' < **kEl* related to the conditional auxiliary (in protasis) *kila - kila+ke* = remote or mythic past
(c) *-re* 'deduction, inference, must [have]' < *-r* 'makes a verb syntactically dependent and semantically anterior in regard to causality or time' perhaps combined with *wine* 'see, look' so that VERB+*r*+*wine* > VERB-*re*
(d) *-ʔel* 'inference, deduction, hearsay [distant/mythic past'] cf. nominal/verbal suffix, *-ʔel* various meanings including stative

Maricopa, a Yuman language (cf. §6.1.1) has a complex evidential system whose markers are all transparently derived from cliticized verbs meaning 'see', 'say', etc. (Gordon 1986: 87).

6.9. Conclusion

In answering the question posed by the title, this chapter attempts to give a sense of the historical depth (or lack thereof) in the formation of evidential systems where such can be documented. This has meant focusing on Eurasia. These languages provide a broad range of evidential phenomena, although some themes tend to dominate. The evidence of Pāṇini on the one hand, and Korča-Kostur Macedonian, on the other, show that evidential systems can develop and degrade in relatively short periods and in relatively restricted areas. At the same time, Eurasia as a whole demonstrates how the grammatical category can either spread or arise independently, and in the case of spread, be elaborated independently. Another theme that has arisen in the course of this investigation is the relatively shallow time-depth of most evidential systems when that time-depth is evidenced or reconstructable. We can also note in particular the typological connection between resultativity, i.e. 'perfectness', and evidentiality, which was suggested at least as early as Lohman (1937). While the formula perfect > evidential is a widely attested change, a great deal of complexity is masked by the '>', and this has been a particular focus in the sections where that development is relevant.

Aikhenvald (2004a: 27–86) provides a thorough summary of the sources of evidential markers and strategies, of which the main types are listed here in abbreviated form:

> Grammaticalized verbs of speech, perception, other
> Biclausal with quotative complement reanalysed as monoclausal (loss or reinterpretation of subordinator)
> (p. 147) Biclausal with two independent clauses reanalysed
> Reanalysis of a complement clause as a main clause
> Deictic and locative markers (also partitive, see §6.6.1; and Kehayov 2008a: 129 on *-vat* in Estonian)
> Strategies: modalities, perfects and resultatives, participles and nominalizations
> Desubordination of speech complements into main clauses
> Copula constructions
> Nouns (rare, but see §6.4.2 on the development of 'hand' into a direct evidential strategy. See also Aikhenvald 2011a on nouns in Arawak languages; and Forker, Chapter 23 of this volume, on pronouns in Chechen and Ingush).
> We can add here also interrogatives and emphatics (rare, but attested, see §6.3.4 on *li* in Romani and §6.4.3 on *-χ:a* Lak and §6.5.1 on *(a)re* in Nepali)

Aikhenvald (2004a: 297) summarizes these sources succinctly:

> • grammaticalization of forms from open classes (mostly verbs, more rarely nouns) and from closed classes (deictic markers, pronouns, locationals); and
>
> • reinterpretation and reanalysis of evidentiality strategies, whereby a grammatical device for which information source was a secondary meaning acquires it as its primary meaning.

The complexity and heterogeneity of both the origins and the manifestations of evidentiality are particularly significant in the general consideration mechanisms of, and differentiation within, transmission and diffusion. A comparative approach to the category contributes to our understanding of how grammars come to be what they are.

Notes:

([1]) The research for the article benefited especially from the generous support of La Trobe University's Research Centre for Linguistic Typology.

([2]) See Aikhenvald (2015a) for a detailed bibliography on evidentials.

([3]) But see Aronson (1991) for a significant reworking of Jakobson's (1957) system.

([4]) See Friedman (2002) for discussion.

([5]) The concept of *distance* was elaborated for Bulgarian by Chvany (1988), and the point that deixis is a fundamental component of evidentiality has been elaborated by Hanks (2007) for Yucatec Mayan. See also Adamou (2011) and Fanciullo (2017) for Balkan Slavic and Jacques and Laehaussois (2014) for Khaling (a Sino-Tibetan language of Nepal). Hanks (2104) gives a general theoretical overview. See also Jacques (Chapter 5 of this volume).

([6]) The question of whether Korean and/or Japanese are 'Altaic' in either sense of the word does not pertain to evidentiality. As Sohn (Chapter 33 of this volume) makes clear, the Korean system is of early modern origin, and its bases typologically attested elsewhere (past/perfect markers, verbs of reporting, etc.). In two respects, the Korean situation bears striking parallels to the Balkans. First, like the Albanian admirative, the Korean evidential markers are never obligatory (Sohn, Chapter 33 of this volume). Second, as with evidentiality in Bulgarian and unlike the Turkic grammatical tradition, the identification of evidentiality as a grammatical category is relatively recent and not altogether unproblematic (cf. Friedman 2002 for a history of the analysis of evidentiality in Bulgarian). For Japanese, expressions of evidentiality are likewise of relatively recent lexical or modal origin. Aoki (1986: 237) cites the possibility that *yoo* (first hand) might be from Chinese *yang* 'appearance' as a translation of Japanese *sama* 'appearance', while *soo* (hearsay) might be from Chinese *xiang* 'shape, appearance, aspect' or from Japanese *sama*. See also Narrog and Yang (Chapter 34 of this volume). See also Akatsuka (1985) on the deployment of modality.

([7]) As Johanson (Chapter 24 of this volume) notes, Yakut *-byt* is cognate with Turkish *-mIş*.

([8]) The Nanai category is best labelled *validational*. This distinguishes it from *confirmative*, which means that the speaker is vouching for the truth of a statement (most often on the basis of direct evidence), the *assertive,* which, e.g. in Lak, is used for emphasizing objective truth, and *affirmative*, which has the potential to be confused with the antonym of *negative*. The validational emphasizes the speaker's commitment to the truth of the state-

ment, and generally occurs in the first person. Although not an evidential *sensu stricto*, it arises from an evidential.

([9]) According to Malchukov (2000: 454) Ulcha is closest to Nanai in that it possesses a validational, albeit not as widespread in the system as Nanai. Manchu has only lexical evidential expressions (Gorelova 2002: 286–324).

([10]) See also Amse-de Jong (1974: 139).

([11]) See Friedman (1978), also, on *-DIr,* Johanson (Chapter 24 of this volume).

([12]) See Friedman (1998b) for details.

([13]) Neither of these is a mood. Both are indirect evidentials.

([14]) In the plural, the marker *-e* neutralizes the opposition.

([15]) Georgian also has a rich system of quotative clitics derived from the *tkva* 'say'; see Aronson (1982: 211–12) for details.

([16]) For Svan, see also Margiani-Subari (2012).

([17]) The labels for the paradigms varies. The most readily cross-linguistically comparable ones are used here. Aronson (1982) provides detailed analyses.

([18]) See Harris (1985: 304) on additional paradigms not of concern here.

([19]) Although Colarusso (1992) deals with Kabardian, in personal communication Colarusso (p.c.) considers *-p'* in Abkhaz to be a present stative suffix.

([20]) See Kumakhov (1989: 199) and Colarusso (1992: 127, 131, 200) concerning the Circassian past subjunctive. See Abitov et al. (1957: 123) concerning a mirative particle.

([21]) The symbol $ represents the continuation of a morpheme interrupted by an infixed gender marker. Zero-marking for gender is indicated by Ø.

([22]) For Armenian, as for other languages, the apostrophe indicates glottalization.

([23]) See also Windfuhr and Perry (2009: 462–5) on the admirative functions of the old perfects of 'be' and 'have' in Tajik with supposed present reference.

([24]) Leinonen (2000: 419–20) compares the Permic system to the confirmative/non-confirmative opposition described in Friedman (1986).

([25]) Zeisler (2014) has argued that epistemic stance is also involved.

([26]) Examples are the perfective direct evidential *-song* < *song* 'went'; and the perfective/perfect inferential evidential *-zhag* < *bzhag* 'put [someplace]' (Lhasa, DeLancey, Chapter 27 of this volume),

([27]) See Rybatzki (2003a: 382–3) and Kim (2003: 357) for additional discussion.

([28]) For Akha, see also Thurgood 1986.

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Evidentiality and Language Contact

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Abstract and Keywords

Evidentials, as a grammatical means of overtly expressing information source, play a pivotal role in communication, cognition, and speakers' status within a community. This accounts for their frequent spread in language contact situations. Evidentials often develop as a consequence of areal diffusion. A language surrounded by languages without evidential distinctions is likely to lose evidentials. Evidentials are among the defining features of a number of well-established linguistic areas, among them the Balkans, the Caucasus, and the Baltic region in Eurasia, and the Vaupés River Basin linguistic area in Amazonia. They have made their way into a number of contact varieties of major European languages, including Spanish and Portuguese. An obsolescent language may lose or restructure its evidentiality system depending on the dominant language speakers are shifting to. Further factors propitious for a spread of evidentials in language contact include multilingualism and shared discourse genres and speech practices.

Keywords: evidentiality, language contact, linguistic area, the Balkans, the Vaupés River Basin, the Baltic region, conventions, cognition, obsolescent language, contact language

7.1. How languages affect each other: evidentiality and language contact

If a number of languages are in contact, with many speakers of one language having some knowledge of the other, then they typically borrow linguistic elements back and forth—habits of pronunciation, phonemes, grammatical categories, vocabulary items, and even some grammatical forms. Borrowing may extend over all or most of the languages in a geographical region. We then get large-scale linguistic diffusion, defining the region as a 'linguistic area'. Languages in contact tend to converge: we find similar meanings obligatorily expressed, and parallel structures developed.[1]

In Friedman's (2003: 204) words, 'it is certainly the case that anything *can* be borrowed'. Some grammatical categories are particularly open to diffusion and contact-induced change. A category whose use correlates with behavioural requirements and cultural conventions will be susceptible to areal diffusion. Evidentials, as a grammatical means of overtly expressing information source, are a case in point. Their role in communication, cognition and speakers' status within a community account for their frequent spread in language contact. An evidential system presupposes an explicit expression of how one knows things. Lack of precision, and omission of information source markers, are likely to be associated with incompetent speakers, or even worse, 'liars'. As Johanson (2002: 99) put it, evidentials as 'semantically essential' and 'communicatively rich categories' are attractive candidates for diffusion.

(p. 149) As we can recall from Chapter 1, an incorrect use of an evidential may result in social exclusion and misunderstandings. Evidentials play a role in the ways speakers conceptualize the world, and interact with cognitive patterns and memory (see Chapters 8 and 9 of this volume). All these factors are propitious to the spread of evidentials between languages in contact.

We start with evidentials as a defining feature of a few well-established linguistic areas in §7.2. Then the gain and loss of evidentials in individual language contact situations in §7.3. Evidential distinctions come to be expressed in contact languages—including varieties of Spanish, Portuguese, and English—used by those whose original languages used to obligatorily express information source (see §7.4). When a minority language falls out of use and becomes obsolescent, accelerated contact with the dominant language may affect evidentials (see §7.5).

7.2. Evidentials as an areal feature

A linguistic area (or *Sprachbund*)[2] is generally taken to be a geographically delimited area including languages from two or more language families (or subgroups) which share significant traits. Most of these traits are not found in languages from the same families outside the area, and can be considered area-defining. For quite a few established linguistic areas, evidentiality is among such features. We start with evidentiality in the Balkans —perhaps the best known and the best researched linguistic area whose members tend to share a small system of evidentials.

7.2.1. Evidentials in the Balkans

The Balkan peninsula is home to a number of languages from several branches of Indo-European, and Turkish, a Turkic language.[3] The 'classic' Balkan languages include South Slavic (Bulgarian, Macedonian, and Bosnian-Croatian-Serbian, especially its southernmost dialects), Romance (Aromanian and Meglenoromanian (Vlach), Daco-Romanian, and also Judezmo (or Ladino)), Albanian (Geg and Tosk), Indic (Romani, or Gypsy, covering the Balkan and Southern Vlax Romani dialects), and Carpathian Romani (also known as the Central dialect)), and Greek. All these languages—with the exception of Greek—have

small evidentiality systems in all or some of their dialects. The Balkan Slavic languages distinguish a firsthand and a non-firsthand evidential (A1 system: see Chapter 1 of this (p. 150) volume). They are typically formed with 'be' as an auxiliary followed by an *-l* participle. Evidentials in Albanian consist of an auxiliary 'have' in the present and the imperfect forms and a special participle. The direct evidential (also known as 'confirmative') covers any firsthand information, including sight, sound, smell, and inference which is based on a reliable source. The indirect evidential (also known as 'indirective' or 'non-confirmative') indicates the lack of firsthand information, inference, and speech report, and may have overtones of surprise or even disbelief (Friedman 2003: 197). In most cases, native verbal forms developed evidential meanings as a result of reinterpretation of aspectual, modal, and other forms. For instance, the Daco-Romanian 'presumptive mood' is in the process of becoming a non-firsthand evidential in its own right (see Friedman 2003 for the analysis of semantics and origins of evidentials in Macedonian and Albanian; and further details in Chapter 6 of this volume).

An illustrative example comes from Istanbul Judezmo. This Romance language—spoken in close contact with Turkish within the Balkans area—is closely related to Spanish. The pluperfect in Judezmo has developed functions very similar to the Turkish indirect evidential *-mış*. The pluperfect, formed with an imperfective form of an auxiliary and a past participle, refers to an event for which the speaker has no firsthand information. The speaker who produced (1) knew the two brothers personally, and witnessed them initially becoming doctors. He was not a direct witness to the fact that the second brother had later become a paediatrician, and so he used the 'pluperfect' since the information was obtained by hearsay or inference.

(1)

dos	ermanos	eran,	uno	salyó	Judezmo
two	brothers	were:IMPERV.3pl	one	become:IMPERV.3pl	
doktor	disçi	el otro	salyó	dahiliye	
doctor	dental	the other	become:IMPERV.3pl	doctor.internal.medicine	
después	**s'aviya**	**etcho**	doktor	de bebés	
after	self'have:IMPERV.3pl	made.PARTIC	doctor	of babies	

They were two brothers, one became a dentist, the other became doctor of internal diseases, later he must have become (or: reportedly became) a paediatrician.

The pluperfect is also used if the speaker, or the main character, was absent and could not have had direct access to the information. In (2), the people were absent and did not see the thief. This is why the pluperfect (that is, a newly developed non-firsthand evidential) was used.

(2)

Kuando	estavan	en	l'América,	les	Judezmo
when	be.IMPERV.3pl	in	the.America	them	
aviya	**entrado**		ladrón		
have:IMPERV.3pl	enter+PARTIC		thief		

When they were in America (that is, they could not have seen the thief because they were absent), a thief entered their house.

The reinterpretation of the 'pluperfect' form as an exponent of unwitnessed (or indirect) evidentiality echoes similar developments elsewhere in the world where a construction with a (p. 151) resultative participle acquires the overtones of something not witnessed directly, and only observed on the basis of the results (see §7.2.3 on languages of the Baltic area, and (26), for an example from Spanish of La Paz; see also Chapter 6 of this volume, on the historical origins of evidentials).

When the speaker translated the main clause of (2) into Turkish, he used the marker of indirect information source *-mış* (*hırsız gir-**mış*** (thief enter-PAST.INDIRECT): Varol 2001: 90–4; see also Friedman 2003: 190–1). The Iberian Spanish in Europe (outside the Balkans) does not mark unwitnessed versus witnessed information in its verbal system. The striking parallelism between Turkish and Judezmo is indicative of the influence of Turkish as a dominant language. This takes us to the roots of the evidentiality in the Balkans.

Small evidentiality systems are a feature of Turkic languages (see Chapter 24 of this volume). The distinction of two past forms in Turkic ***-mış*** versus *-di* as unwitnessed/witnessed was first described in al-Kašġarī eleventh century grammar of Turkish. Evidential past is attested in the oldest Turkic data (going back to the eighth century).[4] By the time of the Ottoman invasion of the Balkans (the middle of the fourteenth century), the two-term evidentiality system in Turkish appears to have already been established. The distinction between witnessed and unwitnessed forms is by and large absent from the Indo-European languages spoken outside the Balkans. As Friedman (2003: 209) puts it, 'medieval Slavic documents only hint at the possibility of usages resembling evidential strategies'. In all likelihood, evidentiality meanings—optionally expressed through verbal forms (originally past and perfect forms) in medieval Slavic—evolved into fully fledged evidentials under Turkish influence. The impact of Turkish as the dominant language in urban areas may have contributed to the grammaticalization of already pre-existing evidentiality strategies (see Friedman 1978 on the complex mechanisms of the development of evidentials out of native past tense forms, and the differences in development across the Balkan Slavic languages, and §6.3.1 of this volume).

A link between a perfect, a resultative, a past tense, and other forms with a completive meaning, and the meanings of inferred and non-firsthand information is a widespread source of evidentials throughout the world (see Aikhenvald 2015b, for various examples from Eurasia and North and South America, and Chapter 23 of this volume). The result of an action or state (especially if viewed as relevant for the moment of speech) is reinterpreted as having the meaning of inference and other non-firsthand sources, such as assumption and hearsay. Once a form becomes the main means of expressing a full range of non-firsthand meanings, it can be considered an evidential. This cross-linguistically widespread tendency to evolve unwitnessed and indirect evidentials out of perfective forms as evidentiality strategies was, in all likelihood, enhanced by language contact. The link between perfectives focussed on result and the interpretation of the preceding event as non-witnessed is a feature of numerous languages across the Eurasian continent (more on this in §7.2.5).

Contact-induced development of evidentiality in some languages of the Balkans can be accorded approximate dates. Albanian (which constitutes a separate branch of (p. 152) Indo-European) is particularly instructive. Unwitnessed evidential forms (traditionally called ‘admirative’) appear to have emerged during the Turkish occupation in the sixteenth century. This is supported by the fact that evidentials are absent from pre-sixteenth century diaspora dialects, including Arvanitika in Greece and Arbëresh in Italy (see Friedman 2003, 2010b and references there).

Contacts between individual languages within the area account for further developments. Megleno-Romanian evidential forms are strikingly parallel to those in Macedonian, a language with which Megleno-Romanian has been in direct contact for a long time. Friedman (2003: 209) argues that the indirect evidential in Vlah Romanian is the result of Albanian influence. In the Farsheriote Aromanian dialect spoken on the Albanian border (in the village of Gorna Belica) in southwestern Macedonia—whose speakers migrated to Macedonia from central Albania about a century ago—the indirect evidential is based on the Albanian prototype using ‘a calqued participial base plus the 3sg Albanian present admirative marker (*-ka*) interpreted as an invariant particle’ (Friedman 2003: 191). This is an instance of a relatively recent borrowing of an evidential.

Even if evidentiality is a prominent feature in a given linguistic area, not every language may acquire it. Greek—one of the ‘classic’ languages of the Balkan area—is a case in point (see, however, Friedman 2003: 189–90, for some arguments in favour of *lé[e]i* ‘one says’ as an emerging reported particle). According to Joseph (2003a: 315), the literary tradition of Greek, the identification of the language with religion and the importance of religion in Greek identity and the ensuing speakers’ attitude to their language may have created an obstacle to the development of evidentiality as a new category in a language contact situation.

7.2.2. Evidentials in the Caucasus

Grammatical evidentiality is among the defining features of the Caucasus as a linguistic area.[5] Small systems of evidentiality, with a distinction between a witnessed and a non-witnessed evidential, are found in northeast Caucasian (or Nakh-Daghestanian) languages (see Chapter 23 of this volume and references therein), northwest Caucasian languages (see Chirikba 2003: 263, 266, 2008: 52), and Kartvelian (or South Caucasian: see Hewitt 1995; Boeder 2000).

The development of evidentiality in two Kartvelian languages—Georgian and the closely related Megrelian—can be accounted for by Turkish influence. The evidential system in Georgian stands apart from that in other Kartvelian languages: it is restricted to the perfect tenses only. In contrast, in Svan, Megrelian, and Laz evidentiality is expressed in other tenses, too (see Hewitt 1979: 87–8). The expression of evidentiality in Megrelian closely resembles the neighbouring but unrelated Abkhaz; this raises the question of language contact with Abkhaz as an additional source for Megrelian evidentials (Chirikba 2003: 267). Evidentiality in Svan, another Kartvelian language, evolved separately under the influence of Megrelian (Boeder 2000: 227; Friedman 2000a: 357; Sumbatova 1999).

A small two term evidential system in northwest Caucasian languages is likely to have been in place before any contact with Turkic languages (Chirikba 2003: 266–7). (p. 153) Evidentiality can be reconstructed for Proto-Abkhaz and Proto-Circassian, the main subbranches of the family. These protolanguages must have been spoken around the eighth or ninth centuries CE. Proto-Circassian may have had some contacts with the Kypchak branch of Turkic (such as Crimean Tatar and early Karachay-Balkar), these contacts are believed to have been negligible in the Proto-Circassian times. According to Chirikba (2003: 266), ‘any discernible Turkish presence in Abkhazia can be traced back to a period not earlier than the sixteenth century, when Ottoman Turkey had established its hegemony over the Caucasian Black Sea coast’, which implies that Circassian and Abkhaz formed evidentiality largely independently of Turkic influence. Surprisingly, Ubykh, a now extinct northwest Caucasian language geographically situated between Circassian and Abkhaz, did not have any evidentiality.

Armenian, an Indo-European language, is a marginal member of the Caucasus linguistic area. The reinterpretation of perfect forms in Western Armenian as unwitnessed evidential forms is believed to be the result of contact with Turkic and with Iranian languages (Kozintseva 2000: 414; Donabédian 2001; and §6.4.4 of this volume).

7.2.3. Evidentials in the Baltic area

Estonian and Livonian (Balto-Finnic branch of Finnic, within the Uralic family), on the one hand, and Latvian and Lithuanian (Baltic branch of Indo-European) on the other, stand apart from their genetic relatives. These languages, spoken on the shores of the Baltic sea in northern Europe, are believed to form a linguistic area. One of its defining features is a reported evidential transparently based on participles which, synchronically, constitute a special verbal paradigm.[6] Similarly to reported evidentials across the world, the re-

ported evidentials in Baltic languages go beyond a simple speech report. They may have overtones of doubt, indicating that the speaker does not vouch for the information reported to them. Examples (3) and (4) illustrate reported evidentials in Estonian and Lithuanian (Klaas 1997: 86–7; Björn Wiemer p.c.). The reported form in Estonian is based on the partitive form of the present participle.[7]

(3)

Naisest	**ela-vat**	ta	lahus	Estonian
wife.ELATIVE.SG	live-REP.PRES(=PARTIC)	he:NOM.SG	separately	

He is said to live separately from his wife (overtones of doubt).

(p. 154) **(4)**

Nuo	zmonos	jis	**atsiskyr-es**	Lithuanian
PREP	wife:GEN.SG	he:NOM.SG	divorce-PARTIC.NOM.MASC.SG	
es-ąs				
be-PARTIC.NOM.masc.sg				

He is said to be divorced from this wife (overtones of doubt).

The exact origins of the shared principle of marking reported evidentiality through participles are a matter of some debate. The construction may have Common Baltic origins (Holvoet 2001b: 379); or it may be an innovation (Balode and Holvoet 2001: 43). According to Ambrazas (1990: 219–34), the reported evidential developed in the Baltic languages and dialects which were in close contact with Balto-Finnic languages, Estonian and Livonian (see also Wälchli 2000, on the role of contact between Latvian and Estonian in the development of reportative use for participles). The exact origins of the reported evidential in Estonian are also debatable (see the discussion in Künnap 1992: 209; and Stolz 1991: 45–50). Small evidentiality systems are a feature of many Uralic languages. In addition, in some Samoyedic languages—such as Enets—reported evidentials come from participles (see Künnap 2002: 151). It is possible that the ultimate source of reported evidentials in Baltic languages lies in the ancient contacts with their Balto-Finnic neighbours (see also §25.3.1 of this volume).

The development of small evidential systems discussed so far has involved reinterpretation of erstwhile evidentiality strategies—perfect and resultative forms, and participles—into grammatical evidentials as a result of language contact. We now turn to contact-induced development of multi-term evidential systems of heterogenous origins in a well established area in northwest Amazonia.

7.2.4. Evidentials in northwest Amazonia: the Vaupés River Basin linguistic area

Complex evidentiality systems are a defining feature of the Vaupés River Basin linguistic area which spans adjacent regions of Brazil and Colombia. Languages in the area belong to two unrelated families—Arawak and the Eastern Tukanoan subgroup of Tukanoan. The area is characterized by obligatory societal multilingualism, based on the principle of linguistic exogamy: one can only marry someone who speaks a different language (see

Aikhenvald 2002, 2011c, 2012a). Hup and Yuhup, two closely related languages, are considered marginal members of the area: their speakers are excluded from the exogamous network of the Vaupés. However, Hup and Yuhup acquired numerous features of the area, due to a long-term interaction with Eastern Tukanoan speakers. The languages of the Vaupés have four to five evidential morphemes marking visual, non-visual, inferred, assumed, and reported information sources (see also Aikhenvald forthcoming).

A comparison between Tariana, the only extant Arawak language in the area, and closely related Arawak languages spoken outside the area, helps understand the origins and development of the Tariana evidentials. The reported evidential is the only one (p. 155) Tariana shares with Baniwa, a closely related language outside the Vaupés area. After the Tariana people moved into the Vaupés region a few hundred years ago (see Aikhenvald 2006b for an analysis of the available historical information), the optional tense and modality markers were reanalysed as exponents of tense fused with information source.

In Tariana and in Eastern Tukanoan languages, every sentence must indicate how the information was acquired by the speaker—whether they saw the event happen, or just heard it, or know about it because somebody else told them, etc. This is achieved through a set of evidential markers fused with tense (see Barnes 1984, 1999; Malone 1988; Ramirez 1997a; Chapter 18 of this volume). These same distinctions have developed in Tariana, under pressure from Eastern Tukanoan languages. That is, in Tariana or in any Eastern Tukanoan language one cannot just say ‘a dog stole the fish’. There are five ways of saying this, depending on the source of information. The following examples illustrate structural parallelism and semantic match between Tariana and Tukano, a major Eastern Tukanoan language in terms of numbers of speakers (see also Chapter 18, on evidentiality in Tukano and other Eastern Tukanoan languages).

If one saw a dog drag a fish from a smoking grid, (5) (Tukano), and (6) (Tariana) would be appropriate, involving the visual evidential (which is fused with person in Tukano). In Tariana, evidentiality is fused with tense. Alternatively, a visual evidential in Tariana can be considered marked with a zero:

(5)

diâyɨ	wa'î-re	yaha-a-**mi**	Tukano
dog	fish-TOP.NON.A/S	steal-REC.P-VIS.3sgnf	

(6)

tsinu	kuphe-nuku	di-nitu-**ka**	Tariana
dog	fish-TOP.NON.A/S	3sgnf-steal-REC.P.VIS	

The dog stole the fish (I saw it).

If one heard the sound of a dog messing around with the smoking grid, or of the fish falling down, one uses a non-visual evidential, as in (7) and (8).

(7)

diâyɨ	wa'î-re	yaha-a-**sĩ**	Tukano
dog	fish-TOP.NON.A/S	steal-REC.P-NVIS.3sgnf	

(8)

tsinu	kuphe-nuku	di-nitu-**mha**-ka (pronounced as *-mahka*)	Tariana
dog	fish-TOP.NON.A/S	3sgnf-steal-NVIS-REC.P	
The dog stole the fish (I heard it).			

If the owner of the fish comes into the kitchen area, and sees that the fish is gone, there are bones scattered around and the dog looks happy, the assumed evidential is appropriate, as in (9) and (10).

(9)

diâyɨ	wa'î-re	yaha-a-**põ**	Tukano
dog	fish-TOP.NON.A/S	steal-REC.P-ASSUMED.3sgnf	

(10)

tsinu	kuphe-nuku	di-nitu-**si**-ka	Tariana
dog	fish-TOP.NON.A/S	3sgnf-steal-ASSUMED-REC.P	
The dog stole the fish (I inferred it).			

(p. 156) And if one had learnt the information from someone else, the reported evidential has to be used, as in (11) and (12).

(11)

diâyɨ	wa'î-re	yaha-a-**pɨ'**	Tukano
dog	fish-TOP.NON.A/S	steal-REC.P-REP.3sgnf	

(12)

tsinu	kuphe-nuku	di-nitu-**pida**-ka	Tariana
dog	fish-TOP.NON.A/S	3sgnf-steal-REP-REC.P	
The dog stole the fish (I have learned it from someone else).			

Tukano, a language that is rapidly gaining ground as a lingua franca of the whole Brazilian Vaupés region, has a further evidential used when the speaker's statement is based on having seen the result of the action. This inferred evidential involves a nominalization (often marked with ø or a suprasegmental) and the auxiliary *niî* 'do, be' which takes the appropriate tense marker and the *visual* evidential specification (see West 1980: 75–6; Ramirez 1997a: 140–1, 291–2):

(13)

Peduru	uí-Ø	niî-**mi**	Tukano
Pedro	be.afraid-NOMZ	be-PRES.VIS+3sgnf	
Pedro is scared (I assume he is scared because I can see that he is pale).			

A similar construction consisting of a copula and a nominalized verb is used with a similar meaning in most other Eastern Tukanoan languages (Malone 1988: 135–7); the form of the copula differs from language to language, e.g. Desano *árĩ-,* Wanano *hi-* (Stenzel 2008a), etc. The following is from Desano (Miller 1999: 68):

(14)

pisadã	wai-re	ba-di-gɨ	ári-**bi**	Desano
cat	fish-TOP.NON.A/S	eat-PAST.NOMZ-masc	be-PAST.VIS+3masc.sg	

The cat must have eaten the fish (you can see his paw marks on the ground where he ate it).

Tariana has an additional inferred, or 'visual traces' evidential, used similarly to Tukano. The evidential marker *-nhi-* has developed out of the anterior aspect marker *-nhi.* This combines with the recent past *-ka* and remote past *-na*. The resulting forms *-nihka* (from *nhi-ka*) 'inferred evidential recent past' and *-nhina* 'inferred evidential remote past' refer to an action, process or state based on an inference from the obvious results—see (15), and its Tukano equivalent, (16).

(15)

tsinu	kuphe-nuku	di-nitu-**nihka**	Tariana
dog	fish-TOP.NON.A/S	3sgnf-steal-INFERRED.REC.P	

(p. 157) **(16)**

diâyɨ	wa'î-re	yaha-'**kɨ**	Tukano
dog	fish-TOP.NON.A/S	steal-NOMZ.MASC.PERFECTIVE	

niî-a-mi]
be-REC.P-VIS.3sgnf

The dog stole the fish (I infer it based on the dog's behaviour and the results I can see: for instance, that the fish is gone from the smoking grid).

The development of the inferred evidential in Tariana involved a number of mechanisms.

The Tariana morpheme *-nhi* in Tariana *-nihka* (from *-nhi-ka*, INFERRED-RECENT.PAST) and *-nhina* (from *-nhi-na*INFERRED-REMOTE.PAST) developed functional similarity with Tukano *niî* due to their phonetic likeness. A complex predicate containing the copula *niî* in Tukano was thus 'calqued' into Tariana as one grammatical word. In Tariana, just like in closely related Baniwa of Içana, *n* and *nh* are different phonemes. Not so in Tukano (where the status of nasals as phonemes is problematic, since one can argue that nasality is a prosodic feature). Younger speakers of Tariana (forties to sixties) confuse *nh* and *n*, and use *n* where *nh* is expected and used by the older generation. This has enhanced the formal matching between the Tukano *niî* and the Tariana *-ni-.*

In addition, the Tukano structure involves a complex predicate containing the copula *niî* marked with visual evidentials and a nominalization. The Tariana structure does not contain a nominalization. It consists just of a verb accompanied by reanalysed anterior mark-

er *-nhi* and past visual evidentials. A connection between anterior and past is well-attested cross-linguistically.[8]

Data from related Arawak languages indicate that, before intensive language contact with the Eastern Tukanoans, Tariana is likely to have had just an optional reported evidential. The form *-pida* is shared with the closely related Baniwa of Içana (which is spoken outside the Vaupés area, within a larger linguistic area). But in Tariana *-pida* is the present tense form of the reported evidential. The recent past tense morpheme *-ka* can be added (forming *-pida-ka,* as in (12)) to convey the recent past tense specification; the remote past tense *-na* can be added to express remote past tense reported—matching the distinctions present in Tukano and other Eastern Tukanoan languages. This is how the Tariana system evolved in the first instance.

After Tariana came into contact with Eastern Tukanoan languages, the existing optional tense system was reanalysed as obligatory tense-marking with present as a formally unmarked member. The existing reported specification (*-pida*) came to be reanalysed as unmarked present reference, and the newly evolved tense markers (*-ka* 'recent past' and *-na* 'remote past') were added to it. The assumed evidential (shown in (10)) arose as the result of reanalysis of a dubitative marker *-si-* attested in closely related Piapoco (Klumpp 1990: 174), spoken outside the Içana-Vaupés area.

The non-visual specification developed as the result of grammaticalization of a verb of non-visual perception, *-hima* 'hear, feel, seem, perceive'. This is an instance of parallel (p. 158) grammaticalization shared with neighbouring Tukanoan languages, especially Desano (in the spirit of contact-induced grammaticalization as advocated by Heine and Kuteva 2001, 2005).

Compounded verbs meaning 'seem, be perceived, feel' often participate in developing the non-visual evidentiality in Eastern Tukanoan languages, e.g. markers of non-visual evidentials Desano *kari-* 'seem', Tuyuka *-ga-* from a relic auxiliary verb meaning 'seem' or 'be perceived' (Malone 1988: 132).

Complex evidential systems have also diffused into Hup and Yuhup, two Makú languages spoken in the Vaupés area.[9] The system of evidentials in both languages is strikingly similar to that in Tukano and Tariana illustrated in (5)–(16). The following examples illustrate visual, non-visual, inferred, and reported evidentials in Hup (Epps 2005: 626, 631, 634, 2008: 641–63). The evidential system in Yuhup is very similar (see Silva and Silva 2012: 98).

(17)

manga	hɨ́ɗ-ăn	təw-nɨ́h=Ø	káh	Hup
Margarita	3pl-OBJECT	yell.at-NEG=VISUAL	ADVERSATIVE	

Margarita didn't yell at them, actually (the speaker saw this).

(18)

nasia	pœ-sĭw-ĭ=hõ	Hup
boat	go.upriver-COMPL-IMPERV=NVIS	

The boat already went upriver (heard but didn't see it).

(19)

ʔam-an	doʔay	ʔun'-ni-iy=**sud**	Hup
2sg-OBJ	Curupira	suck-exist-IMPERV=INFERRED	

The evil spirit (Curupira) has sucked you (your brain), apparently.

(20)

tɨh	ham-teg=**mah**	Hup
3sg	go-FUT=REP	

He'll go (he or another said so).

An additional evidential indicates inference about an event where the result of the event is accessible to the speaker:

(21)

tɨh	ʔəg-yɨʔ-**níi**-h	Hup
3sg	drink-TELIC-ASSUMED-DECL	

He drank it all up (we see from the empty pot).

This evidential stands apart from the other evidentials in Hup (the same applies to Yuhup). Unlike other evidentials, it receives the primary stress in the verb word. This makes it look (p. 159) more like a verb in a verb compound than like other evidential markers, which can cliticize to nominal constituents, and are unstressed. Epps (2005) hypothesizes that it developed its use as an evidential fairly recently—that is, later than the other evidentials. The *-ni-* evidential is cognate with the Hup verb stem *ni-* 'be, exist' which can itself occur as a verbal auxiliary. The parallelism between the assumed evidential in Hup and in Tukano (16), and Desano (14) is striking. The development of an inferred evidential based on an analogy with the Tukano copula *niî* in Hup and Tariana (see (15)) is an example of parallel grammaticalization within the same linguistic area, based on shared contact patterns: both Hup and Tariana are in contact with Tukano (note that there is no evidence for independent contact between Hup and Tariana: but see Aikhenvald 2006b).

Just like the Tariana evidentials, evidentials in Hup and Yuhup are heterogenous in their origin. A related language, Dâw—located on the periphery of the Vaupés area—has only the optional reportative clitic *=mah* (Martins 1994: 106). Nadëb, in all likelihood, also related to Hup, Yuhup, and Dâw, and spoken outside the Vaupés area has a reported marker *mɨh* (Weir 1984: 254). Epps (2005) hypothesizes that reported evidentiality and the marker *=mah* (attested in both Hup and Yuhup) could be reconstructed for the protolanguage.

The non-visual evidential *=hɔ* in Hup can be traced back to a grammaticalized verbal root *hɔh* 'produce sound, make noise'. Its cognate in Yuhup, *=hõ* 'non-visual evidential', could be linked to the verb *hõhoh* 'make noise' (see Silva and Silva 2012: 98; and §18.2.3.2 of

this volume, on a strikingly similar grammaticalization path in Wanano, which could be indicative of additional contacts). The inferred evidential Hup =*sud* can be considered the result of grammaticalization of the verb *sud-* 'be inside' (the same origin is postulated for the Yuhup inferred evidential =*sun*: Silva and Silva 2012: 98). The inferred evidential based on visual results marked with *-ni-* must have come about as a result of grammatical accommodation to the Tukanoan evidential developed on the basis of similarity with Tukano *niî* 'copula' in both Hup and Yuhup (see the discussion above). The visual evidential is the least formally marked. In all likelihood, this is an instance of reinterpretation of a formally unmarked verb as carrying visual evidential meanings (in agreement with the cross-linguistic tendency of the visual evidential as the least formally marked: see Chapter 1 of this volume).

The heterogenous origins of the multi-term evidential systems in Tariana and in the Makú languages in the Vaupés River Basin area are relatively transparent—perhaps due to a comparatively shallow time-depth of the area. Arawak languages closely related to Tariana have just one reported evidential. Dâw, closely related to Hup and Yuhup, and Nadëb (which may also be related), also have only a reported evidential in their systems (Epps 2005). Consequently, the direction of areal diffusion is also straightforward: Eastern Tukanoan languages have played a major role in developing evidentiality in the Arawak language Tariana, on the one hand, and in Hup and Yuhup, on the other.

Complex evidentiality systems are currently believed to be an independent innovation of Eastern Tukanoan languages (see §18.5.2 of this volume). The similarity of patterns is constantly enhanced by ongoing contact between speakers of various Eastern Tukanoan languages, and the established societal multilingualism in the Vaupés River Basin Linguistic area. A reconstruction of evidentials for Proto-Tukanoan hinges on the status of evidentiality in Western Tukanoan languages. Koreguaje has three evidentials: if the speaker was (p. 160) witness to an action, there is no formal marking of information source; a reported evidential and an 'assumed' evidential are expressed with auxiliary constructions (Cook and Criswell 1993: 86–7). Máíhĩki (or Orejón), the only Western Tukanoan language spoken in Peru, appears to have no evidential distinctions (Velie Gable 1975; and a preliminary study by Skilton 2016). Three evidential-like distinctions appear to exist in the Colombian Siona (described in terms of speaker's involvement and viewpoint in Wheeler (1968: 714, 1970: 61–2, and speaker's responsibility, distancing, and certainty in Wheeler 1987: 152–4, and in terms of three degrees of certainty in Wheeler 2000: 189). In her PhD thesis based on a restricted corpus, Bruil (2014) reanalysed the Ecuadorian Siona evidentials as consisting of two kinds—reportative and 'conjectural'.[10] The formal differences in the expression (and the meaning) of categories to do with information source suggest heterogenous origin of evidentials in Western Tukanoan languages. However, in the absence of comprehensive reference grammars for any of the Western Tukanoan languages, Skilton's (2016: 10) claim that evidentiality cannot be reconstructed to Proto-Western Tukanoan nor to Proto-Tukanoan is premature (see Chapter 1 of this volume, on the nature and reliability of sources, and their impact on typology and reconstruction).

In numerous instances across the world, evidentials occur in contiguous areas, and may well be due to the traces of ancient contact. This is the topic of the next section.

7.2.5. Evidentials as possible traces of ancient contact

Numerous languages across the Eurasian macro-continent—including Iranian, Uralic, and Turkic—have a small two-term evidential system, of witnessed versus unwitnessed evidentials.[11] The marking of evidentiality differs from language to language and from subgroup to subgroup. But the systems and their usage are very similar. Apart from an overwhelming majority of Turkic languages spoken across Eurasia, two term evidential systems are attested in the majority of Uralic languages (see Skribnik 1998; Nikolaeva 1999a on Khanty and Mansi; and Chapter 25 of this volume on Uralic languages), in Mongolic languages (Chapter 26 of this volume) and also in Yukaghir, an isolate spoken in the Yakut republic in northeast Russia (Maslova 2003). This striking similarity led Haarmann (1970) to believe that non-firsthand evidentials are a diffusional feature indicative of traces of old language contact across Eurasia as a region.[12] In a few instances, (p. 161) the emergence of evidential systems can be accounted for by contact with Turkic languages (see §7.3; and also §6.5.2 of this volume).

At the far north, Eskimo-Aleut languages have evidentiality in their grammar (Fortescue 1998: 69, 2003). According to Fortescue (1998: 78), evidentiality spread from Eurasia into adjacent areas across the Bering Strait. A number of language areas in North America appear to have evidentials as shared and defining features (see Jacobsen 1986: 7–8; and Sherzer 1976). However, the direction of diffusion and its exact mechanisms remain unclear. Evidentials are defined as a ‘central areal trait’ in the northwest coast linguistic area (which includes numerous Salish, Wakashan, Chimakuan, and a few other languages: Sherzer 1976: 78, 230), the Great Basin (with Washo, Northern and Southern Paiute (both Uto-Aztecan): Sherzer 1976: 163–5, 245–6), and the Plains (with Cheyenne and Arapaho (Algonquian), Siouan, Caddoan, Kiowa (Kiowa-Tanoan), Apache (Athabaskan), and Tonkawa: Sherzer 1976: 183–5, 248). It is interpreted as a ‘regional areal trait’ of northern-central California (including Hupa and Kato, both Athabaskan; Maidu, Wintu, Miwok, and Yokuts) and a Papago-Apachean-Tanoan region of the southwest (Sherzer 1976: 125, 128, 147, 238). Languages such as Yana in California, Washo in the Great Basin, and Kiowa and Tonkawa in the Plains are thought to have acquired evidentiality via areal diffusion (Sherzer 1976: 125, 130, 163, 166, 183).[13]

Evidentials in Amazonia, and in a number of other regions (including Central Australia and Papua New Guinea) tend to occur in contiguous zones.[14] Reported evidentials are a feature of numerous languages north of the Amazon. The Guaporé-Mamoré region in southwestern Amazonia (spanning the Brazilian state of Rondonia and the adjacent departments of Santa Cruz and Beni in Bolivia) contains over fifty languages from eight families in addition to eleven isolates. The majority of these have evidentials (see Crevels and van der Voort 2008: 170–1). But little is known about the mechanisms of development and the direction of diffusion within this purported area (see Aikhenvald forthcoming). We

can only surmise that clustering of evidential systems may be indicative of large-scale language contacts at an earlier stage.

We now turn to further instances of languages gaining—and losing—evidentials as a result of one on one language contact.

(p. 162) 7.3. Gain and loss of evidentials in language contact

Languages in contact are likely to develop similar evidential systems. An evidential marker can be borrowed. This is known as direct diffusion. Or the evidential forms may be different, but their meanings and usage would match those in another language. This is known as indirect diffusion, or diffusion of categories (see Aikhenvald 2002: 3–7).

Borrowing an evidential marker is not very common, as part of a general tendency not to borrow grammatical morphemes. Soper (1996: 59–61) mentions instances of borrowing the non-firsthand marker *-miš* from Uzbek, a Turkic language, into Tajik, an Iranian language. Kryz, a Lezgic language in contact with Azeri, a Turkic language, borrowed the Turkic evidential suffix *-miš* from Azeri. The suffix has the meanings of indirect information source in the past, hearsay and inference, in addition to surprise (see Authier 2010: 15–16; and §23.3 and example (23) in Chapter 23 of this volume). The means of expressing information source in Romani varieties in the Balkans often involve forms borrowed from Turkish (see §6.3.4 of this volume; and also Friedman 2013a, on Sliven Romani).

Within a larger evidential system, one evidential may be borrowed, or restructured, under the influence of another language. Quechua languages typically have three evidentials—direct, inferred, and reported (see Floyd 1999; Adelaar 2017a; and also Chapter 10 of this volume). Young bilingual speakers of Imbabura Quichua, from the northern Andes of Ecuador, use the Spanish verb root *dizi-* ‘say’ instead of the native reported-quotative evidential *ni* (based on the Quichua verb ‘say’). The new reported evidential form, *dizin,* is illustrated in (22) (Gómez-Rendón 2007: 486–7).

(22)

chayka	da-shca	rumi-ka	Imbabura Quichua
landlord	give-PARTICIPLE	stone-TOP	
kuri	ka-shka	**dizin**	
gold	be-PERV	REP	

It is said that the rock the landlord gave [to him] was gold.

The evidential *dizin* is functionally and semantically equivalent to the Imbabura Quechua reported evidential *ni/nin*. As is typical in the language, the evidential occurs at the end of the clause.

Language contact may result in replacing an existing evidential with a form developed under the influence of another language. In a number of varieties of Quechua (including those of Chachapoya in Peru, Cañar in Ecuador, and Santiago del Estero in Argentina) the original reported evidential *-shi/si* was replaced by *nin* 'he/she says', the third person singular form of the verb *niy* 'say'. In some varieties of Quechua (especially the Quechua of Imaza) the newly developed particle undergoes further phonological depletion and is pronounced as *-né* (Taylor 2000: 87–8). This new form replicates the Andean Spanish reported evidential *dice* (lit. he/she says), grammaticalized on the basis of the verb of speech *decir* (de Granda 2002: 128, 2003c: 79; Taylor 1994: 155). (p. 163)

Turkic languages are believed to be the 'epicentre' of diffusion for small evidential systems across Asia. Two term-evidential systems are widespread in Iranian languages (cf. Bulut 2000: 147, on their origins in contacts with Turkish), including Tajik and Kurdish. Northern Tajik, an Iranian language, has developed a system of evidentials by reinterpreting the existing forms on the model of Uzbek, a Turkic language with which it is in contact. An unwitnessed evidential in Tajik has been developed for perfect forms of the verb and related participles (further discussion is in §6.5.2 of this volume). The development of small evidential systems in Finno-Ugric languages of the Permic and Mordva branches based on reinterpretation of past tenses is attributed to relatively recent influence from Turkic languages (including Chuvash: see Bereczki 2005; Fedotov 1972; and §25.3.2.2 of this volume). Along similar lines, the emergence of evidentials in Pre-Proto-Mongolic is attributed to contact with Old Turkic (see §26.2 of this volume; see also §24.10 of this volume, on the importance of Turkic influence in the development of evidentiality across Eurasia). Indirect diffusion has played a major role in the development of a five-term evidential system in Tariana and Hup-Yuhup in Northwest Amazonia, as a consequence of areal diffusion from Eastern Tukanoan languages, as we saw in §7.2.4. Reported evidentials in Bora and Witotoan languages are likely to be a product of convergence between these languages in contact (see Chapter 19 of this volume).

The emergence of an evidentiality strategy can be accounted for by language contact. Using the conditional to convey information obtained via speech report in Spanish is believed to have developed under French influence quite recently (Lopez Izquierdo 2006: 5; see also §35.4.2 of this volume). The use of Finnish and Saami modal verbs as evidentiality strategies may have been influenced by Indo-European languages (mostly Germanic) (see §25.2.2 of this volume).

If a language is structurally more similar to its unrelated neighbours than to its genetic relatives, the similarity will be due to language contact. Semitic languages have hardly any grammatical evidentiality. In a number of Neo-Aramaic dialects spoken in Iran, southeastern Turkey and adjacent regions of northern Iraq, perfect aspect forms are used to express indirect information source, under the influence of structurally comparable forms in Iranian (Persian and Kurdish) and also Turkish (Khan 2012, and further references there). Evidentials in Southern and Central Mongolic varieties of Amdo have been re-

structured under Amdo Tibetan influence—this is shown in §26.7, and also §6.7.2 of this volume).

Language contact can affect the use of evidentials as tokens of a shared speech genre. Arizona Tewa (Kiowa-Tanoan) and Hopi (Uto-Aztecan) are both spoken in the Pueblo area in North America (Kroskrity 1998). Both languages have a reported evidential. In the everyday Arizona Tewa, the reported evidential *ba* (Kroskrity 1993: 144–63, 1998: 27–8) is often used to disclaim firsthand knowledge on the part of the speaker: the narrator is simply 'speaking the past', repeating 'prior text'. The marker *ba* occurs just once in a sentence, as in (23) (Kroskrity 1993: 144–5):

(23)

há	**ba**	díbí-'an	Arizona Tewa
INDEFINITE	REP	3plACTOR-do:PAST	

I hear (or it is said that) they did something.

(p. 164) When used in traditional Pueblo narratives, *ba* assumes the role of a 'genre-marker'. In traditional stories (of a genre called *pe'yú*) it may occur several times within one sentence, as in (24) (Kroskrity 1998: 28, 30–1).

(24)

'í-wae	**ba**,	di-powá-dí	**ba**,	Arizona Tewa
there-at	REP	3plSTATIVE.PREFIX-arrive-SUBORD	REP	
'ó:bé-khwó:li-ma:k'a-kant'ó-dí				
3pl/3.INVERSE-fly-teach-INTENTIVE-SUBORD				

From there so (*ba*), having arrived so (*ba*), they were being taught to fly.

A 'non-narrative rendering' of such a sentence would simply eliminate all but one of the occurrences of *ba*. This narrative convention was probably influenced by similar patterns of the multiple use of the evidential particle *yaw* in Hopi, an unrelated language spoken in the same area (Kroskrity 1998: 30–1). The neighbouring Hopi with which Arizona Tewa is in contact also employs multiple evidentials in traditional stories of a similar genre. (25) illustrates multiple occurrence of the reported evidential *yaw* from a Hopi narrative (Kroskrity 1998: 30–1).

(25)

noq	**yaw**	'ora:yvi	'atka	ki:tava	**yaw**	Hopi
and	REP	Oraibi	below:south	from:village	REP	
piw	ti̱cvo	ki'yta				
also	wren	sg:lives				

And wren also lives below Oraibi, south of the village (it is said).

Evidentials in the two languages are different in their form, but similar in their functions. In each case, they are closely associated with a shared traditional narrative genre (Arizona Tewa *pe'yú* and Hopi *tutuwutsi*). It is instructive to compare the use of evidentials in Arizona Tewa and in Rio Grande Tewa, a genetically related language which is spoken in

a different linguistic area, and is not in contact with Hopi. The differences are striking. For instance, the multiple occurrences of the evidential particle in Rio Grande Tewa are far less frequent than in Arizona Tewa. In both Arizona Tewa and Hopi (but not in Rio Grande Tewa) an evidential can be used clause-finally. There is hardly any doubt that Arizona Tewa evidentials within narratives have been influenced by Hopi patterns. However, parallelism between the two languages is not complete: Hopi narrators use the evidential particle in sentence-initial position, which is impossible in Tewa narratives.

Intense indirect diffusion (with very little borrowing of forms) and shared discourse patterns accompany the stable societal multilingualism in Hopi and Tewa, enhanced by generations of intermarriage. As Kroskrity (1998: 32) puts it, 'over the past two centuries at least, Tewa children have heard Hopi traditional narratives from their paternal kinsmen' who were Hopi-speakers, following the norm of intermarriage of the Tewa with the Hopi. Consequently, narrators used to be able to perform traditional narratives in both languages. It is thus no wonder that the two narrative traditions show dramatic convergence not only in the themes but also in genre-specific evidentiality marking. The convergent pattern of usage (p. 165) includes the 'elevation' of the Tewa evidential to the status of a genre marker, to match its Hopi counterpart.

That is, diffusion of evidentials goes together with diffusion of narrative genres and narrative techniques. Along similar lines, Tariana shares the use of the assumed evidential as a marker of a narrative genre with two Eastern Tukanoan languages, Tukano (Ramirez 1997a: 140) and Desano (Miller 1999: 67).

Alternatively, a system of evidentials can be simplified, as a result of language contact. Retuarã is an Eastern Tukanoan language spoken in Colombia, outside the Vaupés River Basin linguistic area. Its neighbour is Yucuna, a language from the North Arawak subgroup that has only a reported evidential. Yucuna is the dominant language in this region, with speakers of Retuarã bilingual in it. As a result of Yucuna influence, Retuarã has lost the high unrounded central vowel and simplified the system of classifiers (Gomez-Imbert 1996: 445, and p.c.). Its system of evidentials is also reduced. Yucuna has just one, optional, reported evidential *-le* (Schauer and Schauer 1978: 43). Retuarã has three evidentials, all of which are optional: strictly auditory information, assumed information and reported (Strom 1992: 90–1; Barnes 1999: 213). This is in contrast to Eastern Tukanoan languages which have either four or five evidentials, all of them obligatory (see Aikhenvald 2002: 129; and §7.2.4 and Chapter 18 of this volume).

Intensive language contact may result in the loss of evidentials. Evidential distinctions in past tense forms disappeared in Turkic languages which have been in contact with Indo-European languages (see Johanson 2003: 288, 1998: 331). These include Karaim spoken in Lithuania, under the influence of Slavic languages and of Lithuanian (Csató 2000b), and the Turkish varieties of the Trabzon province on the east Black Sea coast, under the impact of Greek (Brendemoen 1997; see further examples and references in Johanson 2003: 288; and §§24.4.1 and §24.10 of this volume). According to Authier (2010: 15), in contemporary Azeri the evidential marker *-mış* is considered 'outdated', 'maybe due to

the influence of Russian journalistic style’(see also Johanson, §24.10 of this volume, on Persian influence on aspectual meanings of Azeri evidential forms).

7.4. Evidentials in contact languages

Evidentials are a salient feature in languages which have it. Expressing one’s information source becomes a speech habit. As Friedman (2003: 210) put it, ‘speakers of Turkic and Balkan languages have reported feeling the absence of a non-confirmative (i.e. non-first-hand) verb form when speaking English’, and adds ‘I have felt this same lack myself when I have returned to the US after spending several months in Macedonia’. Indians of the Vaupés area, when asked to translate into Portuguese what they had just said in one of their languages, complain that Portuguese is not good enough, and the elaborate expressions with an overt statement of information source come out ‘too short’.

Since lack of evidentials is perceived as a gap, speakers of contact languages are likely to ‘make up’ for it by using an array of lexical and other means. Evidentiality is pervasive in Andean languages—in numerous varieties of Quechua and Aymara. The local Spanish has come to mark evidentiality by reinterpreting tense forms (Silver and Miller 1997: 262–3). (p. 166) In the Spanish of La Paz, spoken in contact with Aymara (a language with obligatory evidentials), ‘it is relevant whether the knowledge of facts is direct or indirect’ (Martin 1981: 205). The pluperfect is used to indicate ‘indirect knowledge’, as in (26): the speaker did not see the mother arrive. The other function of the pluperfect in Spanish of La Paz is ‘past with respect to past’ (Laprade 1981: 223) (as in Iberian Spanish; see also Hardman-de-Bautista 1982: 153–4).

(26)

Hoy día	**había**	**llegado**	su	mama	de él	Spanish of La Paz
today	had	arrived	his	mother	of he	

Today his mother arrived (but I didn’t see her arrive).

Another past form, the preterite (which does not have a perfect meaning) refers to something witnessed, as in (27):

(27)

Hoy día	**llegó**		su	mama	de él	Spanish of La Paz
today	arrive:PRETERITE		his	mother	of he	

Today his mother arrived (and I saw her arrive).

If used with first person subject, the pluperfect acquires nuances of uncontrolled, unintentional, and accidental action. If the speaker had accidentally fallen asleep, they would say *Me había dormido*, with a pluperfect. If they had intentionally taken a siesta, they would say *Me he dormido* with the simple perfect (Laprade 1981: 225). The non-firsthand pluperfect can also have overtones of surprise, marking a new unexpected piece of infor-

mation, or turn of event. This is a feature typical of an unwitnessed or indirect term within a small evidential system.

With a first person subject, a 'non-firsthand pluperfect' has an overtone of accidental or unintentional action. An example is at (28).

(28)

me **había cortado** mi dedo — Spanish of La Paz

I cut my finger! (pluperfect: I hadn't realized).

In contrast to the pluperfect, the perfect in the same context implies a volitional and intentional action, as in (29).

(29)

me **he cortado** mi dedo — Spanish of La Paz

I cut my finger (present perfect: I was aware of what I was doing).

This is strikingly similar to the first person effect of non-firsthand evidentials discussed in Chapter 2 of this volume (see also Chapter 1 of this volume). The 'first person effect' is not found in Quechua or Aymara; but it is typical for a small evidentiality system and for corresponding evidentiality strategies.

Along similar lines, the present perfect in Ecuadorian Highland Spanish is developing an additional meaning of a non-firsthand evidential (Olbertz 2005; and also Bustamante 1991: 222–3, on how this phenomenon could have partly resulted from Quechua influence). The Spanish varieties influenced by Quechua and Aymara are in the process of developing a (p. 167) firsthand–non-firsthand (A1) evidentiality system out of their past tenses. (This is similar to how A1 systems were developed in Macedonian and Bulgarian in the Balkans).

These developments make the Andean and other Latin American varieties of Spanish markedly different from other 'Spanishes'. Misunderstandings often arise, usually without speakers realizing it (Silver and Miller 1997: 262).

Speakers of the Vaupés Portuguese, who are native in several Eastern Tukanoan languages (and also Tariana), use an array of lexical markers to make sure they express different evidentiality specifications (Aikhenvald 2002: 315–16). Statements referring to information obtained visually are usually accompanied by a phrase *eu vi* 'I saw', or (if contrasted to something else) *eu tenho prova* 'I have proof'; or, more rarely, *eu tenho experiência* 'I have experience'. Information obtained by hearing or by other sensory experience can be accompanied by *eu escutei* 'I heard' or *eu senti* 'I felt'. Talking about someone else, one could use third person (*ele viu* 'he saw', *ele sentiu* 'he felt' and so on). The way of marking inferred information is by saying *parece* 'it appears, it seems'. And *diz que* 'it is said that' is a conventional way of marking a reported evidential.

The formula *diz que* ‘it is said that’ can be extended to cover all non-firsthand evidentiality specifications. Thus, an Indian who has read an announcement may talk about it using *diz que* (which sounds bizarre for speakers of Standard Portuguese; since for them this conveys a tinge of incredulity). The use of these expressions makes the Vaupés Portuguese sound somewhat obsequious and hedging; and is often judged as weird by monolingual Brazilians from other areas. In Tariana, inferred evidentiality is used in translations and in rendering what one has just read. It sounds bizarre to native speakers of Standard Portuguese when an Indian who has just read an announcement about a football match in the Mission centre says: ‘There is a football match on, it appears’. Silver and Miller (1997: 36–7) mention that if an outsider says, ‘I’m from California’, a Jaqi speaker would be likely to reply in Andean Spanish: ‘You say you are from California’. For the Jaqi speaker this means simply stating the information source, but for the English-speaking outsider such a reply may sound offensive: they may feel they have been accused of lying. Similarly, overuse of ‘lexical evidentials’ by the Vaupés Indians usually are puzzling for speakers of other varieties of Portuguese.

The reported marker *dizque* and its variants *dice* ‘he/she/it says’ and *dicen* ‘they say’ are a pervasive feature of most varieties of the South American Spanish (see an early historical perspective in Kany 1944 and Coronel-Molina 2011; Travis 2006 for Colombian Spanish; Babel 2009 for the Spanish of Ecuador; Andrade Ciudad 2007, 2016 for the Andean Spanish in Peru; and Chapter 35 of this volume on the spread and the development of *dizque* in Romance languages). The use of *dice* as a marker of reported evidentiality in the Spanish spoken in northeastern Argentina is, in all likelihood, the result of a calque from reported evidential in Quechua (de Granda 2003a: 137, 2003b: 155; see also §35.1.3 of this volume). A spectacular example of a diffusion of the reported evidential from Tagalog, the main language of the Philippines, into other languages of the Philippine islands is at §32.6.3 of this volume.

Evidentials make their way into ethnic varieties of English. In Southern Paiute (Uto-Aztecan) and Verde Valley Yavapai (Yuman) evidentials are obligatory. In both communities, it is considered bad ‘to make assertions for which evidence is lacking’: an assertion has to be qualified (Bunte and Kendall 1981: 2). When Paiute and Yavapai bilinguals converse (p. 168) among themselves in English, they add their native forms with evidential meanings. A Paiute speaker would say *Minnie is pregnant* ***ʔkm*** or *The car’s brakes need greasing* ***ʔkm***—marking a hearsay report or a supposition rather than a known fact. A Yavapai speaker would say *Calvin is going to Nevada* ***aik*** or *He’s crying* ***aik***—also—marking a hearsay report or a supposition rather than a known fact. Speakers are aware of this language mixing, and they do their best to avoid such insertions while speaking to Anglos.

If non-indigenous people are present, they would use the nearest possible English equivalent—the phrase ‘they say’: *Minnie is pregnant* ***they say*** or *The car’s brakes need greasing* ***they say***. A Yavapai speaker would say *Calvin is going to Nevada* ***they say*** or *He’s crying* ***they say***. However, this ‘literal translation’ often results in miscommunication. The English speakers understand the Paiutes and the Yavapais to mean exactly what other

speakers of standard English mean by the phrase. Their impression is that ‘those Indians sure say “they say” a lot when they don’t mean it’. This can be explained by the range of meanings *ʔikm* and *aik*. Both markers can be used in a variety of contexts, from hearsay (where they are equivalent to ‘they say’ in English) to inference. ‘Now imagine that you are inside a house and you hear a crash and run outside to see a single person kneeling over the body of an unconscious child who has had some kind of accident involving a bicycle. You ask the person: “What happened?” He or she replies: “He fell off his bike they say.” This is very hard to process as normal English usage’ (Bunte and Kendall 1981: 5). And it is hardly ‘normal’ English usage: the phrase ‘they say’ is a means to fill a gap in English, acutely felt by native speakers of Yavapai and Paiute for whom English is a second language.

Evidentials in contact languages are often unstable. If the dominant language in the community—such as English or Portuguese—has no evidentials, the speakers will eventually have to assimilate to it, and lose their speech characteristics which are perceived as ‘aberrant’ by the more prestigious and dominant norm (see Joseph 2003b: 315). As soon as speakers of Vaupés Portuguese acquire the standard language, they stop using lexical evidentials. In Andean Spanish, the situation appears to be different: the evidential-type distinctions are part of the new norm and not an error or a deviation (Silver and Miller 1997: 263; Bustamante 1991; Olbertz 2005; see also Olbertz 2008). They are therefore best treated as an established feature of this, and other, South American varieties of Spanish (see Chapter 35 of this volume).

If one group aggressively imposes its language on another group, their language is under threat. Evidentials—especially if they are absent from the dominant language—become endangered. This is what we turn to next.

7.5. Evidentials and language obsolescence

Linguistic minorities all over the world are losing ground to dominant and more prestigious languages. Speakers of an endangered language will gradually lose the capacity to fully communicate in the language, and fully understand it. As a consequence, an endangered language—under threat and pressure from the dominant one—will gradually become obsolescent. The process of language obsolescence ultimately leads to language shift and language loss. (p. 169)

An endangered language tends to become structurally similar to the dominant one (see also Campbell and Muntzel 1989). A bilingual speaker typically maintains the categories and distinctions found both in the healthy dominant language and the endangered language. That is, shared features are enhanced by language contact. Categories and distinctions not found in the dominant language tend to be lost. This is known as ‘negative borrowing’ (Dorian 2006). The likelihood of loss of unmatched structures in endangered languages and the enhancement of the ones present in both languages can be explained

by potentially greater efficiency for the bilingual brain to work with identical structures (see Andersen 1982: 97; see also Aikhenvald 2012d).

Evidentials become lost in language obsolescence if the dominant language does not have this category. Nivkh once had a visual versus non-visual opposition in the apprehensive (preventive) mood (Gruzdeva 2001). Krejnovich (1934, 1979) discusses this opposition at some length, based on the analysis of materials on this language collected in the 1930s when it was still actively spoken. The language is now severely endangered, and the remaining speakers of Nivkh are shifting to Russian. By the time of Gruzdeva's work with Nivkh speakers, sixty years on, the visual versus non-visual opposition in apprehensives had been lost from the language.

Traditional Sm'algyax (Tsimshianic) had a reported enclitic *-gat* (Boas 1911c: 348–9). Stebbins (1999), who worked with the remaining semi-speakers of the language in the 1990s, reports that this marker was considered archaic and did not feature in her data.

The last speakers of languages with evidentials may not use them at all. In 1991, Baré, once an important language of the Amazonian northwest, was down to one last speaker, the late Candelário da Silva (see Aikhenvald 1995). The language was partly documented before that, by Lopez Sanz who wrote a brief grammar (1972) based on his work in the 1960s.

The variety of Baré recorded by Lopez Sanz has a richer morphology than the language of Candelário. Verb forms attested in Lopez Sanz (1972) contain up to five suffixes, including the reported evidential *-man*. Candelário no longer used this morpheme, employing various forms of the verb *-ma* 'to say' (mirroring Portuguese *dizque* 'it says that').

Nambikwara languages in southern Amazonia have complex and elaborate systems of obligatory evidentials (see Lowe 1999; Eberhard 2009; and Chapter 17 of this volume). However, many of the languages are highly endangered. Lakondê, a critically endangered language from the Northern Nambikwara branch of the family, is spoken by about eighteen people (Eberhard 2009). Lakondê has a complex system of evidentials (see §17.5 of this volume, for a discussion). A secondhand report—something the speaker was told about by someone non-identifiable or irrelevant—is marked by the reported evidential *-se?* shown in (30). If the speaker quotes someone saying something, a quotative evidential *-setaw-* is used, as in (31) (see Telles 2002: 288–90; Telles and Wetzels 2006: 240–1).

(30)

ã-'pat-ho'te-'ten-'**se?**-Ø-tãn-hi — Lakondê

AGENTIVE-leave-for.somebody-DESID-EVID:REP-3SUBJ-IMPERV-NEUT

She is going to leave (it for me, I was told). (Reported information)

(31)

mãn-Ø-**setaw**-'tãn-hi — Lakondê

burn-3SUBJ-EVID:QUOT-IMERV-NEUT

The house burned (someone (identifiable) told me). (Quoted information)

(p. 170) At present, most Lakondê speakers are proficient in Portuguese, the national language without evidentials. And instead of using evidential suffixes, speakers often recur to periphrastic constructions: 'she left, I saw (it)/I didn't see it/I heard it' and so on (Telles 2002: 290). Instead of the quotative evidential *-setaw-* as in (31), a speaker would say (32).

(32)

hejn-ka-Ø-'tãn	hajn-Ø-'tãn	Lakondê
wash-BEN-3SUBJ-IMPERV	say-3SUBJ-IMPERV	
He washed (the clothes), he said.		

Instead of the reported *-'se?* as in (30), they would say (33):

(33)

hejn-ka-Ø-'tãn	abw-Ø-'tãn	Lakondê
wash-BENEF-3SUBJ-IMPERV	tell-3SUBJ-IMPERV	
He washed (clothes), he told (me).		

This phenomenon—known as 'grammatical reduction'—is fairly typical of languages on their way out.

Saaroa, a Formosan language from Taiwan, used to distinguish visual and non-visual information sources in its case system (similar to closely related Tsou). The case markers continue to be occasionally used in the obsolescent Saaroa, but the visibility distinction has been lost (see Pan 2012 and forthcoming).

As a result of intensive language contact and language obsolescence, evidentials can undergo reinterpretation as epistemic markers. In the 1930s, Dorothy D. Lee (1959) described Wintu, an isolate from California, as a language with five evidentials: visual, non-visual sensory, inferential based on logic, inferential based on personal experience, and reported. In the 1950s, when Harvey Pitkin (1963: 105) worked on the language, he recorded an evidential system with just two choices—visual and reported. At the same time, the two evidentials developed strong epistemic overtones, of certainty versus uncertainty. The visual evidential became associated with full certainty, and the reported acquired overtones of uncertainty (absent from the traditional language). Thus, under pressure from English, the system in a critically endangered language shifted towards marking epistemic distinctions rather than evidentiality.

Languages spoken by diasporic communities tend to lose some of the features of their grammar absent from the majority language in the new country; see, for instance, Lee (2014) on a reduced system of numeral classifiers used by speakers of Korean in Australia. Victor Friedman (p.c.) reports that, in his experience, diasporic speakers of Albanian who grew up in the USA did not use evidential forms (although they could recognize them). This alerts fieldworkers to the dangers of working on languages in diasporic com-

munities, as the patterns of evidential use may change under the influence of new linguistic environment.[15]

(p. 171) 7.6. Evidentials and contact-induced change: to conclude

Evidentials often develop as a consequence of language contact and areal diffusion. A language surrounded by languages without evidential distinctions is likely to lose evidentials. Evidentials are among the defining features of a number of well-established linguistic areas, among them the Balkans, the Caucasus, and the Baltic region in Eurasia, and the Vaupés River Basin linguistic area in Amazonia. They have made their way into a number of contact varieties of major European languages. An obsolescent language may lose or restructure its evidentiality system depending on the dominant language speakers are shifting to.

Language contact does not necessarily result in the spread of evidentials. Evidentiality is a prominent feature in the Balkans as a linguistic area; yet Greek did not acquire it (see §7.2.1, for a possible explanation). Hungarian did not develop grammatical evidentiality, despite a long history of contact with Turkish (see Chapter 25). Evidentiality is not an areal feature of regions within Africa (see Chapter 29 of this volume). Palikur, an Arawak language from northern Brazil and French Guyana, bears an imprint from North Cariban languages, but it did not develop any evidentials (see Aikhenvald forthcoming). What features of language contact and communication determine the limits on contact-induced change and diffusion of categories? This is a question yet to be explored.

Evidentials may develop via reinterpretation of existing forms or grammaticalization of lexical items. We have seen, based on the example from the Vaupés linguistic area, that patterns of grammaticalization of verbs into evidentials can be shared by a number of languages in contact. An evidential form can be borrowed from another language, or calqued. We can recall, from §7.3, how in some varieties of Quechua the native reported evidential was replaced by a new form based on the verb ‘say’, under the influence of the Spanish verb of speech *decir*. Evidentials serve as tokens of discourse genres. If a discourse genre is borrowed, the marking of information source typical for it is likely to be replicated.

We can recall from §7.2.4 that languages which do not have obvious means of expressing the information source are perceived as having a ‘gap’; speakers of languages with evidentials complain that languages with no grammatical evidentiality are deficient. Martha Hardman (1986: 133) comments on how difficult it is for speakers of Jaqi (Aymara) in Bolivia to imagine that one can speak a language which does not mark the information source. Hardman and her colleagues had to ‘adjust’ their English and always specify how they know things, so as not to upset their Jaqi friends. In numerous instances around the world, evidentials have made their way into a contact language—this has been observed in Andean Spanish and varieties of Brazilian Portuguese, and also American Indian Eng-

lish. Varol (2001: 93–4) offers a fascinating discussion of how a child bilingual in French and Turkish attempted to reinterpret the French tense-aspect system to express the Turkish direct and indirect evidentiality. This instance of individual bilingualism and spontaneous reinterpretation of categories to be able to say the same thing in both languages illustrates the diffusability of evidentials.

A major impetus in contact-induced spread of evidentials lies in their importance for effective communication, requirement for clarity, and impact on human behaviour. In many linguistic communities with evidentiality, being precise in one's information source and (p. 172) careful about it is de rigueur. In her discussion of evidentials in Eastern Pomo, McLendon (2003: 113) reports:

> Eastern Pomo speakers from whom I have learned Eastern Pomo since 1959, remembered that when they were children their grandparents constantly reminded them to be careful how they spoke. They were told to be especially careful to speak well to, and about, other people, because if they didn't the person spoken about, or to, might be offended and try to 'poison' them, that is, use ritual or other means to bring them misfortune, illness, or even death. Evidentials which distinguish non-visual sensory experience, inference, memory, and knowledge seem a useful means of speaking with care, asserting only what one has evidence for, and making one's evidence clear.

The factors propitious for a spread of evidentials in language contact include multilingualism and shared discourse genres, and speech practices. In the context of Amazonian societies, the requirement to be precise in one's information sources may be related to the common belief that there is an explicit cause—most often, sorcery—for everything that happens. So as not to be blamed for something that in fact they had no responsibility for, a speaker is careful always to be as explicit as possible about what they have done and how they know about things (see Aikhenvald 2004a: 357–9). This relates to the obligation of stating the evidence for everything that is said (visually obtained information being the most valuable). The speaker is also careful not to impose their assumptions and their information source onto another person. This is potentially dangerous: if the speaker is perceived as having access to how other people know things, they may well be regarded as a sorcerer, with supernatural powers and control over knowledge. In a society where sorcery is the most dangerous crime of all, to be accused of it is hardly desirable. Different conventions in stating information source may create conflicts, miscommunication, and social exclusion. People who live next to each other come to share the conventions, and with them the systems of marking the information source.

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Notes:

([1]) Karatsareas (2009: 209–10) offers an insightful explanation for convergence between languages in contact as a means of reducing the cognitive processing load which may have resulted from exposure to several different language structures. The impact of contact-induced change and convergence between languages in contact has been the topic of a substantial body of literature; see, for instance, Friedman (2000b) on social factors and directionality in borrowing; Johanson and Robbeets (2012) and Johanson (2002) on the processes, and limits, of borrowing or 'copying', and Aikhenvald (2006a) and references therein on convergence and intertranslatability in language contact.

([2]) Here I follow the traditional approach whereby the terms 'linguistic area' and *Sprachbund* are treated as synonyms following the classical definitions by Emeneau (1956) and Sherzer (1973: 760); see also Aikhenvald (2006a). Evidentials are in bold face throughout this chapter.

([3]) See Joseph (2003a: 195), van der Auwera (1998), Friedman (2003, 2006) (and also Mišandeska Tomić 2008) on evidentiality as a defining feature of the Balkans as a linguistic area and especially Chapter 6 of this volume. Friedman (2003, 2006) outlines the extent of the Balkans as a linguistic area. See Johanson (2002: 98–9) on the spread of evidentials into the languages of the Balkans; Friedman (2003: 193) and Kostov (1973: 108) on evidentiality in the Romani varieties in the Balkans.

([4]) See Tekin (1968: 192–3), Friedman (2003: 189 and this volume), Johanson (2002, and this volume).

([5]) See Chirikba (2008: 52, 2003: 263), Friedman (1988a,b) and Tuite (1999: 5) on evidentiality as a feature shared by the Balkans and the Caucasus.

([6]) The Baltic (or Circum-Baltic) region as a linguistic area and evidentiality there are discussed in Klaas (1997); Klaas-Lang and Norvik (2012); Ambrazas (1990: 219–34); Stolz (1991: 45–50); and also Koptjevskaja-Tamm and Wälchli (2001). Sources vary in the terminology used to describe the reported evidential. Some, e.g. Klaas (1997) and Koptjevskaja-Tamm and Wälchli (2001), confuse evidentiality and mood (see Chapter 1 of this volume). Reported evidential in Baltic languages cannot be considered a quotative, because the source of a speech report does not have to be stated.

([7]) Campbell (1991) outlines the mechanisms for the development of reported evidential out of a reinterpreted desubordinated complement of speech verbs (see Metslang and Pajusalu 2002 on evidentials in Southern Estonian dialects; Erelt, Metslang, and Pajusalu (2006: 129) on grammaticalization of present reported evidential in Estonian and language planning of the standard language in the 1920s.). Lithuanian has additional forms signalling inferred evidentiality: see Gronemeyer (1997) and Wiemer (2006b).

([8]) The markers *-nihkà* and *-nhinà* are enclitics which obligatorily take secondary stress; the complex predicate in Tukano is pronounced as one phonological phrase with a stronger stress on the first component and a weaker one on the verb 'be'. This prosodic

similarity is the reason why a complex predicate in Tukano corresponds to one word in Tariana.

([9]) The status of the putative Makú family (see Aikhenvald 2012a: 52–4) and genetic relationships within it are still a matter of debate. An alternative name for the group is Nadahup (a blend of names for Nadëb and Hup, two of the purported members of the family). This name was judged demeaning by native speakers of Hup and Yuhup (since it contains the Portuguese form *nada* 'nothing'; see Aikhenvald 2012a: 53).

([10]) In her approach these reflect 'mode of access' rather than 'information source', and are associated with sentence types. Bruil's (2015) reanalysis of Ecuadorian Siona as a language in which 'evidentiality is not evidentiality', and even the reported marker expresses 'sentential force' rather than information source is dubious. Firstly, it is based on an insufficient corpus of data (see Chapter 1 of this volume). Secondly, the notion of sentence type (interrogative, declarative, and imperative) is confused with other categories such as information source.

([11]) We owe the earliest description of an evidentiality system to Pāṇini, the first grammarian of Classical Sanskrit, who states that the perfect form of a verb is only used for past events not witnessed by the speaker (see Cardona 1997: 148–91, 2002; a summary in Dias 2006 and in Bashir 2006: 2; and §6.5.1 of this volume). Bashir (2006) offers an overview of small evidential systems across South Asia, leaving the issue of potential contact induced change open.

([12]) Reported and quotative constructions (including reported evidentials) appear to be a feature of India as a linguistic area (Saxena 1988: 75; cf. Kuiper 1974: 146). Areal impact from neighbouring Indo-Aryan languages may have contributed to the wealth of quotative and reported constructions in Tibeto-Burman languages (see the arguments in Saxena 1988; and the discussion of quotatives based on verbs of speech in Dravidian and northwest Indo-Aryan languages in Bashir 1996).

([13]) As pointed out by Jacobsen (1986: 8), the broad areal picture drawn by Sherzer may be somewhat vitiated by his failure to distinguish various kinds of evidentials and evidential systems. For instance, the term 'narrative' may in fact refer to a tense-aspect term; and what is called 'quotative' is not necessarily the same as a reported evidential. To his credit, Sherzer defines evidentiality as 'information source', rather than stretching this notion to cover modalities of all varieties.

([14]) A particle marking reported evidentiality is found in four contiguous languages in Central Australia—the Western Desert language (Yankunytjatjara *kunyu*: Goddard 1983: 289), Warlpiri (*nganta*: Laughren 1982: 141), Arrernte (*kwele:* Wilkins 1989: 304) and Warluwarra (Gavan Breen p.c.). The forms are different; but their semantics is strikingly similar. See San Roque and Loughnane (2012a) and Chapter 30 of this volume, on evidentials in the New Guinea Highlands; Aikhenvald (2012a: 277) on evidentiality in Amazonia;

Aikhenvald and Dixon (1998) for some hypotheses about the independent development of evidentials in several places in Amazonia.

([15]) See also Aikhenvald (2004a: 386), on fieldwork methodology with regard to evidentiality and Appendix to Chapter 1 in this volume.

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Ercenür Ünal

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Abstract and Keywords

This chapter investigates how conceptual representations of sources of knowledge make contact with linguistic evidentiality. By drawing on empirical evidence from both adult and child speakers of languages with different evidential systems, the present chapter aims to understand which aspects of cognition are shared by speakers of different languages and which aspects may be susceptible to linguistic influences. Findings from these lines of work support a universalist view of the relation between language and cognition, according to which linguistic categories of evidentiality do not shape, but build on conceptual representations of sources of knowledge that are shared across speakers of different languages.

Keywords: source monitoring, evidentiality, language-cognition interface, language and thought, Theory of Mind, concepts

8.1. Information sources in cognition and language

Humans rely on various experiences to find out new information about the world around them. Information about the world can be acquired directly through various perceptual processes (e.g. *seeing* a vase break) or indirectly through communication or various types of inferences (e.g. *figuring out* that the vase broke based on pieces of glass). These experiences (e.g. visual or auditory perception, hearsay, inference) that characterize the conditions under which we discover information are known as *sources of information* (Johnson, Hashtroudi, and Lindsay 1993). The process of attributing a piece of information to a specific source is known as *source monitoring* (Johnson 1988).

Experimental research has shown that people do not tag their memories with source information. Instead, source monitoring decisions are based on how well the subjective characteristics of a given memory match the generic profile of a source. For instance, if a memory is highly rich in visual details, people tend to attribute it to visual perception (Johnson, 2006; Johnson et al. 1993). Because of the subjective nature of this process, people are not always accurate in their source monitoring decisions. In fact, several studies with speakers of English have shown that people often make source monitoring errors and mistakenly report directly perceiving things that they have only indirectly acquired through imagination, visualization or inferences (Anderson 1984; Durso and Johnson 1980; Johnson, Kahan, and Raye 1984; Johnson, Raye, Wang, and Taylor 1979; Johnson, Taylor, and Raye 1977). For instance, people who have read descriptions of scenes report having seen pictures of those scenes (Intraub and Hoffman 1992); similarly, people who have read sentences that give rise to certain conversational inferences misremember the content of those pragmatic inferences as having been explicitly stated (Bransford and Franks 1971; Brewer 1977; Chan and McDermott 2006; Fazio and Marsh 2010; Harris 1974; Harris and Monaco 1978). (p. 176)

Developmental research on source monitoring has shown that children's understanding of the conditions that lead to knowledge develops over a lengthy period. Visual access seems to be understood early: in simple tasks, even three-year-olds can identify someone who has looked inside a box as knowledgeable about a box's contents over someone who has simply lifted the box (Pillow 1989; cf. Pratt and Bryant 1990). Furthermore, between the ages of four and six, children can selectively use visual access to learn about visible properties of someone such as their hair colour), but children can use verbal communication to learn about invisible properties of someone, such as whether they speak French (Fitneva, Lam, and Dunfield 2013). Furthermore, children report being more confident about their own knowledge when they gain it through visual access compared to being informed by someone else (Koenig, Clement, and Harris 2004; Robinson, Haigh, and Nurmsoo 2008). Understanding the causal link between inferential access and knowledge does not develop until age six (Sodian and Wimmer 1987, cf. Miller, Hardin, and Montgomery 2003, but see Keenan, Ruffman, and Olson 1994). In one study, six- but not four-year-olds could tell that someone who has not looked inside a container filled with balls could infer the colour of the balls using a critical premise (i.e. they knew that the balls were transferred from a transparent container containing balls of the same colour; Sodian and Wimmer 1987). Understanding more subtle distinctions among types of inference continues to develop over the primary school years or sometimes even later (cf. Pillow 1999, 2002; Pillow and Anderson 2006; Pillow, Boyce, and Stein 2000).

In this chapter, we consider how conceptual representations of information sources make contact with language. Human language has the means to encode information sources (through *evidentiality* distinctions) but—as shown throughout this volume—there is considerable cross-linguistic variation in this domain. In many languages, information sources are not grammatically marked: in English, the sentence (1a) can be used whether the speaker has directly witnessed the event or has only indirect information about it, even though it is possible to lexically specify informational access, as in (1b). About a

quarter of the world's languages mark evidential distinctions in their grammatical systems (Aikhenvald 2004a, 2014). For instance, in Turkish, two verbal suffixes, *-dI* and *-mIş*, encode evidential distinctions between direct and indirect past experience respectively (Aksu and Slobin 1986; Aksu-Koç 1988; Göksel and Kerslake 2011; Kornfilt 1997; Slobin and Aksu 1982). In sentence (2a) *-dI* encodes the speaker's firsthand experience of the basic level proposition conveyed in the utterance. In sentence (2b) *-mIş* encodes the speaker's indirect acquisition of the information either through verbal communication or inference. All past-tense sentences involve a choice between these two suffixes.

(1)

a. Ali arrived.

b. I saw/heard/figured out that Ali arrived.

(2)

a. Ali gel-di.
Ali come-PAST.DIR.3SG
Ali came (DIRECT)

b. Ali gel-miş.
Ali come-PAST.INDIR.3SG
Ali came (INDIRECT)

(p. 177) This variation raises the question whether cross-linguistic evidential differences might be reflected in the corresponding source concepts. Could speakers of a language with grammaticalized and obligatory evidential devices, such as Turkish, be less prone to source monitoring errors compared to speakers of a language that lacks such devices, such as English? And might source concepts emerge earlier in learners of languages such as Turkish compared to learners of English?

These questions connect to a broader debate concerning the relation between language and cognition (for recent reviews, see Bowerman and Levinson 2001; Casasanto 2008; Gentner and Goldin-Meadow 2003; Gleitman and Papafragou 2005, 2012; Gumperz and Levinson 1996; Landau, Dessalegn, and Goldberg 2010; Lupyan 2012; Malt and Wolff 2010; Ünal and Papafragou 2016; Wolff and Holmes 2011; see also Sapir 1924; and Whorf 1956 for early discussions). This debate involves two prominent views that both presume that language and thought are tightly related but differ with respect to the direction of the causal flow between language and thought. In one view, habitual differences in the way languages frame the world may lead to differences in how accessible certain conceptual representations are to speakers of these languages (Bowerman and Choi 2001; Bowerman and Levinson 2001; Levinson 2003; Sapir 1924; Whorf 1956). Importantly, the changes in conceptual representations might be more or less permanent, such that they are at play regardless of whether or not speakers are explicitly using language. According to an alternative view, language reflects largely shared universal conceptual representations without changing them (Chomsky 1975; Fodor 1975; Gleitman and Papafragou

2005, 2012; Landau and Jackendoff 1993). This position acknowledges that people may recruit language while performing cognitive computations but posits that these linguistic influences are transient and often diminish or disappear when speakers are prevented from accessing language (Landau et al. 2010; Trueswell and Papafragou 2010). In the specific case of evidentiality, these positions make different predictions, with the former expecting wider language-driven discontinuities in adults' source monitoring performance compared to the latter.

The two broad positions sketched above about the nature of the language-cognition interface have different expectations about how language might relate to cognitive development. If language-specific semantic encoding patterns increase the salience of certain conceptual distinctions, the process of acquiring the semantics of one's language might accelerate cognitive development in the relevant domain (e.g. Bowerman and Choi 2001; Bowerman and Levinson 2001). According to an alternative view, semantic distinctions in language map onto already existing conceptual prerequisites, and thus language builds upon rather than scaffolds cognitive development (e.g. Chomsky 2000; Gleitman 1990; Pinker 1984). In the specific case of evidentiality, the first position expects that acquiring the semantics of obligatory and frequent evidential morphemes might accelerate the development of children's source monitoring, whereas the second position expects source monitoring development to follow a more stable, perhaps universal timetable.

Until recently, most studies of adults' and children's source monitoring had been conducted with speakers of English and other languages where evidentiality is not grammaticalized so these competing predictions could not be addressed. In the sections that follow, we review newly available experimental evidence to assess whether the linguistic encoding of information source affects source monitoring in adults (§8.2) and children (§8.3) from different language backgrounds, and discuss the conclusions in the context of broader theoretical debates about the language–cognition interface.

(p. 178) 8.2. Cross-linguistic variation and adults' source monitoring

Could cross-linguistic differences in the way Turkish and English speakers encode evidentiality in language lead to differences in their memories for information sources? A study by Tosun, Vaid, and Geraci (2013) addressed this question by comparing Turkish and English monolinguals and Turkish-English bilinguals on their memories for information presented in firsthand versus non-firsthand form. In the study phase, participants read sentences presented on a computer screen. In Turkish, half of the sentences were in firsthand form and marked with direct past tense (*-dI*), the other half were in non-firsthand form and marked with indirect past tense (*-mIş*). In English, half of the sentences were in firsthand form and included only a past tense verb (e.g. *Mary missed her flight*), the other half were in non-firsthand form and included an adverbial and a past tense verb (e.g. *Mary allegedly missed her flight*). Later participants completed a memory test in which they were given another set of sentences and reported whether they had read each sen-

tence before, as well as the original form (firsthand versus non-firsthand) of the sentences. English speakers were equally accurate for sentences presented in firsthand and non-firsthand form. Furthermore, their accuracy in reporting the original form of the sentence did not differ depending on whether the sentence was in firsthand or non-firsthand form. By contrast, Turkish monolinguals and Turkish-English bilinguals were less accurate in recognizing sentences presented in non-firsthand form. Furthermore, they misremembered the original form of non-firsthand sentences as having been in firsthand form.

Tosun et al. have argued that these findings support the position that cross-linguistic differences shape source memory. However, several aspects of their methodology raise issues about the interpretation of these cross-linguistic differences. First, the stimuli and the task used for the English and Turkish groups were not equivalent. While English speakers reported merely the presence or absence of a lexical item (i.e. the evidential adverb), Turkish speakers made more detailed judgements and reported which one of the two evidential morphemes (*-dI or -mIş*) marked the verb—which might be harder than remembering lexical items. Second, Tosun et al. did not include an independent measure of cognitive equivalence among English and Turkish speakers. These differences in the stimuli and potential differences among the language groups might drive the cross-linguistic differences in memory performance.

At the very least, these findings suggest that the *explicit* linguistic form of an utterance might influence subsequent memory for the information conveyed in that linguistic message. These findings also cohere with the findings of a recent study with only Turkish-speaking adults, which showed that explicit choices about the evidential morpheme included in linguistic messages might influence suggestibility to misinformation (Aydın and Ceci 2013). Nevertheless, both studies diverge from typical investigations of the language–cognition interface in which speakers of different languages are compared on a *non-linguistic* task (for an overview of studies within this paradigm, see Gleitman and Papafragou 2005, 2012). Thus, both studies leave open the question of whether speaking a language that obligatorily encodes evidentiality influences source memory even in the absence of explicit involvement of language.

(p. 179) A subsequent study by Ünal, Pinto, Bunger, and Papafragou (2016) addressed this question more directly. In an initial experiment, native speakers of English and Turkish were asked to describe photographs of change of state events. Half of the photographs depicted the point after which an event took place so that what happened could be inferred on the basis of post-event visual evidence (e.g. a woman next to bubbles travelling in the air); the other half depicted the point at which an event was unfolding so that what happened could be directly seen (e.g. a woman blowing bubbles). Linguistic descriptions confirmed the presence of strong cross-linguistic differences: English speakers did not use any evidentiality devices in their descriptions, whereas Turkish speakers marked the events they had seen with the direct morpheme (*-dI*) 73% of the time and the events they had inferred with the indirect morpheme (*-mIş*) 64% of the time. Closer inspection of the data revealed that Turkish speakers' use of the indirect evidential for inferred events was sensitive to the strength of the post-event visual cues that gave rise to an inference: in

half of the inferred events, post-event visual cues were ambiguous and clearly different from a perceived event, and Turkish speakers used the indirect morpheme 80% of the time ('high-indirectness' events); in the other half, post-event visual cues yielded secure inferences that were closer to direct perception, and Turkish speakers used the indirect morpheme only 48% of the time ('low-indirectness' events).

Despite these cross-linguistic differences, there were also commonalities in how people from the two language groups handled subtle aspects of information sources. When asked to judge whether they had 'seen' or 'inferred' the events used in the description task, a control group of English speakers chose 'seen' for the seen events (that were also overwhelmingly marked with the direct marker in Turkish), 'inferred' for the high-indirectness events (that consistently elicited indirect morphology in Turkish), and both 'seen' and 'inferred' options equally for the low-indirectness events (that elicited indirect morphology in Turkish only about half of the time). Thus the conceptual distinctions between evidence types drawn by English speakers (whose language lacks grammatical evidential distinctions) appear to align with fine-grained distinctions between direct versus indirect evidence that underlie the use of evidential morphology in Turkish.

To examine potential effects of language on the ability to track sources of information, Ünal et al. (2016) asked new groups of speakers of Turkish and English to complete a source memory task. In a study phase, participants saw the set of photographs from the description task depicting seen and inferred events (alongside additional photographs that served as fillers). In a later memory phase, they saw a second set of photographs where each of the inferred events was replaced by the seen version of the very same event (depicted by the point at which the event unfolded). In both language groups, half of the participants had to merely report whether they had 'seen' or 'not seen' the event, and the other half had to complete more detailed source judgements by choosing one of three options: 'seen', 'inferred' or 'neither'. If language influences source monitoring, then Turkish speakers should be more accurate in their source memories than English speakers, especially for the high-indirectness events that were consistently marked in Turkish with the indirect evidential. If source monitoring is independent from language, then Turkish and English speakers should be equally prone to source monitoring errors. The results were consistent with the second possibility: Turkish and English speakers were equally accurate in their source memory (with accuracy hovering around 70%). Furthermore, for both groups, error rates were higher for low-indirectness events (i.e. events that were closer to perception and were more confusable with seen events) as opposed to high-indirectness events. Finally, when (p. 180) participants who completed the detailed source judgements made an error and failed to report having 'inferred' the event, they reported having 'seen' the event regardless of their linguistic background (cf. also Anderson 1984; Durso and Johnson 1980; Johnson et al. 1977; Johnson et al. 1979).

In sum, studies with Turkish-and English-speaking adults demonstrate that these language groups differ in how they mark source of information linguistically. Cross-linguistic differences in memory performance emerge in contexts where speakers are required to process linguistic material as part of a cognitive task. Nevertheless, these cross-linguistic

differences do not extend to contexts where adults are asked to perform a truly non-linguistic task. Taken together, cross-linguistic studies comparing Turkish and English adults' memories for source of information suggest that long-term experience with the evidential categories of one's native language does not shape conceptual representations of information sources.

8.3. Cross-linguistic variation and children's source monitoring

There is considerable research on the acquisition of evidential morphology (Aksu and Slobin 1986; Aksu-Koç 1988, 2000; Aksu-Koç et al. 2009; Courtney 1999, 2014; Ozturk and Papafragou 2016; Papafragou et al. 2007; Uzundag, Tasci, Küntay, and Aksu-Koç 2016; Ünal and Papafragou 2016; de Villiers et al. 2009; for an overview see Matsui 2014; and Fitneva, Chapter 9 of this volume). Some of this work has also included non-linguistic assessments of children's source monitoring and has found a tight relation between linguistic evidentiality and conceptual representations of information sources (Aksu-Koç 1988, Ozturk and Papafragou 2016; Papafragou, Li, Choi, and Han 2007; Ünal and Papafragou 2013, 2016). In a recent demonstration, young learners of Turkish produced and comprehended the direct evidential (*-dI*) before the indirect evidential (*-mIş*) in linguistic tasks (Ozturk and Papafragou 2016). Interestingly, the same children had higher success in identifying direct sources, such as visual perception, as the experience that led to their own or someone else's beliefs compared to indirect sources, such as inference or hearsay. In another study, Turkish-speaking children between the ages of three and six produced evidential morphemes accurately but had difficulty comprehending evidentially marked utterances (Ünal and Papafragou 2016, cf. also Aksu-Koç 1988; Ozturk and Papafragou 2016; Papafragou et al. 2007). Importantly, in the same study, children of the same age groups had difficulty reasoning about others' evidence even when the task did not involve knowledge of evidential language; but the difficulty disappeared when children were accessing their own information sources. These studies thus reveal asymmetries between sources (direct versus indirect) and perspectives (self versus others) that persist across linguistic and non-linguistic contexts and suggest a homology between linguistic evidentiality and underlying non-linguistic source concepts.

The presence of such homologies leaves all options open as to whether source concepts might be susceptible to influences of language. An obvious possibility that is left open is that processing evidentially marked linguistic information when performing a cognitive task could influence performance (as in the Tosun et al. study with adults in §8.2). Aydın and Ceci (2009, 2013) tested this possibility. In their study, English and Turkish-speaking children between the ages of four and six first heard a narrative describing a birthday party (e.g. 'She spilled the (p. 181) orange juice'). Then, they heard another adult describing misleading information about the birthday party (e.g. 'She spilled the apple juice'). Both the original and the misleading information was evidentially marked in both languages (morphologically with *–dI* or *–mIş* in Turkish and lexically with 'I saw' or 'I heard'

in English). Importantly, the evidential form in the original and the misleading descriptions was either the same (i.e. direct-direct or indirect-indirect) or different (direct-indirect or indirect-direct). Children were given a forced-choice memory task where they had to respond to questions about the details of the birthday party. Of interest was whether children would be less suggestible for original information in direct form followed by misleading information in indirect form compared to the opposite situation, and whether this difference would be greater for Turkish-speaking children compared to English-speaking children. Overall, Turkish-speaking children were more accurate than English-speaking children. However, the interaction between language and the evidential form in the original-misleading information sequence (i.e. direct-indirect versus indirect-direct) that would lend support for the prediction above did not reach significance (even though there was a trend in the direction that the authors expected). Thus, whether the evidential form in an utterance has further cognitive implications in children remains an open question.

A different question is whether distinctions within the domain of information sources might develop earlier in learners of languages such as Turkish that obligatorily or grammatically mark these distinctions compared to learners of languages such as English that mark these distinctions only lexically and thus optionally and less systematically. Notice that the lack of source monitoring differences between Turkish- and English-speaking adults (see §8.2) does not preclude the possibility of language exerting strong and early effects on the development of source reasoning in less mature learners.

A developmental study by Aksu-Koç and colleagues (Aksu-Koç et al. 2009; Ögel-Balaban, Aksu-Koç, and Alp 2012) asked how the acquisition of evidential distinctions might influence the timetable of the development of source monitoring. In a linguistic task, young Turkish speakers between the ages of three and six learned about events through visual perception, inference, or hearsay, and were asked to describe these events. Then children were given two standard source monitoring tasks. In the source choice task (adapted from Gopnik and Graf 1988), children discovered the contents of a box by visual access, verbal communication, or inference, and were asked to report how they came to know about the contents of the container. In the speaker choice task (adapted from Drummey and Newcombe 2002), children heard several statements uttered by two female speakers. Later, children were presented with another set of statements and had to choose which speaker originally uttered each one. Children’s performance in the source task did not correlate with accurate production of evidential morphology in the linguistic task. However, children’s performance in the speaker choice task was predicted by their production of the hearsay morpheme (*-mIş*) in the linguistic task. Furthermore, Aksu-Koç and colleagues argued that the four-year-olds in their speaker choice task outperformed the English-speaking four-year-olds in Drummey and Newcombe’s study. The authors tentatively concluded that the acquisition of evidential morphology can shape the development of source monitoring in language-specific ways, and that, in Turkish, acquiring evidential morphology helps children recall the source of a verbal report (as indexed by the speaker choice task).

Although these findings are suggestive of a relation between linguistic and cognitive development, several factors limit the conclusions that can be drawn about the nature of this relation. First, given that the Turkish indirect evidential, on its hearsay interpretation, (p. 182) does not actually encode the speaker from whom the information is acquired, it is surprising that the production of the hearsay morpheme predicted performance in the speaker choice task. Semantically, there is a straightforward mapping between the meanings of Turkish evidentials and the information sources assessed in the source choice task—and yet children's performance in the source task did not correlate with accurate production of evidential morphology. Second, since this was a correlational study, the direction of the causal relationship between language and cognitive development might be the opposite of what the authors propose. Rather than evidential production driving success on the speaker choice task, it could be that the ability to track the source of a verbal report might drive accuracy in using the indirect evidential in its hearsay function. Finally, it is difficult to make claims about potential cross-linguistic differences in the developmental timetable of source monitoring without directly comparing different language groups (here, English and Turkish learners).

In a study that involved a direct comparison between language groups, Lucas, Lewis, Pala, Wong, and Berridge (2013) tested young learners of English, Turkish, and Chinese on false belief, executive function and flexible trust tasks. In the flexible trust task that is most relevant for present purposes, children had to keep track of two speakers' accuracy in labelling objects in order to be able to select which speaker to trust when learning a label for a novel object. Children were also given standard false belief tasks and executive function measures. The results revealed that only Turkish-speaking four-year-olds performed above chance levels in the false belief task. As expected based on prior research, Chinese children outperformed the other two language groups in the executive function measures. Importantly, in the flexible trust task, Turkish-speaking children performed better than both English-speaking and Chinese-speaking children. The authors hypothesized that Turkish children's superior performance in the false belief and flexible trust tasks can be attributed to learning a language with grammaticalized evidentiality.

Unfortunately, this hypothesis could not be tested directly since Lucas and colleagues did not include a measure of Turkish children's knowledge of evidential language. Furthermore, Lucas and colleagues did not directly test whether the relation between language and flexible trust was mediated by false belief performance, so the mechanism that might transmit language effects on flexible trust is unknown. This is especially important given that the mapping between the meaning conveyed by evidentiality markers (direct, hearsay, or inference) and the information sources in the task (Speaker A versus Speaker B) was not straightforward (as in the studies of Aksu- Koç and colleagues). A more recent study that included a comparison between Turkish- and English-speaking four-year-olds' source monitoring revealed similar performance in the two language groups (Ünal and Papafragou 2015). In that study, Turkish-speaking four-year-olds were highly successful in gaining knowledge about events from both direct/perceptual and indirect/inferential evidence, but had difficulty attributing perception- or inference-based knowledge to someone else for the very same events. Crucially, an age-matched group of English-speak-

ing four-year-olds were no less accurate than their Turkish-speaking peers when tested with the very same tasks.

In another cross-linguistic comparison, Papafragou, Li, Choi, and Han (2007) asked whether the development of source monitoring proceeds differently in learners of English and Korean, a language that morphologically encodes direct evidence (*-e*) versus hearsay (*-tay*). In the Self task children discovered what object was hidden in a doll's house either by looking inside the doll's house or from the experimenter's verbal report, and reported how (p. 183) they knew. In the Others task, children had to identify which one of the two puppets was more knowledgeable about the contents of a container. One of the puppets either looked inside the container or was told about its contents. The other puppet did not gain access to the container's contents because it simply performed an irrelevant action such as kicking or shaking the container. Children had higher success in reporting how they had found out about the hidden object themselves (i.e. Self task) as opposed to identifying the knowledgeable puppet (i.e. Others task). Crucially, there was no language effect, showing that source monitoring proceeds similarly in learners of English and Korean.

In the same study, a subset of the Korean learners was also given an evidential production task. The task showed that these children were in the process of acquiring the evidential distinctions in their language. More detailed comparisons between the evidential comprehension and non-linguistic source monitoring tasks revealed that Korean-speaking children performed better in the non-linguistic task compared to the linguistic task. This asymmetry offers evidence against the possibility that evidential distinctions in language serve as pacesetters for cognitive development. Additional support for this conclusion comes from more recent work with Turkish learners using a fuller battery of matched linguistic and non-linguistic tasks (Ozturk and Papafragou 2016); this work shows that Turkish-speaking children have difficulty with aspects of linguistic evidentiality even after mastering the corresponding information-access concepts. Thus children's knowledge of evidentiality follows, and probably builds on, their ability to handle information sources.

Summarizing, there is currently a small number of cross-linguistic studies on the development of source monitoring. Although some of these studies have reported a source monitoring advantage for Turkish learners over English learners, these studies lacked important controls and suffered from several interpretative issues (Aksu-Koç et al. 2009; Lucas et al. 2013; Ögel-Balaban et al. 2012). One study that did include those controls (Papafragou et al. 2007) found that young learners of English and Korean converge in their source monitoring abilities (see also Ünal and Papafragou 2015). Furthermore, there is evidence that acquiring evidential morphology lags behind the ability to reason about information sources in several respects (Ozturk and Papafragou 2016; Papafragou et al. 2007). Together, findings from these studies support the idea that cognitive development follows a similar timetable across learners of languages with different evidential systems, and that language builds on (rather than shapes) the ability to reason about different types of information access.

8.4. Conclusions

In the present chapter, we have reviewed a growing body of experimental studies addressing the relation between linguistic evidentiality and source monitoring. Our goal was to assess whether the linguistic encoding of information source affects source monitoring in adults and children from different language backgrounds and to use this evidence to throw light on broader theoretical debates about how language interfaces with cognition.

Both adult and developmental studies have shown that linguistic categories of evidentiality have cognitive consequences, but that these linguistic influences are strictly limited to cases where language was explicitly involved in a cognitive task (e.g. contexts in which people (p. 184) had to process sentences with evidential markers; Aydın and Ceci 2009, 2013; Tosun et al. 2013). These cross-linguistic differences did not extend to situations in which speakers were tested with a cognitive task that did not require processing linguistic stimuli (Papafragou et al. 2007; Ünal et al. 2016). Even though some studies claim to have discovered cross-linguistic differences in the development of source monitoring (Aksu-Koç et al. 2009; Lucas et al. 2013; Ögel-Balaban et al. 2012), several aspects of these studies are problematic. Taken together, the available evidence suggests that cross-linguistic variation in the expression of evidentiality does not alter the mechanisms of source monitoring in adults or the timetable of cognitive development in children. In both cases, learned linguistic categories of evidentiality do not serve as a guide to conceptual representations of information sources (and may, in fact, develop later than such conceptual representations in young learners; Ozturk and Papafragou 2016; Papafragou et al. 2007). These conclusions cohere with a broader perspective about the role of language in cognitive processes, according to which the effects of language are carried online, in the moment of performing cognitive computations and do not alter the underlying conceptual structure (cf. also Gleitman and Papafragou 2005, 2012; Ünal and Papafragou 2016, for supporting evidence from other domains).

Further research is needed to gain a richer understanding of how linguistic evidentiality interacts with source concepts. Most of the research reported here has focused on the contrast between grammatical versus lexical encoding of information source. However, there is considerable variation even within the class of grammatical evidential systems, with some systems having several dedicated evidential morphemes within the classes of direct and especially indirect access (see Aikhenvald 2004a, 2014). It is an open question whether richer evidential systems including obligatory (or at least frequently used) distinctions might place different pressures on the source monitoring processes in the minds of the speakers.

This possibility is currently hard to evaluate because we lack information about how more complex evidential systems are actually used during conversation to mark different types of information access (see Ünal et al. 2016). Furthermore, despite their cross-linguistic surface variability, grammatical evidential paradigms appear to be subject to several constraints (Faller 2001; Willett 1988). For instance, the meanings typically encoded by evi-

dentials are abstract (Speas 2004b); many grammatical systems of evidentiality seem to respect the broad semantic distinction between direct/visual access, indirect/inferential and indirect/hearsay access, and even though finer subdivisions within these broad classes are possible, four- and five-way evidential systems are in fact quite rare (Aikhenvald 2014). These broad regularities also appear to affect the learnability of evidential systems (Bartell and Papafragou 2015). Future studies of evidentiality should explore more specific links between semantic evidential distinctions and the corresponding source concepts using careful comparisons of matched linguistic and non-linguistic tasks (cf. Ozturk and Papafragou 2016; Papafragou et al. 2007; Ünal and Papafragou 2016).

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The Acquisition of Evidentiality

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Abstract and Keywords

How do children learn the evidential system of their language? The primary goal of this chapter is to summarize existing research on this topic. Its secondary goal is to position this research within a broader framework of investigating language development focusing on the learner, the target language, and the environment as key explanatory factors. The chapter reviews both observational and experimental studies, the latter exploring the production and comprehension of evidentials as well as their use in assessing the reliability of information. This research provides insight primarily into the contributions of cognitive processes to children's learning of evidentials. The data, however, also hint at how the environment, in particular socialization processes, could help children break the code of evidentials, suggesting that this may be the next frontier of research in the area.

Keywords: evidentiality, language acquisition, production, comprehension, reliability judgements, social interaction

9.1. Introduction

Every language has lexical forms to indicate the source of the information (e.g. ‘I saw’, ‘reportedly’, ‘the teacher said’). In addition, many languages (e.g. Bulgarian, Korean, Tibetan, Turkish) have evidentials, which are grammatical markers of information source. The only difference between the following two Turkish sentences is in the evidential marker used: *-dI* indicates that the reported information is directly acquired, or witnessed, by the speaker and *-mIş* that it is indirectly acquired, e.g. through hearsay or inference.

Ahmed gel-*dI*.
(1) Ahmed come-PAST-EVID:DIRECT
Ahmed came; I have direct evidence.

Ahmed gel-*mış*.
(2) Ahmed come–PAST-EVID:INDIRECT
Ahmed came; I have indirect evidence.

Research on language development usually involves defining the target knowledge children need to acquire and examining possible paths to it. Evidential knowledge has semantic and pragmatic components: learning how forms map to meanings and learning to use the forms appropriately, respecting the discourse and interactional context. The bulk of research on the acquisition of evidentiality to date focuses on the development of semantic competences and we know very little about how children develop sensitivity to social relations and motivations in using evidentials. Still, defining the problem children have to solve in learning evidentials is not straightforward. Three observations illustrate challenges for learners and researchers.

(p. 186) First, the core semantic meaning of evidentials is proposed to be the delineation of the source of knowledge of communicated or queried information (Aikhenvald 2004). They refer to a subset of the conceivable information sources, typically distinguishing one or more of the following six types: vision, non-visual sense, inference, assumption, hearsay, and quotation. Languages partition the conceptual information source space differently both in terms of the number of distinctions they make and where they place the boundaries between evidential categories. Thus, children have to develop precise, language-specific semantic understanding of evidentials.

Second, evidential systems make contact with other semantic domains, notably epistemic modality (the expression of speaker certainty) and mirativity (marking the novelty of the information in relation to the speaker’s other knowledge). Core and derivative meaning is debated for at least some aspect of each of the languages in this chapter. Regardless of the outcome of these debates, evidentials clearly tend to be functionally complex. How do learners break through this complexity and how do we assess its effects on development?

Finally, evidentials need not be used veridically. Speakers can intentionally manipulate them (Aikhenvald 2004; Tamm et al. 2015) or be mistaken. Source memory is a re-constructive process in that it is heavily influenced by the present circumstances and goals of speakers (Johnson et al. 1993). In addition, the acquisition of information at least in some cases involves more than one source (Fitneva 2001). By the time a child talks about an event she has observed, she may have thought about it and heard her mother talk about it. This property of knowledge further complicates learners' tasks.

Many of these challenges have not yet been addressed, reflecting the young age of research on the acquisition of evidentiality. The researchers' task is also affected by linguistic theory, which has been evolving with regards to what exactly evidentiality is and which forms should be considered evidentials. For a long time evidentials were treated as part of epistemic modality, a language system for expressing speakers' attitude (in particular certainty) toward the information they provide (Chafe and Nichols 1986). Correspondingly, epistemic modality framed many early investigations involving evidentials. Recent theoretical developments (e.g. Aikhenvald 2004) indeed invite re-examining the rationale for some of the acquisition research, including what was labelled 'an evidential' and the semantics associated with evidentials. This is an exercise that goes beyond the scope of this chapter and better left to specialists on each of the languages involved.

The chapter focuses on investigations of the development of children's competence with grammatically coded evidentials, i.e. evidentials realized through bound morphemes (as in Turkish) or grammatical word classes such as particles (as in Japanese). Beyond this restriction based on form, however, I have followed the authors' identification of what grammatical elements are evidentials. Not discussed are lexical evidential expressions, evidential extensions of non-evidential categories (known as evidential strategies), and whether the acquisition of evidentiality influences thought.

The chapter has two main parts. The first one describes the course of development of knowledge of evidentials mapped through observational and experimental studies. It is (p. 187) intended for readers interested in the methods and findings of existing research. The second one explores explanations of the development of this knowledge.

9.2. Charting development

Table 9.1 organizes the studies on the acquisition of evidentiality by language (rows) and methodology/competence (columns). As it shows, the languages for which data on children's production and comprehension of evidentials exist are quite diverse. They represent several language families: Turkic, Indo-European, Japanic, Koreanic, Sino-Tibetan, and Quechuan. Evidentials in these languages are expressed through verb morphology (Bulgarian, Korean, Quechua, Romani, Turkish), particles (Cantonese, Japanese), and enclitics (Quechua). In about half of these languages, evidentials are mandatory (Bulgarian, Romani, Turkish, Korean, Tibetan). Table 9.1 also shows that children's knowledge of evi-

dentiality has been assessed in different manifestations (e.g. production, comprehension) and through observational and experimental methods.

Table 9.1 does not include a full description of each evidential system due to space limitations (readers are referred to other chapters in this volume and the cited work for this information). Importantly, acquisition research often focuses on a subset of markers in a language. This may be necessitated by the practicalities of research or the rarity of some evidentials in child (and sometimes adult) language. The research usually concerns 'direct' evidentials, which point to the speaker's direct (perceptual) involvement in the acquisition of the information, and two types of 'indirect' evidentials: one pointing to the involvement of mental inferential processes and the other pointing to the involvement of communication in the acquisition (hearsay).

The following four sections focus on observational production data and experimental production, comprehension, and reliability judgement data. Each section begins with a methodological overview followed by a review of the findings, organized by language. To facilitate cross-referencing across sections, the findings are always presented starting with the languages of the Balkans, moving to those of East Asia, and then to other languages.

9.2.1. Observational data

Observational studies sequence the emergence of evidential markers in the speech of children. They tend to include children younger than those in experimental studies and vary in whether they adopt a longitudinal or cross-sectional format. Longitudinal studies follow usually a small number of children over a period of time. Cross-sectional studies compare groups of children of different ages. Both involve recording and analysing children's conversations and researchers may constrain the interactions to specific events, e.g. meal time or storytelling. The key information observational studies aim to derive is the age-of-acquisition (or emergence) of evidentials and the interpretation children give to the evidential forms. (p. 188)

Table 9.1. Research bearing on the learning of evidentials

Language	Observational Data	Experimental Data			Conceptual Factors	
		Production	Comprehension	Reliability	Theory of mind	Source monitoring
Turkish	Aksu-Koç (1988) Uzundag et al. (2016)	Aksu-Koç (1988) Aksu-Koç and Alici (2000) Aksu-Koç et al. (2009) Ozturk and Papafragou (2016) Ünal and Papafragou (2016)	Aksu-Koç (1988) Aksu-Koç and Alici (2000) Ozturk and Papafragou (2016) Ünal and Papafragou (2016)	Ozturk and Papafragou (2016)	Aksu-Koç and Alici (2000)	Aksu-Koç et al. (2009) Ozturk and Papafragou (2016)
Bulgarian	Georgov (1905, 1908)		Kyuchukov and de Villiers (2009)	Fitneva (2008, 2001)	Kyuchukov and de Villiers (2009)	

Romani			Kyuchukov and de Villiers (2009)		Kyuchukov and de Villiers (2009)	
Korean	Choi (1991, 1995)	Papafragou et al. (2007)	Papafragou et al. (2007)	Papafragou et al. (2007)	Papafragou et al. (2007)	
Japanese	Matsui et al. (2006) Matsui and Yamamoto (2013)			Matsui et al. (2006, 2009)	Matsui et al. (2006, 2009)	
Cantonese	Lee and Law (2001)					
Quechua	Courtney (1999, 2015)			Courtney (2015)		
Tibetan		de Villiers et al. (2009)	de Villiers et al. (2009)			de Villiers et al. (2009)

(p. 189) ### 9.2.1.1. Turkish

In Turkish the evidentials are obligatory verb morphemes that also mark tense and aspect. Turkish children begin to use the direct evidential *-dI* at about eighteen months and the indirect evidential *-mIş* at about twenty-one months (Aksu-Koç 1988). At first,*-mIş* is used to mark new/unexpected information, and a little later it is used in storytelling and to mark an inference based on current results. At twenty-four months, children begin to use another indirect evidential, *-dIr*, to name objects, and at around thirty months, to code information based on inferences from one's long-standing knowledge. Finally, around thirty-six months, children begin to use *-mIş* to mark information obtained from other people (hearsay).

More recent, denser data from bi-weekly recordings of six Turkish-learning children between the ages of eight and thirty-six months were used to further explore the emergence of the different functions of *-mIş* (Uzundag et al. 2016). The data documented non-imitative use of *-mIş* soon after the second birthday for all children. The earliest functions to emerge were to comment on current states (e.g. 'The tea is hot (now that I tasted it)') or non-factual uses such as storytelling and pretend play. In close succession, these functions were followed by the emergence of inferential and hearsay uses of *-mIş*.

9.2.1.2. Bulgarian

Although not well-known, production data for children learning Bulgarian are available from a diary study of two boys (Georgov 1908, 1905). Georgov did not identify the evidentials as such but the emergence of the tense forms with which the direct and indirect evidentials in Bulgarian are associated (aorist and perfect) is documented at about twenty-four months. The difference between hearsay and inference in Bulgarian is grammatically marked only for third person (the copula from the perfect is dropped for hearsay forms). Sentences in third person are quite common in the speech of one of the boys as he spoke about himself in third person. The hearsay form appears in his speech at age twenty-five months.

9.2.1.3. Korean

Korean evidentials are part of a rich system of verb particles expressing epistemic relations. They are obligatory in conversation. Observational data from three children spanning the age period 1;8–2;11 showed that all three began to productively use the markers *-ta, -e, -ci,* and *-tay* in this order (Choi 1991). When children began to distinguish the markers epistemically, they did this by drawing a distinction between unassimilated (hard to integrate with current knowledge) information, expressed by *-ta*, and assimilated information, expressed by *-e*. (*-e* is considered a direct evidential.) With the marker *-ci*, children began to demonstrate sensitivity to whether information was shared with the interlocutor. The marker *-tay,* associated with hearsay information, was the last one to appear in children's speech. Another evidential, *-kwun*, which suggests that the source of knowledge is inference based on present results, was not productively used by the children in the sample.

(p. 190) 9.2.1.4. Japanese

The Japanese evidential particle *-tte*, marking hearsay, is also part of a rich system of markers expressing epistemic relations. Although not obligatory as in Korean, these particles are very common in conversation. Longitudinal data from four Japanese children suggest that *-tte* begins to be productively used along with the particle *-kana* (expressing uncertainty) at about age two, after the particles *-yo* (expressing certainty) and *-ne* (expressing the expectation that the information is shared) (Shirai et al. 2000, as reported by Matsui and Yamamoto 2013).

Matsui and Yamamoto (2013) provide a detailed and elegant analysis of the uses of *-tte* and another quotative particle *-to* in the speech of one child between the ages of two and three. The child used the particles to quote her own and others' utterances, including pretend others, and to quote single words as phrases, e.g. in asking for the meaning of words as in 'What is "school"?' and in using onomatopoeic expressions as in 'The dog says "ruff-ruff".' Comparison of the use of *-tte/-to* by the child and her mother showed that while the child used the particles about equally often to quote utterances and individual words, the mother used them predominantly to quote utterances. The mother was most likely to repeat the child's utterances, while the child's quotes were more likely to be spontaneous, e.g. to introduce imagined speech. Matsui and Yamamoto's work is an important reminder that a hearsay evidentials may not be restricted to introducing communicated information (see also Uzundag et al. 2016 for a similar point in Turkish).

9.2.1.5. Cantonese

Lee and Law's (2001) research on the acquisition of Cantonese evidential particles is based on recordings of child–investigator interactions with some involvement of caregivers. The three children were recorded for about a year each, spanning the age period from 1;7 to 3;8. All children showed use of the particle *lo1* used to point out 'the obvious' (p. 14), such as the present state of affairs, or information that is unquestionable such as in reporting one's own experience. In contrast, only one used the hearsay particle *wo5* and none used the uncertainty particle *gwaa3*. Importantly, the children used lexical devices to mark reported speech, indicating that memory and conceptual issues are not a limiting factor for the production of the hearsay particle.

9.2.1.6. Quechua

Cuzco Quechua has optional evidential enclitics and verb suffixes. Longitudinal and cross-sectional data suggest that the enclitic *-mi* begins to be used to mark direct evidence and the enclitic *-cha* to mark inference between ages three and four (Courtney 1999, 2015). Two-year-old children appear to use *-mi* to mark validation and focus and showed no uses of *-cha* (Courtney 1999). The hearsay enclitic *-si* was only observed nine times by Courtney (2015). It was produced by children aged 4;2 and older mainly for 'delayed mandates', i.e. relaying third party orders. Four-year-olds also used the inflectional suffix *-ra* to mark direct experience and the suffix *-sqa* to mark indirect experience (Courtney 2015). Although these suffixes were frequent in the speech of two-year-olds, they associated them with different kinds of events (events under volitional control and end states

respectively) (p. 191) rather than different kinds of evidence. In the context of elicited storytelling, even children younger than four appeared to associate *-si* and *-sqa* with indirectness. This is in line with proposals that this conversational genre is one of the entry points of evidentials in children's speech.

9.2.1.7. Summary of observational studies

Observational studies reveal significant commonalities in the emergence of evidentials in children's speech across languages. With respect to the question of the age of acquisition, evidential forms first appear in children's speech between the ages of one and three and their evidential meanings appear anywhere between ages two and four. Furthermore, evidentials do not emerge together. Cross-linguistically, direct-experience evidentials appear in children's speech before markers of indirect sources. Interestingly, when a language has different evidentials for inference and hearsay (e.g. Quechua) they emerge in this order paralleling the order in which these meanings come to be expressed by single indirect evidentials, as in Turkish.

The variation in reported ages could be due to the diversity among evidential systems, the methodologies used, and what actually the reported age refers to. Age-of-acquisition is the construct of main interest to language researchers. It is associated with productive use of a marker. The definition of productive use, however, and thus age-of-acquisition, differs across studies. For instance, Choi (1991) defined productive use as using a suffix with three different verbs in a single session and Uzungad et al. (2016) required that the verb-suffix combination did not appear in the previous fifteen adult utterances. In most other studies, researchers report the earliest age associated with a particular use of a marker, i.e. age-of-emergence. While age-of-emergence is important to document, it does not provide clear evidence that evidentials are identified as morphological units by children. These differences among studies put strong constraints on comparing the findings on the development of evidentiality in different languages.

With respect to the question of how children arrive at an evidential interpretation of the markers, conveying source information is a function that emerges late. Temporal, aspectual, and mirative concepts often appear to provide stepping stones to source concepts. A uniquely detailed discussion of how these concepts may be developmentally linked is offered by Aksu-Koç (1988) for Turkish. As a brief example, inferential evidentials are often first involved in marking results (an aspectual notion) and results, or end points of events, are the starting point of inferences.

Observational data offer invaluable insights but they also have important limitations. They are difficult to interpret because the assessment of the meaning conveyed by children depends on being able to see and experience the world through the child's eyes and mind. In addition, assessment of what the child *can* do depends on the opportunities she is provided with. Observational data are often collected opportunistically which can be both a strength and a weakness: a strength because the data may reveal phenomena that we might otherwise miss (e.g. if our theories are wrong) and a weakness because it can limit the quantity of useful data. Finally, assertions about children's mastery of evidentials

are limited even when researchers employ strict criteria for age-of-acquisition. Observational data are rarely analysed (and rarely afford analysis) in terms of whether an evidential could have been used but was not (error of omission), and whether an evidential was incorrectly used (error of (p. 192) commission). Understanding the scope of children's knowledge of evidentials requires assessing whether and what errors they make. Experimental studies overcome some of these limitations and are an important complement of observational research.

9.2.2. Experimental production data

Experimental production studies attempt to elicit production of the target linguistic material in a controlled environment. They control the information available to children and thus can eliminate alternative explanations such as that children's use of evidentials is driven by imitation and reflects memorization of unanalysed linguistic material.

9.2.2.1. Methods

There are several methodologies used to study production. The *event description* method is particularly suitable for elicited production of direct and inference markers. It involves presenting children with a sequence of pictures, a video, or a demonstration either showing an entire event (a balloon being popped) or the beginning and end of the event (an inflated and then popped balloon). Children have to answer 'What happened?' The expectation is that they would use a direct evidential in describing the former situation and an inference evidential to describe the latter situation.

A *re-telling* method is used to test the production of hearsay markers. It involves telling the child about an event, usually with a direct evidential. The expectation here is that in re-telling the information, children would change the direct evidential to a hearsay evidential.

The *correction* method elicits evidentials by motivating children to correct someone else's erroneous presentation of events. It requires change of the received propositional content and capitalizes on a natural and strong motivation. Depending on the child's experience it may also involve change of the evidential.

The *fill-in-the-blank* method minimizes production and memory demands. Here, the experimenter produces part of the event description, leaving only the most relevant part (usually the verb) for the child, e.g. 'The balloon …' This methodology is particularly useful with situations and languages where the evidentials are expected the end of sentences (e.g. verb-final languages or intransitive sentences in SVO languages).

9.2.2.2. Findings

Elicited production methods were first used by Aksu-Koç (1988) with sixty Turkish children three to six years of age (for replication, see Aksu-Koç et al. 2009). Using the event description method, she found that 3;0–3;8 year-olds correctly used *-dI* to describe witnessed events about 87% of the time. The same level of performance with *-mIş* (to de-

scribe events that could only have been inferred) was obtained at about age four. The re-telling procedure was used to elicit the hearsay use of *-mIş*, revealing successful performance at about 4;6.

Ünal and Papafragou (2016) found that even three-year-olds used both *-dI* and *-mIş* appropriately for direct experience and inference respectively when they were presented with live demonstration of an event. Surprisingly, the fill-in-the blank has yielded more conservative estimates. In a study using this method, five- to seven-year-olds produced *-dI* (p. 193) when expected, but only six- and seven-year-olds reliably used *-mIş* in the hearsay condition, and no group achieved above-chance performance in the inference condition (Ozturk and Papafragou 2016). While reducing memory demands, this procedure may interfere with aspects of speech planning that involve evidentials.

Papafragou et al. (2007) studied the production of Korean direct evidential *-e* and the hearsay *-tay* with three- to five-year-olds. They used the correction procedure for the direct evidential and the re-telling procedure for the hearsay evidential. All children correctly produced *-e* when expected. Children achieved above-chance performance in using *-tay* for hearsay at four.

To sum up, although some methods appear to elicit better performance by children than others, in both Turkish and Korean, the elicited production data appear to converge in suggesting that evidentials' meanings are in place by the age of four. Observational studies suggest somewhat earlier age-of-acquisition but given all the differences between observational and experimental methods, the differences in estimates are rather small.

9.2.3. Experimental comprehension data

9.2.3.1. Methods

The most widely used methodology to experimentally study children's comprehension of evidentials is the *sentence-to-speaker matching* task (Who said it?). Children are presented with a picture sequence or videos showing several characters. Depending on when the characters are present, they either witness the event or could infer it. They can also enter the story late and be informed about the event by someone. At the end of the trial, children are presented with pictures of two characters who have experience corresponding to the meaning of different evidentials, e.g. direct experience and inference. Children hear a sentence containing one of the evidentials and have to identify who said it. Across trials, the target sentence contains different evidentials.

Several other comprehension tests were used by Ünal and Papafragou (2016). In a *sentence-to-situation matching* method, the children and the experimenter watch a video depicting an entire event and a video depicting the beginning and end of the same event. Then the experimenter produces a sentence and the child has to identify the video the experimenter is describing. Propositionally, the sentence could apply to either video but if children understand the evidential they can successfully identify the referent.

Acceptability methods present children with a single event. In one variation, children are exposed to two characters who have identical experience of an event but use different evidentials to describe it. Children have to identify 'who said it better?' Another variation involves just one character describing the event. The character uses a matching (correct) evidential or a mismatching (incorrect) one given his informational access. Children's task is to assess the utterance as 'good' or 'silly'.

9.2.3.2. Findings

The comprehension of evidentials is most extensively studied with Turkish learners. Using the sentence-to-speaker matching task, Aksu-Koç (1988) concludes that only the oldest—six-year-olds—in her sample, comprehended *-dI,* and comprehension of the inferential use (p. 194) of *-mIş* is not achieved by that age. Using the same methodology, Ozturk and Papafragou (2016) found linear improvement in the comprehension of inferential and hearsay *-mIş* between the ages of five and seven. Above-chance performance was reached at six and seven respectively. Studies with three- to five-year-olds on children's comprehension of the direct evidential *-dI* and the inferential *-mIş* have failed to elicit evidence of comprehension using several different methodologies (Ünal and Papafragou 2016).

Bulgarian monolingual and Romani-Bulgarian bilingual children appear to comprehend evidentials somewhat earlier. Kyuchukov and de Villiers (2009) presented three- to five-year-olds in both groups with a short story narrated by one puppet with a direct evidential and by another puppet with an indirect evidential. Children had to identify the narrator who saw what happened. The oldest four-year-olds were about 80% correct in this task.

Examining the comprehension of the Korean direct particle *-e* and the indirect particle *-tay* with the sentence-to-speaker matching task and an acceptability task with three- and four-year-old children showed inconsistent performance at both ages (Papafragou et al. 2007).

In a preliminary report of studies on Tibetan, de Villiers et al. (2009) suggest that the direct evidential *'dug* and neutral evidential *yod red* are comprehended before the indirect forms *yod sa red* and *yod kyi red*. Children were instructed to listen to utterances containing evidential markers and to tell whether the speaker had direct (visual) evidence or not for the information described. The oldest group in the study which included children aged eight to nine succeeded with the direct and neutral evidentials but not the indirect ones.

Overall, comprehension tasks appear quite challenging for children. For Korean and Turkish, where experimental production and comprehension data are both available, children perform better on production than comprehension tasks apparently regardless of the format of the compretension test. Ünal and Papafragou (2016) suggest that rather than methodological differences, the lag is due to the conceptual requirements of production and comprehension. In particular, they suggest that the production of evidentials requires the speaker to represent and remember her own sources. Comprehension tasks imply a reverse process: representing the sources semantically and then associating them with a

particular situation or experience. Alternatively, the lag has been related to the development of explicit knowledge—metalinguistic awareness—of evidentials (Aksu-Koç 1988; Aksu-Koç et al. 2009). Metalinguistic questions have been consistently included by Aksu-Koç in her research. Most commonly, after hearing an utterance with an evidential, children are asked 'How does [the speaker] know about this?' As observed by Aksu-Koç (1988) and Aksu-Koç and Alici (2000), young children appear to believe that speakers are certain about what they say and they speak about what they have seen regardless of the evidential the speaker uses. Comprehension tasks may pick up these beliefs.

9.2.4. Experimental reliability judgement data

How do evidentials factor in children's construction of beliefs? Do they make some information more believable than other information? One approach to this question reflects the tradition of epistemic modal interpretation of evidentials. It analyses the contribution of evidentials as a pragmatic implication for computing speaker certainty (Matsui et al. 2006; Ozturk and Papafragou 2016; Papafragou et al. 2007). In addition, it adopts the position that (p. 195) there is a reliability scale for information sources, in particular direct informational is more reliable than indirect informational access (similar to the certainty scale associated with epistemic modals). Grounded in this approach, the majority of studies on how evidentials affect beliefs ask children to compare information presented as direct and information presented as indirect. Usually, the information is about the identity of an object in an opaque box or the location of a hidden object. Children are asked to make a decision on the object's identity or the object's location.

Turkish learners show above-chance preference for statements with the direct evidential *-dI* over statements with the indirect (hearsay/inference) evidential (*-mIş*) at around age six (Ozturk and Papafragou 2016). Korean learners ages three and four show no preference for statements marked with *-e* over ones marked with the indirect *-tay* (Papafragou et al. 2007). Examining the contrast between the particle *-yo* (associated with high certainty) and the hearsay *-tte* with three- to six-year-old Japanese learners, Matsui et al. (2006) found that preference for a statement marked with *-yo* develops between five and six years of age. Courtney (2015) presented Quechua-learning children with an evidential contrast involving both enclitics and verb suffixes: the direct *-mi/-ra* versus the indirect *-si/-sqa*. The three- to four-year-olds showed preference for statements with the indirect evidentials (which is not expected) while the five- to six-year-olds were at chance.

Reliability judgement tasks are expected to be easier than comprehension tasks because they are believed to capture what children actually *do* in response to evidentials, i.e. update their beliefs. Yet they appear to be just as difficult. The two types of tasks share the demand that children focus of the evidential markers rather than the propositional content of a sentence. However, it is possible that the lack of compelling evidence for preference for direct over indirect information is due to a mistaken assumption that evidentials routinely invite reliability assessment and are ranked on a scale just as expressions of certainty. Consistent with the view that evidentials simply add precision to utterances (Aikhenvald 2004), they may not be consistently linked to information reliability and

speaker certainty. One possibility is that the question a listener is trying to answer mediates the influence of evidentials on the listener's uptake of the information (Fitneva 2008, 2001). In one study, Bulgarian children had to find out the location of someone, and in another, they had to solve a mystery (i.e. discover what a boy did on an adventure trip). There was a clear effect of informational goal on nine-year-olds' judgements. For example, in the comparison between inference and hearsay, nine-year-olds preferred hearsay in the first study but inference in the second. Although these findings are suggestive of an effect of informational goal (possibly through highlighting the compatibility between the information and its source), the hypothesis remains to be tested across languages.

9.3. Explaining development

What explains the course of acquisition of evidentiality? Language acquisition work usually focuses on three kinds of factors: the learner, whose conceptual structures and cognitive capacities learning engages, the environment, which includes the learning material and the social interactions that language use is intrinsic to, and the language system itself. While the hypothesis space is vast, two approaches reflecting the nature–nurture tensions (p. 196) in developmental research have been articulated. On the nature side, a learner-centred approach emphasizes conceptual development as an enabling factor in the acquisition of evidentiality (Matsui et al. 2006; Ozturk and Papafragou 2016; Papafragou et al. 2007). On the nurture side is the proposal that the limiting factor is the mapping that children have to perform between linguistic forms and evidential concepts (de Villiers et al. 2009; Ozturk and Papafragou 2016; Papafragou et al. 2007). The social environment is likely to be crucial for successfully executing this mapping.

The learner-centred approach dominates existing research. It evaluates the contribution of children's theory of mind and source monitoring ability to the learning of evidentials. Observational studies have also provided a glimpse at the role of experience empirically linking children's use of evidentials with the availability of evidentials in the input. In addition, they have raised questions about social-interactional influences on the development of evidentiality which are discussed in the section on future directions. However, currently we have no direct evidence on how children solve the mapping task.

Methodologically, claims about the causal role of a factor garner support in two main ways. Strong support is offered by experimental intervention studies where one variable is manipulated and its effect on linguistic behaviour is observed. Weaker support is from studies with correlational designs. When children's competence with evidentials varies as a function of another variable varies that suggests a link between the two variables. Clearly, a correlation may be due to third variables and does not establish the direction of influence between the correlated variables. Nevertheless, it opens the door for considering a causal relationship between the variables. All investigations of evidentiality so far have employed this weaker correlational approach. There is another source of inferences about cause that we may use but is not discussed here: temporal order. A cause precedes

its consequence but in the absence of evidence for a relationship between two events, the question of whether one affects the other is void.

9.3.1. Contribution of the learner

Intuitively, evidentiality relates to our concept of the mind, in particular the origins of knowledge and beliefs. An ability to represent and remember the sources of their knowledge and to conceive of people as having informational access appear to be required for children to be able to produce evidentials and comprehend their use by others (de Villiers and Garfield 2009; Matsui and Yamamoto 2013; Ozturk and Papafragou 2016; Papafragou et al. 2007). Thus, the conceptual underpinnings of the development of evidentiality are seen to reside in children's theory of mind, i.e. the ability to attribute to oneself and others' mental states and to use these mental states in explaining and predicting behaviour. Accordingly, a number of studies have examined the relation between theory of mind understanding and mastery of evidentials.

Two approaches can be distinguished based on assumptions about how evidentials contribute to sentence meaning. One approach focuses on the referential content of evidentials, i.e. information sources and the ability to remember and monitor them (Ozturk and Papafragou 2016; Papafragou et al. 2007). The other focuses on the procedural value of evidentials based on proposals that grammatical elements contribute to meaning by providing (p. 197) instructions about its manipulation (Matsui et al. 2006). The proposal is that evidentials are metarepresentational as with an evidential a piece of information is represented *as* being acquired in a certain way: seen, inferred, heard, etc. (Matsui et al. 2006; Papafragou et al. 2007). This second approach motivated examination of the extent to which metarepresentational ability contributed to children's mastery of evidentials. False belief understanding is assumed to be a cornerstone in metarepresentational development because to understand that a belief can be false recognizes that a situation can be represented as something it is not.

Several types of tasks are used to measure children's source monitoring abilities. The *own source monitoring* task involves presenting children with an entire event or with its beginning and end, allowing an inference that it has occurred. Alternatively, participants can be informed by the experimenter about the occurrence of the event. The children's task is to report how they know. In the *other source monitoring* task, children observe that actors have access to an entire event, partial access allowing inference, or being informed about what happened. Then children are presented with two actors who have had different informational access and asked to identify who saw, was told, or inferred what happened.

Both in Turkish and Korean, children's performance on own and other source monitoring tasks has been examined in relation to performance on production, comprehension, and reliability judgement task. A global source monitoring score (also involving a 'who knows better?' task) correlated with Turkish children's global score on the evidential tasks (Ozturk and Papafragou 2016). However, Aksu-Koç et al. (2009) failed to find a correlation

between performance on production tasks and own source monitoring. For Korean children, accuracy in the production of hearsay marker *-tay* was positively associated with other source monitoring (Papafragou et al. 2007). Thus, the evidence for a connection between own and other source monitoring on the one hand and mastery of evidentials on the other is mixed. This is further highlighted by questions about why some and not other correlations were significant, whether there was correlation among the individual verbal and non-verbal measures that justifies the aggregation of data (especially given ceiling effects on some tasks), and whether the relationships hold controlling for children's age.

More specific approaches have produced more compelling results. Aksu-Koç et al. (2009) found a correlation between Turkish children's memory for who provided them with certain information (tested two weeks after the event) and their ability to produce the reportative *-mIş*. de Villiers et al. (2009) found a positive correlation between Tibetan children's inference-making ability and their ability to use the inferential evidential correctly in answering questions (see also de Villiers and Garfield 2009).

Turning to the metarepresentational foundations of the development of evidentiality, false belief understanding is usually measured by the unexpected content task and the unseen displacement task. In the unexpected content task, children are asked to guess the content of a box, e.g. a Smarties box that actually contains a key. After seeing the actual object, children are asked about their original (false) belief as well as about the (false) belief of a person who has not looked inside the box. In the unseen displacement (Sally–Anne) task, children observe a story in which Sally places an object in one location, say a drawer, and then, in her absence, Anne moves the object to a new location, say a chest. Children have to predict where Sally would look for the object. Responding correctly (that Sally would look in the drawer) indicates that the child recognizes Sally's now false belief.

(p. 198) Just as for source monitoring, the evidence for the idea that the mastery of evidentials is related to metarepresentational ability is mixed. In the same study, false belief performance was found to be positively associated with the comprehension of evidentials for Bulgarian children but not Roma children (Kyuchukov and de Villiers 2009). It was associated with three- to six-year-old Turkish children's production of the deduction evidential *-dIr* but not other aspects of their mastery of this evidential (Aksu-Koç and Alici 2000). Japanese children's performance in a reliability judgement task involving the *-yo* (high certainty) *-tte* (hearsay) contrast also did not correlate with their false belief understanding (Matsui et al. 2006).

The mixture of positive and null findings in the research exploring the relation between children's source monitoring and metarepresentational skills and the development of evidentiality is quite surprising. It suggests that, as operationalized, these conceptual factors have a weak effect on children's acquisition of evidentials. If so, larger and more powerful studies are required to assess the effects. Alternatively, the relationships may have to be conceptualized in different ways (e.g. Aksu-Koç et al. 2009; de Villiers et al. 2009). Furthermore, given the differences among evidential systems, the validity of each relationship may have to be considered separately for each language.

Several other aspects of cognitive development have been evoked in the literature to explain children's mastery of evidentials. For example, perspective-taking skills may play a role in the production-comprehension asymmetry (Aksu-Koç 1988; Ünal and Papafragou 2016). Performance in comprehension tests may furthermore be related to children's 'theory of evidentiality,' i.e. their beliefs about the sources of the information that people communicate (Aksu-Koç 1988; Aksu-Koç et al. 2009). Finally, general abilities related to attention and memory may be implicated in the order effects in the acquisition of evidentials, namely that direct evidentials are usually acquired before indirect evidentials (Aksu-Koç 1988; Courtney 2015; Papafragou et al. 2007). For instance, unlike seeing alone, inference can be analysed as a two-step process: first seeing premise information and then reasoning to compute the inference. Thus understanding inference requires greater attentional and memory resources.

9.3.2. Contribution of the environment

The question about the contribution of the environment focuses on particular properties of the linguistic input and social interaction processes that may provide children with insights about the meaning and use of evidentials. Empirical explorations of this question have focused on the relation between children's mastery of evidentials and evidentials' frequency in the input.

Observational studies reveal that the development of evidentiality is related to the frequency of evidentials in child-directed speech. Impressive because of the depth of analysis, Uzundag et al. (2016) show that the order of emergence of the different functions of the Turkish *-mIş* evidential in child language reflects their relative frequency in child-directed speech. Similarly, Matsui and Yamamoto (2013) show correspondence in the functional and structural properties of the use of the Japanese evidential *-tte/-to* in the speech of a mother and her child. Other studies also show correspondence in the relative frequency of evidential usage between adults and children (Choi 1995, 1991; Courtney 2015; Lee and Law (p. 199) 2001; Matsui et al. 2006); however statistical tests are either not appropriate or not provided and the strength of the relationship is unclear.

The effect of input frequency could be due to nothing more than adults and children talking about the same thing and copying each other (although see Uzundag et al. 2016 for a methodological response to this concern). Moreover, input frequency by itself does not *explain* how children learn evidentials. They do suggest, however, that there is information in the environment that may support acquisition. After all, the frequency of a form in child-directed speech correlates with a number of other potentially important information sources for the acquisition of evidentials: the socio-pragmatic settings their use is associated with (discussed in future directions), lexico-semantic information, and grammatical structure.

9.3.3. Contribution of the language system

Evidential languages present fascinating variability in the number and type of evidential distinctions they make and in the connections with the grammatical systems such as tense and aspect (Aikhenvald 2004; Aksu-Koç 1988). How do these properties of the language system shape the learner's task? No empirical work to date addresses this question but such work can take a number of directions. For instance, Choi (1995) speculates that the earlier acquisition of Korean evidentials compared to Turkish may reflect differences between the languages, including the greater consistency with which Korean evidentials appear at the end of sentences (which may be a perceptually salient position) and their relative functional simplicity (in that they are not related to tense and aspect unlike Turkish evidentials).

Furthermore, the learning of evidentials requires partitioning the conceptual space of informational access along the lines corresponding to the distinctions drawn by the evidentials (Courtney 2015; de Villiers et al. 2009). Thus, it is more appropriate to talk about the acquisition of an evidential system rather than of individual evidentials. One possibility is that the difficulty of the learning task is proportional to the number of evidential contrasts the child needs to carve out. However, more important than the number of evidentials may be the structure of the conceptual domain, i.e. what sources can be and are routinely distinguished by a learner.

Cross-linguistic work is the natural home of exploring how the development of evidentiality is constrained by the properties of evidential system and the language children are learning. Although minimal contrasts between languages are difficult to establish—they vary on more than one dimension—comparative work could also help clarify some of the discrepancies in the existing research findings.

9.3.4. Future directions: social influences on acquisition

On the background of the presently unclear case for strong conceptual constraints on children's learning of evidentiality, a fertile direction for future research is the role of social experiences and processes, e.g. social routines, imitation, and pretend play. These processes were extensively discussed by Aksu-Koç (1988). Although there is renewed interest in them (de Villiers and Garfield 2009; Fitneva 2008; Matsui and Yamamoto 2013), empirical studies evaluating their contribution to learning are lacking.

(p. 200) As an illustration, consider how the social-interactional context could cue the young learner into the situations to which direct, hearsay, and inference evidentials apply. De Villiers and Garfield (2009) note that Tibetan parents' use of a demonstrative expression equivalent to 'Look!' could draw attention not just to the object of attention but also to the situation in which the use of the direct evidential is felicitous (i.e. situations that are looked at). With respect to hearsay, Matsui and Yamamoto (2013) observe that the child's words were the most common object of the mother's quote. Presumably the child can remember what she had just said and compare it with her mother's utterance. Later in development, formal educational settings draw children's attention to indirect sources

of knowledge, too (Fitneva 2008). With respect to inference markers, the mental processes involved are often made salient in the immediate conversation. For example, an inference is often provided with its basis or justification, e.g. 'John must have left. His shoes are not here.' Such juxtapositions of an inferential/deductive statement and its perceptual or other bases have been noted in Tibetan child-directed speech by de Villiers and Garfield (2009). Furthermore, the juxtapositions involved contrasting evidentials, which can support the understanding of evidentials as a system.

Clearly, theoretical and empirical work is required to understand whether, how, and how much social processes contribute to the development of evidentiality. They are likely to play a role, however, for two other reasons. First, in practically all languages the use of evidentials involves 'conventional usage' and is related to genre, e.g. the hearsay evidential is used in folk tales and storytelling. Social conventions are causally opaque and arbitrary. Thus, learning to use evidentials according to the social conventions has to rely on imitation or adult guidance. Second, a number of theories connect the use of evidentials to the social interaction dynamics (Hill and Irvine 1993; Kamio 1997; Nuckolls and Michael 2012). The use of evidentials may relate to the perceived scope of epistemic authority of the speaker and the addressee (Kamio 1997) and responsibility that the speaker is willing to take. Hearsay evidentials especially allow speakers to distinguish the message from the messenger (i.e. themselves). Thus, social roles, situations, and interactional goals could influence children's exposure and interpretation of evidentials.

9.4. Conclusion

Despite impressive progress in understanding the development of children's mastery of evidentials, the field is clearly at the beginning of a long journey. As the research reviewed in this chapter suggests, we are beginning to chart the course of its development. Furthermore, we are beginning to understand what factors may (or may not) be driving development. Fuller understanding of the acquisition of evidentiality requires both breadth, e.g. by examining the contribution of social interaction processes, and depth, e.g. by using alternative variable operationalization and designs.

Two further challenges for future research bear highlighting. One is current theoretical developments. For instance, the distinction between evidentiality and epistemic modality and the concept of markedness may warrant novel experimental approaches. Of note, experimental approaches can also be informative about the nature of grammatical markers. For example, using a test of negation, de Villiers and Garfield (2009) showed that Tibetan (p. 201) children treat '*dug* as an evidential rather than a modal. Based on the logic that a modal's core meaning of certainty does not change but an evidential's contribution to reliability may change depending on the circumstances, Fitneva (2001) argued that the Bulgarian markers are evidentials and children make a distinction between the hearsay and inference forms. The second challenge is expanding research to other languages, in particular languages with rich evidential systems such as Amazonian languages. These evi-

dential systems may exercise unique pressures on the learner and language socialization processes.

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The Interactional and Cultural Pragmatics of Evidentiality in Pastaza Quichua

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Abstract and Keywords

This paper analyses the interactional and pragmatic effects of two evidential enclitics in the Pastaza Quichua language of Amazonian Ecuador. Attention is also given to represented discourse in a variety of genres. The overall goal is a better understanding of the perspectival encoding of experience through evidential enclitics and represented discourse, and the role of these devices in articulating concepts of sociability and politeness principles. A broader aim is to clarify how discourse practices making use of evidentiality and represented discourse may clarify Quichua peoples' understandings of their relationships with each other and with non-human nature. Finally, this paper points to the need for future work which attempts to disentangle evidentiality from epistemic modality in Pastaza Quichua by suggesting that epistemic modality may be generated from evidentials as an implicature that depends in part on intonation.

Keywords: evidentiality, pragmatics, represented discourse, epistemic modality, Pastaza Quichua

10.1. Introduction

This chapter analyses the interactional and pragmatic effects of two evidential enclitics in the Pastaza Quichua (PQ) language of Amazonian Ecuador. The first to be analysed, *-mi*, marks a source of knowledge as based on the perspective of the speaker of a speech event or on the perspective of the speaker of a reported speech event. The second enclitic *-shi* marks the source of knowledge of an 'other', who may be a specific or a non-specific individual. What counts as knowledge for PQ speakers is tied to cultural matters involving peoples' understandings about their relationships with each other as well as their relations with non-human nature. Much less important for assessing what is assertable as

knowledge is the putative contrast between direct and indirect evidence/experience, which is often assumed to be a definitive component of evidential systems.

This pre-theoretical opposition has been deployed in many studies on evidentiality and it continues to form the basis for its typological categorization. The assumed contrast between direct and indirect experience is an imperfect heuristic for the study of evidential systems because it carries a *tabula rasa* assumption within it, namely, the assumption that learning mainly takes place through sensory experience, and that the mind is primarily a processing mechanism for sensations.

This is problematic because it ignores the cultural and psychological scaffolding that is essential for human learning, and which seems to have been alluded to in Boas' description of evidentials for Kwakiutl (1911b: 443) where he described them as marking 'source of subjective knowledge'. If we consider evidentials as encoding source of subjective knowledge, then their patterning in Pastaza Quichua discourse seems very coherent. In particular, as I have argued (Nuckolls 2008; Nuckolls and Michael 2014), the deictic nature of evidentiality (p. 203) becomes central to this system, which is congenial with findings on the deictic nature of evidentiality more generally (see Joseph 2003b: 308), as well as with the findings on a range of Quechua dialects (Dedenbach-Salazar Saenz 1997; Faller 2004; Floyd 1999; Hintz and Hintz 2017; D. M. Hintz 2007; Howard 2014).

This chapter, then, has two interrelated goals which build on past work. First, using concepts from linguistic pragmatics, I will clarify how the use of Pastaza Quichua (PQ) evidentials to provide a framework for knowledge source generates an array of implicatures, communicating speech act-like utterances with various kinds of illocutionary force which may be tied to epistemic modality.

Since making inferences about evidential implications in the Pastaza Quichua dialect must also take into account the distinctive cultural frameworks that make such inferences possible, I will also identify important aspects of these frameworks, particularly as they concern the problematic nature of general statements, standards for proper social behaviour, and an understanding of human and non-human interrelations. An adequate appreciation of Pastaza Quichua cultural frameworks is facilitated, in part, by Gricean maxims, although the maxim of quality needs to be refined to account for the importance of perspective over evidence. The practice of representing discourse with speech reports in evidentially marked statements is another important tool because it facilitates the expression of a perspective without committing oneself to the ultimate truth or verifiability of that perspective.

My second overall objective is to offer a tentative solution to the problem of how to untangle evidentiality from epistemic modality in Pastaza Quichua. Detailed studies of the intonation of this language are lacking but needed, since speakers use intonation, not only for expressive foregrounding of depictive, sound-symbolic meaning (Nuckolls 1996), but also for the pragmatic interpretations of many kinds of utterances. Several of the sentence ex-

amples cited here which communicate certainty, suggest that epistemic modality may be generated from evidentials as an implicature that depends, in part, on intonation.

10.1.1. Pastaza Quichua evidentiality, epistemic modality, perspectivism, and politeness

Pastaza Quichua belongs to the Quechua IIB dialects that are spoken in the Eastern foothills of the Andean mountains and extending into the lowlands of Ecuador, as well as into Colombia and Northern Peru[1]. Quechua's dialect divisions in Eastern Ecuador have not been the subject of sustained scholarly attention since the work of SIL linguists Orr and Wrisley (1965), which posited the existence of the Bobonaza, Tena, and Limoncocha dialects.

Although my examples are drawn from speakers affiliated with the Bobonaza dialect, I use the more encompassing term Pastaza Quichua, or PQ, after the name of the Pastaza Province in which many speakers from various dialects now live. Table 10.1 shows the markers of interactional evidentiality in Pastaza Quichua. (p. 204)

Table 10.1. Interactional evidentiality in Pastaza Quichua
-*mi* marks perspective of speech event speaker or speech report speaker
-*shi* marks perspective of someone who is not the speaker of the speech event or speech report, i.e. an 'other'
-*cha* marks perspective as unknown

I begin my discussion of evidential suffixes in PQ by focusing on the enclitic -*mi*, which is used when a source of knowledge is the speaker of a speech event, or the speaker of a reported speech event. I will then discuss the -*shi* enclitic, which marks a source of knowledge arising from an 'other'. Since speakers' sources of knowledge are often based on what they or others have said, both -*mi* and -*shi* evidentials are often used within speech reports. Besides -*mi* and -*shi*, there is a conjectural evidential in Pastaza Quichua, -*cha*, that will not be discussed here.

Nor will I consider the patterning of evidentials in other varieties of Quechua, despite the fact that they are widely attested throughout various dialects and exhibit some similarities as well as interesting differences. Work by Hintz and Hintz (2017) for example, reveals that some evidential systems in Peruvian varieties of Quechua encode distinctions between individual versus conjoint knowledge.

To adequately grasp the evidential functions of -*mi* and -*shi* in Pastaza Quichua, it's necessary to explain that they contrast with another, non-evidential enclitic, the interrogative/negative -*chu*. When they are in contrast with -*chu*, which may be used to ask a yes/no question, -*mi* and -*shi* most typically function to make assertions. Insofar as they do this,

they assist in the expression of the indicative mood, which may be linked with epistemic modality.

However, it is possible to make a statement that is grammatically indicative without being certain. In English, for example, a sentence such as 'John got an A on the test', with the proper intonation may be turned into a sceptical comment about the validity of the proposition that John got the A grade. In such a case, the grammatically indicative mood would have a pragmatically dubitative modality superimposed on it by the intonation. Certainty and lack of certainty, then, are not only expressed by indicative or interrogative syntactic structures. They may be expressed by means of intonational elaboration as well, a point that will be relevant in subsequent examples.

Because of the complexities that actual examples with intonation and social context bring to an analysis, I consider for the sake of simplicity, examples that I have generated for analysis. These examples are perfectly grammatical and may be found in actual discourse. To clarify their status as my own, I will subsequently refer to such examples as 'decontextualized'.

The first set of decontextualized examples (1)–(4) illustrate basic grammatical distinctions in PQ. Example (1) illustrates the use of *-chu* to focus on the theme or topic of a yes/no question:

	Faviola	ri-ra-**chu**?
(1)	Faviola	go-PAST-INTER
	Did Faviola **go**?	

(p. 205) Example (2) illustrates the use of *-mi* to articulate a positive response to the question in example 1. In this example, the use of *-mi* asserts that the speaker of the statement is making an assertion from his or her own perspective:

	Nda.	Faviola ri-ra-**mi**
(2)	Yes.	Faviola go-PAST-EVID1
	Yes. Faviola **went**.	

Example (3) illustrates a possible negative response to the same question, using the *mana -chu* combination to deny that Faviola went:

	Faviola	mana	ri-ra-**chu**
(3)	Faviola	NEG	go-PAST-NEG
	Faviola **didn't** go.		

Examples (1)–(3) illustrate simple statements which foreground the interrogative, assertive, and negative functions of *-mi* and *-chu*. In these decontextualized examples, it is difficult to separate the epistemic modality from the evidentiality. This is particularly true for examples (2) and (3), which are expressing assertions, but at the same time, making statements based on the perspective of the speaker.[2]

In these examples, the speaker is claiming, based on his or her own knowledge, that Faviola has gone or has not gone. A language without an evidential contrast would allow one to simply say that Faviola had gone, and the perspective underlying such a statement would have to be implied rather than explicit as it is for PQ speakers.

Example (4), however, offers an additional variation, which makes the evidentiality of *-mi* more salient through its contrast with evidential *-shi*. In example (4), a speaker states that Faviola left, but in this instance, the speaker is not claiming to be the source of this knowledge:

(4)

Faviola	ri-ra-**shi**.
Faviola	go-PAST-EVID2
Faviola left. (according to someone)	

In discourse contexts from everyday life, a speaker uttering such a *-shi* marked statement will often add qualifying remarks such as: ‘Uncle Venancio said she was going’ or, ‘Somebody said that somebody else saw her leave early this morning’, which would clarify where the claim originated. Despite the fact that a *-shi* statement indicates that someone else’s knowledge underlies the assertion, there is not necessarily any implication that the statement is unreliable, as will be shown in subsequent examples.

For the PQ language, sorting out the difference between epistemic modality and evidentiality involves clarifying whether or not one is committed to what one asserts, which is a matter of epistemic modality as well as clarifying whether one is making an assertion either (p. 206) from one’s own perspective, or from the perspective of another, which is evidentiality proper. Speakers may be primarily doing one or the other, or they may be doing both. Separating the two distinctions requires an understanding of cultural matters having to do with outlooks on knowledge and how the expression of a perspective on knowledge is different from epistemic modality.

Speakers of Pastaza Quichua are careful to clarify the sources of their statements, *not* because they wish to be empirically accountable to objective facts that are verified by means of evidence. Rather, they exercise such care because there is a cultural preference for contextualizing statements within what Nuckolls and Swanson have termed a ‘concrete perspective’. A concrete perspective is one which involves specifying the details that make any statement intelligible, such as speakers’ personal experiences and memories of specific places, activities, and knowledge about people in their social networks (Nuckolls 2010; Nuckolls and Swanson 2014).

Although being empirically objective and carefully framing a statement's perspective may at times seem to converge with the same end result, namely, a statement that is careful about making any claims at all, the underlying motivations are different. Speakers wishing to be careful about making only empirically based claims would have to be concerned with an abstract, de-contextualized notion of truth. In Amazonian Quichua culture, by contrast, there is a moral and aesthetic preference for articulating the perspective from which a statement is made. This perspectivism is not only part of human communication. It is part of Quichua peoples' animistic cosmology, which allows for the possibility that all life is capable of articulating a perspective.

However, there doesn't seem to be much interest on the part of PQ speakers in articulating a synthesis of multiple perspectives to arrive at a final, coherent picture. Instead, PQ speakers are anxious to avoid a kind of moral presumptuousness, which is how speaking about others' actions and words, without properly contextualized knowledge, is interpreted. Perspectivism for PQ speakers, then, seems motivated, in part, by a kind of negative politeness (Brown and Levinson 1987), in that speakers do not wish to impose on others by presuming to speak for them.

PQ speakers' disinclination to impose upon, or speak for others may be related to findings from other Amazonian cultures as well as small scale societies elsewhere, which value precision and care when claiming knowledge about anything (Aikhenvald 2014: 38–41). The concept of 'warrant for knowledge', discussed by Hanks (2014: 6), which involves the idea that claims for knowledge have to be balanced by a person's rights to express that knowledge, is relevant here as well, and has been mentioned in work on evidentiality by Michael (2014); Mushin (2014); and Sidnell (2014).

The contrast between the goal of being empirically accountable, and being perspectivally 'warranted' becomes most apparent for the anthropological linguist when attempting to elicit generic or summary statements, such as definitions, answers to general questions about language use or about hypothetically possible grammatical structures or situations (Nuckolls and Swanson 2014). These kinds of questions are in many instances resisted. The claim that speaker perspective underlies the evidential contrast between *-mi* and *-shi* is not, therefore, based on native speaker metapragmatic assessments. It is based on years of attempting to understand grammar, usage, and culture by observing and inferring.

In what follows, I present examples of the interactive effects and implications of speakers' use of the *-mi* and *-shi* evidentials. The pragmatics of evidential *-mi* will first be outlined, (p. 207) followed by the interactive effects of evidential *-shi*. As stated earlier, the untangling of evidentiality from epistemic modality in PQ can be a complicated matter. However, I focus on the evidential functions of these suffixes because they mark speaker perspective, which is critically important for cultural reasons, and is always part of statements marked with these forms. The nuances of epistemically modal implications, by contrast, often have to be inferred from contexts.

10.2. Evidential *-mi*

Before delving into the semantics and pragmatics of evidential *-mi*, it is necessary to point out an important difference between PQ and a standard average European language like English. I am not claiming that there is a causal correlation between the existence of this difference and the presence of evidentiality in PQ. This difference does, however, have implications for evidentiality.

Unlike many languages familiar to linguists, Pastaza Quichua is impoverished with respect to illocutionary verbs. Verbs such as ‘to warn’, ‘to announce’, ‘to proclaim’, ‘to threaten’, ‘to reassure’, ‘to insist’, are just a sample of the many illocutionary speech act verbs that populate everyday English language discourse.

By contrast, PQ verbs that involve speaking constitute an extremely small group. They include: *nina* ‘to say’, which is often used to frame quoted speech; *rimana* ‘to speak, tell’, which simply states that speaking took place, but not necessarily anything about the content of what was spoken; *kaparina* ‘to shout’; and *kamina* ‘to insult’[3].

Despite this impoverishment of speech act verbs, PQ speakers are able to marshal the resources of their language to express some very subtle thoughts and sentiments, for which evidentials play a crucial role. The examples to follow will consider how evidential *-mi*, which marks the speaker as the source of a statement’s knowledge, along with other elements of context, contribute to a variety of utterances with speech act effects, which can imply epistemic modality.

One element that has a strong supporting role in helping to communicate speech act effects, is the abundant use of speech reports[4]. In certain contexts, a report of what has been said, whether it is an accurate representation or not, has implications that are analogous to what would be created through the use of speech act verbs such as insisting, blaming, accusing, and threatening, all of which involve elements of epistemic modality, since they are all based on certainty.

(p. 208) 10.2.1. Evidential *-mi* in speech act utterances

I begin with example (5), which has been mentioned as an instance of *-mi*'s focusing functions (Nuckolls 2008: 73), as well as proof that *-mi* is not just used to mark what is directly or sensorily evident (Nuckolls 1993: 241). The example was recorded in the settlement of Puka yaku in 1988, during conversations between a group of women. They were examining a baby who was the size of a newborn, but who was actually, at the time, about seven months old. The baby had been given up by her birth mother in hopes that someone else would be able to raise her. All of the birth mother's previously born children had died in infancy. Despite what these women knew about the baby's tragic family history, one of them made the following statements:[5]

(5)

Wiña-nga-**mi**	wawa;	wira-ya-w-n-**mi**;	kunan rik-i	maki ruku.
Grow-FUT-EVID1	baby	fat-INCH-DUR-3-EVID1	now look-IMP	hand big

(This) baby **will grow up**; she **is getting fat**; now look at her big hands (she insisted, hopefully).

To contextualize this example, it is necessary, first of all, to explain that making statements about a baby's future prospects was not at all the done thing when I was conducting my dissertation field work in 1987–8. For one thing, infants typically survived infancy in Puka yaku, making statements about their future prospects unnecessary. Furthermore, PQ speakers are, for cultural reasons, extremely reluctant to engage in hypothetical speculation about the future, and this is especially true when discussing the future of children (Nuckolls and Swanson 2014: 50–1).

The fact that this woman was willing to say what she said is an immediate tip off that the situation was an exceptional one, allowing typical speaking norms to be violated, in order for implied messages to be communicated.[6] An implicature generated by these statements is that the woman making them felt compelled by her knowledge of the baby's unfortunate background, to express a hope rather than a predictive statement.

The speaker, a woman named Camilla, can be described as violating the Gricean maxim of quantity, which involves saying no more than is necessary, especially in these circumstances, where making any kind of predictive statement could be seen as inappropriate. She (p. 209) can also be said to be violating the maxim of quality, which requires that a speaker does not say that for which evidence is lacking. This particular maxim, however, needs to be rephrased to make it culturally appropriate for PQ speakers as: don't say that for which you have no adequate perspective. Camilla's perspective on the baby's family history should have prevented her from making such a claim. The fact that she violated this maxim leads us to the inference that she was being hopeful.

In addition to the implicature of hopefulness generated by Camilla's statements, there are contextualization cues in her intonation. If Quichua had a verb that meant 'to insist', it would be appropriate to use such a verb to paraphrase what the speaker is doing when

she states, unequivocally, that the baby will grow up and become fat. There is an understated, but unshakable-sounding conviction in the intonation of her assertions.

Additional examples of evidential *-mi* used in speech act utterances abound. In many such examples, the illocutionary force of evidentially marked *-mi* statements can only be understood with reference to PQ conceptions of sociability. As is true of Amazonian cultures in general (Overing and Passes 1998), Pastaza Quichua culture places great emphasis on sociability and conviviality. For PQ speakers, a positive face is associated with someone who exhibits a pleasant demeanour. The ability to laugh and joke is a critical ingredient for PQ sociability. No matter how one is feeling, it is important to exhibit one's most pleasant self to others (Nuckolls 2015).

10.2.2. Evidential *-mi* in face-threatening acts

Within this cultural setting it is possible to generate 'face-threatening' speech acts such as accusing, threatening, and warning by means of utterances which violate the strong expectation that positive face needs will be respected. The occurrence of such violations can be found occasionally in everyday life. However, since overt expressions of conflict are so stigmatized in PQ culture, they are more easily located as *representations* of violations in narratives of personal experience or in traditional narratives that are in constant circulation.

One indicator of such face-threatening acts is the use of evidential *-mi* to focus on a second person inflected verb, or on the second person pronoun *kan* 'you'. Although I have not done an actual statistical count, my casual observation is that the use of evidential *-mi* is found only sporadically with second person forms of verbs and with the second person pronouns *kan* 'you' and *kanguna* 'you-PL'. Evidential *-mi* is far more common on first and third person forms.

Assuming that I am correct, it is possible to understand this pattern as related, at least in part, to a cultural reluctance on the part of PQ speakers to assume the perspective of another individual by presuming to make claims about their thoughts and intentions. This reluctance can be understood as a type of negative politeness because it is characterized by restraint, and the desire to not impose one's views, evaluations, judgements, and suspicions on others.[7]

(p. 210) When a person is directly addressed with the pronoun *kan* 'you', therefore, this is an indicator that the statement could be highly significant, momentous, or even confrontational (Nuckolls 2014). Furthermore, if this second person pronoun is suffixed with the *-mi* evidential, we then have a perfect storm of conditions for the unfolding of a variety of face-threatening, speech act-like utterances.

Consider example (6), taken from a traditional narrative, with an Oedipal theme, about the loss of immortality (Nuckolls 2003). This loss is said to be the result of the actions of a young man, who is portrayed as unknowingly violating his own mother. In this extract, the

boy's sister blames him for the loss of immortality, effectively accusing him of bringing it about by his actions:

(6)

Kan-manda-**mi**	kasna	tuku-nchi	ni-shka.
You-from-EVID1	like.this	become-1PL	say-PERV

Because of you we have become like this, she said (accusing him).

This example also illustrates the shiftability of evidential *-mi*. In this instance, it shifts the perspective of the statement from the actual speaker who narrates the story to the persona of one of its protagonists, namely, the sister, whose words are represented. Evidential *-mi* shifts from the speaking self of the speech event to the speaking self (i.e. the sister), of the narrated event (Nuckolls 2008).

An example from another traditional narrative features evidential *-mi* in a 'moment of truth' statement, where people suddenly realize that a certain man has actually been a bloodthirsty, cannibalistic monster, responsible for killing and eating many people. They directly express their realization with evidential *-mi*:

(7)

Kan-**mi**	wañuchi-sha	puri-k	a-shka-ngi	ni-nawn-**shi**
You-EVID1	kill-COR	walk-AG	be-PERV-2	say-3PL-EVID2

'**You (are the one who has)** been going about killing', **they said.**

Examples of face-threatening acts accomplished with evidential *-mi* on a second person pronoun may also be cited from personal experience narratives. Example (8) is from a lengthy account told by a woman whose husband, while in the Ecuadorian military, became lost in the forest, along with a small group of men, for several months. They became lost because their *teniente*, or 'lieutenant' insisted on crossing the border into Peru and socializing with Peruvian military personnel, even though such socializing was forbidden because of border tensions at the time.

The encounter goes badly for the Ecuadorians, who end up being fired upon by the Peruvians. The result is that the men have to abandon their canoes and make their way back home on foot through unfamiliar territory for a total of three months. At a certain point, the *teniente* who (p. 211) initiated the disastrous encounter was unable to keep going and had to be left behind with a few other men who were also unable to go on. At this point, the *teniente* is represented as being addressed with acrimonious, bitter words by the narrator's husband, who blames him for their terrible predicament, using the second person pronoun *kan* with evidential *-mi*:

	Kan-**mi**	pusha-ra-ngi,	ri-ki!
(8)	You-EVID1	bring.along-PAST-2	look-IMP
	You (are the one) who brought us (to this point), look!		

With these words, the narrator's husband redefines his relationship with his superior officer. By directly blaming him, the narrator's husband is able to justify taking charge of the situation and, along with several other men, continuing to go forward to reach help.

A final example of *-mi*'s role in second person, face-threatening, speech act-like utterances illustrates a type of face-threatening act, which under the circumstances may also be viewed as a face-saving act. With this example we have a personal experience narrative account of the immediate aftermath of a man's assassination.

The man had been a charismatic shaman figure who had been thought to be the instigator of magical aggression against the families of the assassins. After he was assassinated, the shaman's sister was said to have shouted the following at the assassins as they walked away from the scene of the crime:

	Ña-ʲla-**mi**	wañu-ngi	ni-sha	kapari-n
(9)	soon-LIM-EVID1	die-2	say-COR	shout-3
	Saying '**Soon** you're going to die' she shouts (at them)			

With her words, the shaman's sister utters a retaliatory threat against the assassins, which is required for defending her family's honour, and which is a type of face-saving action. Her words are represented as directly addressing the assassins in the second person.

Example (9) demonstrates that face-threatening speech acts do not necessarily depend on *-mi* being attached to the pronoun *kan* 'you'. In this example evidential *-mi* is suffixed to the word for 'soon' *ña-ʲla*, because it is the immediacy of the threatened consequences that is being emphasized. The identity of the assassins is clearly known, since their deed was witnessed by the victim's family. No need, therefore, to focus on the pronoun for accusing or blaming. The culpability of the assassins, after all, is established.

Because of constraints on space, further examples of evidential *-mi* with other kinds of speech act functions, such as announcing important, life-changing circumstances or happenings will not be presented here.[8] Instead, I discuss some of the less commonly occurring functions of *-mi* in the next section.

10.2.3. Evidential *-mi* in questions and generic statements

All of the examples in this chapter thus far have demonstrated that evidential *-mi* assists a speaker in 'spotlighting' exactly where his or her perspective is to be focused. As a special (p. 212) type of enclitic suffix, *-mi* has the potential to occur in final position on any form class, whether noun, adjective, verb, or adverb. Not all such focusing, however, has to do with the kinds of momentous, face-threatening illocutionary acts that have been the subject of the last several examples.

The next example, by contrast, concerns an extremely trivial matter. It occurred in an actual exchange I observed between two women. Speaker F was leaving the house of speaker C and as she passed a heap of trash, she noticed a basket that had been discarded. She shouted the following question, using *-mi* on the word for basket:

(10)

Oooooh!	Kamba	ashanga-ta-**mi**	ni-ngi-chu	Camilla?
Hey	Your	basket-ACC-EVID1	want-2-INTER	Camilla

Hey! Do you want your **basket**, Camilla?

The occurrence of *-mi* in a question is unusual and noteworthy, since the overwhelming majority of PQ evidentials occur in statements.[9]

In this example, evidential *-mi* is used to focus on the word for basket, because the other interlocutor, speaker C, was not at that moment aware of the fact that the basket was relevant to anything that the two of them had just been discussing. What speaker F accomplishes, then, with her use of *-mi* on the word for basket, is the focusing in on the predicate 'basket' for the purpose of asking about it.

In this case, then, we can say that the speaker-perspectivizing function of evidentiality is not working on behalf of the broader proposition involving Camilla wanting the basket. Rather, it assists in the expression of the speaker's perspective on the existence of a new proposition, namely, that there is a basket, and that, for speaker F, the existence of the basket is suddenly of interest.[10]

I turn now to a final example of evidential *-mi*, which functions to express something like a generic statement, though without any implication of the probabilistic frequency said to typify generics (Cohen 1999). We have, instead, a general statement about a gender-based division of labour for preparing meat. Example (11) occurs at the beginning of a hunting story from the narrator's childhood. It is mentioned within a description of how she and her sister were smoking the meat which the men had already skinned. She then

stepped, for a couple of sentences, outside of narrative time, to explain that men had the job of skinning meat:

	Kari-**mi**	ʲuchu-g	a-nawn.
(11)	Men-EVID1	skin-AG	be-3PL
	(The) men (are the ones who) skin (the meat)		

(p. 213) Her generic statement uses the habitual aspectual construction, consisting of an agentivized form of the verb *ʲuchuna* 'to skin' together with the finite verb *ana* 'to be'. A more literal translation of this sentence would be: 'men are the skinners'.

10.3. Evidential *-shi*

Evidential *-shi* may be analysed as the conceptual counterpart of *-mi*. While *-mi* marks the knowledge source of a speaking self, whether of a speech event or a narrative event, evidential *-shi* marks the knowledge source as arising from an 'other'. Just as *-mi* may focus on any element of an utterance to mark the speaker's perspective on knowledge, the 'other' evidential *-shi* may do the same.

As stated earlier, we will not be delving into the use of the third member of the evidential set of suffixes *-cha*, which speakers employ when they want to specify an unknown perspective, which means that a speaker is stating something that is not grounded either in that speaker's or anyone else's perspective, all of which implies a lack of certainty.

The usage of *-shi* does not mean that a speaker is casting doubt on a proposition. Instead, a speaker's use of *-shi* has the effect of bringing in the perspective of another person, through whom a statement is being made, or, less commonly, it invokes a kind of puzzling state of wonder about something.

In contrast with statements containing *-mi*, which can express strong, on record, face-threatening acts, statements containing *-shi* can create implications that invite subtler meanings by bringing in a perspective that is not one's own. As stated earlier, there is a cultural reluctance on the part of PQ speakers to assume the perspective of another individual by presuming to know their thoughts and intentions. This is why many statements made about another person's actions, words, or motives are often carefully framed as not arising from the speaker's own perspective, but rather, from the perspective of an 'other'.

10.3.1. Evidential *-shi* for a non-specific other

I begin by citing examples of evidential *-shi* which articulate the perspective of an unidentified, non-specific other. To demonstrate the power of being non-specific about who the other might be, I present two examples. Both are generic-like statements, but they are at-

tributed to the perspectives of non-specific individuals. These examples show that generic statements can be articulated not only with *-mi* as in example (11), but also with *-shi*.

Example (12) is drawn from the same assassination narrative as example (9). This statement was offered as an explanation for why the man who was killed ignored the warnings of his family members to leave and save himself before it was too late.

	kanta-sha shamu-sha-**shi**	wañuchi-k	a-nawn
(12)	Sing-COR come-COR-EVID2	kill-AG	be-3PL
	They kill by singing **as they come.**		

(p. 214) The speaker who offered this explanation inserted her comment into the stream of the ongoing narrative which was being related by another person, who was emphasizing the frustration and exasperation of the shaman's family as they attempted to convince him to leave and save himself.

By inserting this comment, the speaker, a woman named Jacinta, is stating that there is a habitual pattern of behaviour on the part of the assassins, which explains the man's reluctance. She attributes this reluctance to a state of being stupefied by some kind of magical singing done by the assassins.

An explanation is needed for why she would state this generalization in the voice of an unspecified other. The intonational contour of her voice as she utters this statement reveals complete certainty about what she is saying, as the statement becomes progressively lower in pitch until it ends. There is also extra penultimate stress on the verb *kanta-sha* 'singing', to emphasize her point.

Her certainty has to be handled carefully, however, because to claim that she is knowledgeable from her own perspective about such matters having to do with the enemy would compromise her reputation. Although most PQ speakers I was acquainted with came from culturally mixed families created by intermarriages between Quichua-Achuar, or Quichua-Zaparoan, or even Quichua-mestizo parents and grandparents, people were generally reluctant to admit to their mixed backgrounds.[11] An ideology of ethnic purity, evident by statements such as Ñukanchi Runa manchi 'We are Runa', said with strong emphasis on the word 'Runa', an autonym, was often professed by people who were anxious to manage others' perceptions of them.

Calling someone an 'Auca', a disparaging term for an Achuar speaker, use to be, among older speakers, the surest way to stigmatize another individual. Since the assassins were in fact Achuar, I believe that Jacinta is being careful in framing her claim about their behaviour. Her use of *-shi* makes it clear that her knowledge is based on an unspecified other, which avoids any stigma being attached to herself.

The next example of *-shi* usage for an unspecified other also seems motivated by a speaker's desire to avoid stigma, though for entirely different reasons. In example (13), we have Luisa explaining that certain body parts of a snake, such as brain tissue and fat, may be used for love charms.

(13)

chi	raygu-**shi**	pay-ba	ñuktu	pay-ba	wira-ga	simayuka
That	reason-EVID2	he-POSS	brain	he-POSS	fat-TOP	love.charm

a-k a-n

be-AG be-3

That's why his brain and his fat are used for love charms.

Love magic is an embarrassing topic to profess expertise about. It is something that most people seem to know about but at the same time, they don't want to be seen as (p. 215) known knowers. The use of *-shi* to make a generic-like statement in the voice of an unspecified other, therefore, is a perfect strategy for deflecting attention away from the speaker as a source of expertise, when having that expertise is considered compromising. This use of *-shi* to deflect attention away from a speaker is comparable to the distancing effect of non-firsthand evidentials noted by Aikhenvald (2004a: 316–17) for Tariana speakers.

A final example of the use of *-shi* to articulate the voice of a non-specific other can be found in traditional stories that have been circulating within communities for generations. Because such stories are not attributable to any specific author, the use of *-shi* is found in abundance. The first line of the *buʲukuku* story about a hawk that rescues orphaned children from cruel and stingy caregivers begins as follows, in (14).

(14)

wakcha	wawa-guna-ta-**shi**	chari-k	a-naw-ra.
Orphan	child-PL-ACC-EVID2	have-AG	be-3PL-PAST

(Some people) were keepers of **orphan children.**

The teller's use of *-shi* on 'orphan children' frames the beginning of the story as based on a traditional, anonymous voice. It is interesting to consider how important this perspectivizing by means of evidential *-mi* is for PQ speakers, by contrast with the relative insignificance of stating exactly who the keepers of the children were. Explicitly stating the subjects of verbs in PQ is not necessary. Clarifying perspective, however, is.[12]

10.3.2. Evidential *-shi* for a specific other

I turn now to examples of *-shi* that express the voice of an 'other' that is linkable to a specific individual, whether a fictional narrative persona or someone actually known. Example (15) from a narrative of personal experience describes an episode in happenings

which the narrator was told about by her husband. Having not participated in what she describes, she is careful to use *-shi* to focus on what is new and important in her description, in the same way that she would use *-mi* if she were articulating her own perspective on these events.

(15)

Chiga	ña	itsaaang-ʲa-**shi**	kawi-sha	ri-shka-una,
Well.then	now	quietly-LIM-EVID2	row-COR	go-PERV-PL

mana tawna-sha, mana tulʲu ra-sha.
NEG oar-COR NEG mud make-COR
So then **quietly** paddling they went, not (using the) oar, not muddying (the water).

(p. 216) The importance of the slowness described with the adverb *itsangʲa* 'quietly' is reinforced by the expressively drawn out lengthening of the word's final syllables. The narrator's dramatic emphasis on the word *itsaaangʲa* vividly portrays the men's actions. By suffixing *-shi* on this dramatic description, she meets her cultural responsibility to acknowledge the perspective of her husband, which informed her telling. Interestingly, her need to use *-shi* does not seem to inhibit the expressivity with which she is able to describe what happened, making it sound almost as if she herself was there.

With the next example, we have a case of *-shi* being used to focus on an important piece of new information in order to clarify the critical events of a violent fight between two women, one of whom had been accused of flirting with the other's husband. I was a bit confused at one point in this gossip session about who had done what to whom and so I asked if the woman named 'Theresa' had been thrown to the ground by her accuser.

The teller of the gossip immediately corrected my misperception by stating that Theresa was the one who did the throwing. To correct my mistake, she attached *-shi* to 'Theresa' to indicate that this was the newest and most critical piece of information, which, nevertheless, was not something assertable with *-mi*, since her version of what happened was based on someone else's version:

(16)

Theresa-**shi**	hapi-sha	Valenciana-ta	alʲpa-ma	tuksi-ra.
Theresa-EVID2	grab-COR	Valenciana-ACC	ground-DAT	throw-PAST

Theresa (was the one who), grabbing Valenciana, threw her to the ground.

The teller of the gossip is utterly confident in her knowledge about what happened. Her use of *-shi* in no way calls into question the certainty of the events. It simply reminds the listener that this is someone else's story.

10.3.3. Evidential *-shi* for unanswerable questions

The use of *-shi* to acknowledge the perspective of a known other is extended, at times, to express feelings of puzzlement, wondering, or perplexity that may accompany a type of information question. Such questions deviate from typical information questions asked with words such as *ima* 'what', *may* 'where', *pi* 'who', or *ima raygu* 'why' because they lack the typical information question suffix *-ta*. Moreover, information questions asked with evidential *-shi* do not require an answer and are often represented as inner thoughts or musings spoken out loud. They are analogous to our use of expressions such as 'what in the world …?' or 'why on earth …?'[13]

To illustrate, consider an example of a typical information question in decontextualized example (17). It is a typical information question because it has the information question marker *-ta* on the question word *ima* 'what':

	Ima-ta	pasa-n?
(17)	what-INTER	happen-3
	What has happened?	

(p. 217) By contrast, a similar looking actual question occurs in example (18).[14] It is a re-telling by someone else, of a man's experience of being in the forest when his dog began barking. The narrator describes the man as wondering what the dog is barking at. He does this by asking himself the following question using *-shi*:

	ima-ta-**shi**	kapari-n
(18)	What-ACC-EVID2	shout-3
	What (on earth) is it shouting at?	

It is tempting to think that the narrator is using the evidential *-shi* in this instance to focus on the question from the perspective of the man doing the wondering. However, as the following example will show, this is not necessarily the case. The evidential *-shi* is also used when narrators are asking their own unanswerable questions.

Example (19) features *ima raygu-shi* 'why', in a question from a narrator's own telling of her discovery of her first pregnancy (Nuckolls 2010). In this example, she describes herself as wondering why her menstrual period, referred to as *ñukanchi sami* 'our type of thing' has stopped:

(19)

Ima raygu-**shi**	ñuka,	ñukanchi	sami	sakiri-wa-n?
What reason-EVID2	I	we	type	leave-1ACC-3
Why (in the world) has our type of thing left me?				

Evidential *-shi* is used to articulate questions that are unanswerable, perhaps because unanswerable or unknown questions or musings have a quality of otherness, due to the fact that they are outside of the speaker's capacity to know.

10.4. Evidential *-mi* and *-shi* for represented discourse and multiple perspectives

In this final section, I come full circle, in a sense, by returning to my earlier statement that PQ speakers' reluctance to claim knowledge of another person's thoughts, motives, or actions is related to their practice of perspectivizing any such claims with evidentially marked utterances. In this section I cite data from the use of evidentials *-mi* and *-shi* in represented discourse.

Represented discourse is another type of data that supports my claims for the necessity of perspective, because PQ discourse is full of it.[15] The link between perspectivizing one's knowledge and reporting or representing others' speech is this: If a person's thoughts or motives (p. 218) are assumed to be known and then described, there is a danger of misrepresentation. If a person's words are represented, however, then that person is being allowed to articulate their own perspective.

The abundance of represented speech in PQ discourse may also be understood, in part, as stemming from a Runa cultural emphasis on dialogism (Nuckolls 2010: 49–77). Since I am borrowing the concept of dialogism from the literary theorist Bakhtin (1982) I need to clarify its appropriateness for Runa culture because Bakhtin's conception was human-centric. Runa dialogism, by contrast, consists of a dynamic intermingling of voices from both human and non-human life.[16] This dynamic intermingling is achieved, in part, by means of represented discourse.

For PQ speakers, however, represented discourse is a broader, more encompassing category than it is for a Standard Average European language user. For PQ speakers, even non-humans may be represented as articulating human discourse in their thoughts, as is evident in the next example of a jaguar who is represented as thinking, with articulate speech, that the stick he is about to bite into is a person:

(20)

Pay-ga	'runa-ta-n	kani-ni'	ni-sha-**shi**	kani-u-ra
He-TOP	person-ACC-INST	bite-1	say-COR-EVID2	bite-DUR-PAST
chi	kaspi-ta			
that	stick-ACC			

And as for him, he's **thinking** 'I'm biting into a person' as he was (about to) bite that stick.

Besides the fact that PQ speakers allow non-humans to be represented as speaking or thinking with language, there is another important difference between represented dis-

course in PQ and in English. PQ speakers do not make a distinction between direct and indirect speech. Unlike languages such as English, there is no way to give an indirect report, such as that found in decontextualized example (21):

(21) English (indirect)
He said he would go.

In PQ, by contrast, a person's words or thoughts would have to be reported as if they might have actually been said. Example (22) is a decontextualized example of how a PQ speaker would have to express example (21), changing the indirect discourse into a more direct form: (p. 219)

(22) Pastaza Quichua (direct):

Ri-u-ni-**mi**	ni-sha-ga	ni-ra
Go-DUR-1-EVID1	say-COR-TOP	say-PAST

Saying '**I'm going**' he said.

Although it sounds redundant, the formula *nisha nira* 'saying he/she said' is commonly employed by PQ speakers. It is used to frame discourse as direct by representing actual words that someone could have said to state their intention to go.

In decontextualized example (21), by contrast, any actual words that could have been said are altered. The pronoun 'I' becomes 'he', and 'will go' becomes 'would go'. These are the typical kinds of adjustments found in indirect discourse (Aikhenvald 2011b: 403–6; Guldemann and Von Roncador 2002: viii). PQ speakers do not use indirect discourse. Everything said or even thought is represented as a type of direct discourse.

Despite the fact that PQ speakers do not use indirect discourse, there are ways of framing reported speech to make it seem more, not less, faithful to what may have been said. This observation reflects the finding of Aikhenvald (2011b: 415–16) that direct speech reports vary in terms of how faithful to the original they are, and that there is a continuum rather than an absolute distinction between verbatim speech reports and indirect discourse.

The matter of why a PQ speaker might be motivated to specify speech as more, rather than less, faithful to what was said also needs to be addressed. In a society that does not have formally organized legal or juridical bureaucratic institutions, there is no need to take oaths or to be meticulously precise and exact with language in ways that a complex social organization often requires.

Nevertheless, there are marked occasions where a PQ speaker may feel compelled to state with a great degree of exactness the actual words that were said by someone, and evidentiality assists in creating a sense of greater or lesser directness. The next example,

I believe, constitutes such a case. We have a report of what a man was represented as saying immediately before he ended his own life with a gun.

The man was a soldier in the Ecuadorian military, and his fiancée had just broken off their engagement. He came to visit military friends shortly before taking his life. The narrator and her husband were among the group of people that he last visited. The representation of what he said follows:

(23)

Chiga ni-ra	kay	anillo-ta	kay	ñuka	kasarana	warmi,
So.then say-PAST	this	ring-ACC	this	my	to.marry	woman
kasna-**mi**	tuksi-n	ni-ra-**mi**	ni-sha	tiyari-sha	waka-ra.	
Like.this-EVID1	throw-3	say-PAST-EVID1	say-COR	sit-COR	cry-PAST	

So then he said 'this ring, my fiancée, **like this** she threw (it at me)' **he said**, saying, (and) sitting there he cried.

As stated earlier, it is extremely common for PQ speakers to report the discourse of others with a 'saying he/she said' type of construction. Much less common is what occurs in example (23). The narrator uses two forms of the verb *nina* 'to say', rather than just one, to completely surround the represented discourse. The represented discourse is introduced by (p. 220) a form of the verb *nina* 'to say' as well as followed by a form of the verb *nina* 'to say', making it clear that the speaker intends to set that representation apart from the rest of the utterance.

What is also noteworthy about this example is the use of evidential *-mi* in the soldier's words. The use of *-mi* on *kasna* 'like this', would be appropriate for the soldier, since he would have been reporting the woman's action from his own perspective. The use of *-mi* on *nira* 'he said' is also appropriate for the narrator's report of the soldier's words because she experienced them from her own perspective. The two uses of *-mi* represent two different perspectives: the soldier's perspective on what his fiancée had done, and the narrator's perspective on what she heard the soldier say.

The fact that the soldier's words are so carefully set apart and framed with quotative verbs, together with the fact that both his words and the narrator's words are marked with evidential *-mi*, and the unusual, poignant circumstances in which these words are said to have occurred, all make it likely that the narrator is intending to convey a high fidelity token of what was actually heard.

It is instructive to compare the foregoing with another example of represented discourse involving words that were extremely mundane by comparison. The narrator is relating words that were said to her father by Peruvians who were instructing him about how to handle a large tortoise.

(24)

Kasna	ra-sha	hapi-ngi	ni-nawn-**shi**	peruano-guna	ñuka	yaya-ta.
Like.this	do-COR	take-2	say-3PL-EVID2	Peruvian-PL	my	father-ACC

'Doing like this you take it' **say** the Peruvians to my father.

This is an example of a minimal attempt to represent discourse realistically because it does not even have the typical 'saying he/she said' construction which is most commonly employed. Instead, there is only one quotative verb *ninawn-shi* 'they say' which occurs after the represented discourse. The evidential *-shi* is attached to this verb because the account originated from her father rather than from the narrator herself.

10.6. Conclusion

This chapter has attempted to understand evidentiality in Pastaza Quichua within a culturally sensitive framework which makes sense of its use by drawing upon this culture's preference for perspectivally specified knowledge, concepts of sociability, and politeness principles.

Evidentiality is not about evidence or empirically valid observations. It is a deictic category that shifts in accordance with speaker perspective. PQ cultural valuations of perspective must be appreciated to understand how evidentiality works. PQ speakers are not concerned with abstract, decontextualized truth. They prefer, instead, to frame their knowledge within a concretely contextualized perspective that relates knowledge to specific people, places, and happenings in their 'here and now' world.

This emphasis on perspective has implications for ethics and morality, and for the low tolerance among PQ speakers for attributing intentions and motives to others. The significance (p. 221) of perspective is also reinforced by PQ speakers' heavy use of represented discourse, which is articulated as if it were directly quoted, even when no actual utterances were spoken. Yet, evidential markers together with varying degrees of elaborated quotation verbs may provide clues to the greater or lesser fidelity of the representations of words.

Paradoxically, although PQ speakers make abundant use of represented discourse, their language is impoverished with respect to illocutionary speech act verbs. Despite this impoverishment, speakers may express many kinds of illocutionary speech acts by means of evidential markings, which, in certain contexts, and assisted by second person forms of pronouns and verbs, have speech act consequences involving major changes in peoples' understandings and alignments and re-alignments with each other.

This chapter has also attempted to untangle evidentiality from epistemic modality in Pastaza Quichua. Epistemic modality, which is the modality for expressing a confident assertion, can be made from one's own perspective with evidential *-mi*, or from the perspective of an 'other', with evidential *-shi*. The use of evidential *-shi* is clearly correlated with PQ speakers' cultural expectation that they will specify the source of their knowledge as arising from an 'other', whether known or unknown.

Yet, the fact that *-shi* is used to indicate the voice of an 'other' does not mean that an assertion cannot also be certain. Rather, its use means that the speaker is acknowledging that someone else has authored the speaker's thoughts or words. Speakers often make confident claims that are articulated from the perspective of an 'other'. Such claims may be deferred to others for a variety of strategic reasons, including a wish to invoke the greater authority of an 'other', or to disassociate from the claim as one's own, due to embarrassment or social stigma. Speakers may, however, simply be attempting to be as perspectivally accurate as possible.

An additional aspect of epistemic modality in need of further work, is the role of intonation in communicating certainty. Specific, evidentially perspectivized statements are made and may imply epistemic modality. A number of the sentence examples cited here which communicate certainty suggest that epistemic modality may be generated from evidentials as an implicature that depends, in part, on intonation.

Notes:

([1]) Ecuadorian Quichua is now officially written as *Kichwa* in materials produced by the Ecuadorian Ministry of Education. In that context the term *Kichwa* generally refers to the standardized Kichwa Unificado, which is heavily influenced by Highland varieties. I retain the older spelling Quichua both because of its long history of use and because materials written in lowland Amazonian dialects, of which this is one, have traditionally used this spelling.

([2]) My default assumption is that a negative statement is also based on the perspective of the speaker. If a negative statement were based on someone else's knowledge, then the statement would have to be expressed as something like: 'Faviola has not gone', saying, 'someone said'.

([3]) This is only a list of primary illocutionary verbs, or verbs that must be accompanied by what Adelaar (1990) has called a quotation complement, and what Aikhenvald (2011b) has called a speech report. I have not included secondary illocutionary verbs such as *asina* 'to laugh' and *wakana* 'to cry', which may or may not be accompanied by speech reports. The verb *kunana* 'to advise' might also be included in the list of primary illocutionary verbs, with the caveat that it is undoubtedly borrowed from Spanish *aconsejar* 'to counsel.'

([4]) Speech reports are not unique to this dialect of Quechua. See Adelaar (1990) for a description of reported speech in highland dialects of Quechua.

([5]) All examples are drawn either from the author's tape files or from transcriptions of the author's tape files. Transcriptions are all archived in AILLA, the Archives of Indigenous Languages of Latin America, and may be accessed as follows, based on the number of the example: Example (5) Author's Tape XIX, side A; Example (6) Transcript File page 143; Example (7) Transcript File page 149; Example (8) Transcript File page 205; Example (9) Transcript File pages 490–1; Example (10) Author's field notes; Example (11) Transcript File page 17; Example (12) Transcript File page 487; Example (13) Nuckolls 2010: 173; Example (14) Transcript File page 106; Example (15) Transcript File page 193; Example (16) Transcript File page 603; Example (18) Transcript File page 182; Example (19) Transcript File page 79; Example (20) Nuckolls 2010: 188; Example (23) Transcript File page 169; Example (24) Transcript File page 66.

([6]) The baby was very small and weak-looking and definitely not thriving. An Ecuadorian soldier upon seeing her once remarked that she was '*ultra desnutrida*'. We even flew her out of the village, once, so we could get medical care for her. The nurses and doctors at the hospital did not know what to do to help her, so we had to fly back to the village after a few days. Miraculously, I learned years later, she survived and grew to adulthood and the last I heard she had had a child of her own.

([7]) I do not mean to suggest that cultural matters alone are involved in the use or non-use of certain evidentials with certain grammatical persons. There is not yet enough known about the interactions between firsthand evidentials and the second person. There are, however, many interesting interactions discussed at length in Aikhenvald (2004a: 217–39), who states that statistical tendencies may be significant, citing the work of Floyd on Wanka Quechua (1999) which found correlations between the firsthand evidential and first person, as well as a correlation between the reportative evidential and third person.

Aikhenvald is cautious however, stating that these kinds of correlations could be related to pragmatic and structural factors tied to certain discourse genres, such as the need to make heavy use of the third person, as well as an 'other' evidential for events that happened long ago, involving happenings that the narrator could not have been personally involved in.

([8]) See Nuckolls 2014 for further data on *-mi*'s speech act functions.

([9]) See Aikhenvald (2004a) for a discussion of evidentials in questions across a variety of languages. A recent article by San Roque, Floyd, and Norcliffe (2017) considers a broad sweep of languages and attempts to set up a typology of evidentials in questions. Evidentials in questions have also been reported for other Quechua dialects (Cerrón-Palomino 1976, Floyd 1999, Faller 2002), and the analyses of their functions in questions are quite varied.

([10]) This spotlighting of new from already known themes, as well as the use of *-mi* to communicate primary as opposed to secondary focus distinguish *-mi* from another enclitic *-ga*. See Nuckolls (1993: 242–3) for discussion and examples.

([11]) In the summer of 2015 I had an opportunity to appreciate just how interconnected some Quichua speakers are with the Achuar language. When Shiwiar linguist Martin Kohlberger came to visit the Andes and Amazon Field School last summer, one of my older Quichua consultants, whom I have known for about ten years, actually conversed with him very comfortably in this language.

([12]) Although every statement in PQ is framed by a perspective, not every statement has overtly marked evidentiality. Once a perspective is established, subsequent sentences may not feature an evidential marker. It is usually the case that when evidentials have been left out of sentences in a narrative, they will reappear when a new perspective emerges. Speakers never go too long without reminding their interlocutors about the perspectives of their utterances, especially since evidentials are also involved in focusing the most important or new information in a sentence.

([13]) An analogous use of *-shi* may be found in Floyd (1996b: 919) where he cites the use of *-shi* in riddles to communicate mirativity.

([14]) Although *ima-ta-shi* in example (17) looks like *ima-ta* in example (16), it is important to realize that the two examples are using two different but homonymous suffixes. The *-ta* of example (16) is the information question suffix, while the *-ta* in example (17) is the direct object suffix.

([15]) See Michael (2014) for a detailed description of quotation in an Arawak language, Nanti, and for the role of quotative framing in evidential strategies.

([16]) I don’t wish to push the analogy between Bakhtinian and Runa dialogism too far. Runa are, of course, not working through the same cultural problems revolving around Marx and Kant, to mention only a couple, that Bakhtin was steeped in. Nevertheless, the animistic cosmology of Runa culture seems quite congenial with the concept of dialogism, as it is based in a world that sees all life as having a subjectivity and therefore a voice that is capable of being expressed. I have argued that PQ speakers’ use of ideophones, a type of expressive, depictive word, may be understood as related to their cultural emphasis on allowing a multiplicity of voices and perspectives to be articulated (Nuckolls 2010).

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Abstract and Keywords

This chapter discusses the working of evidentiality in Quechua narrative performance from the central highlands of Peru. In the Quechua narratives analysed, the grammatical marking of source and status of knowledge, and discursive ways of expressing evidence for knowing what is known, are shown to vary strikingly according to performance related factors. On the one hand, narrators base discursively expressed evidence for knowledge, and the veracity and authenticity of the stories they tell, on lived experience. On the other hand, in Huamalíes Quechua the assertion of knowledge and affirmation of validity are grammatically marked by evidential, epistemic modality, and tense suffixes. Taken together, the performative dimensions of discursively expressed evidence, and grammatical choices around evidentiality, constitute the epistemological underpinning of stories about the past in Huamalíes Quechua; both are taken into account in the mixed methods approach to the analysis of Quechua narrative adopted here.

Keywords: Quechua, oral narrative, evidentiality, evidence, narrative performance, Huamalíes Quechua

11.1. Introduction

This chapter will review ways in which evidentiality operates in the context of narrative performance in Quechua, with particular focus on a variety of the language spoken in the central highlands of Peru.[1] I shall demonstrate that, in Quechua oral narratives, going by the corpus under study here, the grammatical marking of source and status of knowledge, and discursive ways of expressing evidence for knowing what is known, can vary strikingly according to factors related to the situation of performance. Who the narrator is, where they live, what social and kinship networks they are part of, and the social preoccupations uppermost in their minds at the time, can have a profound influence on the way a story is told. On the one hand, narrators base discursively expressed evidence for

knowledge, and the veracity and authenticity of the stories they tell, on lived experience —including seeing, and being in, the landscape, and hearsay. On the other hand, in Huamalíes Quechua the assertion of knowledge and affirmation of validity are grammatically marked through use of evidentials, markers of epistemic modality, and certain tenses that embed evidential extension (Aikhenvald 2004a: 14). Performative considerations have an effect on discursively expressed evidence, as also on grammatical choices around evidentiality. Taken together, these two dimensions constitute the epistemological underpinning of stories about the past in Huamalíes Quechua, and both will be taken into account in the mixed methods approach to the analysis of the narratives that follows.[2]

(p. 223) My method is also based on the premise that knowledge is emergent in the storytelling event, not necessarily given at the start, and evidentials and epistemic modality markers are a key grammatical resource for signalling the emergence of each storyline. As Hill and Irvine (1993a) put it in their discussion of how evidence, and responsibility for evidence, are expressed and marked in oral discourse: ‘ “Knowledge” is […] a social phenomenon, an aspect of the social relations between people’ (Hill and Irvine 1993a: 17). And so it is with the knowledge generated in the storytelling performances in which I played the part of interlocutor during the time I spent in the Tantamayo valley.

As Hill and Irvine observe in the introduction to their 1993 volume, some aspects of linguistic form have interactional processes embedded in them (see also Hanks 2012; Nuckolls and Michael 2012). Among these are aspects to be attended to in this chapter, such as: evidentiality, epistemic modality, deixis, and reported speech. These may be drawn together within the single analytical framework of dialogicality. Indeed, a prominent feature of the oral narratives recorded in Huamalíes is their dialogicality, where polyvocality is key. Following Bahktin, and as we shall show in relation to the Huamalíes corpus, in such narrative there is no ‘strictly individual voice’ (Hill and Irvine 1993a: 2). For example, in the story of the black lake (to be analysed in §11.6), it’s not just the narrator making the argument; other voices intervene, through which the narrator seeks to reinforce the authority and authenticity of her own.

To work with the idea of ‘evidence’ helps us focus on interaction, for the very premise of evidencing implies an interlocutor (Hill and Irvine 1993a: 4). These authors sum up the interest of working on ‘evidence’, from a linguistic anthropological point of view as follows:

> To focus on ‘evidence’ takes the traditional anthropological interest in culturally situated knowledge and casts it in the framework of social action, exploring how claims to knowledge (or ignorance) are made, and how such claims might be used. Attention to evidence shows clearly that culturally situated knowledge is not a matter of clearly differentiated states, of ‘knowing’ or ‘not knowing’, but is complex in its dimensions, and highly variable in the range of potential dimensions which may be relevant in interaction.
>
> (Hill and Irvine 1993a: 4)

We can add, furthermore, that the complexity of degrees of knowing is not only expressed discursively, as the majority of the contributors to Hill and Irvine (1993b) show, but also grammatically, through the mechanisms we have already specified. Inspired by Hill and Irvine's (1993a) approach and by the emphasis lain on evidentiality as a social interactive phenomenon in Nuckolls and Michael (2012), and building on the linguistic anthropological method developed in Howard (2012), this chapter will further demonstrate the mutually entailing relationship between social interactional process and linguistic form that emerges in narrative events, where Huamalíes Quechua narrators recount the past histories and experiences proper to their shared cultural heritage. On the one hand, 'interactional processes [shape] the allocation of responsibility for authorship of a message' (Hill and Irvine 1993a: 4); on the other hand, these processes are revealed in grammar, through evidentiality, epistemic modality marking, deixis, and reported speech. (p. 224)

When considered as a systemic feature of language, the core meaning of evidentiality is taken as the grammatical marking of source of information (Aikhenvald 2004a: 5), and the Quechua language has been cited as being one of a number of languages of the world in which evidential marking is obligatory (Aikhenvald 2014: 5, citing Weber 1986). However, as our knowledge grows, it becomes clear that there is variability in the way evidentiality works across the Quechua family.[3] When viewed from a pragmatic rather than a systemic perspective, as narrative performances demand, it will be shown that it is far from the case in Huamalíes Quechua discourse that every utterance must obligatorily carry evidential marking. I shall also draw attention to the ways in which evidentiality intersects with other grammatical categories such as epistemic modality and tense, and I shall go beyond a study of evidentials as a circumscribed system for marking source of information, in order to include evidential strategies such as use of reported speech.

Table 11.1. Evidential and epistemic modal enclitics in Huamalíes Quechua

	personal speaker perspective	**non-personal speaker perspective**	**speaker perspective non salient**
(i) Personal knowledge (EV.PERS); **(ii)** Affirmative validation (VALID.AFF)	-mi		
Non-personal knowledge (EV.NPERS)		-shi	
Negative assertion (NEG)			-su

Co-constructed knowledge; affirmation (EV.CO-CONSTR.KNOWL.AFF)	-chaa		
Co-constructed knowledge; negation (EV.CO-CONSTR.KNOWL.NEG)	-taaku		
Conjectural (CONJ)	-chir		
Speculative (SPEC)	-suraa		

11.2. Evidentiality, epistemic modality, and tense in Huamalíes Quechua

The system of evidential and related epistemic enclitics operating in Tantamayo Quechua is summarized in Table 11.1. Building on Howard (2012) and previous work by Nuckolls (2008, 2012) I use personal versus non-personal speaker perspective as a framework to define the (p. 225) relative functions of these enclitics and interpret their distribution within a given stretch of discourse. Personal versus non-personal speaker perspective is a phenomenological framework to be understood in terms of Benveniste's notion of subjectivity in language (Benveniste 1966: 225–66). Personal speaker perspective pertains in a mode of discourse characterized by marks of deixis and other indices of the speaker's presence in the utterance (e.g. first person and second person inflections in the verb); in Huamalíes Quechua the evidential suffix *-mi* is typical of personal speaker perspective. Non-personal speaker perspective contains no grammaticalized indication of speaker subjectivity in the utterance; the evidential suffix *-shi* is a marker of non-personal speaker perspective.

Table 11.2 summarizes the verb suffixes that mark past tense in Huamalíes Quechua.

Table 11.2. Past tense markers in the Huamalíes Quechua verb

	personal speaker perspective	***non-personal speaker perspective***	***speaker perspective non salient***
Unmarked tense			Ø

Present perfect (PRS.PRF)	-shqa-/-sh		
Past perfect (PST.PRF)	-shqa ka-/ -sh ka-		
Reportive past (REP.PST)		-naa[1]	
Mirative aspect (TA.MIR)	-naa[2]		
Preterite (PRT.PST)	-rqa-		
Habitual past (HAB.PST)	-q ka-		

The tense suffix -*naa*[1] is characteristic of narratives telling of past events that owe nothing to the speaker's own experience; in using this tense the speaker takes no responsibility for the knowledge imparted and indicates no personal investment in the veracity of the facts. However, as my analysis will show, Huamalíes Quechua narrative discourse may not always adhere to non-personal speaker perspective, even when the story content ostensively relates to events beyond the speaker's own experience; tense and evidential usage is indicative of this. In our interpretation, use of the perfect (-*shqa*- sometimes shortened to -*sh*) and past perfect (-*shqa kashqa*) tenses mark a closer cognitive association on the part of the speaker with the events recounted than does the reportive past (-*naa*[1]). This closer cognitive association is triggered by context related factors of the situation of performance. The past habitual (-*q ka*-) tense is only used where personal speaker perspective is entailed. The past preterite -*rqa*- tense is only used where personal experience or witness is involved; in this respect this tense can be said to embed evidential extension. Our examples will show how -*rqa*- may contrast in the same stretch of discourse with -*naa*[1], the latter marking an event to which the speaker was not witness and for which they cannot take responsibility, the former indicating personal witness as source of evidence. Evidentiality and tense are correlated systems in (p. 226) Huamalíes Quechua. For example, -n*aa*[1] frequently correlates with -*shi* as a means to constitute non-personal speaker perspective, while -*rqa*- frequently correlates with -*mi*, entailing personal speaker perspective.

11.3. The nature of the narratives

Residents of several peasant communities (*comunidades campesinas*) within the administrative district of Tantamayo related the narratives to me. In terms of genre, some of these narratives would classify as 'myth' in the social anthropological sense: a story that explains origins and, in its repeated telling through face-to-face transmission before new generations of family and community members, offers a rationale for a current state of affairs and a guide to action in the future.[4] Other narratives are, again in outsider cultural terms, a blend of legend and history, in which the identity of the protagonists and their deeds can be traced to historical events and personages, while the story is interlaced with happenings that would be considered to belong to a supernatural order of reality. For example, a cacique of the colonial period traceable to an historical figure in the archive, in the orally transmitted story, as the result of local political conflict, turns into a condor, flies to a nearby mountainside, and turns into stone (Howard-Malverde 1986, 1990, 1999).

Tantamayo Quechua narrators make a distinction between what might be termed 'myth' and what might be classed as 'legend'. However, the terminology they use derives from the Spanish, suggesting that generic classification comes from external influence, even though the terms are used in a distinctly Quechua way. Where a story unfolds in a generic time and space, with no use of toponyms that might anchor the narrated events to the local landscape, this is referred to as a *kwintu* (from *cuento* 'tale'). A *kwintu* (equivalent to 'myth') is considered no less true for all that, but most typically the evidential marking of a *kwintu* indicates non-personal speaker perspective. The narrated events are beyond the narrator's personal life experience, and were not witnessed by the speaker. In contrast, narratives in which the action takes place on local territory, identifiable by toponyms, and in which, typically, the narrative protagonists trace paths over the landscape as the story unfolds, are referred to as *leyenda* ('legend') (Howard-Malverde 1989: 56–8, 1990: 36–40).

However, a feature of many of the narratives is the insertion of a narrator's personal point of view into the 'mythic-legendary-historical' storyline. Indicators of the narrator's personal investment in the story's content at the cognitive level range in elaborateness from comparing features of content with aspects of the narrator's own life, to detailed explanations as to how the narrator learned the story and the relevance it has for his or her family history, to wholesale reinterpretations of a shared tradition in order for the story to fit with a narrator's individual agenda. As shall be seen, narratives differ in evidential marking and tense usage, due to differing degrees of personal investment in the story told, and the nature of (p. 227) the cognitive associations that the story content holds for the narrator. Indeed, the analysis of evidentiality and the discursive expression of evidence in the stories, leads me to suggest that the concept of genre is not so useful for analytical purposes. Other less categorical ways of viewing the nature of narrative discourse will be proposed, in relation to the excerpts from the stories to which I now turn my attention.

11.4. Evidentiality and evidence in the Hua-malíes Quechua narratives

I have selected for analysis narrative extracts that exemplify a range of speaker perspectives—from non-personal to personal—brought to bear upon the narrated events, and how speaker perspective is constituted in the use of evidentials and tense-aspect marking. Concomitantly, a more prominent personal perspective on the story may trigger more elaborated discursive assertions of evidence and responsibility for evidence.

Extracts 1 and 2 come from the 'Achkay' cycle, widely told stories about an anthropophagous mythic ancestress who lived in ancient times before the world came to be as it is today (referred to as *unay* 'long ago' or *qullana* 'remote' time).[5] I identified two versions of the Achkay story in the Tantamayo valley. While both are deemed to belong to remote time, they differ from each other in terms of storyline and in terms of the spatial setting in which events occur. One version ('Achkay I') unfolds in a generic Andean space (a home, a rock, a potato field) with no specific place names that might pin the events to a known place. The conditions that gave rise to the story are described as a time of famine. I recorded variants of Achkay I with seven storytellers, all of them women. By contrast, the events of the second version ('Achkay II') take place on community terrain; the trajectory followed by Achkay over the local landscape is plotted by use of toponyms. In the performances of Achkay II, a dialogic relationship evolves between narrative and topography: as the storyline unfolds, so too the community territory is mapped out in the narrator's mind's eye. Variants of Achkay II were recorded from five storytellers, three of them men. Extract 1 provides the first twelve lines of one of the standard variants of Achkay I.[6]

Extract 1. Achkay I, Variant 1, AIE

1 Unay-shi ambruuna ka-naa.
They say in the olden days there was a famine.
2 Unay muchuy ka-naa hwiyupa.
In the olden days there was a terrible famine.
(p. 228) **3** Say-shi warmi ishkay wawayuq ka-naa warmi ullquta.
Then they say there was a woman with two children, a boy and a girl.
4 Saypitaqa wambrakuna punuykaptin sakay huk masurka harata tariykurqa ankakuyaananpa kallanata ashi-naa.
Then while the children were asleep at night, finding a cob of corn (the parents) looked for the pan in order to grill it.
5 Saypita wambrakunaqa wiyaskir 'Maychuuraa kallana churaraykan?' niptinqa 'Ulla kuchuchuuchaa mamay chullallaykan kallanaqa' niptin 'Aa punuykashchir' nirqa 'Riyaykaaya-sh kashqa aw, say wambrakunata apay shikraman wiñarkur machayman warkaykamuy' ni-naa papaaninta.
Then when the children heard them saying 'Where is the grill pan?' and replied 'The gwill pan has been put down there in the corner, mummy,'[7] (the

mother) said to their father saying ‘those children aren’t asleep at all, they are wide awake; throw them into a basket, take them away and hang them in a cave’.
6 Intuns papaaninqa shikraman wiñarkurqa apa-sh kash warkuq machayman.
Then their father throwing them into a basket took them to hang them in a cave.
7 Intuns machaychuu ishkan wambrakunaq warkaraykaayaa-naa.
Then the two children were dangling in the cave.
9 Warkaraykaayaptinqa paasaski-naa allqay.
As they were dangling there a *dominico* bird happened by.
10 Allqay paasaskiptinqa wambrakuna qayaku-naa ‘Tiyuy allqay hipiykallaa-may!’ nir.
When the *dominico* bird came by the children called out saying ‘Uncle *dominico* get us out of here!’
11 Nir qayakuptinqa muna-naa-su allqayqa.
When they called out, the *dominico* bird didn’t want to.
12 Imapaataa “aqish baaraq” nima-rqa-yki?’ nir paasaku-naa.
‘Why did you call me “worm measurer?” ’ saying, he passed on by.

[…]

(Howard-Malverde 1984: 15–34)

In Variant 1 of Achkay I, the finite verb in 124 of the total 131 utterances, is in the reportive past tense *-naa*[1].[8] In Extract 1, this can be seen in every utterance with the exception of utterance 6 where the past perfect *-sh kash* occurs. *-Naa*[1] correlates systematically with the non-personal knowledge evidential *-shi*. In Extract 1, *-shi* occurs sporadically in the opening utterances; however, once the story is underway *-shi* does not recur with regularity; the sustained use of *-naa*[1] is sufficient to mark the non-personal speaker perspective of the narrator towards the events narrated. This pattern is evidence that, once the epistemological stance (p. 229) of a stretch of discourse is established, source of knowledge markers are not obligatory on every utterance in Huamalíes Quechua. When this speaker perspective changes, *-shi* may be reintroduced or *-mi* used as an alternative.

In the Achkay Version I narratives, the narrated events are marked by correlative use of *-naa*[1] and *-shi* and the narrator adopts a non-personal speaker perspective. Where there is a shift to a personal speaker perspective, typically in the embedded reported speech of the narrated protagonists, there is a shift away from the *-naa*[1]/*-shi* framework, and other past tenses or the unmarked tense take over.

Lines 1–11 of Extract 1 are a classic example of the way the *-shi*/*-naa*[1] combination sets up a non-personal speaker perspective at the start of a *kwintu* such as Achkay I. Each of these utterances carries *-naa*[1] on the finite verb; the *-shi* evidential occurs correlatively in utterances 1 and 3 but is thereafter dropped, *-naa*[1] is sufficient to sustain the non-personal perspective that characterizes the story.

The story is also characterized by reported speech, which operates as a driving mechanism, in combination with switch reference, as a means to propel the action along. See how this works in sentence 5, where a number of utterances on the part of the children and their parents flip back and forth between the two sets of protagonists, until the outcome, when the mother tells the father to put the children in a basket and take them to hang them in a cave. The switch references stake out the distinction between the protagonists' voices; explicit reference to the alternating speakers' identities is not necessary. Note the shift in utterance 12 from the non-personal perspective of the narrator's voice, to the personal speaker perspective of the voice of the *dominico* bird. Correspondingly, person marking (first person object *-ma-*, second person subject *-yki*) correlates with preterite tense *-rqa-* in the verb form *ni-ma-rqa-yki* ('you said to me').

The Achkay II story brings the protagonist onto local terrain. According to this account there were once two Achkays, a mother and daughter, who lived on Yaqa Willka, the mountain that dominates the valley at the point where the Tantamayo River flows into the Upper Marañón. The mountain is an impenetrable wall of rock rising on the far side of the river, looming over the hamlet of Huancarán and the community of Pariarca—places where the storytellers had their homes. Achkay II tells how one of the Achkay figures crossed over onto community land at the place called Numyaq, some thousand metres below Huancarán on the banks of the river. She encounters a man ploughing a field and, under pretext of lending him a hand in his work, reaches under his clothing, plucks off a testicle and eats it. The ploughman takes flight up the mountainside towards the village with Achkay in hot pursuit. As she goes she loses sight of him due to the sharp incline. As she passes a series of landmarks, she calls out for directions to the Achkay who had remained behind on the top of the mountain and can see the lie of the land.

The narrative becomes a dramatized dialogue as the Achkay figures call back and forth to each other, the reported speech acting as a mechanism to move the story along, and at the same time trace the path of the protagonists over the landscape. Through the litany of place names that thus emerges, we learn the toponymy and topography of the stretch of land reaching from the river's edge up to the place called Runa Hirka, located above the village of Pariarca. At Runa Hirka, according to most variants, Achkay meets her end, tricked by the villagers into falling into a cauldron of boiling water. The variant of Achkay II narrated by EGB of Pariarca is typical, in that it uses the present perfect *-shqa-* for the storyline, sometimes varying with the Ø tense. The reportive past *-naa*[1] is never used. The evidential *-shi* combines with *-shqa-*, attributing something of an 'in between' epistemological status to (p. 230) the narrated events. *-Shi* indicates that the narrator does not take personal responsibility for their veracity; yet the unfolding of the action in the known space brings it cognitively closer, making *-shqa-* the more appropriate tense.

The contrast in tense and evidential use between Version I and Version II of the Achkay story is striking. With regard to tense, although the narrative sustains a non-personal speaker perspective, the siting of past action on local territory is described by use of the perfect (*-shqa-*) and pluperfect (*-shqa kashqa*) tenses (more common when personal speaker perspective is in play), not the reportive past *-naa*[1] as in the Achkay I stories. My

argument is that where narrative action is tied to local topography, the cognitive associations that this triggers in the narrator's mind invites use of tenses that evoke an approximation of the action to the here and now of the performance situation, even though the narrated events are ostensibly of the past and outside the speaker's personal experience. Further evidence of this will be given in relation to other narratives.

Extract 2 is taken from a section of the pursuit sequence in Achkay II, in which we see how *-shi* no longer appears, but *-mi* (and its allomorph *-m*) unfailingly marks the direct speech of the narrated protagonists, both in the interrogative mood utterances (when Achkay calls out 'Which way now?') and in the indicative mood utterances (when the daughter Achkay, looking out over the land, calls back 'This way, that way!'). Their personal speaker perspectives are marked in this way.

Extract 2. Achkay II, EGB

1 […] Numyaq hananman charkurqa 'Martina! Maytana-m maytana-m tuiy?' ni-sh.
[…] arriving up above Numyaq she called 'Martina! Which way, which way now?'
2 Niptinqa 'Saki Warawyamanna-mi hiqarkun' ni-shqa.
When she said that, 'He's going up by Saki Warawya now,' she said.
3 Sayman charkurpis yapay 'Martina! Maytana-m maytana-m tuiy?' ni-sh.
Arriving up there she called again 'Martina! Which way, which way now?'
4 Niptinqa 'Pullan kwistana-mi hiqarkun' ni-sh.
When she said that, 'Now he's climbing halfway up the hill,' she said
5 Sayman pullan kwistamanpis charkurqa yapaypis qayaku-sh Martinaman ari.
And arriving halfway up the hill, again she called out to Martina.
6 Saynuu qayakuraykar cha-shqa 'Martina! Maytana-m maytana-m tuiy!'
She arrived calling out like that, 'Martina! Which way which way now?'
7 Niptinqa 'Saki Warawyatana-mi' ni-sh.
When she said that 'By Saki Warawya now' she said.

[…]

(Howard-Malverde 1989: 27–8)

Extract 2 provides a typical example of how the citative verb *niy* ('to say') acts as a hinge mechanism that connects one citative phrase to the next, pushing the narrative action along in dialogue form. The finite verb form *nishqa/nish* ('she has said') comes at the end of each stretch of speech, followed by the switch reference form with anaphoric function *niptinqa* ('when she said that') that introduces the next utterance. Indeed, reported speech as a mechanism for driving the story along is prominent in both versions of the Achkay story. In Achkay I we have the interaction between children, birds, and animals during two (p. 231) escape sequences (one of which is exemplified in Extract 1). In Achkay II we have the interaction between the two Achkays as they look over the landscape. In

both cases the action becomes a dramatized dialogue in which the narrator's voice embeds the voices of the narrated protagonists.

The salience of the spatial framing of narrative events in oral performance has to be appreciated in relation to the performance situation: sitting out in the open air, in people's yards or doorways, looking out over the vast mountainous landscape, where pathways criss-cross between communities, and where, in the days when I recorded these stories, roads had barely intruded into the countryside beyond the district capital. As elsewhere in the Andes, distinctive features of the landscape are named, and the landscape constitutes an animate cosmos in the way described by Allen for southern Peru (Allen 2015). The relationship between landscape, ritual, mythic belief, and storytelling is a deep one across Andean societies in their history, tied to an agro pastoral way of life that becomes disrupted by the road building that brings more regular access to urban centres. Indeed, when I last visited Tantamayo in 2009 people remarked on how these stories are rarely told any more.

One variant of the Achkay II story powerfully illustrates the influence that the cognitive associations triggered by the ever-present physical landscape can have on the evidence base of the storytelling event. The narrator of this variant is physically located in the place called Huancarán, directly opposite the mountain from where the sentinel Achkay looks out and calls the names of the places the second Achkay passes in pursuit of her victim. Whereas the other variants of Achkay II trace the path of the mythical ancestress to the place called Runa Hirka, directly above the community of Pariarca, in PLL's variant, once the Achkay has reached a point on the territory beyond which she herself is less familiar, her narration comes to an end. Quite literally, from Huancarán where she lives, she cannot see beyond this point due to the contours of the land; in telling the story she cannot visualize how the sentinel Achkay would have been able to see any further, in order to guide the pursuing Achkay on her way. The different toponyms mentioned by PLL, compared with those that occur in other variants, map out the terrain with which she is most familiar, and she claims not to know the story after a certain point because of the hill that blocks the way: *mana fiixuta sayta musyaasu* ('I don't know that part very well') (Howard-Malverde 1989: 61). With her example, we see the emergent nature of knowledge in the storytelling event. The visibility of landscape is needed to keep the story going; it is also a support for memory; not seeing the lie of the land means not knowing the story; a dialogical relationship is revealed between storytelling and landscape, the one discursively producing the other (Howard 2002b: 46).

11.5. Landscape, emergence of knowledge, and evidential usage

The intrinsic relationship between landscape, the storyteller's bodily presence in it, the cognitive associations it triggers, the emergence of knowledge in performance, and the status of that knowledge, has repercussions for the use of tense and evidentials. In this section I shall demonstrate how this is so by analysing tense and evidential usage in an-

other Tantamayo (p. 232) story cycle, which tells of a rebellious cacique of colonial times. I was told six variants of the story of Fernando Ambray, one of which differs from the others in important ways. The standard variant narrated by EML begins as follows:

Extract 3. The legend of Fernando Ambray, standard variant, EML

1 Pariashchuu marka ka-naa.
There was a town at Pariash.
2 Pariarca kaq ka-naa-raasu marka.
Pariarca was not yet a town.
3 Saychuu, Pariashchuu, *cada veintecuatro de junio fiesta patronal* ka-q.
There in Pariash, every twenty-fourth of June it used to be the festival for the patron saint.
4 Sayman shamu-q Chavínpita curaqa.
The priest used to come there from Chavín.
5 Chavínchuuqa unaypita marka ka-q.
There used to be a town at Chavín since the olden days.

[…]

(Howard-Malverde 1990: 6–7)

The narrator begins by setting the scene in a lengthy passage made up of nine utterances, the first five of which are presented in Extract 3. We note how the reportive tense *-naa*[1] marks the first two utterances, which describe a state of affairs in a distant past in which the narrator did not participate. From utterance 3 onwards, still in the scene-setting phase of his story, he shifts to the third person singular habitual past *-q* (*ka-q* 'it used to be', *shamu-q* 'he used to come'). At utterance 10 he shifts back to use of *-naa*[1] as he begins to recount the particular events of the story, as in Extract 4:

Extract 4. The legend of Fernando Ambray, standard variant, EML

[…]

10 I imanuupaaraa, na mayanqa say kwintuqa curaqa tardaamu-naa.
And however it was, the story goes that the priest was late.
11 Mulata muntakur unay mulallawan puri-q montash curaqa.
Riding on a mule, in the old days the priest used to travel just on muleback.
12 Saypitaqa kachayash kanqa kutimu-naa-su.
Then the person they had sent to fetch him didn't return.
13 I procession horaqa día hunaqqa Pariashchuu chaamu-naa-su curaqa.
And on the day and at the hour for the procession the priest did not arrive in Pariash.

[…]

(Howard-Malverde 1990: 6–7)

From this point on, and for the remaining forty-five utterances that make up the narrative, he marks every narrated event with *-naa*[1], while using the unmarked present tense (p. 233) when breaking out of narrative mode to comment. The story tells how, when the priest did not arrive to give mass, the cacique took things into his own hands and led the religious procession around the village square. From the other side of the valley, the priest looked down, and pronounced an act of excommunication upon the cacique. The latter escaped on horseback, eventually to turn into a condor and fly across to the mountain Yaqa Willka where he turned into stone. The storyline is interwoven with metanarrative comments on the part of the narrator, which serve to affirm the veracity of the story. These comments are based on the fact that material evidence of the cacique's passage over community lands can be seen to this day: the lithomorphosed figures of the horse, saddle bags, and trunk, and the condor-shaped stone visible on the distant mountainside, are lasting testimony to the story's truth. It is striking that throughout this variant the narrator never uses the non-personal evidential *-shi*, and very rarely uses *-mi*. The alternation between the non-personal reportive past *-naa*[1] with tenses that imply personal speaker perspective (habitual past, and a rare instance of the preterite in the closing passage) would seem sufficient to sustain the difference between non-personal knowledge and personal knowledge or opinion based on visible evidence. Evidential suffixes marking source of knowledge do not feature in this particular narrator's usage, indication enough that these are not systematic or obligatory in Huamalíes Quechua narrative discourse. Extract 5 further illustrates the contrast between narrative storyline and metanarrative comment:

Extract 5. The legend of Fernando Ambray, standard variant EML

1 Say petakilla forma-mi rumi qaqa kan say Ambraypa hawanchuu.
That rock in the form of a trunk is there, just below (the form of) Ambray.
2 Say-mi shikwaski-naa.
It fell to the ground there.
3 I kikin wak simpaman aywa-naa, say qaqaman hamaq.
And he himself went over to the other side of the valley and came to rest on a rock.

(Howard-Malverde 1990: 10)

These lines show a transition from metanarrative back to the narrative proper. In line 1 the metanarrative observation about the stone in the shape of a trunk is marked with the personal evidential *-mi*. The trunk-shaped stone is visible on the landscape to this day; the narrator asserts its shape based on his own observation. When he reverts to the story proper in line 2, repeating the detail about how the trunk had fallen from Ambray's horse to the ground where it turned to stone, the speaker carries over the *-mi* personal affirmation but then reverts to the narrative mode in the verb. This gives rise to an anomalous co-occurrence in that line of the personal speaker perspective evidential *-mi* with the reportive past *-naa*[1] of non-personal speaker perspective. By line 3 the transition is com-

plete; the narrator is fully back in narrative mode with the *-naa*[1] tense and his usual lack of evidential marking.

Extract 6 provides the opening lines of a non-standard variant of the story of Fernando Ambray in which the narrator (EGB) diverges in a radical way from the standard variant discussed above. (p. 234)

Extract 6. The legend of Fernando Ambray, non-standard variant, EGB

1 Qallarimushaa parlarna aa.
I'll begin speaking now.
2 Fernando Ambray cacique L____ kwintunta kanan-mi yapay willapaashayki qunqashqaykipita.
I'll tell you the story of Fernando Ambray cacique L_____ again, as you have forgotten it.
3 Primero ka-shqa estabilidaaninqa Apu Raqaa-mi.
His first place of residence has been Apu Raqaa.
4 Qanyantin tomaykaa … fotografía tomaykaamu-shqa-yki.
The other day you have been taking photos over there.
5 Saychuu-mi ta-shqa Fernando Ambray cacique L____.
Fernando Ambray cacique L____ has lived in that place.
6 Saypita-mi say inkakuna shamur conquistata rurar 'Huk marka Lima chika-ta palaciota rurashun' nir kay Pariarcapa shamur kachamu-shqa enviadonta Felipeta.
Then the Incas coming to conquer 'Let's build a town like a little Lima and a palace' saying, and coming here to Pariarca they have sent their envoy Felipe here.
7 Felipillo niya-shqa-mi sayta hutin.
They have called him Felipillo.

[…]

(Howard-Malverde 1990: 10–11)

The distinctive feature of EGB's storyline is that the cacique's lifetime spanned both the Inca conquest and the Spanish invasion, and the cacique is represented as having been resistant to both outside forces.[9] A further difference between EGB's version and the others is that here the narrator tells the story entirely in the present perfect tense, evoking personal speaker perspective. In addition, his use of the centripetal directional suffix *-mu-* on verbs of movement, has the effect of bringing the action closer not only in temporal but also in spatial terms. The function of *-mu-* is highly deictic. It situates the action in relation to the speaker; it is a bodily point of reference; its use operationalizes knowledge in relation to the place of enunciation. Use of *-mu-* in narrative discourse is triggered by knowledge of the place and envisaging the narrative action 'in the mind's eye'. The verb phrase *kacha-mu-shqa* '(he) has sent here' (Extract 6, line 6) illustrates this.

EGB's version of the cacique Ambray legend provides fine examples of the operation of speaker perspective in narrative discourse about past events. In this polyvocal text, speaker perspective shifts with the insertion of the narrated protagonists' voices into the warp of the narrator's narrating voice. While the non-personal perspective evidential *-shi* marks the narrated events recounted by the speaker in the narrative event, the personal perspective evidential *-mi* marks the narrated events described by the narrated protagonists, in so far as, from their speaker perspective, they are speaking from personal experience. Variation in tense usage also correlates with the alternations in speaker perspective, as Extract 7 illustrates. (p. 235)

Here, the narrator describes the Inca's route over local terrain in pursuit of the rebellious cacique. The route relates to sites on local territory to which the narrator's community holds title, with which he is personally familiar.

Extract 7. The legend of Fernando Ambray, non-standard version, EGB

1 Entonces saychuupis kan-mi raqaanin inkapa.
So there too is a ruined house belonging to the Inca.
2 Say Qipa Cara punta kaylaanin hunaqna-mi, say Qipa Cara puntachuuna-mi kachariya-sh kashqa ornamentonkunata inkakuna.
There above Qipa Cara, up over now in this direction on the ridge above Qipa Cara, the Incas had left behind their ornaments.
3 Say castillochuu tari-sh ka-shqa.
In that castle (someone) had found (them).
4 Kay postreroraa-chaa *veintenueve de junio*chuu-shi tari-naa.
In these recent times on 29 June someone found them, so they say.
5 Huk primoo-mi ka-rqa-n, Pablo M____ V____ hutin ka-rqa-n primoopa, aha.
He was a cousin of mine, Pablo M____ V____ was my cousin's name.
6 Say-mi willama-rqa-n saytaqa 'Tari-rqa-a inkapa ornamentonta i nuqaqa "Pita negociantekuna-chir kaychuuqa hamapaykan" ni-rqa-a-mi sayta rikachakushqaayaq tikraskikunaapaa mana ka-naa-su say ornamentokuna'.
Then he told me that: 'I found the Inca's ornaments and then saying to myself, "What travelling merchant must be taking a rest around here?" while I was taking a look around, by the time I turned back the ornaments weren't there any more.'
7 'Maharaa-naa' nir willapaama-rqa.
'They were spread out on the ground', saying he told me.
8 Saytana-mi nuqa yarparaykaa.
I am just remembering it now.
9 Saychuu sayraa-shi lindo ornamentokunaqa.
The beautiful ornaments were still there, so they say.
10 Saynuu-chaa willama-rqa-n sayta.
That is the way he told it me.
11 Sayna-mi pasa-shqa Qipa Carapa.
So then they have passed through Qipa Cara.

(Howard-Malverde 1990: 21–2)

In lines 1–2 we find a combination of the personal speaker perspective evidential *-mi* with the past perfect tense, typical of this narrator's way of describing historical events unseen by himself that occurred on local sites. This singular use of *-mi* is, I believe, a reflection of EGB's sense of authority as President of the Community Council (*Cabildo*) and recognized community spokesperson at the time of his story performance.

At line 4 the narrator moves to a more recent time frame, to talk about how buried Inca treasure had once been found by a local person on a village feast day. His shift in perspective is signalled first by use of the co-constructed knowledge evidential *-chaa*, whereby he (p. 236) engages the interest of the interlocutor. He then marks the main verb with the reportive past *-naa*^{1} and reinforces the non-personal speaker perspective (non-personal knowledge) by use of the *-shi* evidential.

In lines 5–7 the narrator recounts what his cousin Pablo had told him about finding the Inca's ornaments on the ground, looking around to see who they might belong to, and on turning back finding that they had disappeared.[10] In bringing his cousin into the story at line 5 he uses *-mi* in combination with *-rqa-* thus fully establishing personal speaker perspective based on direct experience. The *-mi*/*-rqa-* combination persists in the narrative utterance of line 6 when he introduces his cousin's voice, allowing Pablo as narrated protagonist to recount what happened to him from his personal speaker perspective. The main verbs in the reported speech utterances are correspondingly in the preterite *-rqa-* (which embeds personal experience evidential extension). He switches from *-rqa-* to *-naa*^{2} to report on how he found the ornaments had disappeared (*mana ka-naa-su* 'they weren't there any more' and *maha-raa-naa* 'they had been spread out on the ground'). We classify *-naa*^{2} as mirative aspect in so far as it marks states of affairs that come unexpectedly to the speaker's consciousness.

As long as EGB is reporting on this event based on what his cousin told him, he uses the *-shi* evidential for utterances describing the historical facts (as in line 9). When he reverts as in line 11 to telling the story of the Incas based on the evidence of the landscape, he again uses the personal speaker perspective *-mi* in combination with the present perfect *-shqa-*. The patterning of tense, evidentiality, and reported speech is this extract is telling of the power of the landscape to provide direct witness, over and above testimony derived from the hearsay of human interaction.

Thus, if we compare the standard version of the Ambray story with the non-standard one, we observe a difference in tense and evidential usage that can only be explained in terms of the narrators' personal identities and their particular perspectives on the story they tell. While in the standard version the narrator consistently uses *-naa*^{1} as a means to mark his non-personal involvement with the narrated events, the narrator of the non-standard version, in using *-shqa-*, brings the story cognitively closer to his own life, the life of his community, and the life of his interlocutors. Interestingly, *-naa*^{1} is only found in EGB's version when he relates events in the story the evidence for which lies in hearsay (what his cousin Pablo M___ told him, see Extract 7, line 7). As long as he bases his story on his per-

sonal knowledge of the landscape, he uses the present perfect tense and the personal speaker perspective evidential *-mi* to talk about past events that unfolded in the ever-present space. Tense and evidential usage in EGB's version is concomitant with the idiosyncrasy of his storyline; together, these signal a personal interpretation of history for reasons for which there was also extra textual evidence.[11]

11.6. Genealogies, evidence, and evidentiality

The narrator JLA puts a version of the Achkay story to idiosyncratic personal use, in part by connecting it to the story of the cacique Ambray. She tells the story of the origin of a (p. 237) lake (*Yana Qucha* 'Black Lake') situated on the moorlands above the community where Achkay's activities in Achkay II are located. A female protagonist whom she gradually comes to identify with the Achkay in the course of the story, is responsible for the creation of the lake and the flooding of the village. After this, according to JLA, Achkay brought her own offspring to repopulate the place. At the end of this performance the narrator segues into a variant of Achkay I (normally located in a generic space). Having prepared the ground with her story of Achkay's creation of the lake, she alters the plot in order to contend that Achkay actually lived in the local community and from her offspring descended the lineage of a family with who she was in dispute at the time of the story-telling. The narration reveals the process of creation of a belief, the initial denial of the belief by local people (as narrated protagonists), and their gradual acceptance of the truth of the matter. Through this 'storytelling strategy' (Howard-Malverde 1989) the narrator provides a rationale for the family conflict that is part of her life. Extract 8 illustrates how this manipulation of the oral tradition is reflected in features of evidentiality, epistemic modality, and tense.

Extract 8. The story of the black lake (*yana qucha*), JLA

1 Qipaasinchuu taya-sh kashqa unay runa, qullana runakuna.
The men of the old days lived at Qipaasin.
2 Intunsis 'Maychuuta yana qucha kantaaku, nuqakunachuu yana quchaq maa rikashun, llullakunkichir' nirqa aywayan.
So 'Where's this black lake? There's no black lake here. Let's go and see it, maybe you are lying' saying they go (to take a look).
3 Nir aywayananpa 'Taqaychuuchir rikamushqaa hana hirka puntapitami rikamushqaa, waklaachuuchaa yana yanash qucha'.
As they were going to take a look (he said) 'Over there I looked down from the top of the hill, on the other side I saw a black lake'.
4 'Nuqakunachuu mana-mi ima yana quchapis ka-shqa-su, llullakunki' nirqa aywayaananpaaqa say Qipaasinchuu taqkuna, Wankaran kaq, arkarpu-naa Wankaran laaduchuu taq runakuna.
'There's been no black lake in our parts, you're lying', saying, the inhabitants of Qipaasin and Huancarán went and took a look down there, the people who live over by Huancarán.

5 Aywayananpaaqa rasun paypa quchaq, mana nunka qucha kashqanchuu yanayash, yanayanash qucha kaykaa-naa.
When they went (to look), right enough her lake … there was a black black lake in a place where a lake had never been before.
6 ‘Acha achallay! Kayra-chir yana yanash quchaq, kanan imanashunraa kay yanaya yana yakuta.
‘How scary! Here maybe there is a black lake, now what will become of us with this black water.
7 Kayqa mikamaashun-chir, ushamaashun-chir, Wankarantapis Qipaasintapis ushamaashun-chir.
Maybe it will eat us, maybe it will put an end to us, maybe it will finish off (we people of) Huancarán and Qipaasin.
(p. 238) **8** Say achkay warmipa quchan-chir kayqa.
Maybe this is that *achkay* woman’s lake.[12]
9 Say achkay warmi-mi rurama-sh kansi’ nir paykuna mansakash saynuupita Wankaranta abandonayaa-naa.
That *achkay* woman has done this to us’ saying they were frightened, and in that way they abandoned Huancarán.
10 Qipaasintapis abandonar shakayaamu-naa.
Also abandoning Qipaasin they came over here.
11 Qipaasinpita Wankaranpita taakuq kay Quyashman shayaamu-naa.
They came over here to Quyash to live, from Qipaasin and Huancarán.
12 Quyashman taakuq trasladukayaamu-naa ‘Say qucha-mi saltamur’.
They moved over here to live at Quyash (saying) ‘That lake is jumping out’.
13 ‘Yana qucha mikamaashun-chir, achkay-mi saychuu kan’.
‘The black lake may eat us, the *achkay* is there’.
14 Intunsis saynuupa say achkay warmi, yana qucha, say yaqa, saychuu taayan.
So that is how the *achkay* woman, the black lake, those bad (people) live there.[13]
15 Saynuupita kay Wankaranchuu say Ambray nir, saychuuqa taaku-sh.
That is how from that time here in Huancarán that so-called Ambray has lived there.
16 Ambraypa markan say Wankaran ka-sh.
Huancarán was Ambray’s village.
17 Intunsis saynuupa-mi say yaqa warmipa, say yaqa achkay warmipa mald-isyonnin o pudirnin hwurmaka-shqa say yana qucha saynuu-shi.
So that is how that bad woman’s, that bad *achkay* woman’s curse or power has formed the black lake, like that.
18 Say kriyinsya-mi kan say yana quchapita.
There is that belief about the black lake.

(Howard-Malverde 1989: 35–43)

In telling the story of the creation of the black lake, and attributing *achkay* characteristics to the female protagonist responsible, the narrator works up a thesis according to which the *achkay* woman gave rise to descendants who became the Ambray family of colonial times, whose progeny ostensibly still exists in the L___ family, with whom she is in dispute. She uses oral tradition to create the narrative conditions that allow her to put forward this thesis (Howard-Malverde 1989, 1994).

At the end of the second part of her narrative she steps out of the story performance discursively to support the validity of the black lake tale, as in Extract 9. It is significant that a code switch from Quechua to Spanish accompanies the break from performance (Gumperz 1982):

Extract 9. The story of the black lake, JLA

Este cuento de achkay, de yana qucha, me ha contado don Quintin Sánchez de acá, lugareño de acá. Nosotros fuimos a Arancay, a Taso Chico, él me acompañó para ir allí, primeramente (p. 239) profesora, el año cuarenta. Entonces aquí en Laguna Blanca en la cabecera había bonito pasto. Ahí hemos pasteado las acémilas. 'Aquí es bonito pasto mamita, vamos a pastear acá' me dice don Quintin Sánchez. Entonces nos hemos sentado junto a esa piedra donde él me dice 'Esta es la mujer que se ha convertido en piedra. La mujer que pareció acá.' Entonces 'Imapitata pyidraqtin konbirtish?' le digo, 'De qué es?' Entonces me comienza a contar, 'Kay kostami kanaa …' Todo todo ese cuento lo que he acabado de contar, él me contó hasta el *achkay*. Ahí mientras que nosotros pasteamos, que comían, el año cuarenta. Don Quintin Sánchez, él me contó.

That story of *achkay* and black lake, don Quintin Sánchez told it to me. He's a native of these parts. We were on a journey to Arancay and Taso Chico. He accompanied me when I went there on my first teaching post in 1940. There at the head of White Lake there was some good pasture. So we put the mules to graze. 'Here's some nice pasture ma'am, let's graze the animals,' don Quintin Sánchez says to me. So we sit down by that rock and he tells me it's the woman transformed into stone. 'Why did she turn into stone?' (*in Quechua*) I ask him, 'What was the cause?' So he starts to tell me how it used to be coast hereabouts, the entire story that I have just told, he told me, right up to the *achkay*. While we grazed the mules, in 1940. Don Quintin Sánchez, he told me.

(Howard-Malverde 1989: 44–52)

JLA's telling of the black lake story was understandably contentious, and members of the L___ family who came to hear of it denied its veracity and its authenticity. In my field diary I made the following observation:

I asked EML to listen to JLA's version. He said he had never heard of it before and suggested JLA had invented it. […] He found it unconvincing because the narrator had incorrectly placed *Huni Raqr*a. In his words, roughly, other tales are obvi-

ously authentic because they are associated with certain places that correspond to reality; in this tale the misplacing of *Huni Raqr*a and the claim that Achkay came down that way from *Yana Quch*a renders the tale false. *Huni Raqr*a is to the left of *Yana Quch*a and doesn't descend from any lake. The gully that comes down from *Yana Quch*a is *Sesa Raqr*a. […]

(Rosaleen Howard, field diary 9 September 1984).

On another occasion I recorded a conversation with EML on the subject, revealing of cultural criteria for judging 'truth' and 'authenticity' in the oral tradition:

Extract 10. EML on the black lake story (September 1984)

RH. Y tiene la opinión de que tal vez es un cuento que [JLA] sabe pero que otras personas no?

RH. And you are of the opinion that perhaps this is a story that JLA knows but other people don't?

EML. Así es, ya.

EML. That's right.

RH. Y por qué razón piensa usted eso?

RH. And why do you think that?

EML. Que no he escuchado?

EML. That I haven't heard it?

RH. Sí, por qué piensa usted que es un cuento que otra gente no … que solamente doña J sabe?

(p. 240) RH. Yes, why do you think it is a story that other people … that only JLA knows?

EML. Tengo razón como repito porque yo he preguntado a varias personas, así adultos, y no me han contado.

EML. I am right as I say, because I have asked several people, adults, and they haven't told me the story.

RH. (Addressing listeners-in) Entonces ninguno de ustedes ha oído de este cuento?

RH. So none of you have heard this story?

Other listener: No señora, recién acabo de escuchar más bien.

Other listener: No m'am, this is the first time I have heard it.

EML. *Yana Qucha* solo que se refiere cuando va el Ambray volando, ahí sí, es el último (lugar) que para, para pasar a la banda.

EML. *Yana Qucha* is just referred to when Ambray goes flying, it is the last place he stops before going over to the other side of the river.

RH. Y ella dice que Ambray fue descendiente de Achkay. Usted ha oído eso?

RH. And she says that Ambray was descended from Achkay. Have you heard that?

EML. No creo. Achkay ha sido más antes. El cuento es más antiguo. Ambray se refiere a tiempos coloniales ya, cuando el cura existía. El Ambray es de tiempos coloniales, y Achkay es más primero, más de *qullanan* tiempo. Así es.

EML. I don't think so. Achkay was before that. It is an older story. Ambray is about colonial times, when the priest existed. Ambray is from colonial times, and Achkay was earlier on, in ancient times. That's how it is.

RH. Así que, que ella llegó acá a vivir en Huancarán, no será cierto?

RH. So, it wouldn't be true that she arrived here to live in Huancarán?

EML. No será, porque en Huancarán no ha vivido el Achkay sino abajo. Inclusive de acá bajaba esa persona a cultivar maíz abajo y le siguió el Achkay (*he alludes to Achkay II*). Y se fue y en Runa Hirka muere. Yo creo que más no hay. Y no se sabe en qué sitio ha sucedido el otro cuento de Achkay, cuando convierte la papa, les engaña, no? (*he alludes to Achkay I*) La papa con la piedra, eso no se sabe en qué sitio, sino que es cuento no más. En cambio el otro Achkay ya tiene su sitio donde contarlo.

EML. No it wouldn't, because Achkay didn't live in Huancarán but down below. And that person went down from here to plant corn and the Achkay followed him (*he alludes to Achkay II*). And she went to Runa Hirka and died there. I don't think there is more than that. And it isn't known in what place the other Achkay story happened, when she transforms the potatoes, she deceives them right? (*he alludes to Achkay I*). The potatoes (she transforms) to stones, it isn't known in what place, it is just a story. On the other hand the other Achkay story has its place where it happens.

EML clarifies the facts of the commonly shared traditions around the two versions of the Achkay story. He places this personage in a different time frame to the cacique Ambray and points out the difference in the spatial settings between the two Achkay stories. In Achkay I her stage is an anonymous space (*no se sabe en qué sitio ha sucedido* 'it isn't known in what place [the story] happened'); in Achkay II she comes onto community lands (*ya tiene su sitio donde contarlo* '[the story] has its place where it happens'). Thus, in bringing the Achkay (p. 241) I story onto known land, and into the very village where

EML and other family members have their home, JLA transgresses the norms of the tradition; she takes Achkay out of the temporal and spatial framework that is proper to her according to that version; and her argument is a bone of contention among her fellows.

The relationship between the temporal and spatial frameworks of these traditions can be seen to influence the use of tense and evidentiality in the texts. Where narrators make personalized use of the oral tradition to serve a particular agenda, grammatical marking may alter. In the Achkay stories *-naa*[1] is used for events in generic space and *-shqa-* is used when events are locally grounded. In the case of the Ambray tradition, most narrators treat this as a story of bygone times and have no personal investment in it. They use *-naa*[1] on the verbs. EGB however gives the story direct relevance to his life by marking the finite verbs with *-shqa-*. Narrative pragmatics can be held to influence these grammatical choices. In EGB's version we found evidence to suggest that the testimony of place is stronger even than that of hearsay; it is as if 'places speak truer than people' (Howard-Malverde 1990: 81), bringing to mind the way in which PLL pulled up short in her description of Achkay's trajectory over the land, quite literally 'because of the hill that blocks the view' (Howard-Malverde 1989: 61).

11.7. Concluding remarks: narrating lives, transcending genres

Parameters of space, time, and personal identity influence evidentiality and tense in Huamalíes Quechua narrative discourse. Variations in the use of these markers have to be seen from the point of view of pragmatics, to be accounted for in terms of the cognitive, psychological, or emotional associations that the story content evokes in the narrator. It is tempting to work with the concept of genre in relation to these stories, to separate out the elements that we would classify as myth, legend, history, and life story, for example. However, analysis shows that these categories do not really apply to Quechua oral narrative, which is to a large extent embedded in conversation (Mannheim and Van Vleet 1998; Allen 2011) and does not respect neatly defined genre conventions.

It is better to look at Quechua narrative as a flow of discourse whose recurrent themes are to do with the relationship between human society and figures of the non-human world. The narrated protagonists of the stories are of diverse ontological status: landscape spirit beings, animals, legendary-historical figures, family ancestors, and living humans. In exploring through verbal discourse the relationships between these different types of being, stories emerge that, from a culturally external analytic perspective, we might classify in terms of genre. However, if we stay with a more flexible view of the narratives as life stories the events of which unfold on different levels of reality, this allows us to be less categorical in terms of story 'type'. Indeed, to impose a categorical framework may obscure the deeper meanings at work within the stories (which express preoccupation with poverty, perceived infrastructural inadequacies in the community, social conflict, and so on). Underpinned by a shared cultural cosmovision at whose heart lies the tense and ambivalent relationship between levels of reality and sources of power (the 'so-

cial' and the 'supernatural'), any one story can be found to intertwine in a single narrative performance, events deemed to unfold in the (p. 242) present human world, the past human world, and the non-human worlds that span both past and present. The fluidity of the relationship between the narrated worlds, and the way they mesh in performance with the world of the narrative event, is constituted from within a range of speaker perspectives in any given story. In turn, these speaker perspectives are both constructed and linguistically signalled through the correlative use of evidentiality, tense, epistemic modality, deixis, and reported speech.

Notes:

([1]) Fieldwork was conducted in the district of Tantamayo, Huamalíes province, Huánuco department during the early 1980s and again since the year 2000. Visits to Huamalíes were curtailed during the period of Peru's internal armed conflict between 1984 and the late 1990s. Huamalíes Quechua relates to the Quechua I dialect grouping named 'Huaylas-Conchucos' by Alfredo Torero (Torero 2002).

([2]) For anthropological analysis of Tantamayo oral tradition see Howard-Malverde (1989, 1990, 1994). It is worth noting that the differentiation between sources of information as grammatically marked by evidentials is also made in semantic distinctions at the level of lexicon, between ways of acquiring knowledge through seeing in waking life, feeling, hearing, dreaming, and seeing in visions (Howard 2002a).

([3]) To judge by the work of Daniel Hintz and Diane Hintz (2017) on neighbouring Conchucos Quechua, and building on Howard-Malverde (1988) and Howard (2012), the evidential system of the central Quechua languages is more complex than the work of Floyd on Wanka Quechua (Floyd 1994) had previously shown.

([4]) In Malinowski's classic definition, 'myth is a charter for society.' However, in the Huamalíes corpus, storytellers may shape the substance of shared oral traditions in order to advance their own view of the world, altering the standard form of a story to fit with their circumstances; it can thus also be said that 'society is a charter for myth' (Howard-Malverde 1986).

([5]) The figure known as Achkay can be traced to records of the early colonial extirpation of idolatries in the Andes (Duviols 1986: 119, 120; Arriaga 1968: 232). She features in modern day oral traditions particularly, but not exclusively, of the central Peruvian Andes (Jiménez Borja 1937; Mejía Xesspe 1952; Ortiz Rescanière 1973; Weber and Meier 2008).

([6]) For reasons of space, I analyse the grammatical features of the extracts that are relevant to my discussion, rather than providing a full interlinear analysis. The initials indicate narrators' identities. The extracts are in phonological transcription, which differs from the standardized orthography for central Peruvian Quechua. Words from Spanish are written in accordance with Quechua pronunciation.

([7]) In the performance the children's speech is imitated by a phonetic shift from [r] to [ly] in the words *ulla* (*ura* 'down below') and *chullallaykan* (*chururaykan*, 'is placed, put'); in the English translation, the word *gwill* ('grill') is an attempt to reproduce this imitation of childish pronunciation.

([8]) For present purposes I define an utterance as a sentence, at the level of the narrative storyline, with a single finite verb. Some utterances are simple, such as utterance 1 of Extract 1; others contain complex levels of verbal subordination and embedded reported speech, as in utterance 5.

([9]) Fuller detail can be found in Howard-Malverde (1990, 1999).

([10]) The theme of buried gold from Inca times that tantalizingly eludes the finder in the present day is common in Andean oral tradition.

([11]) See Howard-Malverde (1990: 42–4) for fuller details.

([12]) My translation assistant rendered *achkay warmi* as 'mujer mala' ('bad woman').

([13]) Here the verb reverts to the plural; the narrator shifts her thoughts to the people of Huancarán whom she considers *yaqa* ('bad'; 'asocial').

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Stereotypes and Evidentiality

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Abstract and Keywords

Evidentiality and stereotyping are two highly productive concepts that have recently generated interesting, and in the case of stereotypes, often politically intense, research agendas. This paper initially outlines how some of this productivity relies on a certain indeterminacy concerning the key terms. After outlining debates about the key characteristics of evidentiality and stereotypes the paper considers recent work that links evidentiality to stereotypes. Such works are found primarily in linguistics rather than in other discipline and analytical emphasis is on evidentiality rather than stereotyping. Reluctant to make claims based on 'Western' psychology, the linguists approach stereotyping primarily as a social process. Supporting such an approach this review highlights the need for greater analysis of the interactional contexts that deploy both evidentials and pejorative social categories. In addition, there is a need to further investigate the histories of changes in local use of evidentials and stereotypes understood as interrelated social processes.

Keywords: evidentiality, knowledge source, stereotype, context, social interaction, linguistics, psychology, cognition

The notions of evidentiality and stereotype are rarely addressed in conjunction with one another. This is partly due to a history of disciplinary isolationism between psychology and linguistics on how to deal with stereotypes. Many definitions of a stereotype within psychology (Hilton and von Hippel 1996) focus on fairly private, interior mental states that can involve unconscious activities. The alternative view, influential in linguistics, argues that knowledge of social categories, especially those conveying negative evaluations, and their supporting evidence, are better understood as social phenomena, as an 'aspect of the social relations between people' (Hill and Irvine 1993a: 17). Evidential systems, defined as primarily involving grammatical marking of information sources (Aikhenvald 2004a) have long been analysed as embedded in social interaction. The emphasis in the linguistics of evidentiality, broadly defined to include information source and the status of that knowledge, has been on analysing a wide range of knowledge claims as forms of social action (Hill and Irvine 1993a,b; Howard: Chapter 11 of this volume). Irvine long

ago highlighted how insults, acts of ‘verbal abuse’, and attacks on ‘character’ were deeply implicated in issues of responsibility and evidence in talk (1993: 105).

This resolutely sociological and pragmatic approach defines most linguistic analysis of the interaction between evidentiality and stereotyping. The work of the cognitive sciences on stereotypes tends to be ignored. This is evident in a recent overview of linguistic anthropology (Enfield, Kockelman, and Sidnell 2014) where there are a series of chapters in a section entitled ‘Interdisciplinary Perspectives’. Archaeology, critical studies, biology, social and cultural anthropology and other research traditions are discussed. Yet psychology does not appear to warrant a chapter. In the index to the entire collection there is no mention of stereotypes. The two absences seem to go together, but our guides to the volume do not seem to notice the absence of either and do not make explicit comment. What they do instead is honour Malinowski’s (1965: 7) warnings, in *Coral Gardens and their Magic,* about the dangers of placing too much stress on the mind and cognition in the analysis of language. They quote him saying

> … there is nothing more dangerous than to imagine … that the function of language is to reflect or to duplicate the mental reality of man in a secondary flow of verbal equivalents. The fact is the main function of language is not to express thought, not to duplicate mental processes, but rather to play an active, pragmatic part in human behaviour.
>
> (Malinowski cited in Enfield, Kockelman, and Sidnell 2014: 15–16)

(p. 244) Language is to be treated primarily as a social activity, with ‘mental processes’ or ‘mental realities’ left somewhat isolated from the pragmatics of public linguistic expression or simply absorbed into social interaction. In these social accounts there is little explicit reliance on claims that stereotypes crucially operate in ‘internal’ cognitive processes and are then applied to ‘external’ social contexts. Whatever we know about apparently internal or private cognitive processes is always embedded in forms of social interaction that are always involved in any claim to knowledge (Enfield 2013). The aim of such approaches, often influenced by Wittgenstein (1968) and Ryle (1963), was to, if not eliminate mentalism from cognition, at least to reposition both as not especially useful in the pragmatic analysis of meaning and social interaction as proposed by Malinowski (1965); James (1975), and many others since.

This chapter explores some of the debates and arguments that involve these generalizations as found in accounts dealing with evidentials and stereotyping. Both concepts involve descriptions, explanations, and assumptions about language and cognition. As a result, attempts by linguists and anthropologists to purge themselves of psychology when talking of evidentials or stereotypes have proved difficult. Both topic areas and key concepts involve implied, if not explicit, psychological assumptions and claims. For example, social categories have long been understood in anthropology as a form of social thought (Durkheim and Mauss 1969; Douglas 1996). And psychology (Dovidio, Hewstone, Glick, and Esses 2010), sometimes in conjunction with sociology (North and Fiske 2014), has developed a kind of dominance in studies on social categories as stereotypes by develop-

ing politically interesting work on implicit bias, links of stereotypes to non-conscious processes and their revocability. More recently, certain theories of cognition link knowledge to embodiment (Chemero 2013) and, following James (1975); Gibson (1979); and Ingold (2000), define embodied relations with the environment as the basis to knowledge (Wilson and Golonka 2013). Variants of the embodiment paradigm argue, for example, that social categorization or stereotypes might be grounded in sensorimotor activitiy (Slepian, Weisbuch, Rule, and Ambady 2011).

This recent work on stereotypes, has had relatively little impact on linguistics (and anthropology), where discussion of stereotypes has flatlined if not declined. While the post-World War II rise of cognitive psychology in the 1950s and 1960s was reflected in the emergence of cognitive anthropology and cognitive linguistics, in linguistics the rise of pragmatics in the 1970s seems to have shifted interest away from psychology and claims about cognitive processing and stereotyping. Recent linguistic anthropology shifted the analysis to linguistic and cultural ideologies, hegemonic practices, and institutions as sites for the reproduction of inequalities. Stereotypes were described, but the category stereotype was, perhaps because of its cognitive legacies, not that interesting as an analytical category since most of the explanatory work was done by a pragmatics linked to broadly sociological categories.

This chapter further explores these arguments initially by outlining a brief history of the concept of stereotype. We then bring stereotypes in to conjunction with grammatical evidentials as reflected in Aikhenvald's work in Amazonia and develop the point that evidentials, and concerns about status of knowledge, can exemplify cultural stereotypes about the need for precision and the need to explicitly register the amount of knowledge or information being shared (Aikhenvald 2014: 37).[1] These concerns often subtly define relationships (p. 245) between self and more distant others and so extend into a concern with social categories. The study of both stereotypes and evidentiality may be further enhanced by a greater concern with local understandings of perception, inference, and reported communication. The next part of this chapter moves us from descriptive linguistics to linguistic anthropology (Stasch 2104a). Specifically, we look at modes of expressing stereotypes that involve genres of speech such as insults, slurs, and gossip. What is interesting is that all the authors reviewed in the section treat stereotype as a self-evident entity that can be easily used descriptively rather than analytically. I take this de-emphasis of stereotypes as explanatory to also reflect a still dominant emphasis on explanations linking the social, the semiotic, and pragmatics. I conclude by reiterating the need for greater ethnographic description of both evidentiality and possible stereotypes.

12.1. Some approaches to evidentials and information source

Another factor in the relative lack of an integrated analysis of stereotypes and evidentials is perhaps due to the relative novelty of the concept of evidentiality compared to the longer, possibly more complex, history of stereotype as a concept. It could be argued that

the sheer empirical complexity of evidential systems (as revealed in this volume) prevents easy generalizations from emerging. It seems that 'despite the recent surge of interest in evidentiality, it remains one of the least known grammatical categories' (Aikhenvald 2004a: 3). Perhaps evidentiality has yet to be stabilized into definitions, concepts, and working theories that can be usefully brought into conjunction with other concepts like stereotyping or other disciplines such as psychology. Paz (2009: 138 fn 13) has noted linguists have yet to fully work out the relationship in evidential systems between source of knowledge and attitudes to knowledge in a manner that can sort out cross linguistic differences. Material on evidentiality is often presented without detailed reference to local speakers' ideas and practices that define and integrate information sources, and access to knowledge, in to general theories of how knowledge is produced. For example, we might ask, albeit in explicitly Eurocentric terms, do local theories of information sources (involving for example seeing or hearing) regard these forms of perception of the world as part of the knowledge of the entity (via indexical relationships)? Or are such acts of sensory perception seen as independent of knowledge of that entity in a way that makes knowledge of an entity a symbolic representation of the sensual perception?

In some accounts of evidential systems the grammatical category evidential is radically distinguished from the vast array of questions about knowledge evoked by the term information source (Aikhenvald 2007a: 222). In many societies, including those using grammatical evidential marking, various information sources can be ranked. Often visually obtained experiential knowledge is understood to be the most valuable and reliable, followed by self-reporting of information derived from smelling, tasting, or hearing. Such hierarchies imply that the status of the information is being evaluated. Some linguists have argued that information source is not sufficiently precise to specify the semantics of evidentials and define evidentiality as involving the 'nature of a speaker's sensory/cognitive access to the event in question' (Michael 2008: 137; Gipper 2011: 7). The point here is that different evidentials **(p. 246)** (such as visual access and inference) can refer to the same source of information, but highlight different modes of access to that single source. Gipper extends Michael's argument by noting 'evidentials are frequently not chosen according to the speakers' informational source or information access, but rather according to the function of the utterance in the interaction' (Gipper 2011: 8). Following Michael she argues the use of evidentials is determined by social and interactional practices and functions. In addition, rather than understanding evidentials as only expressing the subjective perspective of the speaker she argues evidentials can also reflect inter-subjective perspectives that also involve the addressee's access to information. Evidential use can indicate not just the speaker's information source or access but also the speaker's understandings of the addressee's access to information. Emphasizing the salience of interaction and inter-subjectivity in her analysis of Yurakaré evidentials, she argues their evidentials 'have two semantic dimensions: the type of cognitive access to information, and the speech act participants who are accessing the information' (Gipper 2011: 12, 2014).

Both Michael and Gipper mention cognition in their formal definitions of evidentiality. Neither however elaborates on the role of cognition, as it is not at all crucial to their actual analysis of evidentials. But its underspecified appearance might be taken to imply that

they think experiences and knowledge of the world derived from different modes of access (such as perception via seeing and hearing) can be transformed and recoded into something different: a process involving generic mental representations or schemata.[2] What is also at issue is whether the relevant community of speakers have similar ideas. In addition there may be implicit, or explicit, commitments by the linguists or local speakers to give salience to some form of unified processing of the various information sources or modes of access. Such processing may be understood to be uniquely distributed—for example it could be understood to be located in the brain, the mind, or elsewhere in the body, or located in what we might call a 'soul' (Taylor 1996). The body may be understood as an information source or as a distinct mode of access whereby the body is an additional and important modality, linking entities and events in the world to the speaker and the addressee. It may generate knowledge directly from perceptions or transform these perceptions into other more cognitive entities that would in orthodox Western psychology take the form of representations like prototypes or stereotypes. Moreover any single source or mode of access to information is likely understood by a speech community as part of a complex assemblage of sources that relationally interact in complex ways. My point in raising these possibilities is that despite attempts by ancestral figures such as Malinowski to purify descriptive linguistics of any need for cognitive explanations, issues about the processing of knowledge, perceptions, and information remain embedded, even if largely implicitly, in the analysis of evidentials. More explicit consideration of the psychological theories held by both linguists and the speakers of the language they study may lead to a more productive analysis of evidentials.

Interactive and sociological approaches to the linguistics of evidentiality have often deployed functional explanations that link evidentiality to the political implications of any proposition. Michael (2006) has argued that quotative and reportive evidentials help mitigate speakers' responsibility for the truthfulness of a reported utterance and that reported speech markers can allow speakers to make insulting or critical comments while shielding (p. 247) them from recrimination. In this way evidentials can come to stand for, and thereby define, the speaker's moral responsibility for knowing the entities and events that are given evidential marking (Hanks 2014: 15). But other voices, standpoints, and associated interactions can be embedded in evidentials (Hill and Irvine 1993a) in ways that can diminish the speaker's responsibility for what is known. In addition, an evidential can be used to create pragmatic effects such as 'expressive force' (Hanks 2014) that further help authorize, or destabilize, knowledge claims.

Another area of interest is how evidentials change. Bambi Schieffelin recently pointed to the analysis of new knowledge as a useful part of any discussion of evidentials. She argued that 'given the widespread cultural and linguistic contact and change taking place throughout Papua New Guinea, we also need to think about how contact between languages such as Bosavi, with its obligatory evidential system which encodes particular cultural epistemologies, and Tok Pisin or English, which lack such systems, affects the ways in which utterances are shaped and circulated' (2008: 439). In her work Schieffelin (1996) has outlined how the introduction of written texts into the Bosavi region involved the creation of new evidential markers and changed the way already existing evidentials

were used. Her examples concern a recently introduced educational text on malaria that is presented to a class by their instructor as a speaking subject with its own voice that is true. A novel evidential marker also used by the instructor had the meaning ‘known from this source/not known before’ to indicate information ‘that is new, true, and only known from the written word’ (Schieffelin 1996: 448). The book speaks to the Bosavi of a previously unknown truth. At other times to emphasize the book’s role as a speaking subject, the instructor used evidential markers of verbal evidence rather than a visually observed marker. Another evidential practice of the Kaluli in the 1960s was that no evidential markers were used in written vernacular texts (Schieffelin 1996: 448). Such texts were regarded as a radically new source of knowledge that did not require the application of pre-existing markers of knowledge source. According to Schieffelin one implication of such practices meant that the written text explicitly denied ‘that Bosavi people had reasons or beliefs before contact’ (1996: 456) and that only with the arrival of written texts did the possibility of unqualified truth emerge. Such ideas established a powerful discursive distinction between the past and a present full of the promise of modernity based on true knowledge. Equally powerful differentiations, in this case of social categories and stereotypes, also emerge between past and current Bosavi people, whereby those in the past are somewhat alien to those new Bosavi subjects who now live in the realm of the truth, literacy, and the book.[3] What Schieffelin offers us is the possibility of developing a distinctly Bosavi history of their changing practices of evidentiality and its grammar. Such a project, reimagined to also include a history of Bosavi social categories, and stereotypes, would in effect become a history of some local epistemologies linked to a history of changing social differences and social categories. Such a project, more precisely thought out, is one that might lead to further interesting linkages between stereotypes and evidentiality.

(p. 248) 12.2. Some ideas and arguments concerning stereotypes

While the study of evidentials has some difficulties with stabilizing its conceptual resources it is arguable that stereotype’s longer history has allowed that term to be subject to far greater conceptual and descriptive instability than linguists’ accounts of evidentials. The most crucial area of debate about a stereotype is its unchanging nature especially in certain psychological descriptions. Such descriptions are challenged by the pragmatic, interactively orientated emphasis of linguists and anthropologists who generate accounts of stereotypes that are resolutely social and, in a social constructionist manner, define stereotypes as malleable. Such stereotypes are implicitly, and sometimes explicitly, understood to be responsive to new knowledge and information and to new forms of social interaction.

Commitment to the changeable nature of stereotypes in linguistics, anthropology, and sociology, is partly dependent on the extent to which the explanation of the stereotype relies largely either on talk of dominating structural forces and institutions (involving lin-

guistic ideologies and hegemonic effects of class, gender, normative heterosexuality, race etc) and/or talk about the structuring possibilities of the micropolitics of everyday talk. In some accounts these micropolitics can generate their own contexts and social ordering without much need for descriptive or explanatory reference to any overarching structural ordering. In general stereotypes are commonly described, and analysed by linguists and anthropologists, as highly responsive to the micro-contexts of social and linguistic interaction. These accounts point to the possibility of political intervention and consequential transformations of stereotypes and their content.

Such views run counter to earlier understandings of stereotype, which was initially a technical term in printing that defined a text cast into a rigid form for the purposes of repetitive use (Schroeder 1970; Blum 2004: 261). Stereotypes were explicitly designed not to change. This also highlights how some Anglo-European ideas about stereotype as an information source are profoundly linked to models of textual representation and reproduction. By the late nineteenth century stereotypes started to be linked to the apparently fixed characteristics of people or events. Lippman, a good candidate for the originator of the modern concept of stereotype, emphasized in the early 1920s a stereotype's repetitious qualities when he argued 'a stereotype may be so consistently and authoritatively transmitted in each generation from parent to child that it seems almost like a biological fact' (Lippman 1922: 93, cited in Oxford English Dictionary). This academic naturalization of stereotypes supplements the 'taken for granted' quality of such knowledge, as is evident in the use of stereotypes in everyday insults and slurs.

Lippman's account of stereotype involved integrating psychological and cultural processes (Bottom and Kong 2012). The following quote indicates his interest in understanding stereotypes as an ambitious synthesis of perception, category formation understood as stereotypes, and culture:

> For the most part we do not first see, and then define; we define first and then see. In the great blooming, buzzing confusion of the outer world we pick out what our culture has already **(p. 249)** defined for us, and we tend to perceive that which we have picked out in the form stereotyped for us by our culture.
>
> (Lippman cited in Gendler 2011)[4]

Lippman's account also points to some crucial ambiguities in the concept of stereotype that have themselves persisted through attempts to analyse it. At one level, in his account 'culture' subverts any claim about the autonomy of mental activity, as it is culture and its conventions that define the stereotype. On the other hand the work of the mind is to define the stereotype's conceptual features prior to any perceptual engagement with the world. In this account, the world is excessively full of perceptual information—'the great blooming, buzzing confusion' of William James—that requires ordering by mental representations for sense to be created. In this kind of account, our access to information from the world is overpowering if unstructured hence the brain or mind has to do most of the work in ordering our knowledge. This mind, heavy-lifting with mental representations of perceptual experiences, becomes the dominant source of our knowledge by apparently

optimizing the combination of perception and internally represented knowledge (Wilson and Golonka 2013: 2).

Stereotypes, in Lippman's view, seem to involve three sources of information—the first being linguistic and cultural conventions, and the second involves mental representations that combine with a third confusing, even flawed, source involving perceptual information from the buzzing world. In Lippman's account a stereotype is a complex entity that refers to all three sources and their interrelationships.

However, it was the claim about mental representations that has been amplified since the 1940s in forms of cognitive psychology where stereotypes, understood to involve categories and concepts, are presented as 'fundamental to the ability to perceive, remember, plan, and act' (Banaji cited in Gendler 2011: 39–40). Internal representations and mental processes have become the most important determinants of human behaviour.

In this type of standard cognitive explanation, stereotypes are about mental representations and their cognitive processing that operate independently of social context or other processes in the external world. It is these cognitive processes that crucially define important biases associated with social categories. The understanding of mental representation in these stories of the origins of stereotypes involves an internally located category or symbol that is linked to the stereotype. A further assumption in these accounts is that perception and cognition are different systems. This can involve a particular view of mental representation whereby cognitive knowledge is separated from the perceptual states that produced them. Knowledge as cognition involved 'amodal'—that is, inherently non-perceptual—abstract representations such as componential features, schemata, semantic nets, prototypes, and stereotypes (Barslou 1999: 577–8). These abstract representations feature in cognitive anthropology, cognitive linguistics, and certain understandings of semantics.[5]

By the 1990s a further consensus emerged in strands of psychology that 'automatic categorization' and the automatic associations of categories were 'the major culprits in the endurance (p. 250) of bias' (Blair 2002: 242). The automatic processes involved in information processing give emphasis to options consistent with the stereotype. In some accounts such information processing is about efficiency and information is processed accordingly —information that falls outside the stereotype is either not processed or less efficiently processed.

These processes apparently operated independently of our explicit rejection of the normative content of the bias evident in stereotypes. American university students playing computer games will shoot unarmed black people at a greater rate than they would shoot unarmed white people even though in the games black and white people were armed at the same rate. There is very considerable evidence of the negative social and cognitive effects of stereotypes. Studies into 'stereotype threat' show that when, in the United States, a teacher asks Afro-American students to complete a test of intellectual ability that will be graded they suffer 'cognitive depletion' due to the threat contained in the still existing stereotype that Afro-Americans are naturally unable to do well in studies and exams.

Their responses confirmed the expectations contained in the stereotype. When asked to complete a problem-solving task that was non-diagnostic the Afro-American students did better.

The distinctively cognitive processes involved in generating the stereotype's effects are often described as 'automatic', 'habitual' or 'default responses'. As a result the effects of stereotypes are presented as operating quite independently of any impacts created by new information and new forms of social interaction. In such explanation a stereotype's more troubling effects may not be a conscious achievement. In addition these hidden cognitive operations were sometimes understood to be to a significant degree independent of conscious intervention. The strength of the resulting biases was thought to correlate with a knowledge of the substantive content of prevalent stereotypes irrespective of whether people self-consciously rejected or endorsed the content of the stereotype. As a result the philosopher Gendler (2011) concluded that it may not be possible to address politically important stereotypes with rational arguments and that other forms of belief and cognition are in play. Gendler, perhaps too quickly given Blair's (2002) review, assumed that such academic arguments about implicit bias as an automatic or habitual effect was factual and authorized knowledge and therefore was itself closed to revision.

It may not be useful to assume that accounts of cognition relying on not-as-yet fully understood processes such as automatic information processing are authoritative and justified by the evidence. Since the 1990s other models of cognition have been developed that dispense with the idea of stereotype as linked to mental representation as a type of information source that is independent of the body and the world (Barslou 1999). These approaches do not rely on claims about automatic processing of information linked to mental representations. In some non-representational accounts of cognition perceptual information is equated with mental representations of the same information and this merging of the internal and external information sources replaces the explanatory and analytical reliance on distinctly 'mental' representations evidenced in orthodox cognitive science's explanations of stereotypes. In recent ecological and embodied psychology there is no 'language of thought' (Rockwell 2013: 223) inside the mind that, through some 'mental gymnastics' (Withagen and Chemero 2012: 524), forms representations of perceptions. Instead there were direct perceptions of environmental affordances unmediated by mental pictures or representations (Gibson 1979: 147).[6]

(p. 251) In social cognition theory (Smith and Semin 2007; Blair 2002) stereotypes are activated by aspects of the currently relevant social situation. Madva (forthcoming) has recently cited considerable research that indicates that just thinking counter-stereotypical thoughts seems to reduce the accessibility of stereotypical affects (also Kawakami et al. 2000). In some accounts if the participants in experimental games involving shooting or not shooting black, and white people, thought of the word 'safe' when they saw a black face, they actually showed significantly less implicit racial bias in their decisions. Research by Sassenberg and Moskowitz (2005) indicates that being creative may help in overcoming stereotype effects. The argument here is that stereotypical thinking is typical thinking. It is unoriginal, but can be revised by creative thinking (Madva forthcoming).

Such data suggests a certain responsiveness to the supposed automaticity of information processing involved in implicit bias. In such accounts crucial aspects of our understanding of a stereotype's operation are still dependent on social processes concerning the nature of our, in this case novel or creative, knowledge of public and private internal processes (Enfield 2013: 82).

Given this diversity of evidence concerning the revocability of stereotypes and the variety of approaches to defining the central mechanisms of stereotyping as automatic, unconscious, or habitual still requires creating a consensus that such definitions and arguments concerning information processing are fully warranted. The status of such knowledge is contested by other theories of psychology (Brown and Stenner 2009). Research focused on evidential strategies in claims concerning stereotypes may be a productive addition to such debates.[7]

We need to be cautious in giving salience to debates about stereotypes since they tend to locate generative change in the possibility of reducing a stereotype's impact. Following Dixon, Levine, Reicher, and Durrheim (2012) it seems reasonable to argue that negative evaluation of social categories or stereotyping (however defined) is not really the issue. Rather the issue is the capacity of the stereotyped group to take collective action that changes social relations of disadvantage and inequality. There is some risk of giving psychology, cognition, implicit bias, and stereotypes a greater role in world creation than is warranted. If offense is just a property of words, semantics, and grammar, then all that is required for improvement is a change in wording and associated styles of cognition. If stereotypes and prejudice can be transformed by creating new forms of social interaction between otherwise antagonistic groups then programmes related to such possiblities should be implemented. However Dixon, Levine, Reicher, and Durrheim note that such programmes may tend to dampen moves to create structural change.

They emphasize that relationships between groups that involve stereotypes are also to do with inequalities of power, wealth, opportunities, and outcomes and notions of distributive justice. While stereotypes are part of world-making projects linked to ideologies concerning race, ethnicity, sexual preference, and gender differences, it is also clear that other historical forces, such as price signals and patterns of property ownership, play a role in making up the lived inequalities that help define any stereotype's content and coercive power. Beyond cognition, language, and the possibilities of changing the effectiveness of stereotypes there (p. 252) are relations of inequality that also require transformation through collective action and conflict. Such transformative conflicts may utilize negative stereotypes to typify those in positions of power and privilege. Such ways of representing inequalities are one means of instigating 'inter-group conflict in order to challenge institutional inequality' (Dixon, Levine, Reicher, and Durrheim 2012: 419). These authors call for an approach that would look at the role of stereotypes and prejudice not just in the creation of harmony but also in relationship to conflict that would generate productive social change that reduces inequalities. Such an approach further extends and makes more complex, what an adequate description of stereotypes might need to consider.

12.3. Evidentials and some linkages to stereotypes in Amazonia

So how does talk of evidential marking and evidentiality relate to the knowledge involved in the vast diversity of theories, arguments, and definitions concerning ‘stereotypes’? This question raises difficulties given that evidential systems are often found in societies and cultures with very different epistemologies and ontologies from those where the concept of stereotype was developed. It is methodologically difficult to assume that data, questions, and issues defined in the West (Henreich, Heine, and Norenzayan 2010) to do with stereotypes can be meaningfully applied in other historical and cultural contexts. Anthropologists and linguists have preferred to ‘abandon, initially at least, all questions formulated outside the context under investigation’ (Astuti and Bloch 2010: 84). A key issue is the local relevance of the methodological individualism that underlies cognitive and representational approaches to knowledge and stereotypes. And much of the recent data on stereotypes, implicit bias, and stereotype threat, relies on experimental methods that have yet to be easily synthesized with linguistic and anthropological fieldwork.[8] In addition evidentiality studies have their own internal debates and concerns. The terminology and evidence used to define evidentials is not consistent, and given the complexity of evidentiality, generalizations about the systematic nature of local and universal systems are currently difficult.

These points indicate evidentials can play a role in the creation of authority and power (Aikhenvald 2003e) and play a role in stereotyping. In the Amazon evidentials can be used to define particular types people—such as shamans and ordinary people, competent or incompetent speakers (Aikhenvald 2018)—in ways that can be described as stereotyping in the sense of essentializing and dehumanizing. In a recent essay concerning Tariana speakers in Brazil Aikhenvald (2018) argued that grammatical evidentials are used to distinguish ‘self’ from ‘others’ and can enter into creation and reproduction of social categories linked to stereotypes. For example, for Tariana (and the neighbouring Tukano) speakers there was a strong preference for obligatory evidential marking. They (p. 253) often complained that white people (who speak Portuguese which does not have obligatory evidentiality marking) were ‘liars’ because they never told you how they know things (Aikhenvald 2003e). The Tariana also take particular kinds of evidential use as indicating a person lacks other valued qualities. A person who uses visual evidential inappropriately may be a hidden sorcerer. Over-asserting access to visually derived knowledge in dreams can indicate a person who is pretentiously claiming a status that is not warranted.

Aikhenvald (2014: 33–4) also argues that talk about dreams is normally coded by a non-visual evidential since events in the dream do not belong to the ‘real world’. In this region a dream is not a direct experience, it is a message ‘from an unknown source. The knowledge in a dream is received as a communication from beyond. Hence it cannot be coded as personal experience’ (Kracke 2009: 73). The source of the dream—a kind of super nature or super reality that is different to the everyday world—retains its radical otherness to the dreamer and thereby seems to deny the ordinary non-shamanic dreamer the posi-

tion of a fully experiential subject. This person emerges as somewhat marginal to the shamanic subject that can both see and identify more fully with entities derived from this supernatural realm. Among the Tariana the dream is externalized into a radically unknowable external reality that appears to deny the experiencing subject the possibility of becoming a fully knowing subject like a shaman.

One result is a political hierarchy of subject positions. Aikhenvald outlines how reflexive sensibilities about language are important sites for marking forms of political inequality.[9] We learn from Aikhenvald that the dreams of powerful high status shamans, who, in contrast to most Tariana, see 'everything', are usually reported using visual evidential cues. Shamans, unlike most Tariana, see other typically hidden aspects of the world, in the same sort of way they see the everyday manifest world. Further amplifying this point Aikhenvald notes that Tariana and the neighbouring Tukano stories about shamans contain many examples of their prophetic dreams—all cast in visual evidentials. Among the Shipibo-Konibo dreams by ordinary people are recounted using a reported evidential but when 'a shaman has a dream or a vision induced by the hallucinogenous ayahuasca he will retell this experience using direct, or firsthand, evidential' (Aikhenvald 2014: 33).[10] In his discussion of Huallaga Quechua evidentials, Weber (1986: 142) describes a relatively young speaker using a direct evidential too much. To many listeners this sounded 'incautious with respect to the information' conveyed (Weber cited in Aikhenvald 2014: 34). The man was judged to not actually be a member of the Quechua-speaking community and was considered crazy. In addition, Tariana speakers will label a Tariana person who fails to use evidentials correctly as 'a useless person' (Aikhenvald 2003e). In Aikhenvald's account the use of evidentials is closely linked to a person's status and their access to knowledge and thus to power. Improper use of evidentials enables negative judgements about a person.

In her account Aikhenvald uses the term stereotype descriptively to cover a number of different types of linguistic interaction that involve elements of what might be considered from our external perspective as 'stereotyping'. Her descriptive approach highlights the empirical and definitional complexity of stereotypes. In many societies like the Tariana the subjects of stereotypes can range from human others to non-human others such as the dead, (p. 254) ancestors, or spirits and can involve persons with extraordinary powers such as shamans and masters.[11] The result is an opening up of a rich sociology of the subjects of stereotypes that involves significant and subtle ontological distinctions between actors and the various realities they interact with. Further exploring these possibilities Howard (2014) has outlined how a Quechua narrative's key themes, about a man's shifts and transformations between different spheres of reality, are related to the distribution of evidential marking and of epistemic marking in the narrative text. In her analysis she adopts a speaker's perspective in contrast to Viveiros de Castro's (1998) broader ontological perspectivism that gives humans and some animals equivalent subject positions and perspectives. Nonetheless the world opened up by Aikhenvald and Howard links the analysis of evidentiality to crucial self–other relationships and transformations between different realities. Most academics working on stereotypes or social categories primarily refer only to humans and assume such humans inhabit roughly the same world or reality

and always maintain the same body. Such possibilities, highlighted by Aikhenvald and Howard in their description of evidentiality, may require radically different theories of cognition and embodiment to those currently influential in Western understandings of both knowledge and stereotypes.

12.4. Evidentiality, the pragmatic turn, and stereotypes

While it is fair to say that Aikhenvald's work has helped secure a place for the serious consideration of evidentiality in linguistics, the concept of stereotype is less secure. It has a relatively limited and somewhat episodic life in linguistics, especially of the kind practised by Aikhenvald. It appears more often in writings that deal with linguistic issues strongly linked to cognition rather than descriptive analysis via social interaction, context, and discourse, as promoted by Howard and Aikhenvald. I am thinking here of Putnam's famous use of the term in the 1970s when he narrowed our Lippman derived understanding of 'stereotype' into something more directly linked to semantics. He argued stereotypes conveyed the meaning, or 'core facts', of any 'natural kind' word (Putnam 1975: 150). The core facts were the 'characteristics' of a normal member of the kind. Putnam's stereotype approximated Rosch's more cognitive, and ultimately more influential, concept of prototype.

While Putnam wanted to promote a 'social science' of semantics his understanding of stereotype was not really taken up by linguists and he himself went on to develop often quite different arguments to those he had linked to the concept of stereotype. Interest in the referential semantics emphasized by Putnam was in some types of linguistics replaced with an interest in pragmatics and metapragmatics (Silverstein 1976), speech act theory, Piercean semiotics, and language ideologies (Kroskrity 2000; Schieffelin, Woolard, and Kroskrity 1998).

In some forms of sociolinguistics the concept of stereotype has not been the subject of explicit consideration. Hill's (1995) innovative work on mock Spanish is saturated with (p. 255) stereotypes, but the explanatory analysis is located in concerns with race, discourse, and concepts such as 'direct' and 'indirect' indexicality. Her interest is in how expressions involved in mock English explicitly and implicitly index a range of social structures, ideologies (such as racism) and forms of power that are evident in the linguistic interaction. These social relationships figure in the resulting forms of inequality, difference, and domination.

Recent work in linguistic anthropology and anthropology[12] has addressed 'stereotype' in largely descriptive terms. Stasch presents the stereotypy of tourists interested in experiencing the 'primitive' as a highly structured ideological organization (Stasch 2014b: 191). It is not so much the language used by tourists that is the object of analysis, but a cultural framework, or cosmology, whose different elements are 'felt to confirm and echo each other' (2014b: 209). At issue are ideas about local purity and pollution by Western moder-

nity, authentic and staged realities, and notions of individualism. Stereotypes is the site for a cultural analysis of a holistically coherent cosmology that is enacted in tourist experiences of the primitive. Stasch's concern with primitivist stereotypes is resolutely about 'more than language', a possibility that he thinks defines a social anthropologist rather than a linguistic anthropologist (Stasch 2014a). Compared to Hill's charged work on mock Spanish, that probably ignores the concept of stereotype as too cognitive in explanatory orientation, the result is an understanding of the primitivist stereotypes via a Dumontian reading of the concept of 'ideology' jostling with 'values' as the explanatory focus. For Stasch, stereotyping is adequately defined by reference to such an encompassing ideology, but the obvious issue here is whether such analysis makes sense of how the tourists themselves understand and produce their own primitivist stereotypes. There is a risk that ideological analysis displaces the tourist's voice.

Paz has recently given us an account of stereotype that reflects some of these trends but because his analysis of stereotype is combined with an account of evidentiality, he presents an analysis that is loosely similar to that initiated by Aikhenvald's attempts to deal with stereotyping and evidentiality together. And like Aikhenvald his analytical concern is mainly with evidentials, rather than with stereotypes, which Paz leaves undefined.

His work highlights how stereotypes are often expressed in specific forms of language such as gossip and rumour. His account is part of the already considerable work done on the analysis of insults and slurs (Jeshion 2013; Hom 2008), rumours (Firth 1967), gossip (Gluckman 1963; Handelman 1973; Besnier 2009), and the term 'stereotype' itself (Agha 1998). Descriptors of these different types of linguistic expressions can themselves function as stereotypes. And they can take on evidential functions 'since descriptors such as gossip and slur define the source of knowledge and are sensitive to the pattern of circulation' (Paz 2009: 121). Moreover such descriptors can qualify the knowledge transmitted as something requiring further confirmation, as intrinsically false, as based on ignorance or irrational.

Paz (2009) outlines how descriptors of the source of information, such as gossip and rumour, can take on stereotypical features that define the speakers and their marginal status within the Israeli nation state. The material concerns Latino migrant Spanish speakers living in Israel, some of whom were undocumented residents. At issue is gossip (in Spanish *chisme*). *Chisme* is stereotypically understood to spread possibly scandalous and hence important information. *Chisme*s circulate from 'mouth to mouth' and through other (p. 256) channels that cannot be relied on as completely valid (Paz 2009: 121). There is no identifiable author to such gossip. Moreover *chismes* were understood to circulate only within the Latino community residing in Israel. Gossip was something Latinos, but not other groups, did.

According to Paz rumour among the Latinos was a quite different form of speech. It referred to a source outside the Latino community. Rumour was something that came ultimately from Israeli sources that in many cases can be named and that have authority. This distinction between gossip and rumour contributes to figuring self–other relation-

ships as embedded in understandings of two more or less distinctive discursive communities. Gossip became a crucial feature of Latinos' self-definition that was contrasted with Israeli news media and 'state-centered public institutions' (Paz 2009). Latino self representation via such a stereotypical definition was reinforced in a short-lived Latino newspaper that had a fondly remembered gossip column that was quite different to the fact-based more authoritative Israeli journalism that created a very different public and associated dominant style of politics. As used by Latinos the descriptor rumour marked texts that were thought to originate from Israeli public forums rather from the less reliable Spanish speaking community (Paz 2009: 122).

The newspaper and its gossip column played a key role in creating the sense that Latinos had of themselves as gossips (Paz 2009: 123). The paper's gossip column used what Paz calls an 'evidential frame' that signalled the source as anonymous and marked the text as gossip. Verbs of speaking (to say), perception (to hear), propositional attitude (to know) and inference (to seem) were expressed in an impersonal third person form (they say) or pronominal verb form (it's said). Spatial deictics (around there or somewhere) and three particles—the inferential (it seems), the interrogative (could it be), and the reportive (it's said)—were routinely used to indicate the gossipy qualities of the text. Paz also highlights how intra-Latino public disputes often involved discriminating between what was, and was not, gossip since labelling something as gossip could be used to destabilize, or demolish, an apparently authoritative position in such disputes. In various ways the association of Latinos with gossip was strong and according to Paz helped define and reinforce their marginal position within the Israeli state and media that, unlike Latinos residing in Israel, did not gossip, but could create the basis of 'rumours' about state policies and the role of Immigration Police.

The result is an interesting analysis of evidentiality, group identity, and different notions of publics linked to different types of knowledge and their reliability. But Paz's work, like that of Hill and Stasch, does not give equivalent analytical emphasis to stereotypes per se, but rather focuses on other aspects of concern such as evidentiality, ideology, and pragmatics.

12.5. Evidentials and stereotypes: the possibilities of further relationships?

The aim of this chapter has been to explore the linkages, and disjunction, between two distinct, expansive, but often unrelated, concepts: stereotype and evidentiality. This account was framed by the idea that both concepts were saturated with broadly similar debates about whether the role of distinctly social and cultural factors can be combined with psychological factors that, in many Western theories, are treated as largely internal to the subject's mind (p. 257) or mental processing. While both linguistics and certain strands of psychology have moved to develop approaches where the relationship between the speaker's subjective or internal states and the external social environment was intensified, these moves have yet to really impact across the two disciplines. This is also the

case with the mutual relationship between the analysis of evidentials and stereotypes. As outlined here stereotype has an occasional relationship with linguistics and an even more tenuous history in relation to evidentiality. Where these two concepts co-occur, as in the work of Aikhenvald and Paz the analytical emphasis is on evidentiality rather than stereotype. In these accounts stereotype functioned merely as a descriptor of typically pejorative social categories. It was partially excised from the cognitive theories that gave stereotypes a crucial role in the production of knowledge. It also lost further explanatory power as it was increasingly embedded in institutional and ideological analysis, evident in linguistic anthropology, that ultimately positioned stereotyping as an outcome of such social features and associated relationships of inequality. The more psychological aspects of stereotypes became almost irrelevant to such approaches.

What is also apparent is that beyond the borders of the Western concern with stereotypes, racism, and sexism there is the lively politics of local speakers' models of stereotypes and social categories, difference and inequality that could be described in conjunction with notions of evidentiality. I have argued that for such a synthesis to emerge linguists may need to embed their accounts of evidentiality more explicitly in ethnographic descriptions of local theories of perception, embodiment, knowledge, and what we call stereotyping. To do this may require greater awareness of Western theories of the same processes. In addition, there is a need for greater analysis of the interactional contexts that deploy both evidentials and social categories that distinguish self and other in stereotypical forms. In summary, there is a need to extend and proliferate the intersections of stereotypes and evidentiality in various linguistic research agendas. Perhaps stereotypes and evidentiality could be thought of as productive boundary objects (Star and Griesemer 1989) that, through their current somewhat 'indeterminate referential identity' (Ochs, Gonzales, and Jacoby 1996: 329) will develop more creative links with each other. **(p. 258)**

Notes:

([1]) Cultural stereotypes here refer to things that get emphasized in a culture such as precision about how knowledge is accessed. Cultural stereotypes can be regarded as forms of social, rather than mental, scaffolding that are emergent and transformative in specific contexts.

([2]) On a more metaphorical level information suggests a somewhat similarly abstract entity.

([3]) Schieffelin's account derives from a time when the book and its truth was a very new thing. Telban (2014), working with Karawari speakers (who do not use grammatical evidentials) over a much longer period of time and where new communicative technologies such as the smartphone, have proliferated, notes that the Karawari distinguish between the old days when knowledge was reliable in contrast to now (the 2000s) when it is typically unreliable and untrustworthy.

([4]) Lippman's talk of the 'blooming, buzzing confusion' derives from William James' 1890 work *The Principles of Psychology*.

([5]) And they continue to have influence on some accounts of evidentiality. A recent survey of evidentiality suggests inference operates on propositional content at the level of 'representation'. This representational level apparently 'deals with mental constructs as represented in the speaker's brain' (Hengeveld and Hattnher 2015: 485).

([6]) Affordances are specifications of the environment's patterned capacities relative to the person or animal. They involve relations 'between the physical properties of the world and the action capacities of the body' so that the action capacities 'determine what physical properties an object must have to afford a certain behaviour' (Withagen and Chemero 2012: 526).

([7]) Such a project would build on work undertaken by Ochs, Gonzales, and Jacoby (1996), Chafe (1986), Hobbs (2003) and Atkinson (1999) that emphasizes the language scientists and professionals use to define their sources of information and the nature of the knowledge they produce.

([8]) Although see Ünal and Papafragou (Chapter 8 of this volume) for the use of experimental methods from within linguistics and evidentiality studies. For a recent anthropological application of experimental methods (on interspecies communication rather than everyday human speech) see Orr (2016).

([9]) Here I am paraphrasing Stasch (2014a: 634) who was writing about very different issues.

([10]) Aikhenvald's source is Valenzuela (2003).

([11]) While Aikhenvald does not pursue the matter, the Amazonian concepts of the 'master' of game (Kohn 2013, Fausto 2012) seem to be important in defining these kinds of subject positions and the nature of relevant knowledge sources.

([12]) For those interested, Stasch (2014a) has provided a useful account of the differences between these disciplines.

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Evidentiality: The Notion and the Term

Kaspar Boye

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Abstract and Keywords

This chapter surveys the different ways in which evidentiality is conceived of and referred to. It first outlines the history of the term evidentiality and other terms that have been associated with evidentiality. It then discusses different definitions and ways of understanding evidentiality. Most often evidentiality is defined in terms of the notion of information source or related notions. This notion has been understood as an epistemic notion, as a deictic or grounding notion and/or as having subjective and intersubjective aspects. Subsequently, the chapter discusses three distinctions that are significant to understanding information source and evidentiality, viz. distinctions pertaining to coding (coded versus non-coded), way of encoding (grammatical versus lexical encoding), and discourse prominence (discursively secondary versus discursively primary status).

Keywords: history (of term), information source, epistemic, deictic, grounding, subjective, intersubjective, grammatical encoding, lexical encoding, discourse prominence

13.1. Introduction

In the present volume, evidentiality is defined as the grammatical marking of information source. At present, most scholars working on evidentiality subscribe to this definition, and the literature on evidentiality does not suffer from the high degree of terminological variation that characterizes the neighbouring research field of modality. Still, there is not absolute consensus about the definition. First, a few alternatives to the term *evidential* exist, and evidentiality is not always defined in terms of the notion of information source. Second, even when it is, scholars differ when it comes to the question of how to understand this notion. Third, many scholars take evidentiality to cover not only *grammatical*, but also *lexical* marking of information source. Fourth, not all linguists take evidentiality to cover only linguistically *marked* information source.

This chapter gives an overview of the variation in how evidentiality is referred to and understood. With few exceptions, it focuses on evidentiality as a whole, as opposed to variation pertaining to evidentiality types (e.g. direct evidence, reportative evidence, inferential evidence).

13.2. Terminological issues

As mentioned, most scholars currently working on the topic of this volume converge on referring to it with the term *evidentiality*, and at present this term and the topic it covers is part of the standard linguistic curriculum. In 1986 things were different, however. Jacobsen reported that 'the concept of evidentials seems to be lacking in the standard linguistic textbooks and surveys of grammatical categories', and he speculated that '[t]his must be due in large part to the absence of distinctive evidential forms in the better-known European languages' (Jacobsen 1986: 7). Only with the first descriptions of indigenous American (p. 262) languages did the contours of what was to be known as evidentiality emerge (however, see Guentchéva 1996a: 14–15 on the possibility of an even earlier origin). In excellent historical overviews, Jacobsen (1986: 3–7) and Aikhenvald (2004a: 11–17) trace the notion back to Franz Boas and his work on Kwakiutl. Boas talked about 'evidence', 'source of subjective knowledge', and 'source of information', and also used the term 'evidential', although rather specifically (see Jacobsen 1986: 3–4 and the references therein). These characterizations were taken over by some other Americanists (see Jacobsen 1986: 4–6 for details), and also Boas's friend Roman Jakobson took it up (Jakobson 1957). However, according to Jacobsen (1986: 6) *evidential* was not established as a term in Americanist linguistics until the mid-1960s. Jacobsen credits Mary R. Haas, a student of Sapir, for this.

The mid-1980s marked the turning point by which the recognition of and interest in evidentiality spread from Americanist linguistics to a broader linguistic audience. Four publications may be seen as crucial: Barnes's (1984) and Malone's (1988) papers on evidentiality in Tuyuka were among the first publications on evidentials in South American languages (but see Aikhenvald 2004a: 14 for references to earlier publications); Chafe and Nichols (1986) was the first collective volume dedicated to evidentiality; and Willett (1988) was the first cross-linguistic survey of evidentiality.

The 1990s and 2000s saw a rapidly increasing interest in evidentiality, producing a large number of papers, dissertations, and monographs on evidentiality in individual languages, language families or geographical areas, and a number of collective volumes (Guentchéva 1996b; Johanson and Utas 2000; Dendale and Tasmowski 2001a; Aikhenvald and Dixon 2003, 2014; Guentchéva and Landaburu 2007; Squartini 2007b; Ekberg and Paradis 2009; Wiemer and Stathi 2010a; Diewald and Smirnova 2010b), and culminating in Aikhenvald's (2004a) cross-linguistic monograph covering evidentiality in more than 500 languages.

There are no signs of decreasing since then. Every year produces a considerable number of papers and theses on evidentiality, and research is currently becoming more diverse. Much of the early research on evidentiality was concerned with synchronic descriptions of evidentials or evidential systems (sometimes including diachronic information), and focused on languages for which there was a good case for identifying grammatical evidentials. Since 1986, the field has broadened to include: lexical expressions of information source especially in European languages (e.g. Cornillie 2007a; Wiemer and Wiemer 2010a; Diewald and Smirnova 2010a; Aikhenvald 2014), the acquisition of evidentials (Aksu-Koç and Slobin 1986; Papafragou et al. 2007; Fitneva and Matsui 2009), detailed diachronic studies of how evidentials develop (e.g. Botne 1995; Lazard 2001; Aikhenvald 2003c); evidentiality as an areal phenomenon (e.g. Aikhenvald and Dixon 1998; Friedman 2000a; Kehayov 2008a); the relation between evidentiality and neighbouring notions (e.g. De Haan 1999 and Boye 2012 on the relation to epistemic modality; e.g. DeLancey 1997, 2001; Lazard 1999; and Hyslop 2014b on the relation to mirativity; Aikhenvald 2015b on the interaction between evidentials and other grammatical categories), and theoretical accounts of evidentiality (e.g. Boye 2012 on general functional-cognitive theory; Ifantidou 2001 on Relevance Theory; Hengeveld and Hattnher 2015 on Functional Discourse Grammar; Langacker 2017 on Cognitive Grammar). In recent years, evidentiality has been dealt with also from a psycho- and neurolinguistic perspective (Tosun, Vaid, and Geraci 2013; Arslan 2015) and from an interactional one (Nuckolls and Michael 2012).

While, as mentioned, there is now wide agreement on the term ‘evidentiality’ and the definition of it in terms of information source, agreement is not total. First, a few scholars define (p. 263) evidentiality in a much broader way than is normally done. In particular, *evidentiality* and *evidence* have sometimes been taken to cover not only expressions of information source, but also expressions of degree of certainty. This is the case in studies within the framework of Relevance Theory (Papafragou 2000; Ifantidou 2001), in studies in text and corpus linguistics (Haviland 1989), and in Chafe (1986), who under the headline of *evidentiality* discusses ‘a range of epistemological considerations that are linguistically coded in spoken and written English’ (Chafe 1986: 262).

Second, a number of terms are found in the literature which are more or less coextensive with evidentiality. Some of these emerged prior to the mid-1980s. Hardman (1986) refers to Aymaran evidentials as *data source markers*. Some francophone linguists prefer the term *médiatif* ‘mediative’, coined by Lazard (1956; for discussion, see also Guentchéva 1996b; Guentchéva and Landaburu 2007; Dendale and Tasmowski 2001b) or *médiaphorique* (Hagège 1995), but usually restrict this term to cover indirect evidentials only. Scholars working with Turkic languages sometimes use the term *indirective* in a similar sense (e.g. Johanson 2000a), while in Uralic linguistics the term *indirekte Erlebnisform* ‘indirect experience form’ has been used (e.g. Haarmann 1970). In Balkan linguistics the term *confirmative* has been used for expressions of firsthand evidence, while *non-confirmative* was used for expressions of non-firsthand evidence (e.g. Aronson 1967; Friedman 2000a; see Aikhenvald 2004a: 15 for additional references).

Third, evidentials have sometimes been dealt with under terms which cover expressions of degree of certainty (and sometimes also other kinds of expressions) side by side with evidentials proper. One set of examples of this is found in works within text and corpus linguistics on *epistemic* (or *epistemological*) *stance* (e.g. Aijmer 1980; Ochs 1996; Conrad and Biber 2000). Another set is found in Quechuan linguistics where expressions referred to as *validational* or *verificational* include both evidentials and expressions of degree of certainty (cf. Boye's 2012: 64–8 classification of Imbabura Quechuan *validators* based on Cole 1982). Finally, Aronson (1977) and Friedman (1979) include evidentials, expressions of degree of certainty and (ad)miratives in a category called *status*. Note that this category is defined in a radically different way than defined by Whorf (1956 [1938]), Jakobson (1957) and Role and Reference Grammar (e.g. Foley and Van Valin 1984: 213; Foley 1986: 158) (see Boye 2012: 41–3 on the rather turbulent history of the term *status*).

All of the abovementioned variation pertains to evidentiality at a general level. In addition, there is some variation at a more specific level of evidentiality types. To take one example, 'hearsay evidence' is often referred to as *reportive* or *reportative*, but there is a long tradition of referring to it alternatively as *quotative* (Jacobsen 1986; cf. Aikhenvald 2004a: 394). This is unfortunate, as *quotative* is also used for markers of quoted speech, which are in several ways distinct from evidentials (see also §13.3, and see Boye 2012: 32 for discussion).

As mentioned much of this terminological variation is history. Obviously, much of it reflects a view of evidentiality as epistemic, an issue to which we will return.

13.3. Information source and related notions

This volume follows the majority of studies of evidentiality in defining it in terms of the notion of *information source* (also sometimes referred to as *source of information*) which is intended (p. 264) to capture the meanings expressed by evidentials. That is, evidentials are taken to designate different information sources—or different *types* of information sources. Sometimes other notions are employed for the same purpose. In particular, many authors talk about *evidence* (e.g. Palmer 2001: 8)—thus stressing the link to the category name *evidentiality*. Less frequently, one encounters the notion (*epistemic*) *justification* (e.g. Boye 2012: 19).

There are subtle differences between these notions. In particular, evidence and (epistemic) justification may suggest commitment to the evidentially modified proposition, while information source does not suggest commitment: if you say or indicate that you have *evidence* for the proposition that 'the moon is made of cheese' or find this proposition justified, it is normally implied that to some degree you vouch for this proposition yourself; on the other hand, *information source* implies no such commitment, but is compatible with a situation where you dissociate yourself entirely from any belief in the proposition. In evidentiality research, however, these differences are often ignored. The different notions are used interchangeably in a sense which is neutral with respect to the distinction between association and dissociation. Thus, Anderson (1986: 274) talks about

both justification and evidence, and Willett (1988) about both information source and evidence. Boye (2012: 19) explicitly uses epistemic justification synonymously with information source and evidence. In other words, the choice between these notions seems to be mainly terminological.

A more important issue is how these notions should be understood more profoundly. In philosophy there is a strong tradition of discussing justification and evidence under epistemology (see Boye 2012: 15–18 for a brief overview). For instance, justification figures in Gettier's 'standard analysis' of knowledge:

> S knows that p (where 'S' stands for an arbitrary person and 'p' for an arbitrary proposition) if and only if:
>
> **1.** S believes that p. (The belief condition)
> **2.** P is true. (The truth condition)
> **3.** S's belief that p is appropriately *justified*. (*The justification condition*)
>
> (After Williams 2001: 16, emphasis added).

In accordance with this, many linguists consider not only expressions of degree of certainty, but also expressions of information source as epistemic (e.g. Aijmer 1980: 11; Palmer 1986: 51; Ochs 1996: 410) and as related to the notion of knowledge (e.g. Boye 2012; Aikhenvald 2014; Nuckolls, Chapter 10 of this volume). Based on explicit criteria such as semantic-map continuity and encoding in distributionally defined morphosyntactic systems, Boye (2012) in a cross-linguistic study argues that while evidentiality and epistemic modality qualify as cross-linguistic descriptive categories in their own right (cf. Aikhenvald 2004a: 7), so does a superordinate category of epistemicity, which includes both expressions of degree of certainty and expressions of information source (see also Kronning 2004).

The claim that information source is an epistemic notion goes with a claim about the scope properties of evidential meanings: epistemic considerations have to do with the relationship between situations in the world and our representation of such situations, i.e. with *propositions* in the specific sense of meaning units that can be said to have a truth value (propositions are also sometimes referred to as '(potential) facts' or 'third-order entities'; see Boye (p. 265) 2012: 188–95 for an introduction). This claim entails among other things that a distinction should be made between specifying that the information source is reportative, and marking something as a quotation (Boye 2012: 32): reportative evidentials scope over propositions, whereas quotative markers scope over illocutions.

The view of information source as epistemic and tied up with propositions has occasionally been challenged. Most importantly, as discussed by Jacques (Chapter 5 of this volume; see also Aikhenvald 2015b: 247–52), some languages have information-source marking which scopes over non-propositional nominals, rather than propositions, and which cannot be claimed to impose a propositional reading on these nominals by coercion (see Boye 2012: 253–7 on this kind of coercion). Jacques refers to this kind of information-source

marking as ‘non-propositional evidentiality’, but he notes that it is far less frequent than propositional evidentiality, and that ‘[i]n most languages, propositional and non-propositional evidentials form completely distinct systems’ (Jacques, Chapter 5 of this volume; see also Aikhenvald 2015b: 247–52). This may be taken to suggest that non-propositional evidentiality should be considered distinct from propositional evidentiality rather than be taken into account in a profound understanding of evidentiality. However, more research is needed before any firm conclusions can be drawn.

A second challenge is posed by Hengeveld and MacKenzie (2008), within the framework of Functional Discourse Grammar, who claim that types of information source (i.e. kinds of evidence) differ in terms of their scope properties (see also Hengeveld and Hattnher 2015). This entails that not all types of information source are epistemic. Most importantly, Hengeveld and Mackenzie (2008: 177–8) claim that direct evidence does not scope over a proposition, but over a state-of-affairs (sometimes also referred to as ‘action’, ‘event’, ‘second-order entity’; see Boye 2012: 188–95 for an introduction), i.e. a meaning unit which like the proposition is prototypically expressed by a clause, but which unlike the proposition cannot be said to have a truth value. Discussing the Turkish example in (1), they argue that the evidential suffix *-DI* indicates ‘that the Speaker personally witnessed the State-of-Affairs described’ (Johanson, Chapter 24 of this volume, argues against this, but this may be ignored for the purpose of the present discussion).

Turkish (Hengeveld and Mackenzie 2008: 178)

(1)

Kar	yağ-dı-Ø.
snow	rain-EVID-3
Snow has fallen.	

This suggests a close relation between direct evidentials like that in (1) and perception-predicate constructions like that in (2a), which according to the analysis in Dik and Hengeveld (1991) describe ‘immediate perception’ of a state-of-affairs (cf. Boye 2010a).

(2)

a. I saw [Mary murder someone in the supermarket].

b. I saw [(that) Mary murdered someone in the supermarket].

Boye (2010b, 2012) gives a number of arguments against this conception of evidentiality, maintaining a distinction between witnessing or perceiving a state-of-affairs, and presenting (p. 266) a proposition as based on such perception. The function of *-DI* in example (1) is not to point out some state-of-affairs and classify it as ‘witnessed by the speaker’. If it is an evidential suffix (but see Johanson, Chapter 24 of this volume), *-DI* applies semantically to information about the world, rather than to the world itself or a simple representation of it. It indicates that the speaker has direct justification for the information that ‘snow has fallen’. According to Boye (2010b: 299–300; cf. also e.g. Anderson 1986: 279), only in

constructions like that in (2b), which have a propositional complement, can a perception verb possibly be claimed to express (rather than imply; see §13.5) information source.

A tradition for understanding information source as a deictic notion may be seen as a supplement to the understanding of it as an epistemic notion. This tradition goes back to Jakobson (1957) and includes Givón (1982), Schlichter (1986), Woodbury (1986), Mushin (2001), and De Haan (2005) among others. For instance, Schlichter (1986: 56–8) argues that Wintu evidentials establish an 'epistemic relation' between speaker and proposition ('event') which can be compared to the similar relation established in English by means of tense. In a similar vein, De Haan claims that there is an analogy between evidentials and demonstratives, and that 'the basic meaning is to mark the relation between the speaker and the action s/he is describing' (De Haan 2005: 379). Givón (1982: 43–4) identifies as one of four evidential scalar hierarchies, a 'personal/deictic hierarchy: speaker > hearer > third party'.

It is clear that a distinction between direct and non-direct or between witnessed and non-witnessed can be speaker-based (cf. Aikhenvald 2015b: 259 on the effect of combining a non-firsthand evidential with a clause with a first-person subject). Moreover, there is a clear link between deixis and non-propositional evidentiality in that non-propositional evidentials often apply to deictic elements (Aikhenvald 2004a: 130; Jacques, Chapter 5 of this volume). However, a characterization of evidentiality or information source in general as deictic may seem imprecise. A standard definition of deixis is that it has to do with '[t]he way in which the reference of certain elements in a sentence is determined in relation to a specific speaker and addressee and a specific time and place of utterance' (Matthews 2007: 96). It is not entirely obvious that evidentiality and information source have to do with determination of reference. It might seem to be more appropriate (and to capture Schlichter's and De Haan's ideas) to characterize these notions in terms of 'epistemic grounding' (see Langacker 2008: 259). In the same vein, Boye (2012: 293) understands information source ('epistemic justification') as 'a conceptual anchor' of propositional information (see also Shinzato 1991 on different degrees of integration of information).

Finally, some scholars have discussed evidentiality and information source in terms of the notions of subjectivity and intersubjectivity. As pointed out by Whitt (2011: 348), the understanding of information source as a speaker-based notion entails that it is tied up with subjectivity. Whitt argues, however, that a distinction can be made between subjective and intersubjective evidence:

> Subjective evidentiality occurs when the evidence lies solely with the S[peaker]/W[riter]. Intersubjectivity comes into play when the S/W either indicates the perceptual evidence is available to a larger speech community or when the S/W engages the addressee in negotiating the availability and/or interpretation of given evidence.
>
> (Whitt 2011: 359)

Whitt is in line with Nuyts (2001b) and Cornillie (2007b). In a study of Spanish *parecer* 'seem', Cornillie (2007b) argues that in construction with *que* 'that', 'the access to evidence (p. 267) is always intersubjective', while in construction with an infinitive, *parecer* 'conveys only subjective statements' (Cornillie 2007b: 125). More radically, Nuyts (2001b) identifies subjective modality (in the sense of Lyons 1977: 797–809) as an 'independent evidential-like qualificational category'.

13.4. Evidentiality versus information source: the question of grammatical coding

There is a strong tradition of making a distinction between a meaning domain (or, to employ the structuralist distinction between substance and structure, a content-substance domain; see Boye and Harder 2009: 15–17; Boye 2012: 7–8) and the grammatical coding of values belonging to that domain. For instance, *time* is often used for a meaning domain, while *tense* is reserved for grammatical expressions of time. Some scholars make similar distinctions between *modality* and *mood*, between *action* (or *Aktionsart*) and *aspect*, between *enumeration* and *number*, and between *sex* and *gender*. Based on this, it is natural to distinguish also between *information source* and *evidentiality*. Such a distinction is made in the present volume in accordance with, e.g. Anderson (1986) and Aikhenvald (2003a, 2004a, 2007a, 2014).

However, this distinction presents some challenges, and a whole volume (Squartini 2007a) has been dedicated to discussing pros and cons for the distinction. First, as pointed out by Geurts (2000), the notion of grammar has for a long time remained pre-theoretical and intuition-based. Second, grammaticalization research has established that grammar is not an island, but diachronically linked to the lexicon, and some grammaticalization researchers have advocated a view of grammar and lexicon as opposite poles in a continuum. In the absence of a well-defined distinction between grammar and lexicon, the distinction between evidentiality and information source is hard to maintain.

This is not only a theoretical issue. The absence of a theoretical anchor for the distinction, and the fact that grammaticalization of lexical items into grammatical ones involves an intermediate stage where the lexical source co-exists with the grammatical descendent, mean that in many cases it is hard to classify linguistic expressions as either lexical or grammatical. For instance, so-called subject-to-subject raising verbs such as English *seem* in *nominativus-cum-infinitivo* constructions such as *She seems to be out of the office* have often been analysed as expressions of information source and discussed in relation to grammaticalization (e.g. Noël 2008; see also Cornillie 2007b on Spanish *parecer*). But are they really grammatical? As discussed in Boye (2010c: 73), things are not at all clear. Some scholars classify raising verbs as grammatical or at least as undergoing grammaticalization (e.g. Traugott 1997: 191). In sharp contrast, other scholars advocate an analysis of grammatical verbs (auxiliaries) as lexical raising verbs (e.g. Ross 1969).

Another thing which might be taken to undermine or at least blur the distinction between evidentiality and information source has to do with the development of matrix clauses or predicates such as *(one) says* … into expressions of information source. In some languages, such matrix clauses give rise to affixes that can be uncontroversially considered grammatical. This is the case in Lezgian, where *luhuda* 'one says' gave rise to the reportative suffix *-lda* (Haspelmath 1993: 148). In other languages, however, they give rise to expressions that (p. 268) are normally considered lexical. In Inuktitut (or, West Greenlandic), the verb *unnir-* 'say that' thus gave rise to a reportative adverbial *unnia* (see Boye and Harder 2009 for detailed discussion).

Issues like these—theoretical as well as empirical—have led some scholars to abandon the distinction between evidentiality and information source as it is conceptualized in this volume. Wiemer, in particular, argued forcefully for applying the term *evidentiality* both to grammatical and to lexical expressions of information source (e.g. Wiemer 2005; Wiemer and Stathi 2010b), and among others, Cornillie (2007b) emphasized the need for recognizing a continuum between grammatical and lexical expressions of information source.

Others have maintained the distinction, however. Dealing with syntactic categories rather than with evidentiality, Aarts (2007) argued that there is no necessary opposition between categorial boundaries and continua. In a similar vein, Squartini (2007b) argued for recognizing not only a continuum between grammatical and lexical expressions of information source, but also a distinction between the two kinds:

> In other words, a clear-cut distinction between the set of obligatory markers of 'exotic languages' […] and the English adverbs *reportedly*, *allegedly*, *supposedly* is not only desirable but also unavoidable. Nonetheless, the 'exotic' morphemes and the English lexemes might be conceived as the opposite endpoints of a continuum that admits several intermediate stages […]
>
> (Squartini 2007b: 1)

The question, of course, remains how to distinguish them. As is evident from the quotation above, Squartini's answer is centred on the notion of obligatoriness. In this, he partly follows Aikhenvald (2007a) who talks about both obligatoriness and closed classes:

> In the same way as tense refers to closed grammatical systems, 'grammatical evidentiality' refers to a closed set of obligatory choices of marking information source.
>
> (Aikhenvald 2007a: 221; cf. Aikhenvald 2014: 2–3)

These answers present two problems. First, obligatoriness is too restrictive to include all uncontroversially grammatical expressions of information source. For instance, Inuktitut (or, West Greenlandic) evidential suffixes as suffixes are clearly grammatical. Accordingly, they are included as grammatical evidentials both in Aikhenvald and Dixon (2003) and in Aikhenvald (2004a), but they are not obligatory: Inuktitut clauses need not have an evidential suffix, and omission of an evidential suffix is not bound up with a specific eviden-

tial value. Second, closed-class membership cannot stand alone as a criterion. English evidential adverbs ending in *-ly* constitute a closed class, but are normally considered lexical.

In line with the general theory of grammatical status in Boye and Harder (2012), Boye and Harder (2009) instead propose defining grammatical evidentials as expressions of information source that are by convention 'discursively secondary' (i.e. by convention used to convey backgrounded information—information which is not the main point of an utterance), whereas lexical expressions have a conventional capacity for being 'discursively primary' (i.e. for conveying foregrounded information—information which is (part of) the main point of an utterance) (see Boye and Harder 2012: 7–8 on discourse prominence). This solution entails a distinction between grammatical and lexical raising verbs (Boye 2010c) and a distinction between grammaticalization and (lexical) adverbialization of matrix clauses (Boye and Harder 2015). More generally, the theory in Boye and Harder (2012) includes a theory (p. 269) of grammaticalization. It is thus compatible with the idea of a continuum between lexical and grammatical as well as with the idea of grey zones in-between, but it simultaneously maintains a distinction between lexicon and grammar, and thus motivates the distinction between evidentiality and information source advocated by Aikhenvald and Squartini, and employed in the present volume.

13.5. Further distinctions: semantics versus pragmatics, and discourse prominence

Anderson (1986: 274–5) defined evidentials in terms of four criteria. With minor adjustments (replacing his 'justification' with *information source*, his 'factual claim' with *proposition*, his 'primary meaning' with *semantic meaning*, his 'main predication' with *main point*, and his morphological criterion with a criterion that evidentials are grammatical—and deleting his reference to the speaker as locus of the information source), they go like this (interestingly, one of Anderson's two examples of evidentials accompanying the definition, *I hear* in the sentence *I hear Mary won the prize* potentially violates at least criteria B–D):

> **A:** Evidentials show kind of information source for a proposition […].
> **B:** Evidentials are not themselves the main point of the clause, but are rather a specification added to a proposition about something else.
> **C:** Evidentials have the indication of evidence […] as their semantic meaning, not only as a pragmatic inference.
> **D:** Evidentials are grammatical items.

The evidentiality versus information source debate discussed in §13.4 is a debate on whether to define evidentials in terms of both criteria A and D or in terms of criterion A only. But as captured by the Anderson definition, the distinction between grammatically

and non-grammatically encoded information source is not the only distinction central to research dealing with the notion of information source.

Criterion B goes naturally with a view according to which complex linguistic messages come with a prioritization, such that one part of the message is the main—or 'discursively primary' point—whereas other parts are 'discursively secondary' in relation to that part (see §13.4 on 'discursively primary' versus 'secondary' status). It defines evidentials as elements that cannot be 'discursively primary', but are 'secondary'. According to the theory of grammatical status discussed in §13.4, this means that criterion B is in fact entailed by criterion D: grammatical expressions are elements that are conventionalized as 'discursively secondary'. The entailment does not work the other way around, however. Lexical expressions of information source can in actual discourse be either 'primary' or 'secondary' (Boye and Harder 2007, 2009, 2012). Consider *they say* in (3).

(3) They say [James is a fool].

(p. 270) If (3) is used as an answer to the question what do people think of James, the proposition 'James is a fool' is the main point, and the specification that the proposition is based on reportative evidence is 'secondary'. On the other hand, if (3) is used as an answer to the question why would anyone think James is a fool, *they say* expresses the main point of the sentence, whereas the proposition 'James is a fool' is redundant and as such of secondary importance. Something similar can be said of English *seem* in a construction with a propositional *nominativus cum infinitivo*. Compare (4) and (5) (both from Boye 2010c: 89).

(4)
What is behind the bishop's and archdeacons' reluctance even to consider breaking up the boundaries seems to be a desire to maintain a mixture of middle, high and low churches and not upset the balance.

(5)
Silver stopped short in fear and the crow seemed to dance before him, its great, black wings flapping in horrible commotion.

As discussed in Boye (2010c: 89; see also Noël 2008), in (4) *seem* is 'discursively secondary': the main point of uttering (4) is to assert a proposition concerning the reasons for a bishop's and some archdeacons' behaviour. In (5) on the other hand, *seem* expresses the main point: the main point is that Silver was hallucinating.

Now consider (6).

(6) But I have visual evidence!

Here, *visual evidence* specifies information source, but the information—i.e. the proposition—is left implicit. It is presupposed and retrievable from previous communication. This

means that there is nothing for *visual evidence* to compete with for discourse prominence: *visual evidence* is inevitably the main point of the sentence in (6).

Thus, lexical expressions of information source differ in terms of discourse prominence. This is significant, firstly, to our understanding of the grammaticalization of such expressions. Under the assumption that grammaticalization consists in the conventionalization of 'discursively secondary' status (Boye and Harder 2012), it can be predicted that grammaticalization can take place only in constructions like (3), where there is both a propositional expression and an expression of information source. In cases like (6), where there is no competition for discourse prominence, 'discursively secondary' uses of expressions of information source are excluded, and hence grammatical, conventionally 'secondary' expressions cannot arise. Secondly, the distinction is significant for our delimitation of information source and thus our understanding of this notion. For instance, it is not at all clear that *seem* in (5) expresses information source in any strict sense of this notion. Yet, many publications devoted to English *seem* or its equivalents in other languages ignore this distinction.

Central to criterion C is a distinction between semantic and pragmatic meaning, which is to be understood here as a distinction between conventional (or coded), context-independent meaning, and non-conventional (non-coded), context-dependent meaning. Attention to this distinction is required in order to avoid misunderstandings. Consider (2), repeated here for convenience as (7). (p. 271)

(7)

a. I saw [Mary murder someone in the supermarket].
b. I saw [(that) Mary murdered someone in the supermarket].

As discussed in §13.3, only the complement in (7b) is propositional, and only in constructions like (7b) can a perception verb arguably be claimed to conventionally express information source. Constructions like (7a) simply describe an act of witnessing a state-of-affairs. However, this does not mean that constructions like (7a) cannot be used to *imply* information-source meaning. Obviously, if you saw Mary murder someone in the supermarket, you have evidence for the proposition that Mary murdered someone in the supermarket. The crucial difference between (7a) and (7b) is that only the latter can be claimed to conventionally *express* both a proposition and the evidence for it. In (7a) the evidence and the associated proposition are not expressed, but arise from inferencing based on the description of an act of perception (see Boye 2010b and Whitt forthcoming, for discussion). (7a) might be classified as what Aikhenvald calls an 'evidential strategy' (e.g. Aikhenvald 2004a: 144–7), but does not involve any conventional evidential expression.

The contrast between (7a) and (7b) is admittedly subtle, and it is often ignored (see e.g. Anderson 1986). However, it is easy to see that at some point a distinction between pragmatics and semantics is in fact necessary. Few would claim that *see* in (8) expresses or

even implies information source, and in (9) there is no expression which has ever been associated with the notion of information source.

(8) I saw Mary in the supermarket.
(9) I was in the supermarket.

Yet, in an appropriate context both can be used to imply information-source meaning, for instance if they are used by a witness in a courtroom as an answer to the judge's question in (10).

(10)
What is your evidence for claiming that Mary murdered someone in the supermarket?

Including (7a), (8), and (9) in a study of conventional *expressions* of information source leads to wrong conclusions when it comes to understanding how this meaning domain is conventionalized. An example of such a wrong conclusion is the claim that information source applies also to states-of-affairs meanings.

In (7b), *see* may be claimed to have the specification of information source as its conventional meaning, then, and not simply an inference. It is not obvious though that this claim would be right. Consider also (2), repeated here for convenience as (11).

(11) They say [James is a fool].

Matrix clauses like *they say* can undergo grammaticalization and develop into (among other things) markers of reportative evidence (e.g. Boye and Harder 2009), but before they do so, do they strictly speaking conventionally *express* information source? Do they start out as conventional lexical expressions of information source, or is this aspect simply an inference that follows from what we know about 'saying'?

(p. 272) 13.6. Summary

This chapter first, in §13.2, gave an overview of the history of the term *evidentiality* and related terms. Subsequently, §13.3 discussed definitions of evidentiality and attempts to understand what evidentiality is all about. Most scholars converge on defining evidentiality in terms of the notion of information source or related notions (evidence, (epistemic) justification) that generalize over evidential meanings. As for attempts to place information source and thus evidentiality in a wider context, three—mutually compatible—positions can be distinguished: information source is 1) an epistemic notion, 2) a deictic notion, or a notion which is related to grounding in that it provides an anchor for information, and 3) a notion that has both subjective and intersubjective aspects. §13.4 discussed the distinction between information source and evidentiality, defining the former as a meaning domain or content-substance domain and the latter as the grammatical encoding of information source. Based on a modified version of Anderson's (1986) definition of evidentiality, §13.5 added two other distinctions to this: a distinction between coded (conven-

tionalized), context-independent and non-coded (non-conventionalized), context-dependent information-source meaning, and a distinction between ‘discursively primary’ (main-point) and ‘discursively secondary’ uses of information-source meaning. Non-conventionalized information-source meaning is arguably always ‘discursively secondary’, while conventionalized information-source meaning can be either ‘primary’ or ‘secondary’. This book defines evidentiality as grammatically coded (conventionalized) information source. By the definition of grammatical status in Boye and Harder (2009, 2012), this entails that evidential meaning is information-source meaning, which is coded as ‘discursively secondary’.

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Extragrammatical Expression of Information Source

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Abstract and Keywords

This chapter reviews some selected lexical items expressing various semantic functions connected to the expression of information source. By focusing on a comparative analysis of what is expressed by lexical items and what can be expressed by grammatical markers of evidentiality, this survey aims to assess to what extent a comprehensive treatment of lexical and grammatical expressions of information source might shed additional light on both domains. Particular attention is paid to the interplay between external sensory evidence and subjective evaluation in verbs of direct perception and verbs of appearance ('SEEM-verbs'). The role of the speaker as a 'mediating filter' between epistemic estimation and source of evidence is also discussed with respect to verbs of belief.

Keywords: perception verbs, verbs of appearance, SEEM-verbs, verbs of belief, epistemic/evidential interplay

14.1. Evidentiality: a 'grammar-only' category?

The adjective featured in the title of this chapter ('extragrammatical') undoubtedly requires preliminary caveats and disclaimers. Using this term implies a neat distinction between grammar and 'extra-grammar', a point that cannot be taken for granted in all of the various streams of contemporary linguistics. Setting this debated boundary ultimately depends on the theoretical perspective one adheres to and no solution can be assumed as generally applicable. But even admitting that the boundary were clearly set, the real problem is whether evidentiality crosses this boundary or not, i.e. whether evidentiality only covers grammar or can be extended to lexical phenomena. As will be shown in §14.3, other grammatical categories might be affected by similar difficulties, which, however, are particularly apparent in dealing with evidentiality, a notion whose 'discovery' took place in a moment in the history of linguistics in which a rigid structural account of grammar used to be dominant. Apart from unsystematic recognition in previous studies on Turkish and Albanian (Friedman 2003: 189, 192–3, 213, 2010b: 24), evidentiality was introduced by early American 'ethno-structuralism' (Boas 1911a,b, 1938; Sapir 1921: 114–

15; see also Chapter 13 of this volume) in a landscape that was dominated by a major interest in grammatical properties, with a special focus on ethnical peculiarities of still undescribed languages. Inflectional markers of information source in local languages attracted the attention of American ethnolinguists, who were particularly interested in those structural peculiarities that might emphasize the differences with respect to what was traditionally known from well described Indo-European languages. This historical imprint has permanently marked evidentiality as an 'exotic' category, whose prototype was to be found in those very special systems.

(p. 274) On the other hand, the revitalization of the studies on evidentiality set in motion by Chafe and Nichols (1986) paved the way for a more extensive perspective in which evidentiality is not only restricted to what is 'formally' coded by the core of grammatical systems but is also intended as a more general 'functional category' expressed by different means, which include lexical elements sharing the same semantic content as the grammatical morphemes discovered in Native American languages. Chafe (1986) makes explicit this functional approach by reviewing various lexical and (semi)grammatical elements that allow a non-exotic language like English to compensate the lack of a fully developed grammatical system of evidential markers. The comparative hints between Iroquoian and English proposed by Mithun (1986: 89–90) also prelude to a functional perspective made possible by the comparison of systems in which evidentiality is expressed by different exponents. The crucial consequence of positing a comprehensive functional perspective is that evidentiality can be extended outside the rigid domain of grammar and the very notion of 'lexical evidentiality', i.e. the lexical expression of information source, becomes possible, a claim that is explicitly challenged by those who advocate for a 'grammar-only' conception (Aikhenvald 2004a, 2007a).

Structuralists' focus on grammar and Chafe's (1986) functional approach coexist today in the current stream of studies on evidentiality, which, despite its always increasing scope, is still divided between a 'grammar-only' conception and the extensive idea of 'all-purpose evidentiality'. The bifurcation between these perspectives is particularly apparent when it combines with different conceptions concerning what really belongs to grammar and where 'extra-grammar' starts from. This is clear if one compares Aikhenvald's (2004a, 2007a) strict adherence to a 'grammar only' conception and the functional approach followed, among many others, in Pietrandrea's (2007, 2008) analyses of Italian epistemic-evidential adverbs and adverbial constructions, whose 'lexical paradigm' is described in its structural similarities to an isomorphic 'grammatical paradigm' expressed by inflectional verb forms and modals. Similarly, Boye (2012: 87) considers German adverbs as belonging to a 'morphosyntactic system' based on common distributional properties, which make German(ic) lexical expressions comparable to fully fledged grammatical systems of evidential and epistemic forms. As is spelled out by Aikhenvald (2007a: 227, fn. 6), these different approaches epitomize divergent visions of the boundaries of grammar, which cannot be reduced to a unitary account without violating their theoretical conceptions. Considered from a historiographical point of view, these divergences are particularly intriguing for they crosscut the distinction between functionalist and formalist accounts. Within a functionalist perspective Diewald and Smirnova (2010a) have most ex-

plicitly interpreted evidentiality as a ‘semantic-functional domain’, in which different linguistic means equally contribute to express evidential meanings. But even hard formalist perspectives (see Cinque’s (1999) syntactic ‘cartography’) include lexical adverbs as ‘functional heads’ with evidential meaning (inferences, reports, etc.), which, similarly to grammatical morphemes, are arranged in a hierarchical model that predicts constraints on their linear order. From this point of view, Cinque’s formalist program is very different from the perspective adopted by functionalist approaches followed by Van Valin and La Polla (1997); Ramat and Ricca (1998); and Narrog (2009). But in fact they share a conception of syntax as a multilayered domain in which verb morphology and lexical items jointly contribute to a comprehensive ‘functional’ arrangement of the clause. The result is that both formalist syntax and functionalist accounts extensively elaborate on ‘lexical evidentiality’ as an unproblematic notion.

(p. 275) 14.2. Between grammar and lexicon: grammaticalization and evidentiality strategies

Obviously, those who advocate for a neat separation between grammatical and extragrammatical evidentiality also have to handle verbs indicating evidential sources and modes of knowing, like English *say, see*, and *assume* or adverbs like German *angeblich* ‘apparently’ and adverbial constructions like Italian *secondo Gianni* ‘according to John’. Aikhenvald (2007a) admits their relevance but only as ‘lexical expressions of information source’, which can most interestingly be studied from a cross-cultural perspective (Aikhenvald and Storch 2013). As they gradually grammaticalize, these lexical markers become part of (semi)closed classes of particles and modals, which are ‘evidentials in the making’ (Aikhenvald 2007a: 220). Thus, a decategorialized form of a verb meaning ‘say’ used as a marker of reportativity (e. g. Latin American *dizque*, Chapter 35 of this volume), albeit not belonging to grammar in a strict sense, is considered by Aikhenvald (2007a: 218–20) as an ‘evidentiality strategy’. Consistently with her conception of evidentiality as independent from other categories (especially crucial is the boundary with epistemic modality, cf. Chapter 4 of this volume), Aikhenvald (2003a: 18–20, 2004) prototypically applies the notion of evidentiality strategy to those grammatical phenomena that, even though belonging to modality, mood, and other grammatical categories, do acquire additional evidential meanings. The usage of the Romance conditional mood as a reportative marker of second-hand knowledge, often combined with different degrees of epistemic distance, is a typical representative of an ‘evidentiality strategy’ (Aikhenvald 2004a: 106–7).

The very idea of ‘evidentiality strategy’ suggests some form of secondary, possibly pragmatic, extensions that participate to the general evidential ‘make up’ of the utterance. In Aikhenvald’s perspective, evidentiality strategy is an umbrella covering what is, generally speaking, peripheral with respect to the core of evidential grammar, either because belonging to the grammar of other categories or because not fully grammaticalized. It is not surprising that in dealing with grammaticalization (see also Chapter 4 of this volume)

'grammar-only' conceptions and 'all-purpose evidentiality' tend to reduce their distance. Albeit only in the secondary form of an evidentiality strategy, a grammaticalizing item that expresses reportivity and inferentiality is somehow admitted among 'evidentials' even in grammar-only conceptions, as is also most naturally the case in those 'integrative' accounts (Wiemer 2007, 2010b; Giacalone Ramat and Topadze 2007) in which the balance between grammar and lexicon is not predefined, thus typically admitting intermediate elements.

A step further along the cline between 'grammar-only' and 'all-purpose' evidentiality can be found in those 'discourse grammars' in which a rigid boundary between grammar and lexicon is totally blurred, by focusing on the interplay of evidential lexical items as discourse strategies that complement the array of discourse markers (see also Chapters 10–11 of this volume). Within this framework lexical items belonging to whatever part of speech all participate to modalizing the speaker's interactional role (for a recent example of this perspective see González 2015). In some of these discourse-focused perspectives the relationship with the original grammatical notion is so loosened that the very term 'evidentiality' (p. 276) is dismissed in favour of the overarching notion of 'stance', which is 'the linguistic mechanisms used by speakers and writers to convey their personal feelings and assessments' (Biber 2004: 109). Within these 'linguistic mechanisms' Biber (2004) admits evidential (*apparently*) as well as epistemic adverbs (*certainly*) without distinguishing them from prototypical grammatical markers (see also Biber and Finegan 1989).

14.3. Comparing evidentiality with other categories

Biber's conception of a 'grammar of stance' is totally incompatible with the original structuralistic tradition of keeping lexicon and grammar neatly separated. Being so diverse in their theoretical assumptions, any attempt at comparing these opposite perspectives, let alone their reconciliation, would be a sterile exercise. Nevertheless, we should also keep in mind that the point dealt with here on the boundary between lexicon and grammar is not, in principle, restricted to evidentiality, being instead a potential problem for all grammatical categories. Thus, it is not surprising that in the literature on evidentiality we do find attempts at settling this issue by comparing evidentiality with other linguistic categories with similar features. These are the so-called TAM categories and one of the most apparent signs of the increasingly flourishing interest towards evidentiality is indeed the revision of this acronym, which was recently extended to include E(videntiality) as its fourth initial (TAME). This might suggest an amenable way-out from the sterile deadlock caused by the confrontation between a strict 'grammar only' and a more liberal 'all-inclusive' perspective. The argument that can be derived from the TAM(E) extension is rather obvious: assuming that evidentiality has equal status as the other categories of the acronym, why don't we look at our general understanding of the relationship between a grammar-only perspective and all-inclusive functionalism as is settled for the other categories?

As observed by Aikhenvald (2007a: 221), nobody seems to doubt that *time* and *tense* are two different notions, the former being a conceptual category and the latter its grammatical counterpart. Consistently with this view, *yesterday* and *today* are *time* adverbs, whereas the grammatical opposition between the English verb forms *is going* and *was going* codifies *tense*. If applied to evidentiality, this terminological neatness very naturally leads to Aikhenvald's 'grammar only' perspective, in which evidentiality is only made of uncontroversial grammatical morphemes, marginally including evidentiality strategies.

However, those who follow an all-inclusive functionalism might also provide similarly compelling arguments. The clear time/tense bifurcation only refers to the first initial of the TAM acronym. If we look at the other grammatical categories typically expressed in the verb, the distinction grammar versus lexicon becomes much fuzzier. This complication is particularly apparent in considering the final letter, M, whose meaning is much less clear than T(ense) and A(spect). Consistently with the assumption that the categories contained in the acronym should in principle refer to what is typically expressed by verb morphemes, M was originally intended as the initial for Mood (see e.g. Dahl 1985: 1), but more recently, has also been interpreted as M(odality) (Brisard and Patard 2011: 1). Obviously, replacing 'mood' with 'modality' makes a big difference in terms of a comparison with evidentiality. (p. 277) Mood is very different from evidentiality, which has a clear semantic reference (it denotes source of information/mode of knowing), whereas mood has strict correlations to syntax ('subordinating moods') and pragmatics (some moods have special illocutionary force, e.g. the imperative mood), but poor semantic stability (see the vexed grammatical question on the core semantics of the subjunctive mood). Being so morphosyntactically and pragmatically anchored, mood is, by definition, a grammatical category, which, in principle, should not exist extragrammatically (for a recent overview see Thieroff 2010). In this respect, the behaviour of mood corroborates the assumption that TAM categories should be restricted to notions with definite grammatical exponents. But the opposite applies when M is interpreted as the initial of modality, a category that, considering the debate on its correlations to evidentiality, should more naturally be seen as the direct area of interest in dealing with evidentiality. The intricacies of the relationship between modality and evidentiality have constantly made the study of these two domains problematic (see Chapter 4), which, in some accounts, are considered as belonging to the same macro-category (see, among many others, Palmer 2001; and Boye 2012). This debate also has consequences on the different conceptions of the boundaries between grammatical and extragrammatical phenomena. Modality is typically conceived as a 'supercategory' (Nuyts 2006: 2) acting at different layers in which grammatical and lexical elements are variously involved. The adverb *perhaps* is currently defined as an 'epistemic adverb' and nobody seems to have objections to the assumption that it belongs to 'modality', which implies that modality can be expressed lexically.

The point now is whether we claim that evidentiality should be considered more similar to tense and mood or to modality. If we stress the similarity to tense and mood, lexical evidentiality should not exist. Its nature would be equally inconsistent as 'lexical tense' and 'lexical mood', whose incoherent nature seems to be tacitly assumed. On the contrary, for those who consider that evidentiality should find its direct counterpart in modality there

is no contradiction in admitting lexical expressions of evidentiality. In this respect, it is probably not a chance that among the most strenuous defendants of the independence between evidentiality and modality we do find those who also criticize the very existence of something called 'lexical evidentiality'. Aikhenvald (2004) is an explicit representative of the consistency between the two positions. On the other hand, this is not tantamount to saying that those who admit the very notion of lexical evidentiality, necessarily consider evidentiality and epistemic modality as two faces of the same category. Take, among others, Diewald and Smirnova (2010a: 1–2), who clearly combine the interpretation of evidentiality as a 'semantic-functional domain' with the assumption that evidentiality 'is not a subdivision of epistemic modality'.

As is apparent then, that no consensus can be derived by simply comparing evidentiality with the other TAM categories. The intricate relationship that especially involves modality does not provide conclusive results. But whatever scope of evidentiality one might have in mind, there are still significant empirical lessons that can be drawn from a comparison between what is expressed by the core of grammar and what is instead expressed by other linguistic means, which may be more or less external to grammar and variously intended as belonging to a general comprehensive notion. Therefore, the aim of the rest of this chapter is to investigate whether the study of 'extragrammatical' phenomena provides a different picture from what we already know from grammatical systems or, on the contrary, the same evidential notions applied to grammars also extend to lexical phenomena. This is, first of all, (p. 278) an empirical question that might enrich our understanding of evidentiality and, ironically, might be of more interest for those who posit a clear-cut boundary between grammar and extra-grammar. If the empirical study of lexical phenomena should highlight substantial differences between grammar and extra-grammar, the very idea of such a boundary would be corroborated.

However, comparing lexical and grammatical expressions is not only a practical way out from the difficulties of the theoretical problem of whether lexical evidentiality exists or not. It is also a general option inspired by another letter of the acronym TAME that I have not considered so far. The initial A is also the object of a certain debate: it definitely stands for 'Aspect', which, however, can be intended as a grammatical category or as a more general functional category also expressed by lexical items. *Aktionsart*, types of actions, actionality, as well as 'lexical aspect' (Smith 1991) are notions that have been intended as covering lexical areas or areas intermediate between lexicon and grammar. If 'lexical aspect' exists, the real challenging point is whether what is expressed lexically is semantically different from what is expressed by grammatical morphemes. This observation is the starting point for all the discussions on the difference between 'durativity' and 'imperfectivity' and between 'telicity' and 'perfectivity'. From this perspective, it becomes clear that the discussion developed in the previous sections ceases to be a theoretical option based on different degrees of adherence to 'old structuralism', eventually becoming a crucial issue affecting the balance between lexicon and grammar. This is a point discussed by Boye and Harder (2009) and elaborated in Squartini (2008) as well as in a study

by Michael (2014) on the interactional pragmatics of Nanti quotative markers, among which a lexical verb of saying coexists with a grammaticalized evidential.

14.4. What do we learn from extragrammatical phenomena?

From time to time a fresh look at lexical material turns out to be extremely helpful in clarifying those thorny issues that affect everlasting debates on the boundaries between evidentiality and epistemicity. Take for instance the English adverbs *certainly, probably, probably not, certainly not*, which indisputably represent 'an estimation of the likelihood' that a given state of affairs occurs (Nuyts 2001a: 21) and can therefore be arranged along an epistemic scale (apart from Nuyts 2001a, see also Hengeveld 1989: 138; and Boye 2012: 43–7). If one compares the different degrees of certainty expressed by these genuinely epistemic adverbs to the evidential meaning characterizing the English adverbs of indirect mode of knowing (e.g. *allegedly* and *reportedly*, cf. Ramat 1996), the distinction between epistemic degree of confidence and evidential source of knowledge appears particularly clear. But once we gradually move into grammar by considering intermediate items between lexical and grammar status (modals, particles), these neat distinctions tend to blur. What is particularly telling of the complexities triggered by (semi)grammatical elements is the varied array of analyses proposed for Germanic modals, which, despite their traditional interpretation as epistemic markers, have also been considered either as evidential (see Mortelmans's 2000 account of German *müssen*) or as representatives of an overlapping area between epistemicity and evidentiality (van der Auwera and Plungian 1998), where epistemic markers develop evidential extensions (Boye 2012: 152). Within these discussions the consistent epistemic nature (p. 279) of English *must* has also been reappraised (De Haan 2013a: 314, 2006: 58–9) by contrasting it to its Dutch cognate *moeten*, whose genuine evidentiality is considered uncontroversial due to the coexistence of inferentiality and hearsay (indirect evidentiality) in one and the same modal. Apart from modals, comparable complexities also characterize 'particles' or 'adverbs' (Wiemer 2010b: 90–1) that, albeit originally evidential, tend to develop epistemic overtones as they grammaticalize by showing signs of decategorialization. This is what happens to Latin-American *dizque* (see §14.2 and Chapter 35) and many other items such as those described in Lithuanian by Wiemer (2007). While *girdì*, a petrified form of the verb 'hear', is restricted to reports without any epistemic overtones, the 'adverb' *tariamai*, even though derived from a neutral verb of saying, can hardly occur without epistemic overtones with respect to the reported content, and in many other markers described by Wiemer evidential meaning and epistemic overtones coexist, making it difficult to draw the line between semantic content and pragmatic implicatures. But the analysis of these 'evidentiality strategies' might be biased by grammaticalization, which suggests that, if we want to explore the peculiarities of extragrammatical phenomena, we should look at the core of lexicon. In this perspective, direct perception verbs might be particularly interesting. They are undoubtedly lexical, but at the same time, being expressions of direct evidence, they are also prototypical in terms of evidentiality. The analysis of per-

ception verbs in §14.4.1 will prepare the background for SEEM-verbs (§14.4.2), in which direct perception is filtered by the speaker's subjective evaluation. The role of the speaker as a 'mediating filter' between epistemic estimation and source of evidence will also be discussed with respect to verbs of belief (§14.4.3), whose varied interpretations are another manifestation of the evidential/epistemic diatribe. By underscoring the role of the speaker as primary source of direct evidence but also as a 'subjective filter' of perceptual data, I will concentrate on those lexical expressions that involve the speaker's senses (*I see, I hear*) as well as impressions (*It seems to me*) and beliefs (*I think*), thus neglecting the important lexical area covered by *verba dicendi*. Their role is undoubtedly significant as lexical exponents of indirect reports; yet, they have been more interestingly studied either as (semi)grammatical evidentiality strategies (e.g. Latin-American *dizque* etymologically contains a verb of saying) or in terms of textual construal of indirect speech (Güldemann and von Roncador 2002) rather than from the point of view of their lexical semantics as markers of information source.

14.4.1. Perception verbs: direct and indirect evidence

In his comparative analysis of English and German, Whitt (2010a, 2010b) shows how a verb that typically expresses physical perception (English *see*) can be extended towards inferential meanings (1) and 'metaphorical denotations of knowledge and understanding' (2).

(1)
I *see* you are dying with curiosity to know what has excited my anger, which I consider both inquisitive and impertinent. (Whitt 2010b: 265)

(2)
When I was with him I was always puzzled and uneasy, and always wondering why on earth he had ever married Dottie or rather how Dottie had ever arranged it, but I could *see* why he liked the family publishing business. It was a sort of ivory tower for him [. . .] (Whitt 2010b: 268)

(p. 280) The semantic extension from physical and concrete to mental and abstract can easily be arranged within traugottian subjectification, which, in this case, is independent from grammaticalization. However, what is more relevant in the present perspective is the sheer fact that (1) and (2), despite their 'indirect' and subjective meaning, contain the same lexical entry that elsewhere occurs as a verb of objective direct perception (*see*). This is patently at odds with the assumption that the most fundamental distinction within evidentiality opposes direct perception versus indirect knowledge, the speaker's assumptions typically belonging to the domain of indirect knowledge (see Aikhenvald's 2003b: 139 'generic inferences'). As suggested by Grossmann and Tutin (2010: 278–308, fn. 10) in their study of French *voir* 'see' in scientific writing, a neat distinction between perceptual stimuli and cognitive dimension might be difficult to disentangle especially with lexical perception verbs, in which 'recognition and deduction' are strictly intertwined (*on voit bien dans ce schéma que* 'this diagram clearly shows that (lit. in this diagram one sees well that). Rather radically, Grossmann and Tutin (2010: 278–308) suggest that it is pre-

cisely this combination of indirect understanding and direct perception that should be considered as the genuine 'evidential' meaning of perception verbs, in which the speaker is also intellectually involved as a source and not as a mere 'perceiver' of external data.

Now, the empirical question that might be derived from these observations is whether the coexistence of direct and indirect evidence is only possible due to the lexical nature of the verb *see* or is it a phenomenon that also extends to grammatical systems, thus unexpectedly blurring the direct/indirect opposition? It comes as no surprise *per se* that this boundary can be crossed, if one considers that indirect evidence (especially in inferential reasoning) are prototypically based on external data directly perceived by the speaker ('circumstantial inferences' Anderson 1986: 274: *The light is on; he must be at home*). The same also applies to auditory evidence, expressed e.g. by the English lexical verb *hear* (Whitt 2009), which not only covers direct evidence but also secondhand knowledge acquired through 'hearsay'. Thus, the point is not whether the coexistence of indirect and direct evidence is semantically possible, but how it impacts on grammatical systems and on our understanding of them. A look at Willett's (1988: 57), Aikhenvald's (2004a: ch. 2), and Boye's (2012) typologies, which all invoke the fundamental distinction direct/indirect opposition, seems to confirm the general tendency of grammars to keep this distinction clearly divided. As the A2 type in Aikhenvald's (2004a: 65) classification reminds us, there are, in fact, grammatical markers that cut across the fundamental distinction direct versus indirect, but in these cases only *non*-visual markers of direct evidence pattern together with inferentials, thus confirming a fundamental distinction between what is visually perceived and what, being perceived through other senses, can be categorized as more indirect. But apart from non-visual markers, there is another a point in which Aikhenvald's (2004a: ch. 5) careful survey of the semantics of grammatical systems might provide us something comparable to the behaviour of the English verb *see* in (1–2). In her data Aikhevald (2004a: 186–93) highlights cases in which 'direct' evidentials not only express firsthand sensory perceptions but also cover the speaker's 'internal experience', including 'thoughts and knowledge'. This is what happens, among other languages, in Quechua (Floyd 1999: 63–4; Aikhenvald 2004a: 160), which leads Aikhenvald (2004a: 186–93) to recognize the speaker's internal thoughts as a possible additional meaning of 'firsthand', 'visual', and 'direct' markers. Also Boye's (2012: 138) semantic map admits neutralization (p. 281) between direct and indirect evidence, but this typically correlates with an epistemic bias towards reliability. Lega (Botne 1997) and Supyire (Carlson 1994) have markers covering direct perception as well as indirect inferences. However, this combination is only made possible when the speaker also asserts full reliability, thus recognizing in the speaker 'a kind of proto-evidential capacity to code higher certainty' (Carlson 1994: 365), irrespective of the mode of knowing.

These forms of encroaching on the speaker's internal interpretation and/or epistemic persuasions on direct perception might support other classificatory systems of evidentiality (see the discussion in Squartini 2001) in which the primary division is not direct versus indirect but the speaker's SELF versus OTHER (Frawley 1992: 412–13), which Plungian (2010: 29) dubs personal versus non-personal.

On the other hand, it is the syntactic distribution of English perception verbs, which, by forming a special 'morphosyntactic system' (Boye 2012), confirm the tendency to develop a special syntactic grammar for direct perception, ultimately keeping it distinct from indirect interpretation of sensory data. As concluded in Whitt's (2010b) corpus analysis, the construction in which the verb of perception is complemented by a non-finite dependent clause (*I saw her pass through the room*) 'almost solely is marker of visual evidentiality'. A parallel development characterizes other verbs of perception (most typically, *hear*) with a similar tendency to specialize the non-finite construction for direct perception ('*I heard John cross the street* implies that I did hear John stamping his feet', Aikhenvald 2007a: 213), while the indirect interpretation of verbal report is triggered by the complementation with a finite clause (*I heard that John crossed the street)*. Thus, grammar (here intended as morphosyntactic restrictions) seems to be particularly sensitive to the boundary direct versus indirect (for other examples in various languages see Aikhenvald 2004a: 120–3 and for a general interpretation of syntactic complementation in evidential terms see Boye 2012: ch.4). What instead remains to be better understood is the relationship between the speaker's perceptions and the speaker's thoughts, which is a prominent feature of lexical semantics in visual verbs. Yet, its impact on grammatical systems might have been underestimated.

14.4.2. External appearance and subjective interpretation: SEEM-verbs

The interplay between external sensory data and the speaker's subjective interpretation highlighted in §14.4.1 comes even more prominently to the foreground when one moves from perception verbs to verbs of 'external appearance', such as English *appear, seem, look* (*you* look *tired*). What 'appears' from direct perception is not necessarily claimed to be true and the balance between appearance and reality is exactly the cognitive mould on which the semantics of single verbs of this class variously elaborate showing different degrees of subjective interpretation (Dixon 2005: 204; Usonienė 2000). The semantic connection between objective external appearance and subjective uncertainty can easily be demonstrated by looking at diachronic data. The Old Italian (second half of the fourteenth century) example in (3) shows that the verb *pare*, nowadays occurring as indirect evidential (*pare che* … 'it seems that …') as well as a marker of personal opinions (*a me pare* 'it seems to me': Giacolone (p. 282) and Topadze 2007), used to occur in a much more objective sense as anaphoric referential link to a point of a written text, where the referred fact *appears*, i.e. *is documented, mentioned*:

(3)

le quali chase si conperarono da Iacopo di Lapo Ghavaciani, come *pare* in questo libro a dietro a car(te) 2. (*Libro di ricordanze dei Corsini 1362–1402*, ed. by A. Petrucci, Rome, 1965, p. 16)

These houses were bought by I. di L. G., as recorded (lit. it appears) in this book above on page two.

This usage as internal text-reference provides a possible connection to indirect evidentiality: *pare* refers here to the source of information (what is recorded elsewhere in the same book), which can be twisted towards modern uses of the same verb as hearsay and inferential ('indirective' in general). The connection to evidentiality is confirmed by the English verb of appearance *seem*, which occurs as a copular verb (*John seems happy*) signalling personal opinions or impressions, with respect to which the speaker 'is not fully certain whether the adjectival description is appropriate' (Dixon 2005: 204). Moreover, *seem* expresses hearsay (*It seems that Sam's in the hospital*, Mithun 1986: 90) and inferences (*John seems to be here now*, Anderson 1986: 279), with a semantic dynamics similar to adverbs and adverbials derived from verbs of appearance (Eng. *apparently*, Fr. *apparemment*, It. *a quanto pare*, cf. Ramat 1996; Squartini 2008).

These data involving different constructions of a copular verb also demonstrate that in dealing with SEEM-verbs we are again moving into an intermediate domain between lexicon and grammar, in which the boundary between the two might be difficult to assess (Cornillie 2007b). Diewald and Smirnova (2010b: 178, 187) consider the copular occurrences of German *scheinen* 'seem' as 'lexical uses' (4), with respect to which inferential constructions (*scheinen* 'seem' + infinitive) are 'more grammaticalized' (5):

(4) Sie *scheint* traurig
She seems sad.

(5) Gaigern *scheint* hier draußen Stammgast zu sein, jedermann grüßt und kennt ihn
Gaigern seems to be a regular guest here, everyone greets and knows him.

Once more, it is morphosyntax that turns out to be sensitive to different evidential interpretations, as confirmed in analyses of SEEM-verbs in various languages (cf. Dendale and van Bogaert 2007 for the French pair *paraître* and *sembler*; De Haan 2007 on the relationship between grammaticalization and the special syntax of 'raising verbs' such as Eng. *It seems that John is ill/John seems to be ill*). In this perspective of syntax–semantics interface, Cornillie's (2007a) diachronic and synchronic corpus-based accounts of Spanish constructions with the verb *parecer* 'seem' have shown that the infinitival construction *parece* 'seem' + infinitive is restricted to one evidential mode of knowing (inferences) as opposed to other syntactic structures (*parece* + complement clause, *parece* + dativ al expression of the conceptualizer, parenthetical uses), which cover a wider array of subjective (belief) and intersubjective (hearsay) meanings.

From a semantic point of view these tendencies involving SEEM-verbs confirm the strict functional correlation between inferentiality and hearsay/reports within the general (p. 283) domain of indirectivity, a point that is well known from typological studies on grammatical evidentiality since Willett (1988), with significant confirmation by Johanson and Utas (2000) and Aikhenvald (2004a). In this sense, the study of lexical material does not add anything new to what is well-assessed from research on grammatical systems. What, instead, we might more fruitfully derive from the semantics of SEEM-verbs in a general 'evidential' perspective is again a contribution to the discussion on the role of the

speaker as a ‘conceptualizer’, who balances between direct and indirect knowledge and in this function can also express his/her own opinions, ‘beliefs’ and impressions (*It seems to me*). Thus, what is expressed by SEEM-verbs is not only *how* the speaker *knows* something but *what* the speaker *thinks* on the basis of external input, which, as demonstrated by the Old Italian example, may originally have a very objective and ‘sensory’ basis. Is this direct or indirect evidence? And what is the role of the speaker as evidential ‘filter’ between external data and internal conceptualizations? When Mary says to John *You seem tired/sad*, she is interpreting external (indirect) data on the basis of her own conceptualizations and similarity to a prototypical ‘categorization’ (Kratschmer 2013). This should be an indisputable case of indirect evidentiality, but in fact if we look at how these notions are expressed in grammatical systems of evidential-prominent languages, what we find is not conclusive. ‘[W]hen talking about the internal experience (emotions, thoughts, and the like) of someone other than the speaker’ (Aikhenvald 2004a: 161), as in *You seem tired/sad*, Quechua can use a grammatical marker of indirect inferentiality (something corresponding to English *You must be tired* expressed in Quechua by the inferential marker *-chr*, see Floyd 1999: 68–9), but the evidential marker of direct evidence *-mi* can also occur in contexts in which the speaker stresses personal certainty.

As opposed to the strong certainty conveyed by the selection of a marker of direct evidentiality in Quechua, the strategy adopted when using English *seem* underlines the epistemic uncertainty of the speaker, who signals potential discrepancy between the subjective interpretation of what externally appears and what is in fact true. As demonstrated by the analysis of data from a parallel corpus (Aijmer 2009), English *seem* may express different degrees of commitment to the factuality of the situation, including the creation of a fictitious interpretation that explicitly runs counter normal facts in the actual world (*The door shook and the banging became so wild and erratic it seemed as if the wind and thunder wanted to be let in*, from Aijmer 2009: 78).

This comparison between Quechua grammatical markers and English *seem* clearly permits us to grasp the difference between ‘evidential- versus epistemic-prominent’ languages (van der Auwera and Amman 2005: 307; Boye 2012) and the various correlations between evidentiality and epistemicity that they imply. In evidential-prominent languages (Quechua) thoughts can be expressed by the evidential marker of direct perception, provided that the semantic interpretation also includes strong certainty. On the contrary, the marker used in an epistemic-prominent language (English *seem*) always conveys an ‘epistemic flavour’, which allows the speaker to ‘modalize’ his/her subjective commitment on the factuality of the situation. But if we take these data as a whole, English and Quechua demonstrate that the speakers’ thoughts are not ‘epistemic’ *per se*, for they do not necessarily correlate with a lower degree of certainty. In English they do, but in Quechua they do not, which obviously raises the problem of whether what the speaker thinks should be considered epistemic or evidential.

(p. 284) 14.4.3. Verbs of belief: epistemic or evidential?

Being ‘phenomenon-based’ (Viberg 2005), the verbs of appearance discussed in §14.4.2 have clearly shown the interplay between the external phenomenon, which is directly perceived, and the speaker’s internal interpretation. Now, the role of the speaker as an internal conceptualizer becomes really crucial with ‘verbs of cognitive attitude’ (Cappelli 2007) such as *I think, I guess, I suppose*, which can express subjective opinions and beliefs (Aijmer 1997), thus posing the problem of whether the speaker should be interpreted as an evidential source or as an epistemic evaluator of states of affairs, who focuses on their reliability. Since the first studies on the relative syntactic freedom of these ‘parenthetical’ verbs (Urmson 1952), the epistemic interpretation connected to the truth commitment has been taken for granted. Nevertheless, these intrinsically ‘subjective’ elements (Nuyts 2005: 14) lack the scalar nature associated with genuine epistemic markers, which ‘prototypically’ can be arranged along a continuum of different degrees of certainty (*possibly, probably, certainly*). At the same time, their evidential nature highlighted by Chafe’s (1986) notion of ‘belief’ is problematic due to the fact that ‘belief’ is the only ‘mode of knowing’ that lacks a ‘source of evidence’, which implies that in this very special case the source should be identified with the ‘issuer of the evaluation’ (Nuyts 2005: 14). The interpretative duplicity of these verbs is also mirrored in Boye’s (2012) comprehensive reappraisal of the relationship between modal-epistemic and evidential systems. Due to their common distributional features, Boye (2012: 113) lists Danish *mene* ‘think’ among the other verbs (*sige* ‘say’, *se* ‘see’, *synes* ‘seem’) that form an ‘evidential system’. Nonetheless, when defining the notion of ‘epistemic support’, he follows Caton’s (1969) classification, in which *think* lends its initial to the ‘T-group’ of epistemic qualifiers that express ‘partial epistemic support’, thus occupying an intermediate position along the epistemic scale (Boye 2012: 23).

The controversial status of these verbs is also reflected in discourse analyses, where *I think* can be conflated with epistemic adverbs and modals, for it shares with them ‘the effect of damping down the force of what is said’ (Coates 2003: 331). On the other hand, Kärkkäinen’s (2003: 53) conversational analysis distinguishes between markers of reliability (*I don’t know, may be, probably, might, may, of course*) and belief (*I think, I guess, I figure, I’m sure*). Interestingly, this duplicity is also reflected in pragmatic interpretations, where the verbs of belief are variedly described as strategies to avoid (epistemic) commitment (Jucker 1986: 149), but also as signals used by politicians to assert their ‘authoritative’ stance (Simon-Vandenbergen 2000), thus imposing themselves as trustable sources.

Obviously the question whether *I think* should be an ‘evidential verb’, as Aijmer (2009: 72) dubs it, or is instead the prototypical expression of epistemic stance (Cappelli 2007) cannot be solved without further descriptive research. A comparison with other lexical entries expressing ‘cognitive attitude’ might be extremely helpful in detecting different combinations of epistemic and evidential features in different verbs, thus contrasting the evidential support that characterizes English *assume* or French *trouver* ‘find’ with the lack of specific evidential sources in English *think*, French *croire* ‘believe, think’ and

penser ‘think’ (see Cappelli 2007 for English verbs; and Dendale and van Bogaert 2007 for French). But as suggested in §§14.4.1–2, our analysis of extragrammatical lexemes should also be consistently matched with what we know from grammatical systems, where, in fact, one of the most controversial issues has to do with conjectures (assumptions, generic inferences), variedly (p. 285) interpreted either as prototypical epistemic evaluations or as evidential modes of knowing (Palmer 2001: 29–30; Plungian 2010: 46; Squartini 2016: 63–4).

14.5. Conclusion

The interpretative complexities of the relationship between lexicon and grammar required long introductory preliminaries (§§14.1–3) in which I surveyed the varied set of theoretical solutions adopted to settle the discussion on the relationship between evidentiality and information source. Nonetheless, the lines of research summarized in §14.4 demonstrated that, irrespective of one’s theoretical persuasion, lexical expressions of information source can fruitfully be compared to the core of evidential grammar, eventually providing a richer understanding of both lexicon and grammar.

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Abstract and Keywords

This chapter reviews recent proposals about how the meanings of evidentials should be captured within formal semantic theories, which attempt to model compositional meaning in a way that gives insight into possible semantic variation. The literature surveyed addresses three questions. First, how should the core meaning of evidential morphemes be characterized and what sorts of information can be inferred from their use in particular contexts and hence does not need to be specified as part of the core meaning? Second, can the way that evidentials compose with the rest of the sentence be captured using existing formal tools, or do evidentials have semantic properties that motivate additions to our semantic toolkit? Third, is there a limit to the range of possible evidential meanings? If so, how can a formal semantic theory constrain the possible meanings?

Keywords: formal semantics, evidentiality, epistemic modal, direct, indirect

While all languages have ways of expressing how we know that what we're saying is true, 'in about a quarter of the world's languages, every statement must specify the type of source on which it is based' (Aikhenvald 2004a: 1). For example, in Tukano every statement includes an evidential morpheme indicating whether the evidence for the statement is visual witness, non-visual sensory evidence, inference, or hearsay:

(1) Tukano (from Aikhenvald 2004a: 52)

a. diâyɨ wa'î-re yaha-**ámi**[1]
dog fish-TOP.NON.A/S steal-**RPAST.VIS.3sgnf**[1]
The dog stole the fish (I saw it).

b. diâyɨ wa'î-re yaha-**ásɨ̃**
dog fish-TOP.NON.A/S steal-**RPAST.NVIS**.3sgnf
The dog stole the fish (I heard the noise).

c. diâyɨ wa'î-re yaha-**ápɨ̃**
dog fish-TOP.NON.A/S steal-**RPAST.INFER**.3sgnf
The dog stole the fish (I inferred it).

d. diâyɨ wa'î-re yaha-**ápɨ'**
dog fish-TOP.NON.A/S steal-**RPAST.REP**.3sgnf
The dog stole the fish (I have learned it from someone else).

(p. 287) Much of the literature on such morphemes aims to provide a careful and thorough description of their meaning and use in a particular language. Formal semanticists have an additional goal: to find the common principles and determine precisely how languages vary. Therefore, formal semanticists who study evidentials tend to focus on one or more of the following questions:

(2)

a. **Sentential meaning versus Contextual meaning**:
How should the core meaning of evidential morphemes be characterized and what sorts of information can be inferred from their use in particular contexts?

b. **Formal foundations of meaning**:
Can the way that evidentials compose with the rest of the sentence be captured using existing formal tools, or do evidentials have semantic properties that motivate additions to our semantic toolkit?

c. **Lexical/paradigmatic meaning:**
Is there a limit to the range of possible evidential meanings? If so, how can a formal semantic theory constrain the possible meanings?

My goal in this chapter is to survey the various approaches to these questions that have been taken in recent formal semantics research on evidentials, in a way that will make the areas of progress and controversy in this area clear to readers with little formal background. In §15.1, I will lay out those basic preliminaries that are necessary to understand some of the motivations behind the proposals reviewed here. Readers may also consult Smirnova (2011) for a particularly helpful overview of the basic concepts in model-theoretic semantics that are relevant for evidentials and Krawczyk (2012) for an overview of the basic concepts of evidentiality that are relevant for semanticists. I then turn in §§15.3–5 to the answers that have been proposed so far to the three questions in (2).

15.1. Preliminaries

I will be assuming in this overview that grammaticized evidential systems have properties that distinguish them from other ways that languages might express information source, such as adverbs, epistemic predicates, parenthetical phrases, etc. By 'grammaticized evidential systems' I mean sets of morphemes that stand in a paradigmatic relationship, have a fixed position and are obligatory in the sense that one of the values is always expressed (in certain clause types). As Aikenvald (2004) makes clear, restricting the scope of study to *grammaticized* evidential systems is akin to studying tense/aspect systems rather than the whole range of temporal expressions. I will further assume that the morphemes in grammaticized evidential systems express different values of a common semantic category, characterized informally as 'source of information.' That is, I will be assuming that the semantics of the different evidentials (in Tukano, *visual, non-visual, inferential,* and *hearsay*) share a common core. This assumption comes with a caveat: although I will refer to 'the meanings of (p. 288) evidentials,' some semanticists dispute that the categories share a common semantic core (Garrett 2001; McCready 2010; Matthewson 2010[2]; Blain and Déchaîne 2006). Others do find semantic systems involving variants of a common core meaning, at least for some languages (Chung 2005; J. Lee 2008; Smirnova 2011; Speas 2010). Whether a researcher finds evidentials to constitute a homogenous class will depend at least in part on whether she is studying grammaticized evidential systems or the wider class of expressions of information source.

One interesting property of grammaticized evidential systems is that the range of possible evidential types is quite limited. As Aikhenvald (2004a) points out, one rarely finds more than five distinctions made within an evidential system, and the categories are often the same across dissimilar languages. I will be using the following cover terms for the types of evidence encoded in grammaticized evidential systems:

(3)

a. **Direct**: Evidence acquired through experiencing or witnessing the eventuality.
   Some languages distinguish two types of direct evidence:
   Firsthand, sometimes called visual: Evidence acquired through experiencing or witnessing the eventuality.
   Auditory (or non-visual sensory): Evidence acquired by hearing (or otherwise sensing) the eventuality but not seeing it.

b. **Inferential, sometimes called indirect**: Evidence that leads one to infer the relevant proposition.

c. **Reportative:** Evidence from something someone else has said.
   Some languages distinguish two types of reportative evidence:
   Hearsay: The information conveyed by some report.
   Quotative: The exact words of someone else.

I will use these terms because such terms are used in most accounts of evidentials. However, Aikhenvald warns that 'the labels we use for evidentials may sometimes be misleading if taken literally (2004a: 23). One area of mounting consensus in the literature on the formal semantics of evidentials is that the traditional labels such as 'inferential,' 'direct,' 'sensory' for different types of evidence are not appropriate as primitives of the semantic system. For example, J. Lee (2008) points out that labelling one type of evidence 'visual' or 'sensory' is very misleading because all evidence is actually collected via some sort of sensory perception. We obtain inferential evidence that it is raining when we *see* people come in with wet umbrellas or *hear* a pounding on the roof. We obtain reportative evidence that it is raining when we *hear* someone say 'It is raining.' The difference between direct and inferential evidence is not in whether the evidence was gathered through the senses. Rather, the difference is in how the evidence is related to the information reported. Many of the formal semantic analyses to be reviewed here use labels like those in (3) as a kind of shorthand, deferring the goal of explaining why languages encode the evidence types that they do. However, some (p. 289) interesting recent research, which we will discuss in §15.4, addresses the question of what the actual semantic primitives are and what relations define evidence types.

Note that the definitions in (3) leave implicit *whose* evidence is relevant. In general the relevant evidence-possessor is the speaker, but the possessor of the evidence is more accurately characterized as the relevant perceiver, or 'origo.' In questions, for example, the origo for evidentials is commonly the addressee, the one who has the information necessary to answer the question. The formal semantics treatment of origo in statements and questions has been explored by McCready (2010) and Lim (2011). However, most of the formal semantic analyses of evidentials leave aside the issue of the identity of the implicit possessor of the evidence, focusing instead on the compositional semantic properties of grammaticized evidentials. This is not to say that this issue is trivial. As shown extensively in Aikhenvald (2004a: Chapter 7), many interesting questions arise related to the interactions of the origo and grammatical person marking.

Turning now to the preliminaries regarding formal semantic theories, most of the works to be surveyed here adopt the view that sentences denote propositions, and propositions have *truth conditions*, which are the conditions that must hold of the world if the sentence is to be true. When one knows what a sentence means, one knows what the world would have to be like if the proposition it denotes is true. In other words, when we understand a sentence, we understand what it is communicating about the world. We may not know whether a given sentence is true, but we know what the world would have to be like for it to be true. Because of this background assumption, much of the formal semantics work on evidentials has focused on the relationship between evidentials and truth conditions. As we will see in §15.2, existing accounts treat the information contributed by evidentials as independent of the core proposition, but differ in whether this information takes the form of a presupposition, additional proposition, or illocutionary operator.

The truth-conditional status of evidentials is related to the question of how and when evidentials are composed with the rest of the sentence. The question is tricky because of the mismatch between sentences/clauses, which are structured strings of words, and propositions, which are meanings. Evidentials usually have scope over an entire clause[3], but it is not obvious whether evidentials affect the truth conditions of the proposition denoted by the clause, like adverbs such as 'possibly' or verbs such as 'seem', or the felicity conditions of the sentence in context, like sentence adverbs such as 'frankly' or discourse markers such as 'well' or 'you know.'[4]

Semanticists have developed a set of tests to distinguish 'proposition-level' expressions from 'illocutionary-level' expressions, and much of the literature to date on the formal semantics of evidentials deals with the question of whether their meaning is contributed at the propositional or illocutionary level. The current consensus is that languages differ in the level at which evidentials operate, and that some languages have both proposition-level and illocutionary-level evidentials. In the following section, we will review the tests that seem to show clear differences between languages. (p. 290)

15.2. Evidentials and the semantics/pragmatics distinction

A body of recent research supports the view that evidentials can differ in whether they affect truth conditions or pragmatic conditions. Peterson (2010a) provides an excellent overview of how the standard tests for distinguishing proposition-level expressions from illocutionary-level expressions have been applied to evidentials. He adopts Waldie et al.'s (2009) suggestion that the tests fall into two broad categories: tests involving whether the expression affects the truth value of the sentence, and tests involving scope and embeddability.

These tests have turned up some systematic differences between languages (and also, within certain languages between different evidential types). As with any diagnostics, the interpretation of the results often depends on independent factors, so here I will review only the cases that provide the strongest support for a distinction between illocutionary-level and proposition-level evidentials. Based upon the work of Papafragou (2000), these are examples that Faller (2003) used to argue that Quechua evidentials are illocutionary operators and Rullman et al. (2008) and Matthewson et al. (2007) used to argue that evidentials in St'át'imcets differ systematically from the Quechua evidentials, patterning instead with English epistemic modals[5]. These examples can also be found in Peterson (2010a: 119–34), where there is a much more extensive overview of all of the tests. Since both the original sources and Peterson's overview contain very detailed discussion of examples in Quechua, St'át'imcets and other languages, I limit myself here to the examples that show the clearest cross-linguistic contrasts.

15.2.1. Confirmation and denial

Since propositional operators affect truth conditions, an affirmation or denial of a sentence they are in can be affirming or denying their content. This contrasts with illocutionary operators, where affirmation or denial excludes their content. This is illustrated with the English examples in (4) and (5), where the propositional operator *must* contrasts with the illocutionary operator *frankly*.

(4)

A: She must a genius. B: No, you're wrong. She might be, but not necessarily.

(5)

A: Frankly, she's a genius. B: #No you're wrong. Confidentially, she is, but not frankly.

By this test, St'át'imcets patterns like English modals. (6) illustrates this with the inferential evidential, but the pattern holds for the other types as well. (p. 291)

(6)

St'át'imcets: Denial includes content of evidential:

Context: A is driving past John's house with B and sees John's lights are on.

a. wá7 **k'a** l-ta tsítcw-s-a s-John; tákem i
be INFER in-DET house-3.POSS-EXIST NOM-John all DET.pl
sts'ák'w-s-a wa7 s-gwel
light-3.POSS-EXIST IMPERV STAT-burn
John must be home; all his lights are on.

b. aoz kw-a-s wenácw; papt wa7
NEG DET- IMPERV-3.POSS true always IMPERV
lháp-en-as kw-a-s lháp-an'-as
forget-DIRECT-3.ERG DET-IMPERV-3.POSS put.out-DIRECT-3.ERG
i sts'ák'w-s-a lh-as úts'qa7
DET.pl light-3.POSS-EXIST when-3.CONJ go.out
That's not true. He always forgets to turn his lights off when he goes out.
B's statement ≠ John is not home.
B's statement = It's not true that John must be home.

The data discussed in Faller's work do not include Quechua examples that are precisely parallel to these, but as far as we can tell from examples like (7), the reportative evidential in Quechua does not pattern with English modals. It is ill-formed for the denial to include the evidential.[6]

(7)

Quechua:Denial denies the proposition, not the evidential:

a. Inés-qa qaynunchaw ñaña-n-ta-s watuku-sqa
Inés-TOP yesterday sister-3-ACC-**REP** visit-PAST.2
Inés visited her sister yesterday. (speaker was told)

b. Mana-n chiqaq-chu. # Mana-n chay-ta willa-rqa-sunki-chu
not-BPG true-NEG not-BPG this-ACC tell-PAST.1-3S20-NEG
That's not true. #You were not told this.

15.2.2. Known truth/falsehood

English modals weaken assertions and so cannot be used if the speaker knows the plain assertion to be true, as we see in (8a). Also, English modals generally cannot be used if the proposition they operate on is known to be false, as we see in (8b).

(8)

a. #It must/might be raining – I saw it.[7]

b. #It must be raining, although I'm sure it isn't.

(p. 292) In Quechua, the direct evidential *-mi* can be used even if the proposition it goes with is known to be true. This shows that it is unlike English modals, which weaken the assertion, and it also is in contrast with St'át'imcets, where none of the evidentials can be used if p is known to be true.[8] Similarly, the Quechua reportative *-si* can be used when the speaker believes the proposition to be false, unlike English modals and the St'át'imcets reportative morpheme *-ku7.*

(9)

a. English: #It must be raining, but I don't believe it is.
#It might be raining, but it isn't.

b. Quechua: Felicitous even if speaker knows p to be false:
Pay-kuna-s ñoqa-man-qa qulqi-ta muntu-ntin-pi saqiy-wa-n,
(s)-he-pl-**REP** I-ILL-TOP money-ACC lot-INCL-LOC leave-1O-3
mana-má riki riku-sqa-yui ni un sol-ta centavo-ta-pis
not-SURP right see-PP-2 not one sol-ACC cent-ACC-ADD
saqi-sha-wa-n-chu
leave-PROG-1O-3-NEG
They left me a lot of money, but, as you have seen, they didn't leave me one sol, not one cent. (Faller 2002: 191)

c. St'át'imcets: NOT felicitous when p is known to be false
#um'-en-tsal-itás ku7 i án'was-a xetspqíqen'kst táola,
give-DIRECT-1sg.OBJ-3pl.ERG **REP** DET.pl two-DET hundred dollar
t'u7 aoz kw s-7um'-en-tsál-itas ku stam'
but NEG DET NOM-give-DIRECT-1sg.OBJ-3pl.ERG DET what
#They gave me $200 [I was told], but they didn't give me anything.

15.2.3. Interpretation under embedding

Illocutionary particles in English often cannot be embedded at all. If they are embedded, they continue to convey attitudes of the discourse speaker. Modals, on the other hand, can be embedded and can have an embedded (subject-oriented) interpretation.

(10)

a. Illocutionary particle: *Mary believes that wow, Pilar is a genius.

b. Illocutionary adverb: Mary said that John will unfortunately not be at the meeting. (Discourse speaker believes it is unfortunate)

c. Proposition-level modal: Mary thinks that Pilar must be a genius. (=must, according to Mary's reasoning)

(p. 293)

In Quechua when reportative evidentials are embedded under verbs of saying, they continue to be oriented toward the utterer of the sentence, that is, they are restricted to reports that the discourse speaker has heard. This contrasts with the behaviour of the St'át'imcets reportative, which patterns with English modals in that it may involve reports heard by the subject of a verb of saying.

(11)

a. Quechua: embedded hearsay = report made to speaker

Marya	*ni-wa-rqa-n*	*Pilar-(*si)*	*chayamu-sqa-n-ta-s*
Marya	say-1O-PAST1-3	Pilar	arrive-PP-3-ACC-**REP**

Marya told me that Pilar arrived.
(=Someone reported to the Speaker; **NOT**: Someone reported to Marya that Pilar arrived.)

b. St'át'imcets: embedded hearsay = report made to subject

tsut	kw	s-Lémya7 kw	s-melyíh	ku7 ta	í7mats-s-a
say	DET	NOM-L. DET	NOM-marry	**REP** DET	grandchild-3.POSS-EXIST

s-Rose
NOM-Rose
Lémya7 said that [she was told that] Rose's grandchild got married.
(=Someone reported to Lémya7 that R's grandchild got married)

15.2.4. Scope within a question

Modals in English take scope within questions, while illocutionary adverbs like 'honestly' take scope outside of questions:

(12)

a. Who must be the culprit? (= for which x is it necessarily the case that x is the culprit)

b. Honestly, who is the culprit? (=Request that addressee answer the question honestly)

In Quechua, it is possible for an evidential to be interpreted with scope outside of a question, while in St'át'imcets the evidential is always in the scope of a question.

Quechua: Evidential takes scope outside of question

a. Investigator to the consultant's mother-in-law

(13) Imayna-n ka-sha-nki
how-**BPG** be-PROG-2
How are you?

b. Consultant to mother-in-law
Imayna-s ka-sha-nki
how-**REP** be-PROG-2
(She says) How are you? (Faller 2006: 222)

(p. 294) **(14)**

St'át'imcets: Evidential cannot take scope outside of question:

a. Investigator to the consultant's mother-in-law

swat	ku7	k-wa	táns-ts-an
who	**REP**	DET-IMPERV	dance-CAUS-1sg.ERG

Who did they say I was dancing with?
≠ (She says) Who was I dancing with? (Matthewson et al. 2007: 232)

15.2.5. Summary of the tests and discussion

Research applying these tests suggests that some evidentials are proposition-level and others are illocutionary-level. Some have argued that languages can vary in which types they have and that a given language can have both types of evidentials (Faller 2003; Matthewson et al. 2007; Matthewson 2012; Rullman et al. 2008; McCready 2010; Waldie et al. 2009; Peterson 2010a).

(15)
In Quechua but not St'át'imcets:

a. The evidential is excluded from denials and confirmations.

b. The direct evidential strengthens rather than weakens the assertion.

c. The reportative evidential is distinct from the proposition in that it can be used to report propositions that the speaker believes to be false.

d. The reportative evidential remains speaker-oriented even when embedded.

e. The reportative evidential can take scope outside of a question.

By these five criteria, there are clear differences between Quechua and St'át'imcets, although as Matthewson (2011) points out, it is not entirely clear what all the tests are actually diagnosing. Research applying these tests has begun to make important inroads into explaining the source of these differences. A few observations are in order, to clarify what questions are still left open.

First, it is important to note that for the most part these results do not apply to the entire class of evidentials, but to specific ones. In particular, there is no single test that shows that all evidentials in any given language are illocutionary operators. For example, the 'known truth/falsehood' test shows that the Quechua Direct evidential *-mi* is not like English modals, in that it does not weaken assertions. However, reportative and inferential evidentials weaken assertions even in Quechua. Similarly, other researchers have noticed that reportative evidentials provide the most robust arguments for evidentials taking scope outside of the proposition. As AnderBois (2014) points out, reportatives behave like Quechua with respect to some of these tests even in many languages where evidentials have been analysed as epistemic modals. Differences between reportatives and the other categories have led some (Faller 2002; Murray 2010a, among them) to give reportatives a different illocutionary status from other evidentials.

Second, it is important to note that patterning with modals is distinct from patterning with S-internal operators in general. Indeed, Faller's illocutionary account of the Quechua (p. 295) inferential evidential involves a rule that converts the plain assertion to a modalized one, and Matthewson (2011) shows that St'át'imcets has another evidential, *lákw7a,* which patterns with illocutionary operators as far as the tests are concerned but which clearly operates at a level within the proposition. For this reason it is important to look at

the entire range of tests, and be very careful in determining how the meaning of the morpheme is related to the level at which it operates. The tests are useful insofar as they reveal systematic differences between languages, but much work is left to do in refining them and determining precisely what they show.

Since the clearest pattern revealed by these tests is that evidentials in St'át'imcets systematically pattern with modals, we will now look at modal analyses of evidentials, paying particular attention to how contextual restrictions are encoded.

15.3. Evidentials and epistemic modals

Researchers since (at least) Boas (1911a) have suggested that evidentials fall within the general system of 'modalities of the verb'[9], because they convey information that has to do with the speaker's knowledge. Palmer (1986) argues that epistemic modality 'shows the status of the speaker's understanding or knowledge; this clearly includes both his own judgements, and the kind of warrant he has for what he says' (1986: 51).

Evidentials, which involve the 'kind of warrant,' differ in significant ways from English epistemic modals, which express the modal judgement (De Haan (1999); Hardman (1986); DeLancey (2001); Lazard (2001); Plungian (2001); Aikhenvald (2004a); Johanson (Chapter 24 of this volume); Faller (2011); Murray (2014) among others). In particular, it is clear that the core meaning of evidentials involves information source. As Aikhenvald (2004a) explains, evidentials do not convey information about degree of epistemic certainty. Oswalt (1986) observes that sentences with evidentials are often used to make unqualified assertions.

The dominant formal semantic theory of modality, which is the theory of Kratzer (1981, 1991, 2012), follows Palmer in that modality includes two different components. The modal judgement is formalized as universal or existential quantification over worlds in which the proposition is true. The other component is what Kratzer calls the 'conversational background.' The conversational background is the information 'in view of which' the modal judgement is made. This information about evidence or other types of warrant[10] can be made explicit in English, as in (16), but is part of the meaning of the modal even when implicit.[11] (p. 296)

(16)

a. Given what I know about Mary, she must be in her office right now.

b. In view of the evidence, the defendant must be guilty.

c. Based on what the elders have said, this plant must be good for healing wounds.

d. Given your mother's rules, you must be home by 11pm.

Some formal semantic analyses of evidentials use Kratzer's theory of modals, which has led to the misconception that the differences between evidentials and modals are being ignored or that such theories are claiming that evidentials and English modals 'mean the same thing.' As we will see, the claim actually being made is that languages differ in how the two components of modality, the modal judgement and the evidential warrant, are spelled out. This has not always been clear in formal semantic accounts of evidentials that treated them 'as modals,' because the two components of modality were taken for granted as part of Kratzer's theory. The study of evidentials 'as modals' has led to significant clarification of the nature of conversational backgrounds in Kratzer-type theories of modals.[12] As Kratzer has said in more recent work, 'There are two distinct semantic jobs to be done, then: classify evidence versus assess the truth of a proposition against possibilities projected from a body of evidence.'(Kratzer 2012: 23).

The starting point for applying Kratzer's theory to the formal semantic analysis of evidentials was Izvorski (1997). She proposed that indirect evidentials[13] in Bulgarian are Kratzer-style epistemic modals that trigger a presupposition restricting the conversational background:

(17)

Izvorski 1997 meaning of an indirect evidential, informal version:

assertion:	necessarily p, in view of the speaker's knowledge state
presupposition:	the speaker has indirect evidence for p (Izvorski 1997: 226)

This informal statement leaves a central question implicit: What makes something 'indirect evidence'? Ivorski uses Kratzer's more detailed analysis of the conversational background to explain this. The conversational background is composed of a *modal base* and an *ordering source.* The modal base is the set of propositions that form the basis of the modal judgement. The ordering source restricts the modal base to worlds compatible with contextual information such as the speaker's beliefs and preferences. The ordering source captures the distinction between logical entailment and everyday inference. For example, 'Based on these footprints, Moriarty must be the culprit' doesn't mean that the footprints inevitably entail that Moriarty is the culprit. It means that the footprints (modal base) combined with the (p. 297) speaker's beliefs (ordering source) underlie the conclusion. Together, the modal base and ordering source comprise the assumptions upon which the modal judgement is based.

(18)

a. Modal Base: (a function from worlds to sets of propositions)
In Izvorski's model, the modal base is whatever knowledge the speaker considers to be indirect evidence. It is the information in view of which the speaker believes p.

b. Ordering Source: (a function from worlds to sets of propositions)
The ordering source ensures that the most relevant worlds for evaluating the assertion are those in which p follows from the speaker's beliefs.

c. Modal quantification for indirect evidentials involves a universal quantifier, i.e. quantification is over all relevant worlds, but relevant worlds are only those worlds given by the modal base and ordered by the ordering source.

The formal denotation that Izvorski proposes for EVp is given in (18) and her verbal translation of the formula is given in (19).

(19)

$[[\text{EVp}]]^{f,g} =$
$\{w \in W: \forall u \in W [(u \in \cap f(w) \,\&\, \neg \exists v \in W (v \in \cap f(w) \,\&\, v_{g(w)} < u)) \rightarrow u \in p]\}$
'an indirect evidentiality statement EVp is true in a world w with respect to the conversational backgrounds provided by f and g, iff p is true in all worlds accessible from w which come closest to the ideal represented by the speaker's beliefs regarding the available indirect evidence in w' (Izvorski 1997: 8).

Note that in Kratzer's theory of modality nothing is stipulated about speaker certainty. Degree of certainty might in some contexts be inferred, since the speaker is saying a proposition is true but in a somewhat restricted set of worlds. However certainty is not part of the core meaning.

Matthewson et al. (2007) and Rullman et al. (2008) extend an analysis based on Izvorski (1997) to reportative and perceptual as well as indirect evidentials. As discussed in §15.2, they explicitly argue that evidentials in the language they examine, St'át'imcets, differ from those in languages like Quechua that function as illocutionary operators. They claim that both in the level at which they operate and the information that they convey, St'át'imcets evidentials pattern like modals. In fact, the analysis given by Rullman et al. applies to deontic as well as epistemic modals.

The analysis is designed to account for the systematic differences between modals in English and modals in St'át'imcets: 'Whereas English modals have a fixed modal force but a varying conversational background, modals in St'át'imcets appear to have varying modal force but a fixed type of conversational background' (Rullman et al. 2008: 218–19). They argue that this variation can be explained if we say that St'át'imcets modals include a specification of a particular type of modal base. For evidentials, the restriction is to modal bases in which the particular type of evidence holds. Because of the way they implement this restriction, the quantificational force of the operator over possible worlds does not need to vary from modal to modal. Let's see how this works. (p. 298)

Here are the denotations proposed in Rullman et al. (2008: 350) for the inferential, perceived evidence and reportative evidential modals. They use the choice function f, of type <s,t><s,t>, to pick out the particular worlds to be quantified over.

(20)

a. Semantics of *k'a* (inferential)
$[[k'a]]^{c,w}$ is only defined if c provides an epistemic modal base B such that for all worlds w', w' ∈ B(w) iff the inferential evidence in w holds in w'
$[[k'a]]^{c,w} = \lambda f_{<s,t><s,t>}.\ \lambda p_{<s,t>}.\ \forall w'[w' \in f(B(w)) \rightarrow p(w')]]$

b. Semantics of *-an'* (perceived-evidence)
$[[-an]]^{c,w}$ is only defined if c provides an epistemic modal base B such that for all worlds w', w' ∈ B(w) iff the perceived evidence in w holds in w'
$[[-an]]^{c,w} = \lambda f_{<s,t><s,t>}.\ \lambda p_{<s,t>}.\ \forall w'[w' \in f(B(w)) \rightarrow p(w')]]$

c. Semantics of *ku7* (reportative)
$[[ku7]]^{c,w}$ is only defined if c provides an epistemic modal base B such that for all worlds w', w' ∈ B(w) iff the relevant report made in w is made in w'
$[[ku7]]^{c,w} = \lambda f_{<s,t><s,t>}.\ \lambda p_{<s,t>}.\ \forall w'[w' \in f(B(w)) \rightarrow p(w')]]$

Let's focus on the inferential case. The morpheme *k'a* is defined if the context provides an epistemic modal base that includes the inferential evidence. Assuming there is this kind of modal base, a proposition marked with *k'a* is true for all worlds that are picked out of the modal base by the choice function.

The purpose of the choice function[14] is to capture the fact that it would be too broad to say that p+indirect evidential is true in every single world where the inferential evidence

holds. There could be plenty of worlds where the inferential evidence holds but p is false anyway. For example, suppose we infer that John is at home based on the fact that his light is on and we know he only keeps the lights on when he's at home. If we assert 'John is at home based on indirect evidence', we do not mean that John is at home even in worlds where John's light is on, he only keeps the lights on when he's at home, and space aliens beamed him from his living room in the middle of his dinner. The choice function narrows down the set of worlds but uses universal quantification over all worlds in the narrowed-down set. So, the key difference in their view between St'át'imcets and English is that English modals lack the lexical specification of evidence type.

An important property of this kind of modal semantics is that it is the context that provides the actual modal base in each particular case. The context also, therefore, determines how reliable the evidence is. This is particularly important for the case of the reportative evidential. Notice that in (20c), the restriction is that the relevant report was made in the worlds of the modal base, and then the modal quantifies over worlds in which the report was made.[15] This can in principle include worlds where the report was made and is true as well (p. 299) as those where the report was made but is false. The context determines whether the speaker is just conveying a report without making a commitment to its reliability or is assuming the report is reliable and believes the proposition is likely to be true.

15.4. Evidentials and illocutionary force

Given the tests discussed in §15.2 as well as the clear differences between information source and necessity/possibility marking, it is not hard to see why some researchers have analysed evidentials as operators that affect illocutionary force. In some languages evidential morphemes occupy the same position as illocutionary force markers, and appear to be in complementary distribution with them (see e.g. Murray 2011 on Cheyenne; Broadwell 2006 on Choctaw). Moreover, it is clear that the speaker's information source for an assertion can affect whether an addressee will choose to believe it. In this section we will review the most prominent formal semantic accounts of evidentials as illocutionary markers. For the most part, the formal semantic research has focused on evidentials in assertions. At the end of this section I will discuss a few proposals that deal with evidentials in questions.

Faller argued that the direct (*-mi),* reportative (*-si*), and conjectural (*-chá*) evidentials in Quechua are operators that affect illocutionary force.[16]

(21)

a. *mi*

ASSERT (p) → ASSERT (p)

SINC=$\{Bel(s,p)\}$ → SINC=$\{bel(s,p), Bpg(s, Bel(s,p)\}$ (p. 167)

b. *si*

ASSERT (p) → ASSERT (p)

SINC=$\{bel(s,p)\}$ → SINC=$\{\exists s_2\,[Assert(s_2,p) \wedge s_2 \notin \{h,s\}]\}$ (p. 200)

c. *chá*

ASSERT (p) → ASSERT $(\blacklozenge p)$

SINC=$\{Bel(s,p)\}$ → SINC=$\{bel(s,\blacklozenge p), Rea(s, Bel(s,\blacklozenge p)\}$ (p. 185)

All of these morphemes apply to assertions of p with the sincerity condition 'speaker believes p.' The morpheme *-mi* changes the sincerity condition, to 'speaker believes p and speaker has the best possible grounds (bpg) for believing p.' The morpheme *-si* changes the assertion to a presentation, and changes the sincerity condition to 'There is another assertion of p, made by some other speaker (s_2) who was not the present hearer (h) or speaker (s)'.The morpheme *-chá* changes the assertion from an assertion of p to an assertion of possibly p, and changes the sincerity condition to 'speaker believes possibly p, and this belief is based on reasoning.'

Faller characterizes this formalization as preliminary, and includes a detailed discussion of several alternatives along with her empirical arguments for the illocutionary analysis. She also has provided updated accounts as new theories of illocutionary relations have (p. 300) developed. I focus here on the (2002) proposal because it has been the most influential on subsequent research.

Faller's proposal does not involve a division between modal and illocutionary evidentials, despite the tendency in the field to describe the distinction in this way for the sake of simplicity. In her analysis, the three Quechua evidentials differ along three parameters: whether the speaker is asserting or presenting p, how the sincerity conditions are modified and whether modality is introduced. The conjectural *-cha* is an illocutionary operator that maps the assertion of p to a modalized assertion.

It is important to note that Faller avoids using terms like *direct evidence, indirect evidence, reportative evidence*, instead defining these categories in terms of modifications to speech acts and sincerity conditions, which may be independently motivated. She has also argued (Faller 2006, 2010) that hierarchies of evidence strength are not best captured with these evidence categories.

Faller's original proposal was based in a speech act theory of discourse. Dynamic theories of information flow in discourse, such as Heim (1982, 1992); Kamp and Reyle (1993); and Groenendijk and Stokhof (1990, 1991), treat conversational backgrounds as part of the discourse context, and as such blur the line between proposition-level modality and discourse-level modality. In addition, since 2003 there have been advances in semanticists understanding of how content can be presented in a sentence. In particular, Potts (2005) showed that sentences can convey information that does not affect the truth conditions of the core proposition, but is also not an illocutionary operator. He calls this *not-at-issue content.*

Not-at-issue content differs from both presupposition and illocutionary operators. Presuppositions are triggered by words in the sentence but are themselves implicit, and presuppositions are generally given information, assumed to be part of the common ground. Not-at-issue content is explicitly introduced and it is generally new information. Moreover, not-at-issue content can have truth conditions that are separate from those of the core proposition. Examples of not-at-issue meaning include appositive phrases (Noam Chomsky, a famous linguist) and expressive phrases (the damn dog). Evidentials are explicit, provide new information and in many languages use of the wrong evidential counts as lying about the evidence but not necessarily about the core proposition.

In recent work, Faller (2011) shows how the different types of sincerity conditions (or modal restrictions) can be modelled using Kratzer's (1981, 1991) theory of modality, but argues that these restrictions are not-at-issue content. Faller further maintains that the not-at-issue restrictions are 'part of the truth conditions of the evidential sincerity conditions' (2011: 670).

Murray (2010a, 2011, 2014) is the most detailed discourse-based formal semantic analysis of evidentials. Using the 'Update with Modal Centering' theory of Bittner (2011, 2013), she elaborates an analysis in which evidentials express not-at-issue content rather than presuppositions and modal-like contextual restrictions are introduced at the discourse level. In this framework, assertion reduces the set of topic worlds, that is, the worlds within which a proposition is to be evaluated, and also restructures the relative prominence of individuals, worlds, and propositions in the common ground. In other words, the modal base is constructed as a process of discourse update, and this happens with any assertion, not just assertions containing explicit modals. In this theory, any sentence, with or without an evidential, '… makes at least three new semantic contributions: introducing a discourse referent for the (p. 301) at-issue proposition, directly adding not-at-issue information, if there is any, to the common ground, and imposing structure on the context' (Murray 2014: 2). For example, a sentence like 'It is raining+INDIRECT' would:

(22)

a. present the at-issue proposition that it is raining, which can now be referred to

b. directly update the common ground with not-at-issue proposition 'Speaker has indirect evidence that it is raining'

c. update the structure of the discourse by introducing a proposal that the addressee accept the proposition *It is raining* into the common ground.

The core proposition is presented rather than asserted, although the fact that the sentence is declarative means that the structure of the context now includes a proposal to update the common ground to include this proposition.

In this theory, as in Kratzer-style modal analyses, the effect of the evidence type on speaker certainty is not part of the semantics. The addressee decides whether to accept the proposal to add p to the common ground based on her assessment of the type of evidence and the reliability of the speaker. Information about the reliability of the evidence is not part of the denotation of an evidential.

Building on Murray (2010a, 2011, 2014); Gunlogson (2001); Harris and Potts (2009); and Groenendijk and Roelofsen (2009), AnderBois (2014) explores in more detail how the differences between reportatives and the other evidential categories might follow from the pragmatic repercussions of conveying information about the evidence type. The basic idea is that discourse participants keep track of the commitments of the speaker in addition to the common ground, and the interaction of the two influences whether an asserted proposition gets added to the common ground. Following Gunlogson (2001), the discourse representation always includes the components shown in (23): X is the set of individuals in the discourse, CG_X is the common ground—the propositions known by all discourse participants, and $\{DC_x \mid x \in X\}$ is the set of discourse commitments of each discourse participant.

(23)

Discourse components: $\langle X, CG_X, \{DC_x \mid x \in X\}\rangle$ (AnderBois 2014: 250)

Because these components are always part of the discourse representation, there is no need to stipulate in the semantics the effect of an evidential on assertion strength. All assertions, including those with evidentials, are characterized as in (24) (AnderBois's (29), p. 250):

(24)

An ordinary assertion by discourse participant *A* with propositional content p:

a. Adds p to DC_A.

b. Proposes to add p to $CG_{\{A,B\}}$ on the basis of (a), subject to acceptance or denial by *B*.

For an assertion without an evidential (or other qualifier), p for (24) a and b is the same. For an assertion with an evidential, step a adds EVID(p) to the speaker's discourse commitments and step b proposes to add p to the Common Ground. This is very close to Murray's proposal, except that since the one component of AnderBois's system is a set of propositions categorized as 'speaker's discourse commitments,' the proposition it contains is 'There (p. 302) is such-and-such evidence for p' rather than 'Speaker has such and such evidence for p'. As in Murray's system, whether the addressee accepts the addition of p to the common ground depends on her evaluation of the nature of the evidence, given the context, so a specific strength of commitment is not stipulated for each evidence type.

AnderBois's system allows him to capture the fact that reportative evidentials often seem to have a different status from the other types. For example, in Quechua, the reportative can be used with a proposition that the speaker does not believe. What is special about reportatives, in the view of AnderBois, is not that they're attached at a different level (as in Blain and Déchaîne 2007) or change the illocutionary force (as in Faller 2002). It is simply that reportative facilitates a perspective switch, so that the discourse commitment of the speaker is merely to the existence of a report that p. This observation leads Ander-

Bois to question the validity of a typological distinction between illocutionary and modal reportative evidentials.

We turn now to evidentials that occur in questions. Most formal theories of evidentials can be adapted to treat questions by adding a switch in origo: in languages that allow evidentials in questions, the evidential in a question will encode the type of information the speaker believes the addressee has for the answer, and the illocutionary force of the expected answer (see Murray 2010b; McCready 2010; Lim 2011, to appear; Lim and C. Lee 2012). Complications arise from the fact that languages can vary in which evidentials are allowed in questions. San Roque et al. (2017) provide a recent survey and suggest that the majority of these differences are morphosyntactic rather than semantic in nature. This claim should be taken as very preliminary, since formal semantic analyses of evidentials in questions have only been done for a few languages so far. There are also crosslinguistic differences in the scope of evidentials in questions, as we saw in §15.2.

Another interesting complication is that questions with evidentials can take on extended meanings. If an extended meaning is clearly related to the core meaning, a formal semantic analysis ought to have an account of the relationship. Littell et al. (2010) argue that one common extended meaning, conjectural questions, follows naturally from the way the semantics of questions interacts with the semantics of evidentials.

Conjectural questions, in which the speaker does not expect an answer, often arise when indirect evidentials occur in interrogatives. Littell et al. (2010) give the following examples of a yes/no question and a wh-question from St'át'imcets:

(25)

a. lan=as=**há**=**k'a** kwán-ens-as
already=3SBJN=**YNQ**=**INFER** take-DIR-3-ERG
ni=n-s-mets-cál=a
DET.ABS=1sg.POSS-NOM=write-act=EXIST
I wonder if she's already gotten my letter/I don't know if she got my letter or not.

b. **swat**=as=**k'a** kwán-ens-as ku=lhwál-ci-ts-as
who=SBJN=**INFER** take-DIR-3-ERG DET=leave-APPLIC-1sg-OBJ-3ERG
ti=ts'úqwaz'=ani=n-s-mets-cál=a
DET=fish=EXIST
I wonder who left me this fish. (2010: 90)

(p. 303) The proposal of Littell et al. combines the following three independently needed properties of questions and evidentials:

(26)

a. The denotation of a question is the set of possible answers. (Hamblin 1973)

b. A question inherits the presuppositions of all its potential answers. (Guerzoni 2003)

c. Evidential morphemes trigger a presupposition that there is a certain kind of evidence. (Matthewson et al. 2007)

The idea, in brief, is that combining an evidential with a question results in a set of possible answers, for each of which there is the relevant kind of evidence. Since there is evidence for all of the possible answers, the construction can take on a meaning where the speaker does not expect the addressee to be able to answer. This analysis correctly predicts that conjectural questions can be an extended meaning of inferential and hearsay evidentials in questions but direct evidentials in questions do not acquire this extended meaning. The reason is that it is possible to have inferential or reportative evidence of multiple possible answers to a particular question, but it is impossible to have witnessed more than one possible answer.[17]

15.5. Tense, aspect, and relational theories of evidence type

Whether evidentials contribute their information as a presupposition, a not-at-issue proposition, a restriction on the modal base, or a felicity condition, a key question remains: what exactly is 'evidence,' and how are the various types of evidence distinguished? Do the different evidence types share elements of their denotation (Speas 2004b; Rullman et al. 2008; J. Lee 2008; Koev 2011, 2016), or are they heterogeneous (Garrett (2001), McCready (2010))?

In some languages evidential morphology is fused with tense/aspect morphology and even where tense/aspect and evidentials are expressed by entirely distinct morphological systems, there is a clear connection between tense/aspect and evidence type as has been noted by Johanson (1971); Comrie (1976); Dahl (1985); and Woodbury (1986) among others. Tense is linked to evidence type in that 'when the time reference of an evidential category is different from that of the proposition with which it occurs, the resulting evidential value will be non-experiential.'(Woodbury 1986: 195). The link between aspect, in particular perfect aspect[18], and evidentiality has to do with the role of results as indirect evidence. 'An inference is made based on some traces or results of a previous action or state.'(Aikhenvald 2004: 112). Nikolaeva (1999a) proposed that the meaning of evidential morphemes in (p. 304) Northern Khanty[19] involve equivalence or non-equivalence between events, their results, and speaker's evidence, and showed that tense affects which equivalence relations are possible. Faller (2003) analysed the Quechua morpheme *-sqa* as a 'deictic element which locates the eventuality outside of the speaker's perceptual field

at topic time.' Fleck (2007) shows that the evidential and tense system of Matses explicitly encodes information about when the speaker encountered the evidence.

In this section I will review several formal semantic analyses that use the connection between tense/aspect and evidentiality to define the evidence types, eliminating the need to treat 'indirect evidence,' 'direct evidence' etc. as primitives of the system.[20] A common element of these analyses is that they propose that evidentiality introduces an Evidence Acquisition Time, which can then participate in the same precedence and overlap relations as are encoded by tense and aspect.

As J. Lee (2008); McCready (2010); and Kalsang et al. (2013) explain, formal semanticists need to find a way to define the evidence types, because the world does not contain anything that is in and of itself the extension of 'evidence.' A given state of affairs only becomes 'evidence' insofar as it bears some systematic relation to the thing it is evidence for. This means that the phrases 'direct evidence' or 'inferential evidence' may denote absolutely anything in the universe. In other words, 'evidence' is not an entity, state of affairs, or property or indeed anything else that can be identified in the world; rather, evidence is defined in terms of the relation a state of affairs holds to the proposition being communicated. Languages in which evidentiality and tense/aspect systems overlap give us interesting insight into how to define the evidence types. [21]

The formal analyses that I will review adopt the view of Reichenbach (1947); Comrie (1985); and Klein (1994), that tense and aspect denote relations among three times: Event/Situation time, the Utterance/Speech time, and a Topic/Reference time. Some authors I will discuss propose that evidentials introduce an Evidence Acquisition Time, which can then be related to the other times in the system, while others propose that evidentials encode relations not between times but between situations or worlds.

Izvorski (1997) formalized the way perfect morphology is extended to indirect evidentiality based on the observations of Iatridou (1990, 2000). Iatridou explained the use of past perfect in counterfactual statements (as, for example, in a sentence like 'If I had taken this medicine, I would be better now') by proposing that the perfect aspect's relation between Topic Time and Situation Time is instantiated in the modal domain as a relation between sets of worlds. Izvorski drew the parallels between present perfect and indirect evidentiality as in (27).

(27)

Present Perfect:

a. $TSit \not\subseteq TU$ The core eventuality does not hold at utterance time.

b. Consequent state holds at TU

Indirect:

a. the set of worlds in which p is known $\not\subseteq \cap f(_{ws})$

b. proposition p'=*There are consequences/results of p* is known in $w_s \in f(w)$

(p. 305) Present perfect means that the time of the situation is not included in the time of the utterance, and indirect evidentiality means that the set of worlds in which p is known is not included in the speaker's epistemic state. For perfect aspect, a consequent state holds at Utterance Time, and for indirect evidentiality a consequent state holds in the Utterer's epistemic worlds.

Izvorski makes it clear that 'further formalization is needed to reduce the correspondences identified here between the temporal and modal domains to a single meaning for the present perfect, which, given the right arguments, will produce as output a temporal or a modal construct.' (1997: 14) This is the goal of research by Woodbury (1986); Nikolaeva (1999a); Chung (2005, 2007); Speas (2010); C. Lee (forthcoming); J. Lee (2008, 2011); Smirnova (2011); Koev (2011, 2016); and Kalsang et al. (2013).

15.5.1. Korean temporal evidentials

Chung (2005) and Lee (2008) show that discovering how temporal relations are related to evidentiality is crucial for understanding Korean evidentials, because the meaning of the Korean morpheme *-te*, which expresses evidentiality, depends crucially on which tense it occurs with. Thus, *-te* cannot be classified as a 'direct' or 'indirect' evidential. Rather, different evidential readings arise depending on whether *-te* occurs with the tense/aspect morphemes *-ess, -kyess,* or *- Ø*.

(28)

a. Pi-ka	o-Ø-**te**-la	-Ø + -te = Direct
rain-NOM	fall- Ø -**TE**-DEC	
[I saw that] it was raining.		
b. Pi-ka	o-**ass**-**te**-la	-ess + -te = Inference from results
rain-NOM	fall-**ess**-**TE**-DEC	
[I inferred that] it had rained.		
c. Pi-ka	o-**kyess**-**te**-la	-kyess + -te = Inference via reasoning
rain-NOM	fall-**kyess**-**TE**-DEC	
[I inferred that] it would rain.		(examples adapted from Lee 2008: 4)

A central fact that motivates a temporal analysis of Korean evidentials is that the 'direct', spelled out as present tense + *-te,* can be used in contexts where the speaker did not witness the event, but only acquired the evidence at the same time as the event. This is true for Bulgarian as well, (see §15.5.2) and other languages. (see e.g. Fleck 2007 on Matses). (p. 306)

(29)

Context: The speaker woke up from the sound of somebody using water in the bathroom. Now, the speaker says to his roommate: (J. Lee's 42b, p. 24)

Ne	ecey	pam-ey	shyawueha- Ø -te-la.
You	yesterday	night-at	take.shower-PRES-TE-DEC

[I made a sensory observation that] you were taking a shower yesterday night.

Chung (2005, 2007) analyses *-te* as a 'spatio-temporal deictic past tense,' which 'induces evidentiality.'(2005: 101) This morpheme introduces a timespan that 'provides a vantage point for evidentials.' (2005: 111) She argues that the morphemes *-ess* and *-keyss* are ambiguous between aspect markers and evidentials. If the timespan of the speaker's perception of the evidence overlaps with the timespan of the event, the 'direct' reading results. If these timespans do not overlap, the 'indirect' reading results.

J. Lee (2008) adopts the view that *-te* introduces a timespan, but treats *-te* as an evidential and *-ess* and *-keyss* as unambiguous past and future tense markers, respectively. She formalizes *-te* as follows:

(30)

$$\textit{-te} \rightarrow \lambda P\langle s,\langle i,t\rangle\rangle\, \lambda w \lambda t\, \exists t' [t' < t \wedge \forall w' [w' \in \mathrm{BEST}(SO, ST/DX, w, t') \rightarrow P(w')(t')]]$$

The evidential morpheme *-te* introduces an evidence acquisition time (t' above), which is always prior to the utterance time (t' < t). And, it introduces quantification over all worlds that are in the set of worlds compatible with the Sensory Observation (SO, the modal base) and the speaker's epistemic state, that is, a Stereotypical Doxastic ordering source (ST/DX) at the evidence acquisition time. Note that the Sensory Observation might be of the event itself or of any state of affairs that leads the speaker to infer the proposition.

As in Chung's analysis, there are no specific 'direct' or 'indirect' features, and 'evidence' is not a primitive of the semantics. The different readings result purely from the way the sensory observation and the time it took place combine with tenses to yield a reading in which the evidence acquisition time precedes the event time or overlaps with it. Present tense (Ø) means that event time (ET)[22] overlaps with the evidence acquisition time (EAT). Past tense (*-ess*) means that the sensory observation was made after the event, and Future (*-kyess*) means that the evidence was acquired before the event.

(31)

Lee (2008: 9)

Tense	PAST (*-ess*)	PRESENT (Ø)	FUTURE (*-kyess*)
Temporal Relation	ET < EAT	ET o EAT	EAT < ET
Evidential Reading	**Inferential**	**Direct**	**Inference about plans/intentions**

(p. 307) ## 15.5.2. Bulgarian temporal evidentials

Both Smirnova (2011, 2012) and Koev (2011) make proposals for Bulgarian that build on Chung and J. Lee's analyses of Korean (as well as on Izvorski's original modal proposal). Smirnova's analysis includes epistemic modality, while Koev provides an illocutionary level analysis, but both argue that labels like 'direct' and 'indirect' should be replaced with a specification of temporal relations.

Smirnova (2011, 2012) develops an analysis of Bulgarian in which temporal relations restrict evidence type. Her proposal is very similar to J. Lee's analysis of Korean. Treating the evidential as not-at-issue content along the lines of Murray (2010a), she proposes that evidential morphology introduces an Event Acquisition Time, and is defined only if the

speaker has *external evidence*. External evidence, like Lee's Sensory Observation, may be anything other than the speaker's internal experience. She proposes the following lexical entry for the Bulgarian evidential morphology: (2012: 28)

(32)

$$\lambda Q\, \lambda w\, \lambda t\, \exists t''\, [(t'' \leq t)\, \&\, \forall (w', t''')[(w', t''') \in \mathrm{MB}_{\mathrm{DOX}(\alpha)}(w, t'') \rightarrow Q(w')(t''')]],$$

This says that the proposition is true in all of the speaker/reporters'[23] belief worlds ($\mathrm{MB}_{\mathrm{DOX}(\alpha)}$) where the (structural equivalent t'' of) evidence acquisition time (t') precedes or is simultaneous with the Speech Time (t). Note that this differs from Lee's analysis in that the evidential itself does not relate the EAT to the Event Time. Rather, EAT is related to Speech Time. Tense relates EAT to Reference Time, and Aspect relates Reference Time to Event Time. (Tense and Aspect are not shown in the formula in (32), which represents just the meaning of the evidential morpheme.) She makes no claims about any differences between Bulgarian and Korean, so it is not clear whether the languages differ or one of the analyses could be used for both languages.

Koev (2011) also argues that evidentials in Bulgarian mark a temporal relation; in his analysis the relation is between the time that the speaker acquired the evidence (EAT)[24] and the time of the event. The key difference between his analysis and Smirnova's is that Koev treats the indicative as expressing direct evidentiality and the evidential paradigm as indirect. He proposes DIR and IND evidential operators, defined in temporal terms:

(33)

$$\begin{aligned} &\text{DIR:} \quad \mathrm{EAT} \leq \mathrm{RT} \\ &\text{IND:} \quad \mathrm{RT} < \mathrm{EAT} \end{aligned}$$

Smirnova points out that the way Koev formulates the temporal relations makes the wrong predictions for cases where future is used with evidential morphology. She also calls attention to cases where EAT coincides with RT but evidential morphology (which Koev considers 'indirect') is used. At any rate, both proposals are based on the idea that the difference between direct and indirect evidence should be derived from temporal relations. (p. 308)

Koev's analysis does not have the modal component suggested by Smirnova. Instead, building on Murray (2010a) and AnderBois et al. (2010), he argues that a sentence with an evidential places into the common ground the backgrounded (i.e. not-at-issue) proposition that the speaker has evidence (acquired at EAT), and introduces a *request* that the prejacent proposition be put into the context set. The evidential encodes nothing about certainty, but when the addressee assesses the likelihood that the speaker's information entails the proposition, she may or may not accept that request. So, a sentence like (34) with an indirect evidential introduces the components shown in (35).[25]

(34)

Ivan	celu-n-a-l	Maria
Ivan	kiss-PERV-3SG.PAST-INDIC	Maria

Ivan kissed Maria, as I learned later.

(35)

a. $\exists p \wedge p \subseteq p^{cs} \wedge$

b. $\exists x \wedge x = \text{ivan} \wedge \exists y \wedge y = \text{maria} \wedge \exists e \wedge \text{kiss}p(e, x, y) \wedge e \subseteq t \wedge t < es \wedge$

c. $\exists e_l \wedge \text{LEARN}\, p^{cs}\, (e_l, \text{AGENT}(e_s), p) \wedge t < e_l \wedge e_l < e_s \wedge$

d. $\exists p\, cs \wedge p^{cs} = p$

(35a) is the proposal that introduces p. (35b) is the content of p. (35c) is the not-at-issue proposition contributed by the evidential. It says that there is an event of the speaker (AGENT(e_s)) learning p, which is added directly to the context set (p^{cs}) and this learning event follows the topic time and precedes speech time. (35d) is the proposal to update the current context set with p.

The decision about whether to agree to accept p will be informed by the not-at-issue temporal information plus whatever knowledge the speaker might have about the context. For example, because the addressee now knows that the speaker learned p after it happened, she will automatically know that the speaker couldn't have been a witness to the event. Her decision about whether to accept p then depends on whatever she happens to know about the reliability of the speaker, the plausibility of p, etc. This is information that in Koev's view should not be part of the formal analysis of evidentials, because this will be true for any kind of discourse.

Thus, there are strong arguments that in Korean and Bulgarian, evidence type is derived from a relation between p and the time that the speaker learned p. It is not clear that the temporal account could be extended to all languages. However, the temporal factors observed by Koev, Chung, C. Lee, and J. Lee are intriguingly similar to factors independently noticed by Fleck (2007) in Matses. Fleck reports a configuration he terms 'double tense,' in which 'the speakers specify both (i) how long ago an inferred event happened and (ii) how long ago the evidence upon which the inference was made was encountered.' (2007:

589) Fleck describes the Matses system as 'typologically unique,' but if the authors reviewed here are right, Bulgarian and Korean also encode both of these temporal relations. The morphological (p. 309) system of Matses is more elaborate, but the interactions between evidentiality and tense/aspect are strikingly similar.

Can analyses of this type be extended to languages where evidentials are not related to tense/aspect in any transparent way? Speas (2010) and Kalsang et al. (2013) suggest, following Nikolaeva (1999), that evidential categories are defined in terms of relations between situations, not between times (or locations, or worlds). Speas claimed that direct evidentials are used when the speaker learned p in a situation that includes p (analogous to the fact that 'I saw John leave' includes 'John leave'), while indirect evidentials involve just an accessibility relation between situations. The idea is similar to those reviewed above in that 'evidence' is defined in terms of how the speaker's observation is related to the asserted proposition. In the view of Speas and Kalsang et al., evidentials encode the same *relations* as tense/aspect, but the *relata* are situations rather than times. Kalsang et al. focus on the evidential *shag*, which has been described as having three different meanings: revelatory, past perfect, and perfect inferential (Tournadre and Dorje 2003), but which in some contexts seems to be interchangeable with the direct evidential *'dug*.

(36)

a. kha sang khong 'khrom la slebs 'dug.
yesterday he market loc arrived 'DUG
Yesterday he arrived at the market. (and the speaker witnessed the event)

b. kha sang khong 'khrom la slebs shag.
yesterday he market loc arrived SHAG
Yesterday he arrived at the market. (and the speaker witnessed the event)

Kalsang et al. (2013) argue that both *'dug* and *shag* are direct evidentials, whose defining property, following Speas, is that they indicate an inclusion relation between the situation in which the speaker learned that p and the situation of which p is true. They differ in the direction of that relation: *'dug* is used when the learning situation (which they call IS, for information situation) includes the situation of which p is true (which they call ES, for evaluated situation), and *shag* is used when the ES includes the IS, that is, when the speaker learned p via just part of the situation of which p is true.

Kalsang et al.'s arguments that the Tibetan direct involves situations rather than times have to do with stage level predicates and the way in which perfective and imperfective interact with the quantization of events. These are both phenomena that are intricately related to tense/aspect in ways that are not yet fully understood. Moreover, it is clear that temporal relations are important to other parts of the Tibetan system. For example, there is another direct evidential, *song,* which is restricted to propositions about the past. It should also be noted that neither Speas nor Kalsang et al. explains in any detail why they believe the relata in a system like theirs must be situations rather than events (or worlds), and formalization of their idea is not detailed enough to compare with other pro-

posals. What their proposal does is open the possibility that the relational definition of evidence type developed for languages like Bulgarian and Korean might be adapted to languages where the connections between tense/aspect and evidentiality is not so transparent.

Related to the idea that evidentials encode the same relations as tense/aspect but differ in the category of the relata is the proposal of Blain and Déchaîne (2006, 2007) that the difference resides in the level at which the evidential is introduced. They argue that Cree (p. 310) evidentials can be classified as either CP-external (reportative and quotative) or IP-external (dubitative, non-factual, indirect), and suggest that in other languages there are also AspP-external and vP-external evidentials. They suggest that their proposal 'contrasts with proposals that analyse evidentials as a uniform syntactic and/or semantic class' (Blain and Déchaîne 2007: 259). The class of morphemes that they consider to be evidentials goes beyond those that express information source, and this may be the reason they do not find a uniform class of evidentials. However, their proposal encodes an insight similar to that of Speas and Kalsang et al., if we suppose that level of attachment might determine the possible relata for an inclusion or precedence relation.

Recent work on the relationship between tense/aspect and modality raises interesting possibilities for a more uniform analysis of different types of evidentials and perhaps also for sorting out the differences between contextual restrictions at the propositional and illocutionary levels. Matthewson (2011) examines the St'át'imcets evidential *lakw7a*, which seems to pattern with illocutionary operators according to the standard tests, yet operates over events. *Lakw7a* requires that the speaker have sensory evidence for the proposition, but disallows visual witness of the eventuality itself. Matthewson explains that characterizing the meaning of *lakw7a* requires that we distinguish the *means* of acquiring evidence (visual, other sensory, reasoning) from the *way that evidence is related to the eventuality* (evidence for the proposition about the eventuality versus evidence of the eventuality itself). This calls to mind the proposals reviewed above in which evidentials specify a Sensory Observation and relate the time it took place to the eventuality. Matthewson (2015) further argues that careful investigation of the nature of evidence types leads to new insights about how the modal base for English epistemic modals is restricted.

15.6. Summary And Conclusion

Research on the formal semantics of evidentials has progressed alongside evolving views of the various ways in which languages encode contextual restrictions on sentence meaning. Current frameworks have ways of introducing restrictions on the worlds within which a proposition is true and also restrictions on how the proposition is to be evaluated within a discourse. It is not always clear how to determine which type of restriction is involved. Research on evidentials has turned up some systematic contrasts, although there are many open questions about how to formalize these contrasts. What is clear is that the meanings of epistemic modals depend crucially on the presence of evidential restrictions, yet information about the type of restriction is distinct from information about modal

force. Languages seem to vary in whether both the modal force and the evidential restriction are expressed by a portmanteau morpheme, and perhaps in the level at which the restriction is imposed.

Research on evidentials has reinforced the view that denotation of epistemic modals relies crucially on some characterization of what 'evidence' is, and that evidence type cannot be simply stipulated with labels like 'inferential' or 'visual.' Evidence type may be definable in terms of some relation between the state of affairs constituting the evidence and the asserted proposition and/or its content. In some languages, this relation is clearly temporal, having to do with when the speaker acquired the information. It is not clear to what extent the relational definitions can be extended beyond languages with temporal evidential systems, but it (p. 311) is clear that the definition of evidence type should distinguish evidence that is the eventuality itself from evidence that implies that the eventuality occurred.

This research has also contributed to new insights into the dynamics of discourse update. First, it seems clear that a distinction must be made between presupposition, which is background information that is implicit and assumed to be shared by speaker and addressee, and not-at-issue content, which is explicitly introduced and generally new information. Second, speaker commitments are distinct from speaker knowledge. Third, the speaker's level of certainty depends crucially on the reliability of evidence, but neither level of certainty nor reliability is encoded directly as a core part of an evidential meaning. Speaker commitment may be derived from the way that at-issue content and not-at-issue content are presented and evaluated in a discourse. Reliability of evidence is pragmatically determined, and as such is not specified as part of the denotation of an evidential. (p. 312)

Notes:

([1]) In Tukano, the evidentials are fused with tense. We will discuss the relationship between tense and evidentials in §15.5.

([2]) Although Matthewson et al. (2007) doubt that evidentials have a uniform denotation across languages, they propose that St'át'imcets has a set of three evidentials that share a uniform modal semantics and vary only in the restriction on evidence type.

([3]) I am setting aside here non-propositional evidentials, for example evidential-like distinctions on nominals, as I am not aware of a formal semantic analysis of them. See Aikhenvald (2015b) and Jacques (Chapter 5 of this volume) for discussion.

([4]) There is no implication here that evidentials mean the same thing as any of these other categories. The issue is the level at which they compose with the rest of the sentence.

([5]) As we will discuss in §15.3, these authors do not claim that evidentials and modals mean exactly the same thing. The tests involve level of application, with the assumption that modals are an example of a category that operates at the propositional level.

([6]) As Matthewson et al. (2007) point out, this Quechua example shows that the evidence type cannot be denied, but does not show denial of the proposition excluding the evidential.

([7]) Sentences like this are felicitous in a context where the speaker has asserted that it is raining and the addressee has disagreed or where the speaker is for some reason unsure despite having seen it. Both of these are contexts in which p is NOT known to be true—in the former case, the addressee does not know p to be true, and in the second case the speaker has some reason to doubt the evidence of her own eyes.

([8]) The reportative is the only evidential in Quechua that can be used when p is known to be false. In St'át'imcets, none of the evidentials can be used when p is known to be false. Note that Matthewson (2011) points out that von Fintel and Gilles (2010) show that there are cases where an English modal can be used when the speaker knows the prejacent proposition to be true.

([9]) Boas did not treat evidentials as epistemic modals. Jacobsen (1986: 3) notes that Boas called distinctions between different kinds of evidence 'modalities of the verb' and described evidence source in terms of subjective knowledge.

([10]) In Kratzer's theory there can be other types of 'warrant', such as the rules and regulations in view of which deontic modals are true. Also, the conversational background is more complex, as we will see below.

([11]) It's not clear that the example in (16c) is the same as the others, since it may involve a report of the reasoning of the elders rather than the reasoning of the speaker. It is also important to note that English epistemic modals are not felicitous if the speaker has direct evidence. This issue has been addressed by von Fintel and Gillies (2010), but see Matthewson (forthcoming) for a critique of their approach.

([12]) Note that spelling out one or the other of these functions has the effect of restricting its possible values. In English, where the warrant for judgement can be implicit, the range of possible warrants is in effect unlimited, whereas evidential morphemes spell out only a closed class of evidence types. Wiemer and Kampf (2012; 2015) explain in a discourse-pragmatic analysis that the more complicated the warrant is, the more likely it is that an epistemic function will emerge, and apparent parallels of evidentials with epistemic modals emerge as the reconstruction of the cognitive or communicative basis for the inference gets more complicated.

([13]) Izvorski's analysis was also designed to capture the parallel between perfect aspect and indirect evidentiality. We will discuss this aspect of her proposal in §15.4.

([14]) Kratzer (2012) points out that the role of the choice function here is basically the same as that played by the ordering source in her theory. Rullman et al.'s reasons for using a choice function have to do with parallels that they want to draw between the re-

strictions found with evidentials and those found with indefinite NPs rather than with any fundamental disagreement on the basic theory of modality.

([15]) This is problematic, since it is not clear that a speaker who makes an assertion based on someone else's report means to assert that the proposition is true in all worlds where the report was made.

([16]) She also argues that Quechua has another evidential, *sqa*, which is in the temporal domain. See §15.4.

([17]) In a Hamblin-type semantics for questions, conjoined responses are possible but they are treated as derived single responses, so if one witnessed John taking the fish and Mary taking the fish, the two would be combined, so that formally one witnessed 'John took the fish and Mary took the fish.'

([18]) As Björn Wiemar (pc) reminds me, perfect is in some sense distinct from perfective/imperfective aspect, so the fact that it is perfect aspect that so often has an extended evidential meaning is key to understanding the temporal/evidential connection.

([19]) In earlier work she referred to the language as Ostyak, but that name is no longer used for the language.

([20]) Rett and Murray (2013) use temporal relations, specifically, a recency restriction, to explain why evidentials can acquire a mirative reading in certain contexts. See also Murray (2011).

([21]) Jakobson (1957) was the first to characterize evidentials in relational terms. Discussing narratives, he called evidentials 'the verbal category which takes into account three events—a narrated event (E^n), a speech event (E^s), and a narrated speech event (E^{ns})' (quoted in Aikhenvald 2004a: 13–14).

([22]) I have chosen to use the terminology of Smirnova (2011), since it makes the relationship between evidential-introduced times and tense/aspect times more transparent. J. Lee uses 'Described Eventuality (DES)' for ET and Evidence (EVI) for Evidence Acquisition Time (EAT).

([23]) The Bulgarian indirect evidential covers inferential evidence or reportative evidence. Context determines whether the relevant belief state is that of the speaker (inferential) or some other reporter (reportative).

([24]) Again, I am using Smirnova's terminology for ease of exposition. Koev uses Learning Time (=EAT), Topic Time (=RT) and Utterance Time (=ST).

([25]) The examples and glosses are reproduced from Koev. Wiemer (pc) informs me that IND here is actually fused with 3sg in a portmanteau morpheme.

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Abstract and Keywords

This chapter investigates the phenomenon of evidentiality in two Cariban languages, showing that the statement of source of information is not only a matter of grammatical expression, rather as a category it permeates the cultures of these Cariban peoples. Trio and Wayana distinguish a witnessed versus non-witnessed evidentiality pattern. Wayana has an additional reportative marker that has developed out of the non-witnessed form. This chapter looks into the use of evidentials in everyday speech as well as in oral traditions and shows how Trio and Wayana storytellers use evidential forms as a perspectivization strategy to position themselves vis-à-vis the source of information contained in the narratives. In addition, this chapter shows how the discourse of shamanic journeying is distinguishable from that of a speaker who has entered into an altered state of consciousness, such as coma, sleep-state and the like.

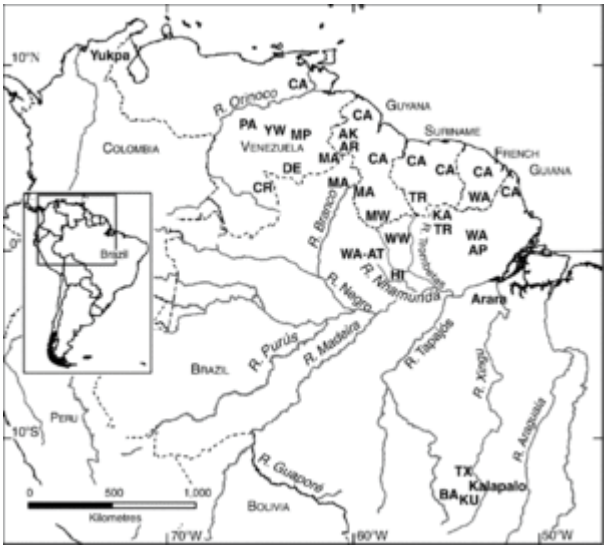
Keywords: Trio, Wayana, witnessed evidential, non-witnessed evidential, reportative, oral traditions, shamanic discourse

16.1. Introduction

The Cariban language family is one of the larger families in South America. The languages of this family are spoken in five separate geographical areas, mostly along or contiguous to major waterways, namely the Orinoco River in Venezuela, the Essequibo in Guyana, the Corentyne and Tapanahoni Rivers in Suriname, along the Marowijne River which forms the border between Suriname and French Guiana, and also further south along the Paru River in Brazil. Further south, one finds several Cariban languages in the Upper Xingu region in Brazil. One outlier, Yukpa, is spoken in the Sierra de Perijá on the Colombian-Venezuelan border. The locations of the extant languages are given on Map 16.1. The size of each of the language communities varies from roughly 20,000 (Macushi in Brazil and Guyana) to ten (Katwena in Suriname), with most speaker numbers averag-

ing around a few hundred to two thousand. While geographically all are found in the Amazon Basin, the northernmost Cariban groups, for example, the Kari'na in Venezuela and the coastal Guianas are historically considered Circum-Caribbean groups and culturally differ somewhat from the forest-dwelling communities further south, with respect to their more elaborate and stratified system of sociopolitical organization (see Hofman and Carlin 2010).

What all the Cariban communities have in common besides their languages is a basic animistic ontological stance whereby humans and animals, who share their interiority (*anima*) but differ in their physicality, 'form part of a shared relational frame of interaction' (Halbmayer 2012: 12) that may or may not be perspectivistic à la Viveiros de Castro (1998, 2004) (for a detailed discussion of recent anthropological work on the 'new' animism, perspectivism, and the ontological turn, see Halbmayer 2012). This pan-Amerindian conceptualization of the world is not just a Cariban ontology, rather it is found throughout the Americas albeit in forms that differ only in the details of assemblage. In principle, Amazonian animism sets out from the basic ontological principle of a spiritual unity (of humans and animals) and a corporeal diversity, so that what one sees in physical terms is not necessarily that which it is in essence: a spirit or soul can be wearing 'clothes' that mask the (p. 316) underlying essence. Clothes or clothing is a common metaphor in Amazonia to describe not only outward appearances but also attributes and competences associated with beings of that outer appearance. Thus, in the transformative world of Amazonians, where focus is on states of being and changes of state, changing one's 'clothes' entails that appearances may be deceptive, or, as put so succinctly in the title of an article by leading British anthropologist Peter Rivière (1994) 'WYSINWYG (What you see is not what you get) in Amazonia'. Reading the oral traditions of Amazonian peoples, one runs the gauntlet of trying to determine whether a given protagonist is really that which is expressed by the nominal, that is, is jaguar really a jaguar or perhaps a spirit in jaguar clothes? In the words of leading British anthropologist Joanna Overing (1990: 602), one is faced with seeming 'chaos, obscurity, ambiguity, and confusion', at least such is the case when working with translations into European languages.



Map 16.1. Cariban languages.

Source: From Aikhenvald (2012a).

Legend: AK – Akawaio (or Kapong), AP – Apalaí, AR – Arekuna (or Pemong), BA – Bakairí, CA – Carib (or Kalinya, Karinya, Galibi), CR – Carijona, DE – Dekwana (or Makititare), HI – Hixkaryana, KA – Kashuyana (or Kaxuyana), KU – Kuikuro, MA – Makushi (or Macuxí), MP – Mapoyo, PA – Panare, TR – Trio (or Tiriyó), TX – Txikão (or Ikpeng), WA – Wayana; WA–AT – Waimiri–Atroari, WW – Wai Wai, YW – Yawarana.

Built into the Cariban languages, however, is a grammatical truth-tracking system that allows us to know whether a protagonist is in essence that expressed in the noun—for example, jaguar—or whether s/he is intrinsically something else entirely, and simply appearing in jaguar clothes having undergone a transformation of some sort. Such nominal marking (p. 317) for transformation of state has been termed ‘similative’ or ‘facsimile’. This truth-tracking similative forms part of a larger truth and knowledge marking system that includes the ubiquitous Amazonian frustrative, assertive, and evidentiality marking, all means by which to tell with some degree of certainty or uncertainty whether a given statement is veridical, likely, or possible. Thus source of information, and in particular visual input, as well as speaker’s attitude towards the information given in an utterance is paramount. Paradoxically enough, far from being chaotic or vague, the Cariban languages both afford us, or indeed even demand, a great deal of specification, precision, and clarity of reference to states of being, knowledge, and source of information (see also Carlin 2009). While the truth and knowledge systems are crucial for speakers of Cariban languages to function in their daily lives, such systems are also notoriously difficult to elicit in a fieldwork situation (after all, unknown unknowns are seldom asked about). However, the oral traditions, and questions about these, can provide us with a wealth of linguistic data through which to investigate the epistemological import of the truth-tracking and various evidentiality systems the languages exhibit.

While the Cariban languages are not known for their extensive evidentiality systems, at least compared with some other language families in Amazonia such as the Nambiquaran languages, they do, however, exhibit quite an intricate and complex interplay between different types of evidential marking, on the one hand on verbs and in particular in non-finite clause types, and on the other hand, as expressed in evidential and epistemic particles. The study of evidentiality in the Cariban languages is still very much in its infancy and is often treated only minimally or not at all in descriptive grammars. Two exceptions are the seminal work of Ellen Basso on Kalapalo (2008) and that of Berend Hoff (1986, 1990) on Kari'na (a.k.a. Carib), which deal extensively with evidential particles. Only few studies deal with evidentiality to the exclusion of epistemic modality and, notwithstanding the fact that it has not been always possible to separate out markers and meanings of epistemic modality from dedicated evidential marking and meaning, we can already isolate some interesting patterns across the family. On the one hand some languages have a plethora of modality- and evidentiality-marking particles, such as those described by Hoff (1986); on the other hand we have languages that make more restricted use of evidential particles but rather express evidentiality on the verb or clausally.

In this chapter I focus mainly on Trio and Wayana, spoken in the south of Suriname and across the borders in Brazil, Guyana, and French Guiana. The Trio number approximately 2760 people (see Mans 2012: 21), of whom the majority live in the southern densely forested part of Suriname, and roughly 900 live in Brazil. Their language is still being transmitted to younger generations, although as more and more sustained contact with outsiders is taking place, a projected result of the large highways currently being constructed, this may change in the near future. The Wayana, who number roughly 1500 people, also live in Suriname (ca. 600), in French Guiana (ca. 600), and among the Apalai in Brazil (exact numbers unknown). In these two languages, in contrast to the large body of evidential particles found in Kalapalo and Kari'na, one can see a cline of more verbal and clausal evidentiality marking in Trio towards evidential particle marking in Wayana. Likewise we will see the development of a reportative in Wayana that is not found in Trio.

My point of departure is a body of oral narratives in the original languages collected by myself and others (Koelewijn 2003; Chapuis and Rivière 2003; Carlin et al. forthcoming), and with which I have worked extensively. The narratives are supplemented by conversational and other naturally occurring speech data collected in the field over the past twenty (p. 318) years. By taking the narratives as the basic unit of the expression of evidentiality, I aim to show that besides the actual grammatical morphemes that express evidentiality, source of information is also expressed on a discourse level in different ways—for example by narratological means such as disclaimers or perspectivization. To orient the reader, I first give in §16.2 a typological profile of Trio and Wayana, followed in §16.3 by a sketch of the grammatical features of the evidentiality systems common to both languages. In §16.4 I look at some strategies for showing source of information in narratives, and finish with some concluding remarks in §16.5.

16.2. Typological profile of Trio and Wayana

All Cariban languages have an easily recognizable shared lexicon. However, the grammatical details across the family differ extensively, so that one can readily identify grammaticalization patterns from one language to the next. In keeping with the family, Trio and Wayana are both agglutinative languages which are mainly suffixing. The only prefixes are the person markers and diathesis prefixes. Wayana also has an infix *-h-* which is found on adverbials and which functions as an intensifier. The major word classes are verb, noun, postposition, and adverb, with smaller word classes such as particles, interrogatives, interjections, and ideophones. Number is marked independently on all relevant word classes by means of word class-specific suffixes. Adjectival concepts are expressed by means of adverbs and verbs. Nouns can be marked with nominal past tense suffixes which are often, but not always, found in combination with possessive personal prefixes. Constituent order is generally OVA for transitive clauses and VS or SV for intransitive clauses, although there is some variation due to pragmatic considerations. There are four basic clause types, namely verbal clauses, clauses with the verb ‘to be’, non-verbal clauses, and quotative clauses. The first category includes transitive and intransitive verbs; there is a system of split intransitivity in both languages whereby a small set of intransitive verbs take the person-marking of the transitive set of verbs. In the second type, the complement of the verb ‘to be’ consists of a locative or adverbial. Often, however, the verb ‘to be’ is elided in Wayana. Non-verbal clauses consist minimally of a noun or pronoun and maximally of two juxtaposed noun phrases, one of which consists of a pronoun. Finally, quotative clauses consist of a verbatim account of what is said followed by, in Trio, a person-marked inflected form of the verb *ka* ‘to say’, and in Wayana by *tïkai*, a non-finite form of the verb ‘to say’—we will return to this *tïkai* form in §16.3. There is another clause type that has been the subject of great contention among Caribanists—that is, one that is based on the second type given above, namely a clause with a generally elided verb ‘to be’ and a form of the verb with a non-finite marker *tï-V-se/he* which is used to express non-witnessed evidentiality; we will look at this clause type in more detail in §16.3.2.1. Subordination is expressed by means of nominalizations, with the exception of two postpositional expressions, namely *iweike* in Trio meaning ‘because’, that seems to be undergoing grammaticalization into a subordinate marker, and a postposition added to a nominalized verb in both languages, *-tuwë* in Trio and *-tïhwë* in Wayana, meaning ‘after’.[1]

(p. 319) 16.3. The evidentiality systems

The type and form of evidentiality marking on a verbal form in Trio and Wayana is conditioned by an interplay of both tense and person. The type and form of the expression of evidentiality in the past tenses differs from that of the non-past tenses.

16.3.1. The non-past tenses

In the non-past tenses, person, that is, speech act participants versus the third person, conditions what is known in Cariban studies as certainty (for SAPs) versus non-certainty (for non-SAP) evidential marking. There are four exponents of the category person, namely 1, 2, 1+2, 3, and semantically a person 1+3, which formally takes its person-marking prefix from the third person. In contrast to all other persons, the 1+3 pronoun is obligatorily present.

In Trio, certainty marking for all SAPs in affirmative clauses takes the form of a suffix *-e* (with a zero allomorph if the verb to which it is attached ends in the vowel *e*) that is added to a verb in the present and future tenses, as shown in (1) and (2). In Trio, the non-certainty marker for the third person and also for SAPs in interrogative clauses is *-n(ë)*, as shown in (3) and (4). The full form *-në* is used when further morphology is added, as shown in (5). Interrogative clauses in the first person and person 1+2 read as rhetorical questions, see (6).

w-ipono-ja-e
(1) 1A3O-tell-PRES-CERT
I am telling it.

w-ipono-ta-e
(2) 1A3O-tell-FUT-CERT
I will tell it.

n-ipono-ja-n
(3) 3A3O-tell-PRES-NCERT
He is telling it.

m-ipono-ja-n?
(4) 2A3O-tell-PRES-NCERT
Are you telling it?

m-ipono-ja-në=nkërë?
(p. 320) **(5)** 2A3O-tell-PRES-NCERT=PERSIST
Are you still telling it?

w-ipono-ja-n?
(6) 1A3O-tell-PRES-NCERT
Should I tell it?

In Wayana, the certainty marker for SAPs is generally found as *-i*, as shown in (7). The certainty marker follows the non-past tense/imperfective aspect marker *-ja*. Verbs that end in the vowel *a* do not take the non-past suffix *-ja*; rather, the final vowel undergoes a change to *e* which is immediately followed by the certainty marker *-i*, see example (8). While there is no future marker in Wayana, the non-past imperfective marker *-ja* can carry future meaning, depending on the context. The certainty marker *-i* has an allomorph *-he* which seems to be used as a stylistic device that also has epistemic value expressing an unexpected (mirative-like) or imminent state of affairs, as shown in (9) and (10).

w-ekalë-ja-i
(7) 1A3O-give-NPAST-CERT
I am telling it.

wï-ke-i < *ka* 'to say'
(8) $1S_a$say.NPAST-CERT
I am saying/I say.

(9)

ëëëë,	u-mëk-ja-he,	kuni!
INTERJ	$1S_a$-come-NPAST-CERT	granny

So here I am, Granny! (Literally: I am coming, Granny!)

(Chapuis and Rivière 2003: 68)

(10)

Ëëëë,	ï-waptë	m-alë-ja-he,	Kuyuli!
INTERJ	1POSS-fire	2A3O-take-NPAST-CERT	Kuyuli

Oh my, you are taking my fire, Kuyuli!

(Chapuis and Rivière 2003: 72)

Non-certainty is indicated in Wayana by the absence of the *-i* suffix, as shown for the third person in (11) and in interrogative clauses with SAPs and the third person in (12) and (13). In contrast to Trio which uses rising intonation to express a question, polar questions are marked in Wayana with the second-place particle *ka* as shown in (12) and (13).

It should be pointed out that it is unusual in both Trio and Wayana to make assertions about a second person (idiomatic expressions notwithstanding). For example, 'you are washing your daughter' rather, the actions of a second person are framed in a question such as 'are you washing your daughter?' even if one is standing beside her watching her wash the child. Making assertions about a second person who is an interlocutor in the exchange entails making an assertion on behalf of that person or speaking for that person. This is (p. 321) something that Cariban peoples are reticent to do right across the board. For this reason, the most futile questions to a speaker of Trio or Wayana are 'what (do you think) they will think of this?' or 'do you think they will be all right with this?' Such questions are always answered by statements that start with 'well, I think …' or 'I think

it's all right.' Likewise a village leader, who is mandated to speak on behalf of his collective, will only speak for his own village and never for another village.

In the third person in affirmative clauses, Wayana distinguishes a higher degree of certainty by means of a third person portmanteau prefix *mën-* used specifically to mark the speaker's conviction that an event or state will surely happen. In example (14), the speaker has strong evidence that the person is coming, for example, perhaps he spoke to him on the telephone just before he boarded the airplane, although the type of evidence itself is not specified. Note that vowel-initial verbs drop the initial vowel when prefixed by *mën-*.

Samoe n-umëk-ja
(11) Samoe $3S_a$-come-NPAST
Samoe is coming.

(12)

ët-awok-he	ka	wï-të-ja?
REFL-offer:drink-SUP	Q	$1S_a$-go-NPAST

Should I go to offer drink?

(Chapuis and Rivière 2003: 390)

pakolo-tak ka nï-të-ja?
(13) house-DIR Q $3S_a$-go-NPAST
Is he going to the house?

Samoe mën-mëk-ja
(14) Samoe $3S_a$:CERT-come-NPAST
Samoe is coming (I have strong evidence to this effect).

Since person 1+3 combines both a SAP and the third person, there is a potential conflict in the choice of evidentiality marking. However, in addition to the obligatory presence of the 1+3 pronoun, in Trio *ainja* and in Wayana *emna*, both Trio and Wayana use the third person prefix to mark person and use the certainty marker of the SAP first person, compare examples (15) and (16). For this reason, in Wayana, the prefix *-mën*, which indicates a higher degree of certainty in the third person, cannot be used in combination with the 1+3 pronoun *emna*.

ainja n-ipono-ja-e
(15) 1+3PN 3A/3O-tell-PRES-CERT
We (excluding listener) are telling it.

emna n-umëk-ja-i
(16) 1+3PN $3S_a$ -come-NPAST-CERT
We are arriving (coming).

(p. 322) 16.3.2. The past tenses

Both Trio and Wayana distinguish between a witnessed versus non-witnessed form of the verb in the past tenses, that is, broadly speaking a finite, person- and past tense-marked verb indicates that the speaker was witness to the event expressed in the verb. While this holds in a strict sense for Trio, we will see that in Wayana a speaker's emotional involvement in a given event or state also has a role to play. In addition, the habitual past tense in Wayana also requires certainty/non-certainty marking.

First I give a brief outline of past-marking in the two languages. Both Trio and Wayana have zero-marking for the recent past, see Trio example in (17) and Wayana in (18). Both languages mark non-recent past by means of a suffix *-ne* as shown for Trio in (19) and Wayana in (20).

w-iponopï OR w-ipono[2]
(17) 1A3O-tell:RPAST
I told it.

w-enep
(18) 1A3O-think:RPAST
I thought (about) it.

w-ipono:-ne
(19) 1A3O-tell-NRPAST
I told it.

w-ipanakma-ne
(20) 1A3O-hear-NRPAST
I heard it.

In both languages, the suffix *-ne* is dropped in the third person and a portmanteau prefix *kïn-* in Trio (21a) and *kun-* in Wayana (22a) expresses both tense and person. If an overt lexical object immediately precedes the verb, however, the prefix is dropped and the tense suffix is retrieved (Trio example in (21b), Wayana in (22b)).

(21)

a.	kïn-pono	b.	tajaja	Ø-iku:-ne=to
	3A:PAST-tell		tajaja	3A-sing-NRPAST=pl
	he told about it		they sang *tajaja* (kind of spirit song)	

(22)

a.	kun-ka	b.	mëlë	Ø-ene-ne
	$3S_a$:PAST-say		DEM:INAN:MED	3A-see-NRPAST
	he said		he saw that	

(p. 323) Trio also has a little-used distal past marker *-(ja)kën(e)* which has habitual past meaning, found in the corpus in the first and third persons. Wayana likewise has a past habitual tense suffix *-(j)(ë)mëhneja(i)* which, unlike the Trio distal past, requires certainty versus non-certainty marking, see (23). The verb 'to be' in Wayana has distinct non-recent past forms, namely *-ken(e)* for SAPs, and *-k(ë)* for the third person which is marked by the prefix *kun-* as described above, see (24a,b).

(23)

mën-ka-imëhneja	tamusi-tom
$3S_a$:CERT-say-HAB:PAST	elder-pl
The elders used to say.	

(Chapuis and Rivière 2003: 150)

(24)

a. w-eha-ken
   $1S_a$ -be-NRPAST
   I was.

b. kun-eha-k
   $3S_a$:NRPAST-be-NRPAST
   he was.

16.3.2.1. Past non-witnessed

In contrast to the person- and tense-marked verbs given in §16.3.2 that indicate that the speaker was present and witnessed the event, the non-witnessed past is expressed by means of a construction of the form *tï*-V-*se/he*, known as the *tï- -se* construction in Cariban studies. In fact there is no indication at all of past-tense marking here, rather this construction is a non-finite, non-tense-marked verb that is marked with a semantically

bleached third person coreferential prefix *tï-* and a non-finite marker, in Trio *-se* (or allomorphs *-e, -je*, or zero), and in Wayana *-he* (or allomorphs *-e, -i,* or *-se*). In both languages, among older speakers, a person- and tense-marked form of the verb 'to be' often occurs with the *tï*-V-*se* construction, but is now generally elided, a Trio and Wayana example is given in (25) and (26) respectively (see also Carlin 2011; Gildea 1998: 228).

(25)

wewe	t-ëhkë-se	i-ja-:ne
tree	COREF-cut-NFIN	3-GOAL-pl

They cut the trees.

(26)

t-ëne-i	man	ku-tamu-tpï-komo-ja
COREF-see-NFIN	$3S_a$:PRES	1+2POSS-grandfather-PST-PSR:pl-GOAL

Our ancestors saw it (the events referred to in the narrative).

While most, if not all, Cariban languages have a verbal form marked with the circumfix *tï- -se*, or allomorphic variations hereof, the literature is not conclusive as to the shades of meaning attributed to this form, nor even as to its morpho-syntactic status. As Gildea (1998: 218–32) shows, this marker has been referred to in some works as a participial, an (p. 324) adverbializer, a pseudo-passive, a past tense marker, and the like. Indeed, Gildea (1998) dedicates a full chapter to this circumfix in several Cariban languages in an attempt to explain the development of a surface ergative pattern, without, however, mentioning that at least in some languages this circumfix is a marker of evidentiality. An alternative analysis to Gildea's of this construction in Trio is given in Carlin (2004, 2011) where on a clausal level it is analysed as an event-central thetic construction.

As shown in examples (25) and (26), with transitive verbs, the A argument, if present, is marked by means of a goal marker *-ja* in both languages and usually follows the *tï- -se* marked verb. In the case of intransitive verbs, an overt S is unmarked and can occur before or after the *tï- -se*-marked verb. For pragmatic reasons, there is quite a lot of variation in constituent order; however, commonly found patterns in both languages are OVA and VS. While in Trio the A argument is generally present, either as a lexical item or as a person-marker on the goal postposition, in Wayana texts one often only finds the A and S arguments if they are not immediately understood from the context. Thus examples such as (27) and (28) where neither the A of the verbs 'to cut' or 'to put into container' nor the S of the verbs 'to rest' and 'to tire' are explicitly mentioned, occur frequently in the Wayana corpus.

(27)

t-ëkët-se=lep,	t-ëleta-i=tot,	tï-pëlëp-he
COREF-cut-NFIN=FRUST	COREF-rest-NFIN=pl	COREF-tire-NFIN

They cut it in vain, they rested, they had tired.

(28)

moloinë	t-ën-ma-i	ëni-jak
then	COREF-container-VRBLZR-NFIN	container-DIR

Then (he) put it into a container (he containerized it into a container).

In Trio and Wayana, the use of this construction does not in any way call into doubt the veracity of the assertion made, rather its use indicates that the speaker was not present when the event took place and thus was not witness to it. Although the *tï*-V-*se* or *tï*-V-*he* construction is called the past non-witnessed, there is no actual reference to the past, that is, it is irrelevant whether an event took place centuries ago or two minutes ago. Rather, a speaker is simply stating that an event (or state) has come into being, and thus exists, and that s/he was not present at the time of coming into being of this event/state. This is the form that, not surprisingly, is predominantly found in the oral traditions where storytellers are narrating about events which they themselves did not witness. Indeed, in narratives, person- and tense-marked verbs are only found in quoted speech—neither Trio nor Wayana have indirect speech.

In Wayana, the form *tïkai* that is, the verb *ka* 'say' marked with the *tï- -he* circumfix given in (27), has become a reportative marker that is also used when one repeats verbatim what an interlocutor has said, even though all speech participants are present. A typical exchange between three or more people is given in (29) where, for example, participant B was unable to hear or understand what was said by A.

(29)

A:	maa,	w-ïtë-imë-ja-i	
	disc	$1S_a$-go-CYC-PRES-CERT	
	Well, I'm going home.		
B:	ta	tï-ka-i?	
	how	COREF-say-NFIN	
	What did s/he say?		
C:	'maa	w-ïtë-imë-ja-i,'	tï-ka-i
	disc	$1S_a$-go-CYC-PRES-CERT	COREF-say-NFIN
	'Well, I'm going home' s/he said.		

(p. 325) Although the majority of arguments used with the past non-witnessed occur in the third person, this does not mean that others persons are excluded. In the case of SAPs involving the first person, it is indeed the case that one is generally present to witness one's own actions; however, during altered states of consciousness such as trance, intoxication, sleep, lack of intentional attention, lack of volition, and the like, one does find the non-witnessed past being used with SAPs, notably the first person, a phenomenon that

Aikhenvald (2004a: 237) calls ‘the first person effect’. Thus, in the Trio example in (30), the past non-witnessed is used with a first person S argument marked on the verb ‘to be’ to express his lack of control in not falling asleep even though the referent was tasked with staying awake and guarding a fish trap throughout the night.

(30)

tï-w-ë-ënï-se	w-a-e
COREF-S_a-REFL-sleep-NFIN	1S_a-be:PRES-CERT

I fell asleep (I couldn’t help it).

A state of altered consciousness brought on by shock, shamanic attack, or the like also warrants use of the past non-witnessed with a first person, as evidenced by the story told by a Trio friend who was attacked by sorcery. In relating the immediate events leading up to how he ended up in a coma, he told how he had gone hunting with friends when he saw a stingray (31), here he uses a tense- and person-marked verb. This is followed immediately by a non-witnessed form in (32) to the effect that his soul left his body (jumped out). In using the non-witnessed evidential form of the verb it is clear that on seeing the stingray he had immediately entered into a state of altered consciousness. In order to check whether or not he had been stung by the stingray, I asked if the sting was still in his foot to which he replied that he hadn’t been stung (33), using the non-witnessed form and without an overt A, because immediately upon seeing the stingray his state of consciousness had shifted.

(31)

sipari	w-ene
stingray	1A3S-see:RPAST

I saw a stingray.

(32)

t-omore-tëu-je
COREF-soul-jump:out-NFIN

(My) soul jumped out.

(33)

owa,	t-ïkonka-e-ta,	w-ene=rëken
NEG	COREF-pierce-NFIN-NEG	1A3S-see:RPAST=only

No, there was no act of stinging (not witnessed by speaker) I only saw it.

(p. 326) Shamanic journeying, on the other hand, is not considered to be entering into an altered state of consciousness, rather it entails being in an alternate reality whereby the shaman is an active agent, witnessing his own interactions with his spirit guides and beings in other world dimensions. Thus the non-witnessed forms are largely absent except where the protagonists lack control or volition as in the following excerpt (34) from a Trio *pïjai* ‘shaman’ who is describing that after he and his spirit guide passed over the village Wakapumïn in the celestial world, they were not able to sleep there, on the one hand be-

cause night does not fall there, and on the other hand because of certain behavioural restrictions that *pïjai* have to adhere to while journeying (for example, not consuming substances in alternate worlds). In examples that constitute text excerpts throughout the rest of this chapter, I give in the first line the entire running text, followed by the separate clauses.

(34)

Ma Wakapumïn wapo ainja kïnirëtë. Tïwëënïseta ainja, ikomainjewa nai irëpo.

ma	Wakapumïn	wapo	ainja	kïn-irëtë	
DISC	Wakapumïn	first	1+3PN	3A3O.NRPAST-cross:over	
tï-w-ë-ënï-se-ta			ainja	ikomain-je-wa	n-a-i
COREF-S_a-REFL-sleep-NFIN			1+3PN	get:dark-NFIN-NEG	3S_a-be:PRES-NCERT
irë-po		pata			
DEM.INAN.ANAPH-LOC		place			

Well, first we crossed over Wakapumïn. We didn't sleep there (weren't allowed to/couldn't), it doesn't get dark (night doesn't fall) there in that place.

16.3.3. Summary: knowledge and source of information

As shown, certainty versus non-certainty marking is used with the non-past tenses in Trio. This also holds for Wayana, with an additional higher certainty marker *-mën* being distinguished for the third person and a suffix *-he* in the first person that expresses imminency or which in some contexts might be considered a mirative. As shown in Carlin (2004: 300–1) the fact that the non-certainty suffixes are used for SAPs in interrogative clauses provides us with compelling arguments that speakers' stance of uncertainty of outcome is key. However, it is necessary to point out that such evidentiality marking does not stand alone but rather forms part of a larger system of information packaging in which it is obligatory to indicate through different grammatical means a speaker's attitude to his/her assertions. While speaking here of attitude might sound more like epistemic modality rather than the core meaning of evidentiality as source of information, certainty-marking expresses source of information as a speaker's introspective source, in the case of first persons, egocentric knowledge, in the case of second persons visual or other sensory input based on an immediate interaction with that second person. Non-certainty with regard to SAPs utilizes the same source but with a question mark. In the case of third persons there is neither egocentric knowledge nor necessarily a speech act interaction with that third person and thus a metaphorical distance in knowledge is created.

Both Trio and Wayana have a non-recent past suffix *-ne*, whereby in the third person it is dropped and tense is combined in a portmanteau prefix also expressing person. In the past habitual tense, Trio does not allow certainty/non-certainty marking; however, in Wayana it is obligatory. As stated, a person-marked, tense-marked finite verb form indicates that the speaker was witness to the states/events expressed, whereas the *tï*-V-*se* construction is used to express that the speaker is reporting on events that have come into being that s/he was not (p. 327) witness to, thus the A or S arguments generally refer-

ence a third person, or a SAP referent undergoing a lack of volition or control, or in an altered state of consciousness.

16.4. Telling a truthful tale

As shown, Trio and Wayana use grammatical and clausal means to express source of information, whereby information based on visual or other sensory input holds a special salience. In Carlin (2009), I showed how the Cariban languages allow very high levels of specification with regard to states of being and the intrinsic nature of nominal referents. Similarly, precision in a communicative setting is paramount, and also entails that one is responsible for one's own actions and one's own words—both Trio and Wayana make use of responsibility clitics. Clarity and openness in stating the source of one's knowledge, on the basis of which one makes assertions, are all-pervading aspects of Trio and Wayana culture and as such include taking responsibility for one's assertions or not. False assertions and false attributions leave one and others open to accusation which, in a worst case scenario, can lead to death, either one's own or someone else's. This is, of course, not to say that the Trio or Wayana cannot manipulate the truth, they just have to work harder to do so since it takes more effort to speak ungrammatically than it does grammatically. It is not only the speaker who is safeguarding their own integrity, however, because clarity of knowledge source—that is, using the witnessed versus non-witnessed form of a verb—also aids the listener in his/her assessment of the assertion. A case in point is, for example, conversations I had with some Trio who mentioned someone's release from prison whereby the person who had not yet seen him in person used the non-witnessed construction *teepatakae* 'he appeared (and I wasn't there to witness it)' whereas the person who had seen him after his release used the witnessed form *neepataka* 'he appeared'.

It is not surprising, therefore, that narrators of oral traditions likewise state the source of their stories, on the one hand grammatically, through using the non-witnessed construction to present events that happened in primordial times or 'before times' when they were not yet born, and on the other hand, by stating the name or genealogy of the narrator from whom they themselves heard the story. In many, if not most, published collections of oral traditions that have been translated into a European language, one frequently finds that the original introduction is not included, and is often seen as irrelevant to the actual story. Several examples are found throughout in the English and Dutch translations of Trio oral traditions in Koelewijn and Rivière (1987); and Koelewijn (2003), whereby the latter includes the original texts in Trio. This is rather unfortunate since these introductions are not just the irrelevant ramblings of old storytellers, rather they are a pertinent statement of the source of information and at the same time a disclaimer in case a given version differs in some way from the original narrator's version. Thus they are meaningful contributions to the entire narrative and cultural context and as such constitute a way for the narrator to keep his integrity intact. Indeed, as we shall see with a Wayana introduction, some disclaimers are explicitly expressed. In the following I give just a few examples of how the truth and knowledge tracking system works in narratives.

A narrative, or a set of related narratives, in Trio generally begins with an introduction to the topic of the story (35), followed by its provenance, which is simultaneously the biography, of the story. This may be the name of the storyteller(s) who related this version of the story to the current narrator (36), in this case, expressed in a nominal possessive phrase *Pakotï* *(p. 328)* *inponopï* which is literally 'Pakotï's telling thing', or it may be the name of the storyteller who related the story to another elder who told it to the current narrator. Which of the two it is can be determined by the use of the witnessed or non-witnessed forms of the verbs. In the second clause in (36) we see the present tense form of the verb *ka* 'say', which indicates that the current storyteller heard it from Pakotï himself.

(35)

Ma serëkene serë, mahtoimë epohtoponpë tamutupëja.

ma	serë=kene	serë,	mahto-imë
DISC	DEM:INAN:PROX=DUR	DEM:INAN:PROX	fire-AUG

epoh-topo-npë	tamutupë-ja.
3POSS:meet-NOMZ-PST	elder-GOAL

Well, on this note (continuing this), this (is the story of) the former encounter of the elder with the huge fire.[3]

(Koelewijn 2003: 215)

3

(36)

Irë apo nkan tamutupë. Serë Pakotï inponopï.

irë	apo	n-ka-n	tamutupë.	serë
DEM.INAN.ANA	like	$3S_a$-say:PRES-CERT	elder	DEM:INAN:PROX

Pakotï	i-n-ponopï
Pakotï	3POSS-3O-tell:NOMZ

That's what the elder says. This is what Pakotï tells.

(Koelewijn 2003: 215)

By way of contrast, in the following example which occurs after the topic of the story—The coming of the Bee-people—is introduced, the narrator points out that this is a very old story (37a), told by elders no longer alive. The deceased status of these elders is indicated by the same type of possessive phrase given in (36), namely *wïtoto inponopïhpë* 'the Amerindians' former telling thing' whereby the nominalized verb *iponopï* 'tell' is marked with a nominal past marker *-hpë*. Likewise the name of the deceased storyteller Mekenti is given, without it being clear yet whether or not the current storyteller actually knew him. This information comes in the following three clauses (37c,d,f) where the past non-witnessed forms of the verbs *ëta* 'to hear' and *ei* 'to be' are used, that is, Mekenti was likely not even alive during the current narrator's lifetime. The introduction ends with a comment as to the long life of this story by saying that Mekenti just heard this from his elders and that the current narrator was not present to witness Mekenti's act of hearing.

(37)

Pena ahtao wïtoto inponopïhpë, tamusan inponopïhpë serë, Mekenti inponopïhpë. Irë apo Mekentija tëtae. Inenewa tese nërë, mërëme ooniponkërë irërë tïtamupëerëken tëtae ija. Irë tïïkae mëe. (Koelewijn 2003: 66)

a. pena ahtao wïtoto i-n-ponopï-hpë,
long:ago when Amerindian 3POSS-3O-tell:NOMZ-PST

b. tamu-san i-n-ponopï-hpë serë, Mekenti
elder-PL 3POSS-3O-tell:NOMZ-PST DP:INAN:PROX Mekenti
i-n-ponopï-hpë.
3POSS-3O-tell:NOMZ-PST

c. irë apo Mekenti-ja t-ëta-e.
DEM:INAN:ANA like Mekenti-GOAL COREF-hear-NFIN

d. in-ene-wa t-ee-se nërë,
3O-see:NF-NEG COREF-be-NFIN 3PRO.ANIM.ANAPH

e. mërë-me ooni-po=nkërë irë=rë,
DEM:MED:INAN-FACS DEM:DIST:INAN-LOC=PERSIST DEM:INAN:ANA=EMPH

f. tï-tamu-pëe=rëken t-ëta-e i-ja.
3COREF-elder-SOU=only COREF-hear-NFIN 3-GOAL

This (is) what the Amerindians told long ago, what the elders told, what Mekenti told. Mekenti heard it like that. He didn't see it himself, however, that (story) is still out there, he just heard it from his elders.

(p. 329) While such introductions may seem superfluous to non-Trio audiences, they do have a function, namely that of giving the history, the recorded ancestry, and hence the sacredness of the story. They allow the listener to gauge the genre and the significance of the stories.

(38)

irë-tae=rëken	n-a-i	serë
DEM.INAN.ANAPH-PERL=only	$3S_a$ -be:PRES-NCERT	DEM.INAN.PROX
j-in-eta-hpë		
1POSS-3O-hear:NOMZ-PST		

This that I heard goes (is according to) just like that.

In addition to the genealogy given in the introduction to a story, Trio narrators generally finish the story again with a reference to the genealogy, naming former storytellers. This is often accompanied by a statement to the effect 'this is what I heard' as shown in (38). The statements *jinetahpë* 'what I heard' or *jinetahpërëken* 'just what I heard' function as disclaimers that the story was just made up by the storyteller or that he has made any errors in the re-telling.

The Wayana storytellers also stress, at several places in the narrative, that they are relating something they heard in the past. In contrast to the Trio case, however, in the Wayana oral traditions, the vast majority of stories are attributed, not to any particular elder but to a generic set of elders, *tamusitom* [elder:pl], or *ekalënanom* 'storytellers' which is a form of the verb *ekalë* 'to give' or 'to tell', nominalized by the agentive nominalizer *-ne*, followed by the plural marker *anom*. A Wayana story usually starts with a disclaimer as to authorship, which also functions as a disclaimer to any perceived errors in the narration. At the same time the general claim is that the story to be told is part of Wayana heritage without personalizing a particular version, stories are in this case often referred to as *tëkalëhem* 'a candidate for being told', 'something that is or can be told'. While there is no strict format for starting a story in Wayana, some common ways are to situate the events to be told in the past by simply stating (p. 330) that the story is about people of long ago, or about the past lives (literally, former way of being) of the Wayana, mainly using nominalized verbs with the nominal past marker *-npë*, as shown with the verb forms *eitoponpë* 'former way of being' and *ekalëtoponpë* 'former story (telling)' in examples (39) and (40).

(39)

maa	t-ëkalë-he-m	w-ekalë-ja-i	hemalë	uhpak
DISC	COREF-tell-NFIN-NOMZ	1A3O-tell-PRES-CERT	now	long:ago
ei-topo-npë	Kalipono-tom	ei-topo-npë		
be-NOMZ-PAST	Wayana-pl	be-NOMZ-PAST		

Well, today I'm going to tell something to be told, how it was long ago, how the Wayana were in the past.

(40)

maa	hemalë	upaka-to-nom	Wajana	ekalë-topo-npë
DISC	today	long:ago-NOMZ-pl	Wayana	3POSS:tell-NOMZ-PAST

w-ekalë-ja-i
1A3O-tell-PRES-CERT
Well, today I'm going to tell the story of the Wayana of long ago.

Similarly to the Trio, the Wayana express that they are just telling what they heard (41) and, depending on how confident the storyteller feels about telling a given story, s/he may add even stronger disclaimers such as the following example in (42). Here the storyteller points out that, through no fault of his own (evident in the non-witnessed from of the verb *ipanakma* 'hear'), he didn't actually hear many storytellers at all. Alternatively, in spite of his reputation as a renowned storyteller, he may feign modesty and make a claim as in (43).

(41)

maa	hemalë	apsik	ï-n-ipanakma-tpï=lëken	w-ekalë-ja-i
DISC	now	little	1POSS-3O-hear:NOMZ-PAST=only	1A3O-tell-PRES-CERT

Well, now I'm telling just a little of what I heard.

(42)

apsik	tï-panakma-i	ï-ja	ekalë-na-nom
little	COREF-hear-NFIN	1-GOAL	3POSS:tell-AG:NOMZ-pl

I heard (non-witnessed) few storytellers.

(43)

Tuwalë-la-nma	ïu,	talanme	eja-la-nma	w-ekalë-ja-i
know-NEG-INTENS	1PN	maybe	straight-NEG-INTENS	1A3O-tell-PRES-CERT

I don't know at all, maybe I'll tell it all wrong.

The vast majority of verb forms expressing events and states in Wayana narratives are, like the Trio texts, the past non-witnessed forms with the circumfix *tï*-V-*he*. Exceptionally, however, the protagonists are more often than not introduced or attributed some characteristic with the distal past (witnessed) form of the verb *ehi* 'to be', namely *kunehak*, as shown in examples (44) and (45), whereby the character Kulum in (44) refers to the (p. 331) king-vulture being. In the text excerpt in (46), the culture hero and military warlord Kailawa is introduced, also using *kunehak* 'was' with his characteristic feature, namely fierceness, ensuing because of *hemït*, the plant-based potion imbued with spiritual powers used to fortify him. His actions, however, in line (46d) are expressed using the past non-witnessed construction.

(44)

Kulum,	wëlïi-me	Kulum	kun-eha-k
Kulum	woman-FACS	Kulum	$3S_a$:NRPAST-be-NRPAST

Kulum, Kulum was a woman.

(45)

eluwa	kun-eha-k	i-pïtï-mna	uhpak	aptao
man	$3S_a$:NRPAST-be-NRPAST	3POSS-wife-PRIV	long:ago	when

Long ago, an Amerindian was without a wife.

(46)

Kailawa, uhpak, kunehak ëilan. Ëile kunehak Kailawa: tohme? Hemït umpoi! Hemït umpoi kunehak Kailawa ëile! Tïkaimotai kohle wayana, tuwëi, tënatkai Wayana eja! (Chapuis and Rivière 2003: 764)

a. Kailawa uhpak kun-eha-k ëila-n
Kailawa long:ago $3S_a$:NRPAST-be-NRPAST fierce-NOMZ

b. ëile kunehak Kailawa tohme?
fierce $3S_a$:NRPAST-be-NRPAST Kailawa why

c. hemït umpoi! Hemït umpoi kun-eha-k Kailawa ëile
potion cause potion cause $3S_a$:NRPAST-be-NRPAST Kailawa fierce

d. Tï-kaimota-i kohle Wayana, t-uwë-i,
COREF-kill-NFIN many:INTENS Wayana COREF-shoot-NFIN
t-ënatka-i Wayana e-ja!
COREF-decimate-NFIN Wayana 3-GOAL

Kailawa, he was a fierce one long ago. Kailawa was fierce: how come? Because of the *hemït* potion! Because of the *hemït* potion Kailawa was fierce! He killed many many Wayana, he shot them, he decimated the Wayana!

This raises the question as to why the tense- and person-marked form of the verb 'to be' is used here. One possible explanation is that because of the historicity of the narratives the main protagonists, or the attributions afforded them, are perceived to have existed, or

alternatively that this is a stylistic feature of narration. A more thorough investigation of the internal structure and morphology of Wayana oral traditions would be required to answer this question.

Thus, where the Trio, if possible and known, give the genealogy of a story and trace it back temporally through generations of storytellers, the Wayana present us with a more static image of the narrative, namely it is situated in the past (something to be told from long (p. 332) ago) but present in relation to themselves and their level of remembering and knowledge. As such, some narrators are more modest than others in their disclaimers. Likewise the introduction of key protagonists in Wayana by means of a tensed, person-marked verb indicating the witnessed past places this protagonist and how he was in the world in an area outside of what we tend to call the 'mythical' world. I have attempted in this chapter to avoid using the word 'myth' or its derivatives, because of the implied meaning in European languages of 'not true' or 'imaginary', because for Cariban peoples these aspects of meaning do not necessarily hold, as evidenced, for example, by a translational equivalent in Kari'na as *isenurupiry ja'konombo aurananon* which one Kari'na speaker from Galibi, Suriname, freely translated into Dutch as *dingen die gebeurd zijn toen alles nog met elkaar sprak of vertellingen uit de tijd van ons begin* 'things that happened in the time when everything still spoke to each other or stories from the time of our beginning'.[4] Such ontological and indeed semantic differences become relevant and need to be recognized, especially when dealing with truth- and knowledge-marking, since they raise the question of whose truth?

16.5. Conclusions

I have shown in this chapter that although evidentiality marking is a grammatical category in itself that can be measured in morphological or clausal marking, it is also useful to explore the phenomenon of veridical speech in the broader cultural context of Amazonian peoples. The questions presented here comprise the larger framework within which marking source of information is necessary and desirable, and why it is that speakers of Cariban languages feel compelled to grammatically mark the inconstancy (changing states) of being and of knowledge. While the Trio distinctions between witnessed versus non-witnessed are clear and consistent, Wayana presents us with a more nuanced picture of possible states of reality by presenting leading protagonists in narratives in a perspective of other possible worlds. Both languages, however, pattern similarly with regard to the certainty versus non-certainty marking, albeit with a finer distinction of certainty in the third person in Wayana, which usually entails some externally acquired extra information.

Notes:

([1]) As an aid for reading the examples in the following, both Trio and Wayana have generally accepted, though not yet standardized, orthographies, wherein the high central vowel /ɨ/ is written as *ï*, and the schwa /ə/ is represented by the grapheme *ë*. The voiceless bil-

abial fricative /ɸ/ in Trio is represented orthographically as *hp*. The alveolar flap /ɾ/ is written as *r* in Trio and *l* in Wayana. All other graphemes correspond roughly to the IPA symbols they represent, notwithstanding allophonic variation. There is an *s*–*h* correspondence between the two languages. E.g. Trio *serë* 'this' is found as *helë* 'this' in Wayana.

([2]) Both languages have a set of verbs that undergo reduction of the final syllable (Trio) or of the final high vowels *ï* or *u* (Wayana). In Trio either the non-reduced or the reduced form of verbs that drop their final syllable indicate recent past. In Wayana, only the final vowel is dropped.

([3]) Unless otherwise indicated, all translations are mine.

([4]) Chief Ricardo Pané offered this translation during the UTSN 2-3-X-314-G Twinning workshop held in Galibi, Suriname in January 2016.

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Abstract and Keywords

This chapter describes evidentiality as it is expressed within the Nambikwara language family of west central Brazil, a loosely related affiliation of seventeen language communities living close to the Brazil-Bolivia border. This overview limits its scope to the four varieties where evidentiality has been documented (Mamaindê, Lakondê, Sabanê, and a generic variety of Southern Nambikwara). All four of these languages share several traits that could be considered characteristics of Nambikwara evidential systems. These are: a large set of evidentials (between four and eight); sets that include inferred and reported; forms that link evidentials and tense; and the use of 'multiple perspective' as a way of referencing the singular or plural nature of the 'knower'. It is this latter trait that constitutes the most salient feature of evidentiality within the family as a whole, one that deserves further attention.

Keywords: evidentiality, Nambikwara, Mamaindê, Lakondê, Sabanê, Southern Nambikwara, general knowledge evidential, multiple perspective, individual perspective, dual perspective

17.1. Introduction

The epistemological world of the Nambikwara peoples of west-central Brazil is reflected in a robust system of evidentials. All of the Nambikwara languages documented thus far have them, each with a slightly different set. These various sets of 'knowledge markers' orally codify how it is that the Nambikwara speakers know what they know, making this knowledge immediately accessible to addressee as well as to the speaker. This chapter will give a broad outline of evidentiality as it is expressed in the various Nambikwara languages. The focus will be on the distinct components of these evidential systems, while pointing out the similarities and differences found in each. In the conclusion I will review

the distinctives of this morphological category within the Nambikwara family, and what this family contributes to the global mosaic we call evidentiality.

17.2. The language family

The Nambikwara language family is comprised of two major branches, Northern and Southern (Map 17.1), and a single independent speech variety, Sabanê. The Northern Branch in turn has two clusters. The first of these is the Roosevelt River cluster, home to the Lakondê and Latundê languages, and the second is the Guaporé River cluster, where we find Mamaindê and Negarotê. The languages within each of these two clusters are mutually intelligible, but communication across the clusters is difficult and uncommon.[1] (p. 334)

Map 17.1. Nambikwara languages

The Southern Branch, on the other hand, is comprised of a larger set of closely related lects, all mutually intelligible. As the variation between these is slight, we will refer to these jointly as Southern Nambikwara. The list of Southern Nambikwara languages in Figure 17.1 is taken from Telles and Wetzels (2011). However, defining the exact number of Southern Nambikwara speech varieties is confusing, as the list varies according to author. While Telles and Wetzels list twelve such varieties in four groupings, Price (1972: 111) includes eighteen speech varieties, grouped into three clusters (Juruena – 9 lects, Galera/Guaporé – 8 lects, (p. 335) and Sararé – 1 lect), Lowe (1999: 269) lists twelve varieties without any subgroupings, and Kroeker (2001: 1) gives a list of eleven varieties in two clusters, five Guaporé valley lects, and six Juruena valley lects.[2]

Figure 17.1. The Nambikwara language family tree

17.3. Shared traits of the Nambikwara evidential systems

Evidentials have been attested in all four of the Nambikwara speech varieties documented thus far: Southern Nambikwara (Kroeker 2001: 62–5; Lowe 1999: 274–6), Lakondê (Telles (p. 336) and Wetzels 2006; Telles 2002: 288–90), Sabanê (Araujo 2004: 138–40), and Mamaindê (Eberhard 2012: 468–87, 2009; Kingston 1971a,b).[3] Note that both north and south branches of the family exhibit evidentials, as well as the one language that stands alone, Sabanê. The well-documented use of evidentials across such a representative portion of languages instantiates this grammatical category as a salient characteristic of this family.[4] So far, the Nambikwara family includes only large evidential systems (six evidentials or more: Lakondê, Southern Nambikwara, Mamaindê) or mid-range systems (four evidentials: Sabanê).

The remainder of this chapter will be a comparison of the evidentials found in these four languages: Southern Nambikwara, Lakondê, Sabanê, and Mamaindê. Table 17.1 lists the evidentials of each, as well as the secondary extensions and other distinctive properties.[5] Characteristics in the table will be touched upon at various points in the discussion that follows.

17.4. Southern Nambikwara

Marking a fairly common set of four sources of information (visual, inferred, reported, and general knowledge)[6], Southern Nambikwara evidentials do not at first stand out (Kroeker 2001: 62–5). However, the remarkable complexity of this system lies in the fact

that most sources of information are also inflected for the perspectives of two different 'knowers', (p. 337) (p. 338) effectively creating two paradigms with separate evidentials. These will be referred to as the '*individual perspective*' and the '*dual perspective*'.[7] Individual perspective refers to information known only to the speaker, and dual perspective to information known to both speaker and addressee.[8] Aikhenvald (2004a: 234) points out that systems which grammaticalize this level of differentiation between a single first person observer and a first *plus* second person observer are quite rare in the world.

Table 17.1 Evidential Systems of four Nambikwara Languages

Evidentiality in Nambikwara Languages

	S. Nambikwara	Mamaindê	Sabanê	Lakondê
Evidentials				
Visual	✓	✓		✓
Non-visual		✓		✓
Inferred	✓	✓	✓	✓
General knowledge	✓	✓		
Reported secondhand thirdhand	✓	✓	✓	✓
		✓		
Quotative				✓
Sensory (firsthand)			✓	
Internal support, or ‘gut feeling’	(✓)			
Modals embedded within evidential system				

Reliability				✓
Supposition				✓
Evidential Extensions				
visual used as ‘certainty’		✓		
non-visual used as ‘internal state’		✓		
non-visual used as ‘possibilitive’				✓
inferred used as ‘mirative’		✓		
reported used as ‘doubt’		✓		
general knowledge used as ‘truth’		✓		
Other Properties				

Evidentials fused with tense	✓	✓	✓	✓
Individual evidentials limited to specific tense			✓	✓
Individual evidentials employed in multiple tenses (w/ multiple forms)	✓	✓		
	S. Nambikwara	Mamaindê	Sabanê	Lakondê
evidentials used w/future tense			✓	
Individual versus Dual Perspective	✓			✓ (some forms)
Given versus New Information	✓			
contrasting systems: Certainty claim versus Neutrality claim			✓	

co-occurring systems: Reported co-occurring with other evidentials		✓	✓	✓
evidentials on nouns	(✓)			✓
evidentials marking deictics				✓

Adapted from Eberhard 2009: 471. The table shown here corrects an error made in the original table (as well as in the table reprinted in Eberhard 2012: 138), which incorrectly included characteristics of Latundê evidentials. Those characteristics have since been shown to belong to Lakondê (Telles, p.c.). There has to date been no research specifically focused on Latundê evidentiality. Check marks in parenthesis indicate topics on which our knowledge is deemed incomplete, due to disagreements among the relevant authors, and to data that are not sufficient nor consistent enough to clarify the issue at hand.

(p. 339) To better understand such evidentials, it is instructive to consider the broader notion of *multiple perspective*. Evans (2005: 99) introduces multiple-perspective constructions as 'constructions that encode potentially distinct values, on a single semantic dimension, that reflect two or more distinct perspectives or points of reference'. Due to this very broad definition it can apply to temporal, spatial, social, or epistemic domains.

Epistemic perspective, the viewpoint from which something is known, is most often realized in speech through a single perspective, that of the speaker (Evans 2005: 93). This single (or individual) perspective can shift from speaker to addressee, and from first person to second person, as is the case in certain declaratives and interrogatives. However, at times one needs a multiple perspective to communicate those things that both speaker and addressee know (or even things a whole community knows). Thus, all languages have developed some means of distinguishing between either single or multiple perspective. This distinction can be made either lexically or grammatically. It is this latter scenario that is the case in Southern Nambikwara (and in other languages of this family). The grammaticalization of multiple perspective, then, is what we find in the dual perspective set of Southern Nambikwara evidentials. Epistemic viewpoints and sources of information converge in one and the same system.[9]

Perspective is also involved in the '*general knowledge*' evidential mentioned earlier. General knowledge refers to knowledge that is known (or available to be known) by the whole community as part of the habitual experience of a collective, or part of the body of knowledge that has been passed down from one generation to the next, such as the extensive Nambikwaran mythology. As such, it is a further subtype of multiple perspective. This requires us to distinguish not only between single and multiple perspective, but also between two types of multiple perspective—that of dual and communal perspective. The dual perspective evidential encodes a perspective where the viewpoints of two participants are combined, while the general knowledge evidential marks a communal perspective, that which is known by the whole group.

As we would expect, the general knowledge evidential does not participate in the individual versus dual dichotomy, as it does not employ two distinct forms. This is also a consequence of the very nature of the general knowledge evidential. A general knowledge evidential with *individual* (*single*) *perspective* would not make sense, for *if* it is general knowledge, then it would not be private information known only to the speaker. Likewise, a general knowledge evidential with *dual perspective* would simply be redundant. This explains the single option for general knowledge in the table, and the total of seven evidentials instead of eight in the overall system.[10]

Each of the four sources of information in Southern Nambikwara is also inflected for tense: past, recent past, and present. Future tense, however, does not participate in the evidential system, as is the case in many languages with evidentials. While Kroeker (2001: 62) indicates that each evidential may be employed in all tenses other than future, we (p. 340) are only provided with a single example of an evidential in remote past. This is the reported evidential.[11] Whether the others may be used in that tense is not clear.

Besides marking source of information, tense, and epistemic perspective, these individual and dual forms do extra duty by also being employed at the discourse level to mark information as either new or given (Kroeker 2001: 22; Lowe 1999: 274–6). As we would expect, the individual perspective forms mark new information while the dual perspective forms mark given information. For any statement 'x', communicating that the 'knower' of 'x' is both first and second person must obligatorily imply that 'x' is given information for both parties. Thus, in Southern Nambikwara, the difference between these two grammaticalized functions (one an evidential function and the other a discourse function) is simply one of emphasis. It is assumed that context within discourse will determine that emphasis.[12]

This double paradigm system for Southern Nambikwara evidentials is represented in Table 17.2.[13]

Table 17.2. The Southern Nambikwara dual-paradigm evidential system.

	Individual Perspective	**Dual Perspective**
1. VISUAL		
Present	-na^{3}/(-Ø)	-ti^{2}tu^{3}
Recent Past	-na^{2}/(-Ø)	-te^{1}ni^{2}tu^{3}/ten^{1}tu^{3}
Past	-hẽ^{3}/(-na^{2}hẽ^{3})	-tai^{1}ti^{2}tu^{3}/tait^{1}tu^{3}
2. INFERRED		
Present	-nĩn^{2}ta^{2}	-tu^{1}ti^{2}tu^{3}
Recent Past	-nĩn^{2}su^{2}	-te^{3}nu^{1}ti^{2}tu^{3}
Past	(-nũ^{2}hẽ^{3})	-te^{3}nait^{1}ti^{2}tu^{3}
3. REPORTED		
Recent Past	-ta^{1}hẽ^{2}	-ta^{1}te^{1}ti^{2}tu^{3}
Past	-ta^{1}hẽ^{1}	-ta^{1}tẽx^{1}ti^{2}tu^{3}
Remote Past	-ta^{1}hxai^{2}hẽ^{1}	----------
4. GENERAL KNOWLEDGE	-te^{2}ju^{2}hẽ^{3}	

(p. 341) Examples of each evidential are provided in the following examples.[14]

VISUAL – INDIVIDUAL PERSPECTIVE

(1)

wa^{3}ko^{3}n-a^{1}-hẽ-^{3}la^{2}

work-1SG-EVID:VIS.INDV/PAST-PERV

I worked yesterday.

INFERRED – INDIVIDUAL PERSPECTIVE

(2)

wa^{3}ko^{3}n-Ø-nĩn^{2}su^{2}-la^{2}

work-3SG-EVID:INFER.INDV/RPAST-PERV

He must have worked today.

REPORTED – INDIVIDUAL PERSPECTIVE

(3)

wa^{3}ko^{3}n-Ø-ta^{1}hxai^{2}hẽ^{1}-la^{2}

work-3SG-EVID:REP.INDV/REM.PAST-PERV

I was told that he worked (in the remote past).

VISUAL – DUAL PERSPECTIVE

(4)

wa^{3}ko^{3}n-a^{1}-tai^{1}ti^{2}tu^{3}-wa^{2}

work-1SG-EVID:VIS.DUAL/PAST-IMPF

You and I saw that I worked.

INFERRED – DUAL PERSPECTIVE

(5)

wa^{3}ko^{3}n-Ø-te^{3}nu^{1}ti^{2}tu^{3}-wa^{2}

work-3SG-EVID:INFER.DUAL/RPAST-IMPF

He worked (and I inferred this).

REPORTED – DUAL PERSPECTIVE

(6)

wa^{3}ko^{3}n-Ø-ta^{1}tẽx^{1}ti^{2}tu^{3}-wa^{2}

work-3SG-EVID:REP.DUAL/PAST-IMPF

We were told that he worked.

(7)

GENERAL KNOWLEDGE

ti^{3}ka^{3}l-a^{2} kai^{3}l-a^{2} yain^{3}-Ø-te^{2}ju^{2}hẽ^{3}-la^{2}

anteater-DEF ant-DEF eat-3SG-EVID:GEN.KNOW/PAST-PERF

The anteater habitually eats ants.

(p. 342)

17.5. Lakondê

The most salient feature of Lakondê evidentiality (described first by Telles 2002: 288–90, then Telles and Wetzels 2006) is that it exhibits scattered coding, being realized in three separate subsystems: two evidential subsystems on the verb, and another subset of markers on nouns. The overall impression is that there is evidentiality ‘everywhere’. This makes it a challenge to describe as a cohesive whole. Even determining the total number of evidentials is not straightforward. Lakondê could be categorized as having either a mid-sized or a large-sized system, with either five or eight evidentials respectively. This discrepancy in the number of evidentials depends on the perspective one takes when defining certain grammatical categories, as we will see. The evidence gathered here (from Telles and Wetzels 2006) will point to the conclusion that Lakondê has in fact the most developed and most complex evidential system within the Nambikwara family. We will start by addressing evidentiality on verbs first, and then move on to its marking on nouns.

Evidentiality on Lakondê verbs is grammatically encoded via two morpho-syntactic systems; a subset for secondhand (hearsay) information, and another set for firsthand information. The secondhand information subset is composed of two well-established evidentials, reported and quotative. The former is marked by the morpheme /-se?/, and the latter by /-setaw/. These are suffixed to the verb and positioned close to the derivational suffixes. They are not obligatory. There is no tense implied in these forms as they can co-occur with various tenses. See Table 17.3.[15]

Table 17.3. Lakondê evidentials: secondhand system, verbs

evidential	**Form**	**Usage**
1. Reported	*-ˈse?-*	*hearsay*
2. Quotative	*-setaw-*	*quotes*

Examples of each evidential are found in the following examples.[16]

SECONDHAND SYSTEM

REPORTED

(8) taˈnũh-Ø-ˈse?-Ø-ˈtãn

give-3O-EVID:REP-3S-IMPF

She gave it to him, I heard.

QUOTATIVE

(9)

ho'te ãn-Ø-Ø-setaw-'tãn
monkey kill-3O-3S-EVID:QUOT-IMPF
He said that he (himself) killed the monkey.

(p. 343) The complexity of Lakondê evidentiality is found in the larger set of five morphemes that mark firsthand information. These are integrated into the tense/aspect/mood system at the end of the verb and are thus part of an obligatory set of tense markers. They may index either evidential or modal functions, some forms marking one, others marking the other. The evidential functions expressed are visual, non-visual, and inferred. The modality functions mark reliability, supposition, and possibility. It is this melding of two grammatical categories, evidentiality and modality, into a single morphological category that poses certain options for analysis. Interestingly, one of the forms can function either as an evidential or modal, expressing either the non-visual evidential or the possibilitive modal, depending on the context and the needs of the speaker.

Telles and Wetzels (2006: 238, 245) take a structural approach, describing the firsthand system as a single verb category due to the fact that all five of these forms occur in the same obligatory slot in the verb string and never co-occur. As some of these forms reflect the speaker's stance on the certainty/uncertainty of the utterance rather than the means by which the information was acquired, Telles and Wetzels prefer to avoid attaching the *evidential* label to any of these morphemes. Instead, they refer to the whole set of five forms as *epistemic modals*, some of which happen to function as evidentials, and others as more typical modals. Thus, in the Telles and Wetzels account, the marking of visual and inferred sources of information are expressed by way of epistemic modals, in what they refer to as an *evidentiality strategy*. When the speaker desires to emphasize the non-visual source of information, the secondary extension of the possibilitive modal is employed.

Another perspective is possible from which to view this system, and that is the one I adopt in this account. Instead of characterizing morphemes by the slot they occupy on the verb, I will instead categorize them pragmatically. This is based on the view that the identity of a given morpheme is more fundamentally related to its function and primary meaning than it is to any specific locus in the grammar. This is also in line with Aikhenvald (2004a: 7, 2006c: 320), who points out that while modality and evidentiality are often equated in language descriptions, they are in fact separate grammatical categories, and should be treated as such.

If we adopt this functional perspective, and if we focus only on those morphemes whose role it is to mark source of information *on the verb,* then the two co-occuring subsystems outlined can be characterized jointly as a six term evidential system. The firsthand system, found near the end of the verb, consists of visual, non-visual, dual visual (to be described further below), and inferred.[17] The secondhand system occurs closer to the root and is composed of the reported and quotative evidentials. The non-visual evidential in the firsthand system has an extension that may be used optionally to express 'possibility'.

The remaining forms that mark *reliability* and *supposition*, found in the same verb slot as the firsthand evidentials, are 'pure' modals and nothing more. There need not be anything exceptional about modals and evidentials inhabiting the same morphological space.

The Telles and Wetzels account is certainly not unreasonable. To the contrary, it is based on what we might call a more emic system of classification, one that respects the morphological divisions the language has already put in place. However, for the purpose of identifying only (p. 344) those mechanisms that communicate source of information during the speech act, we must be able to look within these morphological categories and identify which components function as evidentials and which do not.

The 'dual visual', while part of the firsthand paradigm outlined above, is unique in certain ways and needs further explanation. The other evidentials found in the firsthand paradigm, namely visual, non-visual, and inferred, occur only in past tense, either remote or recent (Telles and Wetzels 2006: 250). They also refer only to the speaker's perspective and do not include the addressee's point of view. The 'dual visual', on the other hand, occur only in the *present* tense, and refers to *both* speaker and addressee perspectives simultaneously, or more specifically, to information that is known by both.[18] In this latter respect, it is identical to the dual perspective found within the Southern Nambikwara system. For this reason I have dubbed this category 'dual visual'. The dual visual *-na* is glossed in Telles and Wetzels with the verb 'see', thus the clue that we are dealing with a morpheme that references the sense of sight. While not providing a name for this evidential, Telles and Wetzels (2006: 244) define it as 'current evidence shared by both speaker and listener'. This form occurs at the end of the verb in the same slot as the other firsthand evidentials, effectively adding a 'marked' present tense form to the paradigm, one that carries a specific evidential meaning along with tense (standard present tense is unmarked). The use of *-na* is further restricted to clauses with third person subjects, another null morpheme category.

All verbal evidentials marking firsthand experience are represented in Table 17.4.

FIRSTHAND SYSTEM

VISUAL – PAST (INDIVIDUAL PERSPECTIVE)

(10) wi̯-ˈhat-Ø-ˈtãn-ˈti

eat-not.have-3S-IMPF-EVID:VIS/PAST

He did not eat (I saw it).

Table 17.4. Lakondê evidentials: firsthand system, verbs

EVIDENTIAL	**Form**	**Tense**	**Perspective**	**Extension**
1. Visual	-'ti	Past (remote/recent)	Individual (speaker only)	--
2. Dual Visual	-na	Present (3rd person)	Dual (speaker & addressee)	--
3. Non-Visual	-si	Past (remote/recent)	Individual	Possibilitive
4. Inferred	-hi-jãn … -'ti *('impression'+ emphatic+visual)*	Past (remote/recent)	Individual	--

(p. 345)

(11)

NON VISUAL – PAST (INDIVIDUAL PERSPECTIVE)

ˈwa̰ja	hejn-ka-ta-ˈtãwn	ˈpat-ˈtãnª-si
you.PL	wash-BEN-1O-CMPL	leave-2S.IMPF-EVID:NVIS/PAST

It is possible that you.PL have washed [. . .] for me (because I heard the sound coming from the river).

INFERRED – PAST (INDIVIDUAL PERSPECTIVE)

This is formed via a (non-adjacent) combination of the visual evidential *-ti*, the emphatic *-jãn*, and the auxiliary verb *-hi* 'to have an impression'.[19]

(12)

ˈa̰jh-hi-jãn-Ø-ˈtãn-ˈti
go/walk-have.impression-EMPH-3S-IMPF-EVID:VIS/PAST
ˈhat-ta-ta-ˈti
not.have-NEG-ANT.PAST-EVID:VIS/PAST
It seems that he went, no one is there.

(13)

DUAL VISUAL – PRESENT (DUAL PERSPECTIVE)

ta̰-Ø-na̰
fall-3S-EVID:VIS.DUAL/PRES
He is falling (we—speaker and listener—can see it).

The final trait of Lakondê evidentiality is the use of evidentials on nouns (Telles and Wetzels 2006: 248–9).[20] There are two such forms, both located in the nominal suffix string, and both of them clearly functioning as visual evidentials. The difference lies in their deictic value. The first form, *-te-*, marks a referent that can be seen in the distance, while its semantic opposite, *-ta-*, refers to a seen entity that is proximal. Both index that which can be seen by both speaker/addressee, and thus also imply a dual perspective. It is assumed that these are not obligatory morphemes, but constitute choices the speaker has at her disposal to further modify any nominal she is referencing. Taking these two nominal evidentials into account and combining them with their counterparts found on verbs, we arrive at an overall system of eight evidentials for Lakondê (see Table 17.5).

Table 17.5. Lakondê evidentials: nouns

evidential	**Form**	**Perspective**	**Deictics**

1. Visual Distant	-te	dual	distant
2. Visual Proximal	-ta	dual	proximate

(p. 346)

(14)

NOUN SUBSYSTEM
VISUAL DISTANT– (DUAL PERSPECTIVE)
ˈsih-te-ˈte
house-EVID:VIS.DIST-REF[21]
House (which we see at a distance).

(15)

VISUAL PROXIMAL – (DUAL PERSPECTIVE)
tã-ˈnãn-ta-ˈte
1p-larva-EVID:VIS.PROX-REF
My coró (kind of edible larva).

17.6. Sabanê

The Sabanê verb (Araujo 2004: 138–40), as in other Nambikwara languages, is marked for both tense and evidentiality. Unlike the other languages in the family, however, one of the evidential forms can occur in any tense, including future. This system has a total of four evidentials divided into two subsets: three in Subset A – *sensory* (information coming from all the senses, comparable to a firsthand evidential in many languages), *inferred,* and *inferred neutral* (to be defined below)*;* and one in Subset B – *reported*. Subset A is obligatory while Subset B is not. This reported evidential occurs in a separate place on the verb and can co-occur with any of the first three evidentials.

Subset A is part of a larger morphological class that contains forms which function both as modals and evidentials, each inflected for tense. This single set of forms is concerned not only with source of information, but also with the speaker's stance on the veracity of that information. Two categories of morphemes are possible within this class. These categories are based on contrasting stances: those that make 'certainty claims', and those that don't. In effect, this latter group reflect a speaker's 'neutrality claims'.[22] Certainty claims are statements for which the speaker is claiming to have evidence of truthfulness. Neutrality claims are statements for which such confidence is lacking, and there is no truth claim associated with the statement. Neutrality claims can thus be suspect, being viewed as 'possibilities' rather than certainties. All of the forms in this class perform one

of these two modal functions, while some of them also refer to information source.[23] These latter forms are the evidentials of Subset A.

The full Sabanê evidential/modal system is outlined in Tables 17.6 and 17.7. In the first table, forms in shaded cells are the evidentials, marking source of information. Forms in the unshaded cells give no indication of information source and are not part of the (p. 347) evidential system. Note that there are two inferred forms to choose from, one communicating that the speaker believes the inferred information to be trustworthy, and the other, *inferred neutral*, flagging that same inference as unmarked for truth. Both occur only in past tense. Table 17.7 shows the reported evidential as separate from the rest of the evidential system.

Table 17.6. Sabanê Evidentials/Modals – Subset A

SUBSET A	**Certainty Claim**		**Neutrality Claim**	
TENSE	*Sensory*	*Inferred*	*Neutral*	*Inferred Neutral*
past	-datinan	-tika	-ntal	-np
present	-dana		-al	
future	-telon		-tapanal	

Table 17.7. Sabanê Evidentials – Subset B	
SUBSET B	***Reported***
	-tiaka

Examples of the four Sabanê evidentials follow.[24] In the first data set the sensory evidentials are shown, including an example (17) of how the sensory evidential can be used in the Future tense. Note that this is possible when one is dealing with sensory evidence of an imminent event.

(16)

SENSORY EVIDENTIAL/CERTAINTY – PAST AND FUTURE

nan –i –datinan

to.cry –VS –EVID:SENS.CERT/PAST

S/he cried (I saw/heard it).

t-ilup-a-telon

(17) 1obj-to vomit -? -EVID:SENS.CERT/FUT

I am going to vomit.

(18)

INFERRED EVIDENTIAL/CERTAINTY – PAST

kieylali–k	kan –n –tika	hala –n –dana
peccary–OBJ	to.die –VS –EVID:INF.CERT/PAST	to.stink–VS –EVID:SENS.CERT/PRES

The peccary died; (because) it stinks.

(p. 348) **(19)**

INFERRED EVIDENTIAL/ NEUTRALITY – PAST

m– yotop –i –np –i

2OBJ– to.know–VS–EVID:INF.NEUTRAL/PAST –ASS

(One infers that) you knew it.

(20)

REPORTED EVIDENTIAL

wayulupi.maysili –k	kan –n –tiaka –dana
CAT.YOUNGLINGS–OBJ	TO.DIE –VS – QUOTE– EVID:SENSE.CERT/PRES

Somebody said that the kitten died.

17.7. Mamaindê

Mamaindê fits somewhere in the middle of this group, employing a set of six evidentials in a double paradigm system (from Eberhard 2012; see also Eberhard 2009: 468–87). The basic evidential paradigm consists of the following: visual, non-visual, inferred, and general knowledge, while a supplementary co-occurring system is used for two reported evidentials, being divided into reported secondhand and reported thirdhand.[25] This division is similar to the dual system already noted in Lakondê and Sabanê in §§17.5 and 6 respectively. The most unique aspect of the Mamaindê system is its robust use of *extensions*, which are secondary senses that evidentials may employ for related or even metaphorical purposes. These will be described in §17.7.1.

Following the general pattern observed in Southern Nambikwara, most Mamaindê evidentials mark tense as well as information source, utilizing a separate form for each tense. In practical terms, such tense specific forms mean that the Southern Nambikwara and Mamaindê systems have many more evidential morphemes (eighteen apiece) than any of the other Nambikwara languages, even more than Lakondê that has the most evidential *types* (eight). In Mamaindê, however, this tense plus evidential marking is not a perfect one-to-one fit. Some morphemes within the system only mark tense (the two future tenses), without any reference to evidentiality, while others mark the source of information (reported and general knowledge) and lack a specific tense. While there are no evidentials in future tense, they are allowed to co-occur with the desiderative (see Eberhard 2012: 140–3).

Theoretically, all of the Mamaindê evidentials can be used with all persons (except for the present tense visual, which is limited to third person).[26] However, in practice, the evidentials are used more frequently with third person than with any other. (p. 349)

Table 17.8 brings together the Mamaindê evidentials and tenses into one comprehensive overview.[27]

Table 17.8. The Mamaindê Tense/Evidential System

EVIDENTIAL	**Present**	**Recent Past**	**Interm. Past**	**Distant Past**
1. *Visual* (*also Certainty*)	(-lat^{h}a –only third pers)	-nãn	let-nãn	-hĩnʔ
2. *Non-Visual* (*also Internal State*)	-nha / nhaʔ	-hĩn	-le-hĩn	-le-hĩn
3. *Inferred* (*also Mirative*)	-sihna	-ntĩn	-le-ntĩn	-sihĩnʔ
4. *Reported second-hand* (*also Doubt*)	-satau-nha	-satau-hĩn	-satau-le-hĩn	-satau-le-hĩn
5. *Reported thirdhand* (*also Doubt*)	-sĩn-nha			
6. *General Knowledge* (*also Truth*)	-nĩnta / -ĩnta /-nta			

(based on Eberhard 2012: 141)

Unlike the other five evidentials, general knowledge is not used to mark tense per se, as only a single form is available. However, this evidential does carry with it certain implications regarding temporal and modal notions. The most prototypical use of this evidential is to mark events found in Mamaindê mythology, events which are expected to be known by all. This common usage colours such utterances with an aura of mythical time, a period occurring in the ancient past, or even in a historical time (Eliade 1959: 68–115). The second function of the general knowledge evidential involves the marking of a habitual event. This usage is closer to a modal notion than it is to tense, with no specific time associated with it.

Examples of each Mamaindê evidential are provided in the following examples.[28]

(21)
VISUAL EVIDENTIAL

ta-tukwin?ni-tu	na-?aik-tu	tau-lat^{h}a-wa
POSS1-father.in.law-FNS	POSS3-field-FNS	chop-S3/EVID:VIS/PRES-DECL

My father-in-law is clearing his field (and I know this because I just came from his field and I saw him working).

(p. 350) NON-VISUAL EVIDENTIAL

This evidential marks information that was obtained by any sense other than sight; either smell, touch, or hearing.

(22)

ta-tukwin?ni-tu	?aik-tu	tau-Ø-nha-wa
POSS1-father.in.law-FNS	field-FNS	chop-S3-EVID:NVIS/PRES-DECL

My father-in-law is clearing his field (and I know this because I just passed near his field and heard him chopping).

(23)
INFERRED

ta-tukwin?ni-tu	?aik-tu	tau-Ø-sihna-wa
POSS1-father.in.law-FNS	field-FNS	chop-S3-EVID:INF/PRES-DECL

My father-in-law is clearing his field (and I know this because both he and his axe are gone).

REPORTED EVIDENTIAL – 2ND HAND

The reported second hand evidential ***/-satau/*** is always followed by one of the inflected forms of the non-visual evidential.

	reported + non-visual
present	/-satau/ + /-nha/
recent past	/-satau/ + /-hĩn/

intermediate/distant past	/-satau/ + /-le/+/-hĩn/

(24)

ta-tukwin?ni-tu	?aik-tu	tau-satau-Ø-nha-wa
POSS1-father.in.law-FNS	field-FNS	chop-RS-S3-EVID:NVIS/PRES-DECL

My father-in-law is clearing his field (and I know this because someone told me).

REPORTED EVIDENTIAL – THIRDHAND

This morpheme is used to indicate that the speaker heard the information from a third-party, such as a storyteller, who in turn heard it from someone else. Evans (2005: 104) refers to this type of embedding of one perspective within another as a form of '*meta-perspective*'.

(25)

ta-tukwin?ni-tu	?aik-tu	tau-sĩn-Ø-nha-wa
POSS1-father.in.law-FNS	field-FNS	chop-RS3-S3-EVID:NVIS/PRES -DECL

My father-in-law is clearing his field (and I know this because someone said they were told that it was so).

GENERAL KNOWLEDGE

This evidential marks information that is known to the whole community, either because it is habitual, or because it is part of their mythological lore. This second usage is the most common.[29] (p. 351)

(26)

ta-tukwin?ni-tu	?aik-tu	tau-Ø-nta-wa
POSS1-father.in.law-FNS	field-FNS	chop-S3-EVID:GEN.KNOW-DECL

My father-in-law is clearing a field (everyone knows this because he's been doing this every day now for a month).

(27)

jahon	?aik-tu	tanik-ta?	nãn-je?-Ø-nĩnta-wa
old.man	field-FN	bury-CONJ.and	cry-EMPH-S3-GEN.KNOW-DECL

They buried the old man in the field and cried (everyone knows this because it's part of our mythology).

17.7.1. Extensions of Evidentials

The most distinctive feature of the Mamaindê evidentials are their secondary semantic properties, also referred to as *extensions* (Aikhenvald 2004a: 153). All of the Mamaindê evidentials can be utilized in this fashion, giving them more flexibility and expressive power. The only other Nambikwara language in which extensions have been reported is

Lakondê, with a single extension. The extensions of the Mamaindê evidentials are discussed as follows.

VISUAL – EXTENSION AS 'CERTAINTY' OR 'OBVIOUS'

The visual evidential is also used as a default to highlight factual statements. This 'certainty' function constitutes an extension to the visual, and can be employed to mark anything the speaker wishes to highlight as being true even if it was never observed directly. This extension constitutes a large part of the use of the visual evidential, and could be seen as its 'default' use.

(28)

na-wek-tu	<Brasilia>	ikalaka-lat^{h}a-wa
POSS2-child-FNS	Brasilia	work-S3/EVID:VIS/PRES-DECL

Her child works in Brasilia (and this is true, even though I have not directly observed it).

The present tense visual evidential *-latha* only applies to third person. Its extension of 'certainty', however, can be applied to first person as well. This can be shown in example (29), where it clearly is not functioning as a person-marker, but as an extension of the visual instead, emphasizing the obviousness of the statement. As there is no overt present tense visual evidential in first person to make use of, the third person marker can be employed in contexts where the referent is clear.

	tai	jąu-lat^{h}a-wa
(29)	I	be-S3/EVID:VIS/PRES-DECL

I'm obviously here (I can see myself; I'm here).[30]

(p. 352)

NON-VISUAL – EXTENSION AS 'INTERNAL STATE'

As we have seen, the non-visual is typically used for situations where the speaker heard but did not see the event occur. However, this evidential can also be used in a secondary fashion as an extension which refers to one's emotions, thoughts, or general internal state. This secondary usage is limited to first person, and as such is another good example of the semantics involved in 'first person effect' (Aikhenvald 2004a: 163, 168, 219).

After hearing a funny joke, a young Mamaindê man remarked:

(30)

tai-ãni	nahohnto?	kãun-ta-le-Ø-hĩn-wa
PN1-FNS	much	laugh-O1-INTER.PAST-S3-EVID:NVIS/PAST-DECL

To me, it was really laughable.

INFERRED – EXTENSION AS 'MIRATIVE'

The inferred evidential has a mirative extension, or the additional function of expressing surprise. It appears that this is not uncommon in languages that employ this evidential (Aikhenvald 2004a: 200–1). Inferred itself implies the process of discovery, where one infers things from circumstances. This element of discovery is closely related to the notion of 'the unexpected', which in turn is the basis for any surprise, thus giving the extension a semantic connection. In Mamaindê, this evidential is the only grammatical means of expressing surprise.

In the following example, the shaman's wife was bitten by a snake, and the shaman, who witnessed the event, relates the story using the inferred evidential instead of the visual. This usage, while clearly not the typical understanding of inferred, highlights the element of surprise in the storyline, as the snake was expected to run away, but instead held its ground.

(31)

na-k^{h}ato?,	tę?-tu	ih-a?si?,	na-sei-ijah-ãni
COP-CONJ.THEN.SS	snake-FNS	run-NEG	POSS1-N.CL.PLACE-DEM-FNS

jąu-je?-le-Ø-ntĩn-wa
be-EMPH-INTER.PAST-S3-EVID:INF/PAST-DECL
Then, the snake, without running, stayed in its place.

REPORTED – EXTENSION AS 'UNCERTAINTY'

The reported evidential (either one) may also have an extension or secondary meaning, that of expressing doubt. Speakers will use the reported evidential to indicate that the information did not originate with them, and thus distance themselves from responsibility. To the hearer this comes across as information that is unreliable or less trustworthy. Thus, if the speaker actually did witness an event, but wishes instead to conceal that information, or to cast doubt on it, or avoid being held responsible for it, he can choose to employ the secondhand reported evidential. In the next example, if the speaker is jealous of the shaman, who is considered the better hunter, he might employ such a strategy to colour the result and sound as if he is not totally confident in the source of his information. In this case, the usage of the reported evidential could cause the listener to speculate that the shaman may not have killed the jaguar after all.

(32)

wa?nĩn-so?ka	janãn-tu	sun-satau-le-Ø-hĩn-wa
shaman-N.CL.HUM	jaguar-FNS	kill-RS-INTER.PAST-S3-EVID:NVIS/PAST-DECL

The shaman killed a jaguar (yesterday) (and I know this because someone told me – at least that is what they said).

(p. 353)

GENERAL KNOWLEDGE – EXTENSION AS 'TRUTH'

Finally, general knowledge has a secondary extension used to mark ‘truth’. There are times when a Mamaindê will use a general knowledge evidential instead of a reported evidential to mark the veracity of an event which they acquired as hearsay. In such cases the speaker wishes to mark the hearsay statement as being ‘just as true’ as any indisputable communal knowledge. In (33), a Mamaindê woman recounts part of an episode she had heard from her son. He had travelled to the city a month earlier, and the police had stopped him and confiscated his shotgun. As I had just arrived for a visit, she safely assumes I have not yet heard of her son’s story. The reported evidential would be the expected one to use in such a case. However, she tells me the story using the ‘general knowledge’ evidential instead of the reported evidential in order to avoid any shadow of doubt that might accompany reported events. As she was well aware that her listener did not actually know the story, the general knowledge marker was not being used in its usual manner. Instead, it was employed as a morphological strategy to help her emphasize the truth of the event and to convince her addressee that neither she nor her son had made the story up.

(33)

nahi?	ju-ten-so?ka	ta-wek-tu	na-khat-tu
then	door-shut-N.CL.HUM	POSS1-child-FNS	POSS3--stick-FNS

tu-ka-jẽ?-Ø-nĩnta-wa
get-from-EMPH-S3-EVID:GEN.KNOW-DECL
So then, the police (those who are door shutters) took the gun, my son’s gun, from him.

17.8. Further comments on the General Knowledge evidential

I have used the term ‘general knowledge’ as a way of recasting Kroeker’s ‘customary’ category for Southern Nambikwara (2001: 62) as well as Kingston’s ‘collective verification’ category for Mamaindê (1976: 50–4) into a single notion, one that acknowledges their mutual dependence on the same information source, namely, communal knowledge.[31] This general knowledge evidential is used in both Southern Nambikwara and Mamaindê to mark habitual events as well as mythical events known to all.[32] In Mamaindê, this second usage could be considered the prototype of this evidential. It thus often has an air of the distant past about it, recalling knowledge that was passed down from one generation to the next for centuries, (p. 354) representing the accumulated learning of an entire people. It is that body of historical information that every normal adult in the community is expected to know. [33]

A similar category in the broader literature is the notion of ‘assumed’ information (Aikhenvald 2004a: 64–5). This is a more common evidential, and typically includes not only knowledge known to all, but also knowledge arrived at by common reasoning. Reasoning, however, is not a semantic component of general knowledge in either Southern Nambikwara or Mamaindê.[34] Thus ‘assumed’ and ‘general knowledge’ are not inter-

changeable and should not be confused. The latter is about knowledge that is given, that is customary or has been taught from an early age, and is already known to all. For this reason, myths, legends, and popular stories all carry this evidential.

Mamaindê does not distinguish between individual and dual perspective as does Southern Nambikwara. We might then expect the general knowledge evidential in Mamaindê to cover not only information known by all, but also those events known only to the speaker and addressee. This, however, is not the case. When reminiscing with one of my Mamaindê friends about finding and carrying a large flat piece of wood out of the jungle while the two of us were on a hike years earlier, I used the general knowledge evidential to remind him of the event.

(34)

ta?wen	ʔa̰i-k^{h}ato?,	hiuti-k^{h}alo	tu-ta?	mãn?
forest	go-then,	tree-NCL.flat.thing	get-and	hill

*tu-ta̰i-khit-je?-nĩnta-wa
get-go-PL1-EMPH-EVID:GENKNOW-DECL
We really did go into the forest and get that tree slab and haul it up the hill!

But like a good language mentor, he immediately corrected my verb, using the past tense visual evidential. He reminded me that I was there and saw it, but the community did not know this story. The fact that both speaker and addressee were present did not call for the general knowledge marker. This shows the epistemic limits to general knowledge within the Mamaindê system. The corrected verb should have been marked with the visual evidential.

(35) tu-ta̰i-khit-je?-lek-nãn-wa
get-go-PL1-EMPH-INTER.PAST-EVID:VIS.PAST-DECL

Finally, in Mamaindê at least, the general knowledge evidential is understood as being more certain or true than all other evidentials. This is because the information known to everyone is considered beyond dispute. ‘The sun comes up every morning’. Such a statement would be marked by the general knowledge evidential, and would have a truth index higher than any reported, inferred, or even visual information.

Another reason for this is that the experience of a ‘general knowledge’ type event is closer to the addressee than any other sort of experience that could possibly be marked on (p. 355) a Mamaindê verb. While events that others report to us are part of their experience and not ours, events that are habitual or common knowledge are things we know to be true ourselves and are part of our own experience as well.

The above also applies to myth. The narrative of myth lends itself to being perceived as something ‘experienced’ vicariously by the speaker and the addressee alike, not only through the retelling of the ancient events, but also through the communal re-enactment

of these events during ritual. This is reminiscent of Eliade (1959), the influential historian of religion, for whom myths were regarded as primordial history capable of being repeated and re-entered, cyclically, in the ceremonies of a community. In Mamaindê, the importance of such experiential knowledge, both the firsthand and vicarious varieties, is demonstrated by the grammaticalization of experience by way of the general knowledge evidential.[35]

In language communities where certain sources of knowledge outrank other sources of knowledge, we can use a ‘truth cline’ to represent such value judgements. In Mamaindê (and possibly other communities who employ a ‘general knowledge’ evidential), the trustworthiness of common knowledge outranks the trustworthiness of knowledge only known to some. This suggests the ‘truth cline’ in Figure 17.2 for Mamaindê evidentials.[36]

Figure 17.2. Truth cline applied to Mamaindê evidentials

The testimony of group history also adds its weight to this evidential, a benefit that no other evidential enjoys. It is for this reason that myths are all recounted utilizing the ‘general knowledge’ evidential. The frame of reference triggered by this evidential is that one is not listening to information coming from an individual speaker at a single moment in time, but to a narrative of the collective, one that predates both the speaker and the addressee. The community, both present and past, has spoken.

(p. 356) 17.9. Conclusion: the distinctive features of Nambikwara evidential systems

The previous discussion describes the evidential systems of the four languages studied thus far in this family. From that description we can identify the qualities most characteristic of Nambikwara evidentiality. They are summarized as follows:

Size:

The four evidential systems studied thus far all utilize either mid-sized or large sized evidential system, ranging from the four evidentials of Sabanê, to the eight found in Lakondê. The class of evidentials thus constitutes a salient portion of Nambikwara morphology.

Tense:

Each of these systems combine the use of evidentials and tense into a single portmanteau system of inflectional marking. In Lakondê and Sabanê, evidentials are limited to particular tenses. Southern Nambikwara and Mamaindê utilize different forms for individual evidentials in each tense, creating large sets of evidential morphemes. Only one, Sabanê, employs an evidential in future tense.

Shared evidentials:

Inferred and reported evidentials are the two evidentials common to all. In three of the four languages documented, the reported evidentials are part of a separate co-ocurring system affixed to the verb at a distinct and non-adjacent location from the rest of the evidentials.

Perspective:

Three of the four languages studied also have some way of distinguishing between various epistemological perspectives in regards to ‘who is doing the knowing’. As a result, besides the individual perspective, several types of ‘multiple perspective’ are employed, whether by means of a dual perspective, a general knowledge perspective, or both. Lakondê employs the individual and dual perspectives in a portion of its system. Mamaindê recognizes a dichotomy between individual perspective and general knowledge. Southern Nambikwara distinguishes between all three, the individual and dual perspectives, as well as general knowledge. It is this notion of perspective, and in particular multiple perspectives, that constitutes the most distinctive feature of evidentiality within the family as a whole.

Notes:

([1]) All Nambikwara language communities are small. The total population of the entire Nambikwara family was 2232 in 2013 (Socioambiental-http://pib.socioambiental.org/pt/c/quadro-geral). Of the four languages documented thus far, one exhibits strong oral vitality (Southern Nambikwara) another threatened vitality (Mamaindê), while the other two are either moribund or extinct. There was only one elderly speaker of Lakondê in 2002. This scenario reminds us not only of the urgency of describing and documenting such languages before they are gone, but also of the importance of guiding endangered language communities along the challenging journey of making their own informed decisions about the future of their traditional language repertoires and unique identities in the face of massive language and cultural shift.

([2]) In Figure 17.1, I have intentionally omitted those variants which are virtually extinct *and* whose structures we know very little about or nothing at all (Tawandê, Sowaintê, Tawendê, and Yalapmundu).

([3]) As data on evidentiality from Latundê is not yet available, it is not included here. We are also missing data from a number of other languages in the family. A few evidentials have been found in some of the Negarotê texts collected by the author, but this system

(apparently similar to Mamaindê) has not been documented sufficiently to include at this time. Likewise, there is data missing from many dialects of Southern Nambikwara. Lowe's description of Southern Nambikwara (1999: 270) focuses exclusively on the Kithãulhu lect, and Kroeker's (2001: 2) study is a compilation of data from six Southern Nambikwara dialects: Kithãulhu, Halotesu, Saxwentesu, Wakiletesu, Wasusu, and Kititaulhu. Even so, these omit any mention of a large number of other varieties, leaving us with questions as to the differences between the various Southern lects in terms of much of the grammar, including any possible differences in their use of evidentials.

([4]) Lakondê and Latundê are distinct but closely related languages in the northern branch of this family. Telles (2002) includes many elements of Latundê in her in-depth description of Lakondê grammar (as her title 'Fonologia e Gramática Latundê/Lakondê' suggests). However, her treatment of evidentiality in that work is restricted to the Lakondê language alone (Telles, p.c.). Thus the study of Latundê evidentiality is still incomplete and will not be considered here. As they are very similar languages in many other respects, the Latundê system could well be the same as the one in Lakondê, but that has not been confirmed.

([5]) A [✓] in the table indicates that researchers have identified the item as a property of a given system. The lack of a [✓] does not necessarily mean that it doesn't occur in that system, but simply that this property was not included in that language's description. If a language has only a single reported evidential, this is indicated in the reported secondhand row, with the implication that it combines both second- and thirdhand.

([6]) Kroeker (2001: 62–5) refers to these four evidentials respectively as 'observation', 'deduction', 'narration', and 'customary'. I have used a set of standardized terms to make the comparison between languages more straightforward. Kroeker's 'customary' evidential I am recasting as 'general knowledge', a term that is similar (but not identical) to 'assumed' in the literature. A more detailed account of this evidential within the Nambikwara languages will be discussed at the end of this article.

([7]) Kroeker (2001) uses the terms 'individual verification' and 'collective verification' instead, but these simply refer respectively to an individual speaker's point of view versus a speaker + addressee combined point of view. These terms are also not to be confused with the double and joint perspectives found in Evans (2005: 103).

([8]) Lowe's (1999: 274–6) analysis of Southern Nambikwara, somewhat different from Kroeker's, involves four evidentials (visual, inferred, reported, and internal support), as well as two subcategories of inferred (inferred from actions or from circumstances), and an interaction between evidentiality and a sub-system which marks given and new information. He makes no mention of Kroeker's individual versus collective verification paradigms. Unquestionably the most interesting of Lowe's claims is his 'internal support' evidential, which he defines as a 'gut feeling' that something is true. Unfortunately, the single example given is not glossed in sufficient detail, and we can only be left wondering how this interesting evidential might fit in with Kroeker's more comprehensive analysis. Due to this lack of information, I do not include 'internal support' as an attested Southern

Nambikwara evidential in Table 17.2. It is enclosed in parenthesis in Table 17.1 to indicate its ‘incomplete’ status, suggesting an area for further study.

([9]) Multiple perspective encoded within evidentials, although under-studied in the past, is now beginning to become a focus of research. Bergqvist (2015a: 2) makes the point that multiple perspective is a component of the concept of *inter-subjectivity*, which in turn is an important notion that should be considered in any study of evidentiality.

([10]) Nevertheless, Kroeker classifies ‘general knowledge’ as a component of Individual perspective.

([11]) This irregularity in Kroeker’s data explains why Table 17.2 has a different set of tenses for reported than for the other evidentials.

([12]) There is also some mention of evidentials being utilized on Southern Nambikwara nominals, although the relevant authors do not agree. Lowe (1999: 282) gives a set of three evidentials for nouns, observational, inferential, and quotative, each with several forms marking tense and given/new information. Kroeker (2001: 45–6), on the other hand (whose grammar is far more comprehensive in all other aspects), describes the marking of tense and given/new information on nouns but makes no mention of evidentials in this context at all. Lowe’s description has some important gaps as well, with some evidentials being listed without any examples given (quotative), and then examples of other evidentials for which the description does not appear to match (‘current’ versus ‘observational’ in present tense). Due to the disagreement between the authors, and the confusing state of the data provided, we will have to wait for future research to clarify this possible use of evidentials in Southern Nambikwara before anything of certainty can be said about them.

([13]) Given the nature of the data presented by Kroeker, it is not always clear as to the exact form for each evidential in each tense. The biggest difficulty in the data available is that there are numerous occasions where the number of morpheme glosses does not match the number of morphemes. Thus, a few of the forms in Table 17.2 are my interpretations of Kroeker’s data. These forms are marked by parentheses.

([14]) All data on Southern Nambikwara is from Kroeker (2001: 62–5). Glosses have been standardized for this volume. Kroeker uses /x/ for glottal and superscripted numbers for tone marking: 1-falling, 2-rising, 3-low.

([15]) Tables 17.3–5 categorize all of the evidentials of the Lakondê system according to their place within one of the three subsystems. Note that they include only those forms which can be clearly classified as ‘pure’ evidentials. All other related morphology, such as other modals and tenses, or even tense markers used for evidential strategies, are not included.

([16]) All Lakondê data is from Telles and Wetzels (2006). Glosses have been standardized for this volume.

([17]) Telles and Wetzels (2006: 246) use the term ‘sensory inference’ for the ‘inferred’ evidential.

([18]) A separate *evidentiality strategy* that semantically implies a ‘dual perspective visual’ is also available to Lakondê speakers when referring to past continuous events, utilizing a complex construction of two morphemes regularly employed only to mark tense. According to Aikhenvald (2004a: 144–51), such strategies are distinct from the grammaticalized evidentials covered in this volume. The reader is directed to Telles and Wetzels (2006: 243) for further details.

([19]) It could be argued that such a composite form is a variation or *extension* of the visual evidential. The semantics is clearly related, as inferred information is typically acquired through clues that are provided through our sense of sight. Here however, it appears to apply to other senses as well, as Telles and Wetzels (2006: 246) refer to it as a *sensory inference* evidential.

([20]) Within the larger family, this may not be unique to Lakondê, depending on what further research on Southern Nambikwara nominals brings to light in reference to the claims in Lowe (1999: 282).

([21]) There appears to be a glossing error in the original text (Telles and Wetzels 2006: 249), referring to this form as ‘proximal’. I have taken the liberty to change the gloss to ‘distant’ here.

([22]) In Araujo (2004: 139), these two categories differentiate ‘evidential events’ from ‘neutral events’.

([23]) All the evidentials in Subset A are thus three-way portmanteaus; marking tense, source of information, and modality.

([24]) All Sabanê data is from Araujo (2004). Glosses have been standardized for this volume.

([25]) A further distinction between an individual perspective and a dual (speaker-plus-addressee) perspective has also been reported for Mamaindê by Kingston (1976: 50–4). But no data is given.

([26]) The visual evidential has become grammaticalized as a part of the person system, taking on the additional meaning of third person subject. This is limited to the present tense /-*lat*^{h}*a*/ morpheme, marking visual/firsthand information on present tense, third person subjects.

([27]) The two future tenses are not included here as they do not participate in evidentiality. The last two evidentials, reported thirdhand and general knowledge, do not distinguish between the available tenses.

([28]) All Mamaindê data in this chapter is from the author's own fieldwork, text collection, and participant-observation. Most of it can also be found in Eberhard (2009: 468–87). Glosses have been standardized for this volume. Data is given in phonemic form, and does not represent the current orthography.

([29]) Kingston (1987: 100–5), in the newest Portuguese version of his pedagogical grammar of Mamaindê, mentions three other variations to the general knowledge evidential (verificação coletiva), but these forms have not been corroborated by current speakers. It could be that these are older forms that have fallen out of use.

([30]) The take-over of a third person marker by a first person subject is a special application of the visual evidential and its 'certainty' extension in Mamaindê. This is similar to Aikhenvald's 'first person effect' (2004a: 220–32), where first person is assumed with some evidentials and their extensions.

([31]) While Kroeker utilizes 'collective verification' to refer to the viewpoint of both speaker and addressee, and 'customary' for things everyone knows, Kingston (1976: 52–4), on the other hand, employs 'collective verification' to refer to general knowledge. The latter is not limited only to speaker and addressee, but covers information known by all. Thus Kingston's 'collective verification' is roughly equivalent to Kroeker's 'customary' evidential.

([32]) While Kroeker (2001) refers only to the use of his 'customary' evidential for habitual events in Southern Nambikwara, in personal communication Kroeker (p.c.) has confirmed that this same evidential marks all myth as well.

([33]) While not a common category, general knowledge markers have been found elsewhere. Bergqvist (2015a: 3, citing Mithun 1999: 181) compares the Mamaindê general knowledge evidential to a clitic marking 'established facts' in Central Pomo.

([34]) Kingston (1976: 52–62) makes a passing reference to two subcategories within his 'collective verification' evidential: a visual and a non-visual. Unfortunately, no examples are given. Those subcategories are not included here.

([35]) Such evidentials also provide evidence for ways in which culture can influence language to the point of suggesting, through repetitive social behaviour, which kinds of linguistic structures are in fact needed.

([36]) At present this ranking is an untested hypothesis. It would seem likely, however, that if it does apply, it would pertain to older speakers more so than younger ones. Some of the youth are beginning to question the stories of their ancestors, due to outside influences. Thus the relative ranking of these information sources would be changing over time.

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Evidentiality in Tukanoan Languages

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Abstract and Keywords

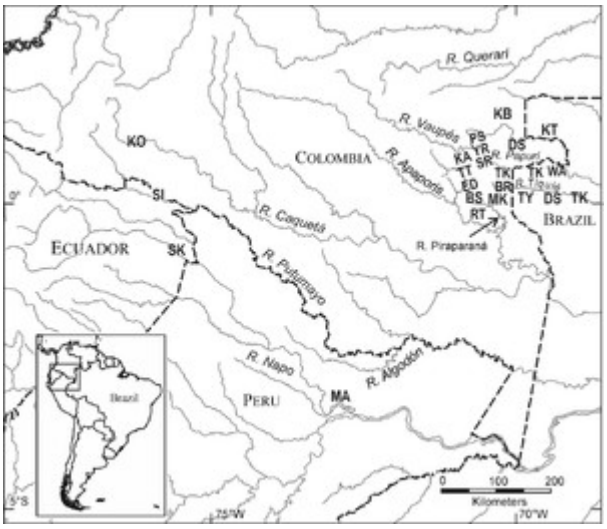
This chapter offers a comprehensive overview of evidentiality in the Tukanoan family of northwestern Amazonia. It begins with the organization of Eastern Tukanoan evidential systems, showing their place within a larger 'clause modality' paradigm and in the template of finite verbs. It then outlines the semantics of the four-to-five evidential categories typically found in these systems, considers their epistemic and mirative extensions, and discusses the coding of person and tense/aspect distinctions in the varied morphosyntactic realizations of evidentials as bound affixes or analytic constructions. The expression of evidential values in interrogatives, and observations on special cognitive contexts and speakers' awareness of and attitudes towards evidentiality are then addressed. A final section discusses evidentiality in Western Tukanoan languages and its diachronic development as a defining feature within the Eastern branch.

Keywords: Amazonian languages, Tukanoan language family, obligatory evidential marking, evidentials in interrogatives, mirativity, evidentiality and epistemicity, diachronic development of evidentials

18.1. Introduction

Among the many languages of Amazonia with grammaticalized evidentiality, few are as well known as those of the Tukanoan family (Map 18.1).[1] In particular, languages from the Eastern branch have been spotlighted on the world's evidential stage due to their particularly complex systems of obligatory source-of-information marking. First noted within Kaye's (1970) analysis of Desano verb morphology, and investigated further by Gomez-Imbert (1982b, 1986, 2003, 2007a); Barnes (1984); Malone (1988); and Stenzel (2008a), Tukanoan systems have been widely cited in theoretical and typological studies (among others Aikhenvald 2003a, 2003b, 2004a; Anderson 1986; De Haan 1999, 2001a, 2001b; Mushin 2001; Palmer 1986; Willett 1988) [2].

We begin our overview of Tukanoan evidential systems with an introduction to the family, information on regional contexts, and a summarized typological profile. §18.2 describes the organization of evidential systems, their place within the 'clause modality' paradigm and in the template of finite verbs in *realis* statements. It outlines the semantics of the evidential (p. 358) categories, considers their epistemic and mirative extensions, and discusses the interaction of evidentials with person and tense/aspect distinctions and their morphosyntactic realizations as bound affixes or analytic constructions. §18.3 focuses on the expression of evidentials in interrogatives; observations on special cognitive contexts and speakers' awareness of and attitudes towards evidentiality are addressed in §18.4. Finally, §18.5 discusses evidentiality in Western Tukanoan languages and its diachronic development as a defining feature within the Eastern branch.



Map 18.1. Tukanoan language groups

Legend: Western: MA=Máíhɨ̃ki; SK=Sekoya; SI=Siona; KO=Koreguaje. Eastern: BR=Bará; BS=Barasana; DS=Desano; ED=Eduria(Taiwano); KA=Karapana; KT=Kotiria; KB=Kubeo; MK=Makuna; PS=Pisamira; RT=Retuarã; SR=Siriano; TT=Tatuyo; TK=Tukano; TY=Tuyuka; WA=Wa'ikhana; YR=Yuruti

18.1.1. The Tukanoan family

Tukanoan languages are spoken in regions of Colombia, Ecuador, Peru, and Brazil, in northwest Amazonia. There are four languages in the smaller Western (WT) branch (see Figure 18.1). Máíhɨ̃kì (or Coto/Orejón) has an ethnic population of approximately 500 people living on the Napo River in Peru. The Sekoya, numbering some 1,100, live in adjacent regions of Peru and Ecuador on the Putumayo River. The Siona and Koreguaje also live in the Caquetá-Putumayo region, with approximately 600 Siona near the Sekoya in (p. 359) Ecuador and 300 more in Colombia. The Koreguaje number some 2,500, living exclusively in Colombia.

Figure 18.1. The Tukanoan Language Family (Chacon 2014: 282)

The sixteen Eastern Tukanoan (ET) languages are spoken in the upper Rio Negro region spanning the Brazil-Colombia border and encompassing portions of the Vaupés, Piraparaná and lower Apaporis river basins. The total ET population is approximately 26,000, the largest groups being the Tukano (or Ye'pa-masa), Kubeo, and Desano, with some 12,000, 8,000, and 4,000 respectively. The smallest group, Pisamira, has only fifty-eight people,[3] while Taiwano (or Eduria) and Yuruti have fewer than 200. The Bará (or Waimajã), Barasana, Karapana, Makuna, Tanimuka-Retuarã, Tatuyo, Pisamira, and Siriano populations range from several hundred to 1,000, and the Tuyuka, Wa'ikhana (or Piratapuyo), and Kotiria (or Wanano/Guanano) groups number between 1,500 and 2,000.[4] Aside from the smallest groups, most of the ET languages spoken primarily in Colombia are still used by a majority of their ethnic populations. Language use is also high for the Tukano in both Colombia and Brazil, where it has become dominant throughout the Vaupés subregion, contributing to language shift among populations such as the Desano and Wa'ikhana (Aikhenvald 2002; Stenzel 2005).[5]

(p. 360)

18.1.2. Shared and divergent features of Eastern-Western typological profiles

Both geographic distribution and contrastive grammatical features distinguish the Eastern and Western branches of the family. Major differences in phonology include segmental (WT) versus morpheme-based (ET) nasality and a lack of tone in some WT languages. Differences in lexicon and morphosyntax include the existence of pluractional and valency root alternations and a subclass of 'mutating' verb roots requiring distinct inflectional paradigms for major sentence types in WT. In contrast, evidentiality has developed as a primary component of ET verbal expression, and is a widely disseminated areal feature due to endemic contact both among ET groups and between ET groups and speakers of Arawak and Nadahup[6] languages (Aikhenvald 1999, 2002, Chapter 7 of this volume; Aikhenvald and Dixon 1998; Epps 2005, 2006; Epps and Stenzel 2013; Gomez-Imbert 1991). Yet the ET branch is far from homogenic, and a number of contrasting morphosyntactic and phonological features point to Vaupés and Pirá subregional profiles.[7] Laryngeal activity is one such contrastive feature: most Vaupés languages (TUK, WAI, TUY, KOT, DES) have both post-aspiration of word-initial voiceless plosives (phonemic only in KOT)

as well as allophonic pre-aspiration of root-internal voiceless consonants. Pre-aspiration is the equivalent of root-internal consonant gemination in the Pirá languages, where no post-aspiration occurs (Gomez-Imbert 1997, 2011a; Stenzel and Demolin 2013).

Tukanoan languages are highly synthetic, agglutinative, and almost exclusively suffixing. They display the nominative-accusative syntactic alignment found throughout the western region of lowland Amazonia (Birchall 2014: 244) and clear OV constituent order with subject positioning conditioned by discourse-pragmatic considerations. They employ both head and dependent marking of grammatical relations in clauses, have small case systems with a single core argument suffix and systematic differential object marking (Stenzel 2008b). The two basic word classes are nouns and verbs, with the existence of a separate class of adjectives being debatable. Nominalization processes are productively used for subordination, complementation, and qualitative/attributive noun modification. Tukanoan noun classification systems display features of both canonical 'gender' and 'classifier' types, with classification morphology performing concordial, derivational and referential functions (Gomez-Imbert 2007c). Verbal words can be extremely complex due to pervasive use of root serialization to express a variety of adverbial, aspectual, modal, and spatial distinctions (Gomez-Imbert 2007b; Ospina Bozzi and Gomez-Imbert 2013; Stenzel 2007). Finite inflection codes person, tense/aspect and 'clause modality' distinctions for different sentential moods, with evidentiality obligatorily marked in declarative (*realis*) statements. Prominent features of discourse include tail-head linking, switch-reference marking, pervasive nominalization of subordinate adverbial clauses, and constituent order variation related to topic and focus (Stenzel (p. 361) 2015a, 2016). More detailed typological profiles can be found in (Barnes 1999, 2006; Gomez-Imbert 2011a; Gomez-Imbert and Stenzel forthcoming).

18.2. The organization of ET evidential systems

18.2.1. Defining features of evidentials and their place in the verbal word template

Unlike languages that employ independent particles or second-position clausal clitics as evidential markers (see Aikhenvald 2004a: 67–8 for examples from other South American languages), ET evidentials are a component of finite verb morphology. They prototypically occur as bound morphemes, although some languages also have analytic constructions composed with auxiliary verbs (§§18.2.3–4). While innovations are found in particular languages, ET evidential systems generally display the following semantic and morphosyntactic characteristics:

i. evidentiality is an obligatory grammatical category of finite verb inflection;
ii. evidential morphemes occupy the final slots of the finite verbal word in *realis* statements, forming a subset of 'clause modality' markers indicating reality status (*realis/irrealis*), sentence type (declarative, interrogative, directive), evidentiality and modality;

iii. as inflectional markers, evidentials occur only once per clause, and prototypically fuse source-of-information with categories of person/number of the subject argument, as well as tense/aspect distinctions;
iv. evidentials have clausal scope and do not fall within the scope of predicate negation;
v. being markers of finiteness, evidentials never occur in subordinate (adverbial or complement) clauses, which are nominalizations that lose all finite distinctions except subject co-reference, and;
vi. evidential systems are composed of four to six contrasting semantic categories.

The basic template of the verbal word in Tukanoan languages is given in (1). Simple finite verbal words (2), are minimally composed of two obligatory elements: a lexical root and a 'clause modality' (position +3) suffix. However, verbal words are often much more morphologically complex (3), containing serialized roots and additional optional morphemes coding polarity, intensification, aspectual, and/or modal distinctions (positions +1 and +2).[8] The lexical stem may consist of a single verb root, a noun-incorporated root, a morphologically derived root, or a series of roots that together form a detailed predicative concept. Most ET languages fuse distinctions of person and gender (for third singular referents) in 'clause (p. 362) modality' suffixes, but a small set of ET languages from the Pirá subregion marks person separately on the left (position -1) or right (position +4) edge (see §18.2.4).

(1)

The basic ET template for finite verbs in *realis* statements

(-1)		(+1)	(+2)	+3	(+4)
person/ gender	ROOT(s)	negation intensification emphasis	aspect modality	evidential + tense/aspect + person/gender	person/ gender

(2) [9]

a. Tuyuka (Barnes and Malone 2000: 441)
waa-**wi**
go-VIS.3SGM
He left.

b. Kubeo (Chacon 2012: 345)
kai=e oko hitabɨ-ke popo-**wɨ**
all=MASS water lake-origin dry-N3AN
All the water from the lake has dried.

(3) Tatuyo (Gomez-Imbert and Hugh-Jones 2000: 334)
ká-~jáá-róka-~kúbú-ehá-**jú-pá**-o
STAB-fall-be.immobile-arrive-INDIR-REP-3sgf
She fell to the ground immobile (it's said, reported).

18.2.2. Evidentials as a type of 'clause modality'

The obligatory markers in position +3 of the template in (1) code the three major sentence types: statements, questions, and directives. Different sets of markers code each type and are, for the most part, mutually exclusive, forming a single larger paradigm of verb-final finite morphology.[10] 'Statement' and 'question' sentence types also have distinct subsets of markers for *realis* and *irrealis* contexts. *Realis* contexts are those coded as 'past' or 'present' in languages for which temporal values are proposed, and 'perfective' or 'imperfective' for those in which analyses favour aspectual readings. *Irrealis* covers 'future-like' contexts (which include markers of intention and prediction), conditionals, and conjectures. In ET languages, position +3 markers are, by default, markers of *realis*, as Gomez-Imbert first noted: 'The Tatuyo (p. 363) speaker must express how he or she acquired knowledge of that which is stated when it is viewed as *really existing* or *having existed*' (1986: 119, emphasis added).

In (4) we see a set of sentence types with corresponding contrastive verb-final markers in KOT, and the 'clause modality' paradigm is summarized in Table 18.1.

(4)
Contrasting sentence types and 'clause modality' markers in Kotiria (Stenzel 2013a: appendix 1)

a. *realis* statement with visual evidential marker

hí-phiti-ro	chía	~dá-ta-**ra**
COP-COLL-SG	food	get-come-**VIS.IMPERV**.2/3

Everyone brings a lot of food (on festival days).

b. *irrealis* statement with prediction marker

jɨ'ɨ́	~bichá-ré	wa'í-~kídá-~wáhá-í	wa'á-i-**ka**
1SG	today-OBJ[11]	animal-PL-kill-1/2m	go-1/2m-**PREDICT**

Today I'm going (to go) hunting.

11

c. *realis* question with default interrogative marker

~bɨ'ɨ́	do'sé	joá	~dá-**ri**	~bɨ=jahíri~pho'da-re
2sg	WH	do/make	get-**INTER**	2sg.POSS=heart-OBJ

How did you take out your heart?

d. *irrealis* question with supposition interrogative marker

jabá-rí-ró	hí-**ka-ri**	~hí'da
WH-NOMZ-SG	COP-**SUPP-INTER**	EMPH

Who/what (in the world!) could that be?

e. directive with imperative marker

~bɨ'ɨ́	a'rí-thí=~be're	wa'í-~kídá-~wáhá-gá
2sg	DEM.PROX-stick=COMIT/INST	animal-PL-kill-**IMP**

Go hunt with this stick.

Table 18.1. The ET 'clause modality' paradigm

Sentence type	**Marker types**	
Statement	*realis*	evidential: visual, non-visual, inference, reported, quotative
	irrealis	assumed
		intention, prediction, speculation
Question	*realis*	visual, non-visual, indirect
	irrealis	speculation
Directive		command, offer, exhortation, permission, warning, etc.

(p. 364)

18.2.3. The semantics of evidential categories

We still lack detailed descriptions for a number of ET languages. However, drawing from available resources and utilizing Aikhenvald's (2004a: 63–4,188–91, 2012a: 249) category typology for complex evidential systems, we find that ET evidential systems are generally

analysed as having between four and six contrastive semantic categories, roughly corresponding to types C1, C2, D, and a logically possible 'E' category that includes a sixth, 'quotative' distinction (Aikhenvald 2004a: 65). Table 18.2 offers a summarized overview of the ET systems, including RET, although according to Strom (1992: 90–1), RET markers expressing non-visual, reported, and assumed information are both optional and infrequently used; Eraso (2015: 272–3) considers them epistemic rather than evidential in nature. Some languages appear more than once in Table 18.2 if there are differing analyses of their systems in the literature.

18.2.3.1. Visual

Visual is the most frequently used category, indicating the speaker's firsthand/direct knowledge of the event or state related in a *realis* statement. A number of authors (Kaye 1970; Gomez-Imbert 2007a; Chacon 2012: 270; Silva 2012: 256) analyse visual evidence as formally unmarked, morphemes in this category contributing only person and tense/aspect values. This interpretation helps explain the use of visual markers as components of other evidential constructions (e.g. the non-visual and inference analytic constructions discussed in the following sections). Nevertheless, when visual morphemes occur as the sole finite markers on a verb, the default evidential *interpretation* is that of firsthand or visual knowledge, establishing a relative contrast to other, more marked categories.

18.2.3.2. Non-visual

Non-visual is the more marked category of firsthand evidence, occurring in statements based on sensory input other than sight. Auditory information is by far the most common type of non-visual evidence, but in some languages, input may also be smell, taste, or touch. The use of non-visual markers implies that visual sensory input is unavailable, either because the nature of the predication itself precludes direct observation, e.g. talk about one's internal emotions or sensations (5a), or because location or circumstance prevent visual confirmation, even if the verb itself involves non-visual perception, e.g. smell (compare 5b–c).

(5)

a. Yuruti (Kinch and Kinch 2000: 479)

~jabika	diá-soko-a-**tiwɨ**	jiɨ
yesterday	become.sick-begin-PST.REC-NVIS.1/2	1sg

I started getting sick yesterday.

b. Tatuyo (Gomez-Imbert 2003: 12 and fieldwork notes)

~bi-hɨtí-~júu-bihá-ø-ø

2sg-smell-be.good-QUAL-VIS-IMPERV

You smell good. (stated with a visual marker when perceived in daylight)

c. ~bi-hití-~júu-bɨhá-**kɨ-pɨ**
2sg-smell-be.good-QUAL-NVIS-IMPERV
You smell good. (stated with a non-visual marker when perceived in the darkness)

(p. 365)

Table 18.2. Distribution of evidential categories in ET languages

Number of Distinctions	Categories	Languages
3	(optional) non-visual, assumed, reported	RET
4 (C1)	visual, non-visual, inference, reported	DES TUK BAS EDU KAR MAK BAR TUY
4 (C2)	visual, inference, assumed, reported	SIR WAI KOT KUB DES
5 (D1)	visual, non-visual, inference, assumed, reported	TUY YUR KOT
5 (D)	visual, visual distal, non-visual, inference, reported	TAT
6 (E)	visual, non-visual, inference, assumed, reported, quotative	DES

Sources: DES (four categories: Kaye 1970 (C1); Miller 1999 (C2), six categories: Silva 2012: 253–78), TUK (Ramirez 1997a: 120–41), BAS (Gomez-Imbert 1997: 279–315), KAR (Gomez-Imbert 1999: 76; Gomez-Imbert and Hugh-Jones 2000: 336), MAK (Smothermon, Smothermon, and Frank 1995: 46–52; Gomez-Imbert 1999: 76), EDU, BAR (Gomez-Imbert fieldwork notes), SIR (Criswell and Brandrup 2000: 400), KUB (Morse and Maxwell 1999: 32–8; Chacon 2012: 291–3), WAI (Waltz 2012: 132; Stenzel fieldwork data), TUY (five categories: Barnes 1984; Malone 1988; four categories: Vlcek 2016: 176), YUR (Kinch and Kinch 2000: 479), KOT (four categories: Waltz and Waltz 2000: 456; five categories: Stenzel 2013: 272–80, 2008a), TAT (Gomez-Imbert 1982: 61,1986, 2003, 2007a).

Uses of the non-visual vary and may overlap with other categories and may depend on the semantics of the verb. Kaye's initial discussion (1970: 35–40) of the non-visual *-ko* in DES notes that:

> **i.** *-ko* does not occur with most verbs that denote potentially visible events, but can occur with actions in progress not observed by the speaker but about which he or she has little doubt:
> **ii.** *-ko* is obligatory with verbs of emotion, feeling (be hurt/sick/sad, etc.), or modals such as the desiderative *-dia*, if the subject is first person; (p. 366)
> **iii.** *-ko* may be used with verbs referring to events interpreted as concrete facts: e.g. *~basi-ko-* 'to know (a language)' but not as innate processes, such as *baja-~basi-* 'to know how to dance';
> **iv.** *-ko* appears in future statements with third person subjects but when used with first or second person, takes on a predictive sense after a conditional, adding a flavour of doubt.

This 'predictive' sense is reminiscent of BAS segmental (but not tonal) homophony between non-visual *-ro* and admonitive *-ro* used in warnings (Gomez-Imbert 1997: 310–11). A contrasting situation occurs in TAT, where statements involving verbs of emotion and feeling and first person subjects can occur with either visual or non-visual markers, indicating different degrees of intensity: the visual (6a) indicates superficial pain and the non-visual (6b), pain that is deep and intense. In (7), we see a rare example of the non-visual *-kɨ* with a verb of perception. A female dog was lying outside a house, making noise as she moved around, which provoked her mistress to utter the order in (7a). The dog stopped for a moment but then resumed making noise, prompting her mistress's comment in (7b).

(6) Tatuyo (Gomez-Imbert 2007a: 69)

a. ~jɨ=paáro ~púdí-ø-ø
1sg-stomach hurt-VIS-IMPERV.3INAN
My stomach hurts.

b. ~jɨ=paáro ~púdí-**kɨ**-**pɨ**
1sg-stomach hurt-NVIS-IMPERV.3INAN
My stomach hurts inside.

(7)

a. júgi-~ké-ha! ~kádi-ja!
move-NEG-IMPER sleep-IMPER
Stop moving! Go to sleep!

b. ápi-~kéti-**ki**-~**bo**
listen-NEG-NVIS-IMPERV.3sgf
She doesn't listen. (I hear)

Though many ET languages have synthetic non-visual evidence markers of the type seen in (5)–(7), some employ analytic constructions. In KOT, non-visual evidence can only be expressed by a construction in which the main predicate event—in (8), 'the kidnappers coming'—is a nominalized complement to a serialization: *koa-ta* 'make noise+come', indicating the 'sound-of-X-happening' with associated cislocative motion (towards the speaker). This fixed serial verb combination itself takes final evidential inflection from either the visual or assumed categories, and the interpretation of 'non-visual' evidence is the result of the construction as a whole, representing a fifth semantic contrast within the system (see Table 18.7). (p. 367)

(8)
Kotiria (Stenzel 2013a: 270)

~dubí-a	~ja'á-~ida	tá-á	~dí-a
woman-PL	catch-NOMZ.PL	come-3pl	be.PROG-3pl

koá-ta-ra
make.noise-come-VIS.IMPERFV.2/3
Women-kidnappers are coming! (the speaker hears them approaching in the dark)

Malone (1988: 129) states that a number of ET languages, including DES, SIR, YUR, BAR, MAK, and TUK, have specific and highly marked 'auditory evidence' constructions alongside synthetic suffixes. The shape of these constructions is either [stem-NVIS-VIS] or [stem-PERSON (nominalization) AUX-NVIS-VIS]; the auxiliary generally being the verb 'do', as in (9).

(9)
a. Tukano (Ramirez 1997a: 131)

~ahú~pea	~badî-de	~du'dî-~**da'**	**weé-sa-~ba**
biting.gnats	1pl.INC-OBJ	bite-SS	do-NVIS-3AN.pl

Gnats are biting us! (the insects are too small to see, but the bites can be felt)

b. Desano (Silva 2012: 257)

~igi	pea	tabe-**gi**	**i-ku-~bi**
3sgm	firewood	chop-3sgm	do-NVIS-3sgm.IMPERV

He's chopping firewood. (the speaker is inside a house and can only hear the chopping going on somewhere else)

However, neither of these templates mirrors the KOT [stem-PERSON (nominalization) *koa-ta*-VIS/ASSUM] construction, which Stenzel (2015b) analyses as a recent grammaticalization[12] of a serial verb construction with highly transparent lexical components.

Cross-linguistic analyses (Anderson 1986; De Haan 2001b; Willett 1988) identify ‘seem’ or ‘be perceived’ roots as the most common lexical sources for non-visual markers, and both Malone (1988) and (Aikhenvald 2002, 2004a, 2011a) point to grammaticalization of serializations with such roots as the likely origin of ET non-visual synthetic suffixes. No other ET language displays the less common grammaticalization path of KOT, with a non-visual construction developing with a lexical ‘make-noise’ root. However, there are areal parallels in two regional Nadahup languages: Hup (Epps 2005: 625–8, 2008: 537–40), and Yuhup (Ospina Bozzi 2002: 182–3; Silva and Silva 2012: 98),[13] raising the hypothesis that contact diffusion may be involved in the KOT innovation.

(p. 368) ### 18.2.3.3. Inference

Inference (‘apparent’) markers indicate conclusions based on observable results. In ET languages, the inference category presumes *external* evidence, in contrast to non-visual or assumed, categories for which evidence may be internal (e.g. a physical sensation) or internalized (e.g. personal experience or collectively shared knowledge). In many ET evidential paradigms, the external nature of inference precludes its use with first-person subjects (Barnes 1984). Nevertheless, in some languages inference markers can occur with first-person subjects with mirative-type interpretations (see §18.2.3.6).

As with non-visual, some ET languages, including DES, TUK, KOT, and WAI, use analytic constructions for inference. Both inference constructions in (10) have main predicate nominalization, by *-kɨ* in (10a) and *-ri* (10b), and use the copula as the auxiliary verb, with final marking from the visual category.

(10)

a. Tukano (Ramirez 1997a: 140)

jeé-de	wi’í-pɨ	akobohó-~ka’-’**kɨ**	**~dĩî-a-pɨ**
POSS-OBJ	house-LOC	forget-ASS-sgm	COP-PAST.REC-VIS.N3

I’ve forgotten my things at home! (male speaker observing he doesn’t have his things with him)

b. Wa’ikhana (Stenzel, fieldwork data)

i’ya-do	~dii-**di**	**ihi-di**
eat-3sgm	be.PROG-NOMZ	COP-VIS.PERV.2/3

He was eating. (observing a man with a plate in his hand).’

18.2.3.4. Reported and quotative

Reported (‘secondhand’ or ‘hearsay’) markers indicate information obtained from others, and some ET languages, such as KOT, have two forms distinguishing referential from non-referential secondhand sources (Table 18.7; Stenzel 2013a: 273–4). Similarly, Silva (2012: 257–8) analyses DES as having a distinct quotative, the default marker for folklore and ‘thirdhand’ information such as rumours or news that cannot be verified, contrasting with

a reported marker for information conveyed by someone who might have witnessed it firsthand.

While most languages have synthetic reported markers, in KUB, a clitic =*ya* is concatenated at the end of the verbal word, after all other inflectional affixes. It can be combined with the firsthand/direct (visual) markers and with forms in future tense, but cannot occur with inference or assumed (Chacon 2012: 279–84, and p.c.).

Speakers of ET languages generally do not employ reported markers for indirect speech reports, preferring direct quotation of another person's speech as a fully finite sentential complement of a speech verb. Direct quotation preserves the original evidential reference, freeing the current speaker from the 'attenuated certainty' epistemic overtones associated with reported markers. An exceptional case is TAT, where in everyday speech, indirect speech reports can be the equivalent of direct quotation. This may be due to the existence of an epistemic prefix *ká-* (§18.2.3.6), which independently attributes certainty even when used with the reported markers.

Some analyses indicate restricted use of reported markers with first or second person subjects (e.g. Kaye 1970: 32). In TAT, on the other hand, the combination of a reported suffix with (p. 369) first or second person reports an action or state attributed to the speaker by others (11a) or the addressee (11b), a roundabout way of reporting gossip.

(11) Tatuyo (Gomez-Imbert 2007a: 75)

a. ~ki-re, ki-ji-bóo-**jú-pá-o** [ɟúpóo]
   3sgm-OBJ 3sgm-1sg-want-INDIR-REP-F
   I (F) want him (it's said).

b. áto ~bi-ká-wéhe-bóo-**jú-pá-o** [ɟúpóo]
   here 2sg-STAB-garden-want-INDIR-REP-F
   You wanted a garden here (they say).

18.2.3.5. Assumed

Perhaps the most interesting, and in some ways enigmatic, ET evidential category is assumed.[14] First, we find that the semantics of the assumed category may intersect with semantic territories covered by other categories, principally non-visual (Malone 1988: 132), and can be based on a broad range of non-observable evidence, including inference based on logical reasoning or previous experience, as well as internalized, shared knowledge about the world (Givón 1982: 44–5; Willett 1988: 61).

In those ET languages lacking a non-visual category, assumed becomes the umbrella category for all non-observable source information, while in languages with both assumed and non-visual categories, interesting semantic divisions of labour are observed. In TUY, non-

visual markers are used to refer to the speaker's own internal sensations (12a) and assumed markers are used for internal sensations of others (12b), whereas in KOT (13), assumed markers are used for the internal sensations of *any* referent, and non-visual is restricted to situations involving external, and primarily auditory, evidence (see (8) in §18.2.3.2).

(12) Tuyuka (Barnes 1984: 260)

a. ~basi-ri-ga
know-NEG-NVIS.PRS.1/2
I don't know.

b. ~basi-ri-**ki**
know-NEG-ASSUM.PRS.3sgm
He doesn't know.

(13) Kotiria (Stenzel 2013a: 436; 2017: 210)

a. ~phurí-ji'di-a-**ka**
hurt-INTENS-AFFEC-ASSUM.IMPERV
It hurts a lot.

b. ~de ~kha'be-era-**a**
NEG want-NEG-ASSUM.PERV
(She) didn't want (to go with her captor).

(p. 370)

Secondly, the morphological patterns employed with assumed indicate that this category occupies a semantic 'border region' between *realis* and *irrealis*. In languages such as TAT and BAS (Gomez-Imbert 2007a), assumed is morphologically similar to the unmarked visual and to future-like constructions, and is analysed as part of *irrealis*.[15] In languages such as KOT, the assumed imperfective *-ka* can co-occur with modal markers such as the desiderative *-dua* and dubitative *-bo* to form wishes or speculations, but otherwise patterns morphologically with other *realis* markers and is arguably an evidential category.

18.2.3.6. Hierarchies, epistemic values, and other semantic extensions

Barnes (1984: 262) states that speakers of TUY are sensitive to the hierarchical organization of evidential categories, always coding statements with the highest level of information available, in the order: visual > non-visual > inference > reported > assumed. Ramirez's (1997a: 121) analysis of the hierarchy in TUK inverts the inference and reported categories, grouping the latter with visual and non-visual as categories of sensory evidence, while Stenzel (2013a: 294) argues that the KOT hierarchy parallels TUY for the

firsthand categories—visual > non-visual > inference—and that these rank above reported. However, assumed, ranked low in the TUY hierarchy, is arguably equal to visual in the KOT hierarchy, given its use in statements based on historical or collective, shared knowledge.

ET languages seem particularly attuned to the *sensory* (sight > others), and *directness* (sensory knowledge > inference) semantic parameters for evidential systems proposed by Givón (1982: 44). These parameters contribute to hierarchical organization, underscore the deictic nature of evidentials, and provide a cognitive basis for interpretations of their epistemic extensions (De Haan 2001a; Floyd 1999). Kaye attributes epistemic values to DES evidentials, stating that 'evidentials [form] a scale of *certainty* about a given event [indicating] how much weight the speaker is willing to place on the fact that a given event is *true*' (1970: 42, emphasis added). He moreover argues that speakers do not question the veracity of visual statements.

The fact that the dubitative morpheme *-bo* can occur in inference and assumed statements in KOT but is unacceptable with visual and non-visual is additional evidence that direct sensory marking implies default 'truth' interpretation that cannot be morphologically attenuated (Stenzel 2013a: 295). As for reported markers, as mentioned earlier, these can be used to defer epistemic responsibility away from the speaker, the case in (14). As she was recounting an historical narrative, the elderly KOT speaker made this rather harsh remark about a neighbouring village. Her use of the reported marker permits her to utter the comment but distance herself from responsibility for the negative assessment. (p. 371)

(14)

Kotiria (Stenzel 2017:239)

a.	~a=tó	dií-~khoa-ro	hí-ro	~dí-**yu'ka**	tó	
	so=REM	blood-be.lying-SG	COP-SG	say-REP.QUOT	REM	
	~a=hí-a	tí-~da	~kha'báchi-a	phayí	~dí-**a**	tó-re
	so=COP-3pl	ANPH-PL	fight-PL	a.lot	be.PROG-ASSUM.PERV	REM-OBJ

So (they say) it's a place of spilled blood. That's why the people there are always fighting.

Evidentials do not have similar implicit epistemic interpretations in TAT and BAS; these languages have an innovative 'stabilizer' prefix *ká-* (morphological in TAT, tonal in BAS[16]), which has explicit epistemic value. Table 18.4 shows that TAT *ká-* is compatible only with the perfective (*-wɨ*) paradigms of visual and non-visual distant evidentials. Inference and reported take a different final paradigm, unmarked for perfectiveness, but are *interpreted* as perfective because they accept *ká-*, even though the BAS inference forms are composed with the visual imperfective suffixes (see Table 18.5). The 'stabilizer' occupies the slot immediately before the lexical base and its presence implies that the speaker is relating a definitive, final version of a situation, indicating that the action or state has reached a level of stability—much like a property—that attributes 'truth' value. Normally, speakers begin to use *ká-* some five or six days after they had access to the information, but immedi-

ate use of *ká-* is occasionally observed.[17] Recounting of mythology oral literature in general is told using the 'stabilizer + reported' conjugation in TAT,[18] and the reported in BAS.

Finally, although there is still much to learn about how evidentials are employed to code additional semantic meanings, one recognizable pattern involves the combination of inference markers and first person subjects, resulting in 'unexpected knowledge' or 'mirative' interpretations (DeLancey 1997). (15a), from a KOT narrative, is uttered by a long-dead creature who has just been magically revived. The sentence has both a first person subject and the rare combination of an inference construction marked by a final assumed suffix. Use of the assumed *-ka* is unsurprising, as this suffix marks all statements related to the speaker's feelings—here, the creature's sensation of having been asleep. But its use as the final marker in the inference construction is unusual, seemingly coding the creature's great surprise at finding himself awake (alive) again. In (15b), the WAI speaker uses an inference construction with a first person referent to imply that getting drunk really wasn't his fault—he just didn't realize he was drinking sweet potato beer! (p. 372)

(15)

a. Kotiria (Stenzel 2013a: 290)

jɨ'ɨ́	~kharí-jɨ'dɨ-a	wa'á-**ri**	**hí-ka**
1SG	sleep-INTENS-AFFEC	go-NOMZ	COP-ASSUM.IMPERV

I've been asleep a long time!

b. Wa'ikhana (Stenzel fieldwork data)

~sɨ'di	siti-wiha	wa'a-dɨ	~japi-ko
drink	smell-go.outward	go-sgm	sweet.potato-CL:liquid

ihi-**di**	**ihi-di**
COP-NOMZ	COP-VIS.PERV.2/3

I became drunk (because apparently) it was sweet potato beer.

These examples illustrate the kinds of special extended semantic readings—of surprise, unintentionality, or conscious unawareness—that may result when inference, assumed, or non-visual markers occur with first person subjects, what Aikhenvald (2004a: 219–31) analyses as types of 'first person effects'.

18.2.4. The grammatical expression of evidentiality, person, and tense/aspect distinctions

Although some ET languages use analytic constructions for certain evidential categories, the most common—and for many languages *only*—means of expression is through synthetic inflectional markers that fuse evidential values with tense/aspect values and sometimes person distinctions. We turn now to a few representative ET systems, identifying areas of regularity and innovation.

Table 18.3. Tuyuka evidentials in synchronic and diachronic perspectives

	Visual		**Non-Visual**		**Inference**		**Assumed**		**Reported**	
PAST	B.	M.	B.	M.	B.	M.	B.	M.	B.	M.
3 SGM 3SGF 3 PL.AN 1/2, INAN	*-wi* *-wo* *-wa* *-wɨ*	***-w**-i* *-o* *-a* *-ɨ*	*-ti* *-to* *-ta* *-tɨ*	***-ti**-i* *-o* *-a* *-ɨ*	*-ji* *-jo* *-ja* *-ju*	***-yu**-i* *-o* *-a* *-ø*	*-~hi-ji* *-~hi-jo* *-~hi-ja* *-~hi-ju*	***~hi-ju**-i* *-o* *-a* *-ø*	*-ji-gɨ* *-ji-go* *-ji-ra* *-ji-ro*	***-yu**-gɨ* *-go* *-ra* *-ro*
PRESENT	B.	M.	B.	M.			B.	M.		
3 M.SG 3F.SG 3PL 1/2, INAN	*-i* *-yo* *-ya* *-a*	***-ja**-i* *-o* *-a* *-ø*	*-gi* *-go* *-ga* *-ga*	***-ga**-i* *-o* *-a* *-ø*	***-~hi**-gɨ* *-go* *-ra* [a]		*-ki* *-ko* *-ku-a* *-ku*	*-ku-i* *-o* *-a* *-ø*		

([a]) Barnes analyses the INFERENCE category as incompatible with first person; however, see §18.2.3.6 for examples of INFERENCE markers used with first person in other languages.

We begin with Tuyuka, probably the most well-known ET system. Table 18.3 combines information from Barnes's (1984: 258) seminal presentation of the full synchronic paradigms (p. 373) of (gender-fused) forms and Malone's (1988: 126–7) diachronic analysis of their underlying evidential + gender values.

Malone's analysis identifies distinct evidential/tense formants for the firsthand categories: visual past/present *-w*/*-ya* and non-visual past/present *-ti*/*-ga*. However, areas of formant overlap occur in the remaining three categories: *-~hi* in both past assumed and present inference forms, and *-ju* in the past assumed inference and reported forms. Indeed, *-ju* occurs in the same three categories in YUR (Kinch and Kinch 2000: 479) and SIR (Criswell and Brandrup 2000: 398), while in KOT and WAI *-ju/jo* also surfaces in the reported forms (Table 18.7). The fact that reflexes of *-ju* are found throughout ET languages and are completely absent in WT suggest the origin of *-ju* as an innovative marker of non-firsthand or indirect knowledge in the ET branch. Indeed, *-ju* is analysed in just this way in the inference and reported forms in DES (Kaye 1970: 27), TAT and BAS (Tables 18.4 and 18.5).

The TAT evidential system (Table 18.4) was first described by Gomez-Imbert (1982a: 55–62) as opposing direct/indirect information sources (the two broad subcategories identified in De Haan 2013a), the latter marked by *-ju*. The TAT system has four basic categories—visual, non-visual, inference, reported—plus a 'visual distal' distinction, likely a recent innovation attributable to the grammaticalization of a serialized root (see §18.5.2). As noted in §18.2.3, the TAT visual is the unmarked member of the set, with a default value of *-Ø;*[19] and has the same (im)perfective final suffixes as the visual distal category, whereas the non-visual *-kɨ* takes a slightly different imperfective paradigm. Inference and reported share the 'indirect' *-ju* suffix but take different final paradigms: person-marking for inference while the reported formative *-pá* is followed by cross-referencing class markers.

BAS (Table 18.5) also has four basic categories with (im)perfective distribution parallel to TAT. The formative *-a* marks visual imperfective; perfective is *-Ø*. The non-visual formative *-ro* is cognate neither to TAT nor TUY. Inference and reported share the formative *-ju* but have different final paradigms. Inference takes the same set of person markers found in visual imperfective, while reported shows interesting variations: the *-hu* formant apparently distinguishes reported from inferential with neutralized person distinctions, although it alternates with *-ho* 'FEM' and with *-ha-~ra* 'PL'; some speakers cliticize the pronoun *~íi* '3sgm': *-ju-hu ~íi* → *-ju-~híi*. Four-category systems such as the two profiled above occur in about half of the ET languages, as shown in Table 18.2.

Finite ET verbal markers, which have evidentiality as one of their semantic components, also generally index the grammatical subject of the clause (but see discussion of TAT later in this section). Paradigms of suffixes make three- or four-way person distinctions coded primarily by final vowel alternations as follows:

i. Third person animate singular, with gender agreement:
'MASC' coded by /i/

‘FEM’ coded by /o/

ii. first and second person and inanimates, a residual ‘other’ category, coded by /ɨ/
iii. Animate plural, coded by /a/ in four-value systems, otherwise ‘AN.PL’ is subsumed within the ‘other’ category.

(p. 374)

Table 18.4. The Tatuyo evidential system and verbal word template

PERSON + ASPECT						**EVIDENTIALS**				
		O	**S/A**	**STAB**	**BASE**[a]	**VIS DIST**	**VIS**	**NVIS**	**IN-FER**	**REP**
IMPERV	1SG	*ji-*	*ji-*	**ká-*		***-rahá*** *-ø*	***-ø****-ø*	***-kɨ-****pɨ*		
	1 PLINC	*~ba-* *di-*	*~ba-* *di-*							
	1 PLEXC	*ha-*	*ha-*							
	2SG	*~bɨ-*	*~bɨ-*							
	2PL	*~bɨ~* *háa-*	*~bɨ~* *háa-*							
	3 ANM	*kɨ́-*				***-rahá*** *-~bi*	***-ø****-~bi*	***-kɨ*** *-~bi*		
	ANF	*kó-*				*-~bo*	*-~bo*	*-~bo*		

	AN-PL	*~dá-*				*-~ba*	*-~ba*	*-~ba*			
	INAN					*-ø*	*-ø*	*-pɨ*			
PERV	1SG	*jɨ-*	*jɨ-*	*±ká-*		***-rahá*** *-wɨ*	***-ø****-wɨ*		***-jú*** [b] ***-pá***	***-jú-pá****-ɨ*	
		1PLINC	*~ba-di-*							*~ba-di-*	*-o*
	1PLEXC	*ha-*	*ha-*							*-~ra*	
	2SG	*~bɨ-*	*~bɨ-*							***-jú-pá****-ɨ*	
	2PL	*~bɨ~háa-*	*~bɨ~háa-*							*-o*	
										-~ra	

	3 ANM	*kɨ̂-*					***-rahá*** *-~wi*	***-ø*** *-~wi*	***-jú****-pí*	***-jú-pá****-ɨ*
	ANF	*kó-*					*-~wo*	*-~wo*	*-pó*	*-o*
	AN-PL	*~dá-*					*-~wa*	*-~wa*	*-pá*	*-~ra*
	INAN						*-wɨ*	*-wɨ*	*-pá*	*-e*

([a]) The lexical ‘base’ may be composed of a single root or set of serialized roots.

([b]) The ‘indirect’ *-ju* has an allomorph *-hu.*

(p. 375)

Table 18.5 The Barasana evidential system and verbal word template

PERSON + ASPECT CODING				**ROOT(S)**		**EVIDENTIALS**			
		S/A	**STAB**			**VIS**	**NVIS**	**INFER**	**REP**
IMPERV	1SG	*H*			***-rujú^{b}-***	***-a****-ha*$_{HL}$	***-ro-****hɨ*$_{HL}$		
	1PLINC								
	1PLEXC								
	2SG								
	2PL								
	3 ANM	*HL*				***-a****-~bi*$_{HL}$	***-ro-~****bi*$_{HL}$		
	ANF	*-~bo*$_{HL}$				*-~bo*$_{HL}$			
	ANPL	*-~ba*$_{HL}$				*-~ba*$_{HL}$			
	INAN	*-ha*$_{HL}$				*-hɨ*$_{HL}$			
PERV (visual only)	1SG	*H*	*Polar Tone*		***-rujú-***	***-ø****-bɨ*		***-ju^{a}-ha$_{HL}$***	***-ju-hu$_{HL}$***
	1PLINC								

	1PLEXC								
	2SG								***-ju-hu$_{HL}$***
	2PL								***-ju-hu/ho$_{HL}$***
	3 ANM	*HL*				***-ø-~bi***		***-ju-~bi$_{HL}$***	***-ju-hu$_{HL}$/ ~híi***
	ANF					*-~bo*		*-~bo$_{HL}$*	***-ju-hu/ho$_{HL}$***
	ANPL					*-~ba*		*-~ba$_{HL}$*	***-ju-hu/ ha-~ra$_{HL}$***
	INAN					*-bɨ*		*-ha$_{HL}$*	***-ju-hu$_{HL}$***

([a]) The ‘indirect’ *-ju* has an allomorph *-cu*.

([b]) The serialised root *-rujú-* ‘to appear visually’ is the semantic equivalent of the grammaticalised *-rahá-* ‘visual distant’ in Tatuyo.

Synchronic reflexes of these vowel-coded distinctions are found in WT and ET agreement paradigms, as Table 18.6 illustrates with equivalent sets of *realis* past tense markers from a sample of languages.

Though person is prototypically fused with evidential formatives, several ET languages of the Pirá subregion employ rather different person marking strategies. Returning to Tables 18.4 and 18.5, we see both left-edge prefixal (morphological in TAT, tonal in BAS) agreement for first and second ('deictic') person, in additional to right-edge, non-fused suffixal agreement for the four-way third person ('non-deictic') distinctions shown in Table 18.6. Such non-fused person marking affects the interpretation of markers in the 'other' category, wherein homophonous forms indexing inanimates and first and second person *-pɨ, -wɨ* (Table 18.4) and *-ha, -bɨ* (Table 18.5) cannot be analysed as having the same semantic values. With first and second person coded prefixally, suffixes mark only aspect, while suffixes code both aspect and person agreement for inanimates.[20]

Table 18.4 moreover shows that of the three morphological slots preceding the lexical base in TAT, two are reserved for person. In declarative statements, the left-most slot is for prefixes cross-referencing animate O arguments of transitive verbs, followed (p. 376) by prefixal 1/2 markers,[21] making TAT the ET language with the most extensive person-marking system.

Table 18.6. Subject agreement paradigms with three and four-way distinctions

	Ecuadorian Siona (Assertion.PST)		**Tukano (Visual. PST)**	**Yuruti (Visual. PST)**	**Kubeo (Visual. PST)**
3SGM	*-bi*	3SGM	*-a-~bi*	*-wi*	*-bi*
3SGF	*-o*	3SGF	*-a-~bo*	*-wo*	*-biko*
1/2, 3PL.AN, INAN	*-wɨ*	1/2, INAN	*-a-pɨ*	*-wɨ*	*-bɨ*
		3PL.AN	*-a-~ba*	*-wa*	*-~ba*

Sources: SIO (Bruil 2014: 181), TUK (Ramirez 1997: 120), YUR (Kinch and Kinch 2000: 479), KUB (Ferguson et al. 2000: 364; Chacon 2012: 270)

In the related statement and question in (16), we see words that are complete clauses, thanks to this cross-referencing system, incorporation of the inanimate object 'coca', and verb serialization. Both words/clauses moreover have the epistemic prefix *ká-*, which occurs only in *realis* perfective forms (see §18.2.3.6). In (16b), the person-neutralized interrogative marker occurs in the verb-final slot, forcing a shift in subject agreement *~dá-* to the prefixal position.

(16)

a. Tatuyo (Gomez-Imbert 2011b, 2014)
kí–ká-pátu-~dúú-tíhá-ga-~kéti-~bahúu-~koá-**jú-pá-~ra**
3ANM-STAB-coca-feed-do.last-DESID-NEG-INTENS-EMPH-INDIR-REP-AN.PL
They really didn't want to feed him with coca for the last time (it's said, reported).

b. kí-~dá-ká-pátu-~dúú-tíhá-ga-~kéti-~bahúu-~koá-**jú-pá-rí**
3ANM-3AN.pl-STAB-coca-feed-do.last-DESID-NEG-INTENS-EMPH-INDIR-INFER/REP-INTER
Didn't they really want to feed him with coca for the last time (indirect).

BAS has similar subject-marking strategies, but with tonal prefixes: H for deictic person, HL for non-deictic person (Table 18.5).[22] These tonal prefixes interact with the tonal melody of the verb itself, which may be further modified by a process of polarized tone change indicating a 'stable' stage of the action or state (equivalent to the *ká-* prefix in Table 18.4). This system of tonal person marking is not only unique within the Tukanoan family, but is a typological rarity for person-marking in general (Siewierska 2004: 25–6).[23]

(p. 377) In contrast to the innovative *complexification* of person marking in TAT and BAS evidential paradigms, the KOT-WAI sub-branch innovated in the opposite direction, towards *simplification* of the finite verbal coding paradigm. Comparing the tables for TUY, TAT, and BAS, with Table 18.7, we see both extensive neutralization of gender and number distinctions and a major shift to first versus non-first orientation in the KOT-WAI paradigms.[24] We should also note the two analytic evidential 'constructions'—non-visual and inference—and the various aspectual, rather than tense, values (discussed below).

Table 18.7. The evidential paradigms of the Kotiria-Wa’ikhana sub-branch

	VISUAL				**NON-VIS**	**INFER-ENCE**	**ASSUMED**		**REPORTED**	
	1ST		**NON-1ST**							
	PERV	IMPERV	PERV	IMPERV	*koa-ta-*	*-ri hi-*	PERV	IMPERV	QUOT	DIFF
KOT	*-i*	*-ha*	*-re*	*-ra*			*-a*	*-ka*	*-yu’ka*	*-yu’ti*
WAI	*-i/ɨ*	*-aha*	*-di*	*-de/-re*		*-di ihi-*	*-aye*	*-aga*	*-~yo’ga*	*-~yo’ti*

Based on Stenzel 2013: 272, and fieldwork notes; Waltz 2012: 132

A good number of ET evidential paradigms have been analysed as including past/present temporal values for at least some of their categories, and some additionally mark ‘recent’ and ‘remote’ past distinctions, e.g. Tukano (Ramirez 1997a: 120). However, any reference to ‘tense’ as a feature of evidentials in ET languages must always be highly qualified, because tense terminology is grounded in notions of ‘absolute’ temporal reference, relating event time to the time of speech as what Comrie (1985: 36) calls the ‘deictic center’ (also Payne 1997: 236; Givón 2001: 285–6). Such tense distinctions can be considered to have ‘predicate’ scope. However, ET evidentials do not code such ‘absolute’ temporal reference, rather they point to *how* and *when* the speaker accessed information from a particular source and whether that access is still available. In this sense, tense has ‘evidential’ scope, and any temporal interpretations regarding the predicate action/state are constrained by this filter.

In Barnes’s discussion of TUY tense distinctions (1984: 265), for instance, we understand tense to have only evidential scope for the visual, non-visual and reported categories—establishing *when* the speaker obtained the information—while for the categories of inference and assumed, it has something akin to predicate scope. While the actual temporal realization of the predicate action and the time when the information was acquired often overlap relative to the time of speech, particularly with perfective, eventive predicates marked by visual evidentials, we do find examples of what appear to be temporal ‘mismatches’, particularly in instances of more stative-like, imperfective predication. This is the case in (17), from a KOT narrative in which an evil being has captured a woman and carried her away to his hollow log in the forest. The woman’s sons saw the abduction and have now led their father back to the log. When they arrive, he asks the question in (17a) and the sons respond with (17b). Since the boys assume their mother is still in the log, we might expect an imperfective (‘present tense’) evidential marker in their statement. Yet the marker only (p. 378) codes the nature of the sons’ visual *access* to the information, which is perfective (‘bounded’ or ‘past’), even though the predicate state ‘mom’s-being-in-the-log’ is still ongoing.

(17) Kotiria (Stenzel 2013a: 277)

a. ~doʔó-í hí-**ri**
WH-LOC COP-INTER
Where is she?

b. ~ó-í hí-**re**
DEIC.PROX-LOC COP-VIS.PERV.2/3
Here she is.

The TAT conversational example in (18) illustrates a similar context. In this case, a woman had opened her bag earlier to give beads to someone, then closed and hung up the bag and stayed in the room until another person came in, asking the question in

(18a). Even though she still had beads in the bag, they were visually inaccessible at that point, so her response has the perfective form (18b).

(18) Tatuyo (Gomez-Imbert 2014: 5)

a. wai-kápee ~bɨ-kígó-ø-**tí**
fish-eyes 2sg-possess-VIS-IMPERV.INTER
Do you have beads (fish eyes)?

b. jɨ-kígó-ø-**wí**
1sg-possess-VIS-PERV
I had (some).

Such examples have prompted some authors' preference for aspectual rather than temporal readings for category-internal oppositions (e.g. Gomez-Imbert 2007a for TAT and BAS; Stenzel 2008a, 2013a for KOT; Chacon 2012 for KUB; Silva 2012 for DES). The perfective value reflects the 'boundedness' of cognitive access to information and the imperfective value indicates ongoing access. Chacon (2012: 262–4) moreover argues that marking paradigms in KUB are sensitive to the inherent aspectual semantics of verbs. In the (unmarked) visual, two sets of markers combine with dynamic stems to derive past/perfective readings and with stative verbs to derive present/generic/imperfective interpretations.

18.3. Evidential distinctions in interrogatives

Interrogative morphemes are used in both polar and information questions in ET languages. They generally contain the formative *-ti* or *-ri*, and may be composed with evidential morphemes used in statements. However, the set of evidential interrogative forms is always smaller than the set of forms used in statements (Aikhenvald 2004a: 243).

The distinction between visual and non-visual is usually maintained in interrogatives, while that between inference and reported is systematically neutralized. In TUY, a single form *-yi-ri* covers inference, reported and assumed (Malone 1988: 122), reducing the set (p. 379) from D1 to C1. The TUK interrogative forms listed by Ramirez (1997a: 120) and Aikhenvald (2004a: 85) include visual, non-visual and inference, but not reported. Again, a C1 system in declarative clauses is reduced to a B2 system in questions.

As we saw in §18.2.2, interrogative suffixes comprise one of the subsystems of 'clause modality' markers occupying the final slot of the verbal word (where tense/aspect and person agreement markers occur in declaratives). Tense/aspect distinctions may still surface in question-marking morphology through initial-consonant alternation: *-ti* 'imperfective/present/recent past', and *-ri* 'perfective/(remote)past'), while person is neutralized and is either expressed outside the verb or, as in TAT and BAS, by segmental or

tonal prefixes. Table 18.8 shows the interrogative markers in BAS and TAT, with the imperfective/perfective distinction marked by the *t-r* consonant variation only for visual (a–d); the non-visual has only an imperfective form (e), and a single form covers inference and reported (f).[25]

Table 18.8. Interrogative markers in Barasana and Tatuyo

Interrogative word		**BAS**		**TAT**	
		Penult	final slot	Penult	final slot
Direct knowledge	a. VIS.IMPERV	*-a*	*-ti*	*-ø*	*-ti*
	b. VIS.PERV	*-ø*	*-ri*	*-ø*	*-ri*
	c. VIS.DIST.IMPERV			*-rahá*	*-ti*
	d. VIS.DIST.PERV			*-rahá*	*-ri*
	e. NVIS.IMPERV	*-ro*	*-ha-ri*	*-kɨ*	*-ti*
Indirect knowledge	f. INFERENCE/REPORTED	*-ju*	*-ha-ri*	*-ju*	*-pa-ri*

Based on Gomez-Imbert 1997: 298, 2003: 124, 2007a: 76

Similar *-ti/-ri* alternation occurs in the firsthand interrogatives of TUK, and a single combination *-pa-ri* covers non-firsthand questions (Ramirez 1997a: 120, 143–4; Aikhenvald 2004a: 246). Nevertheless, the morphology of evidentials in interrogatives is not always a straightforward reduction or neutralization of the forms used in statements. In BAS and TAT, the *-ju* formative of indirect interrogatives (f) mirrors its use in declarative inference and reported evidentials (Tables 18.4–5). The formative *-pa* in the TAT interrogative *-pa-ri* (f) also occurs in both the inference and reported declarative paradigms. In contrast, the *-ha* formative of the BAS *-ha-ri* non-visual (e) and indirect interrogatives (f) appears in the agreement prefixes for first and second person and inanimates in the visual imperfective declarative paradigm. Interpreting *-ju* as a mark of indirect knowledge illustrates its broader semantics pertaining to both categories, and additional *-pa/-ha* morphology does not lead to specific inference or reported interpretations.

Neutralization of inference and reported distinctions occurs in (18), from the 'Nocturnal curassows[26] story' in BAS. In this scene, three orphans—who eventually become curassows (p. 380) because their mother doesn't love them—have discovered snake bones in the places they usually defecate. The first clause in (19a) directly quotes the children wondering what their mother has been feeding them, a clear inferential context containing the *-ju-ha-ri* indirect evidential interrogative form. This is followed by a clause stating their own experience, using the visual imperfective, followed by another clause with a visual imperfective interrogative (19b).

(19)

Barasana (Gomez-Imbert, fieldwork data)

a. tí-hai-ri-re ~iá-~koa-ri '~jeé=~raká ~bádí-ré
ANPH-place-PL-OBJ see-EMPH-NOMZ what=INST 1pl.INC-OBJ
HL-eká-~rugú-**jú-hari** ~cóo ~bádí hákó?
3-feed-CONT-INDIR-INTER 3sgf 1pl.INC mother
tó-~karaká-~ribi-~de ~bádí-ré ~kúba
INAN-quant-day-IDENT 1pl.INC-OBJ fish.stew
eká-~rugú-**á-~bo** ~cóo' ~gábéré jí-**ju-hu** ~ída
feed-CONT-VIS.IMPERV-3sgf 3sgf RECIP say-INDIR-REP 3pl
Seeing (the snake bones in) those places: 'What has our mother been feeding us? Every day she feeds us fish stew,' they said to each other.

b. '~doó-hí waí-ré HL-bihá-~rugú-**á-ti** ~cóo
where-LOC fish-OBJ 3-find-CONT-VIS.IMPERV-INTER 3sgf
~bádí hákó ~jábí-íri-re?'
1pl.INC mother night-PL-OBJ
Where does our mother find the fish every night?

If a narrator A tells this story to listener B, B restates a final chunk of A's discourse a common regional practice signalling listener participation (Aikhenvald 2004a: 243). Thus,

at the end of (18a) *jí-ju-hu ~ída*, B is expected to ask the corresponding indirect evidential question: *jí-ju-ha-ri*? 'Did they say that (indirect evidence)?' Both inference and reported statements would be covered by the same question.

KOT also codes fewer distinctions in interrogatives than in statements, but displays yet other kinds of neutralization, having just three forms coding a continuum of *realis* and *irrealis* meanings that are comparable to corresponding categories for declaratives (Stenzel 2013a: 303).

Table 18.9 Interrogatives in Kotizia

	realis ◄——————————► *irrealis*		
INTERROGATIVES	IMPERV *-hari* PERV *-ri*	*-ka-ri*	*-bo-ri*
COMPARABLE CATEGORIES FOR STATEMENTS	VISUAL	ASSUMED	SPECULATION

The visual evidential category has corresponding imperfective and perfective interrogative forms, both containing the prototypical *-ri* formative. The *-ha* component of the imperfective *-hari* moreover copies the first person imperfective visual evidential marker (Table 18.7). Use of these forms indicates the speaker's expectation that the addressee has firsthand knowledge of the desired information and can provide it. Suppositional questions, on the (p. 381) semantic border between *realis* and *irrealis*, are formed with a combination of *-ri* and the imperfective marker *-ka*, from the semantically comparable 'frontier' category of assumed knowledge. Such questions indicate that speaker suspects, but is not completely sure, that the addressee has direct knowledge of the information requested. Finally, the combination of the dubitative *-bo* and interrogative *-ri* indicates speculation or questions involving *irrealis*-like situations, in which the speaker is uncertain of the addressee's knowledge or ability to answer the question (Stenzel 2013a: 304–6).

Such patterns contrast with RET, in which evidentials are already a small, optional and not frequently used set in declarative sentences. No interrogative markers occur in the final slot of the finite verb and evidential values do not appear at all in questions, unlike the other ET languages (Strom 1992: 90, 141–4).

As noted for KOT, the semantics of evidentials occurring in ET interrogatives entail a shift in perspective; they no longer code the *speaker's* cognitive relation to the source of information, but imply the speaker's presumption as to the nature of the *addressee's* knowledge (Ramirez 1997a: 144; Aikhenvald 2004a: 247). For example, when a TAT speaker uses a visual interrogative form, the implied expectation is that the addressee has eyewitness knowledge of the situation. For instance, the question in (20a) was asked of a person who went to fetch firewood, after which the sound of an axe was heard; (20b)

was addressed to a woman (who didn't know how to make pottery) by people who were gone when the Mother of Pottery came to the longhouse and made some for her. In (20c), the non-visual interrogative form is used because the questioner assumes the addressee cannot see if it is raining.

(20)

Tatuyo (a,c: Gomez-Imbert 2007a: 76, b: Gomez-Imbert 1990: 22)

a. ~dóo-~kóo paí-ro ~bi-bópe-ø-té?[27]
WH-quantity big-CL.INAN 2sg-split-VIS-IMPERV.INTER
How much (wood) did you split?

27

b. ~dó-a ~bi-~dá-wéé-bohá-ø-rí hotíi-re-á?
WH-ANPL 2sg-3pl-make.pottery-BEN-VIS-PERV.INTER pots-OBJ-TOP
Who made pottery for you?

c. tó-óká-ki-tí?
3INAN-rain-NVIS-IMPERV.INTER
Is it raining?

18.4. Evidentials, cultural attitudes, and conventions

Evidentials in ET languages are obligatorily marked, so it is interesting to note speakers' awareness of their meaning and their attitudes toward missing or misused evidentials. Gomez-Imbert reports that an elderly Tatuyo woman she had met during her initial fieldwork had become rather senile by the time she returned for her second trip. Although the (p. 382) woman was highly respected in the community, when she spoke, children laughed and adults had to make an effort to remain serious. Other women explained that the old lady was mixing up the use of evidentials, which everyone found amusing. Unhappily, the linguist didn't know enough Tatuyo yet to carefully observe the details (Gomez-Imbert 1982b). Similarly, Aikhenvald notes that in languages with obligatory evidential marking, a person who uses evidentials inadequately may be considered mad or a liar (2004a: 337–9).

The TAT anecdote above indicates community awareness of the array of available evidentials and of their appropriate use and semantics. This is confirmed by TAT speakers' metalinguistic explanations and Spanish equivalents for TAT categories using various forms of the verbs 'see' and 'hear':

(21)

a. 'visual' is interpreted as *mirando* 'seeing';

b. 'visual.dist' is interpreted as *mirando allá lejos* 'seeing from a distance';

c. 'non-visual' is interpreted as *oyendo* 'hearing';

d. 'inference' is interpreted as *mirando rastro* 'seeing traces, tracks';

e. 'reported' is interpreted as *que otros contaron* 'which others told'.

Gomez-Imbert's main TAT consultant also tried to compensate for the lack of evidentials in Spanish with lexical expressions, and was happy to learn of the existence of a reportative expression *dizque*, which she incorporated into her elementary Spanish (Gomez-Imbert 2003: 126). Consciously exchanging one evidential for another is a way of lying, and awareness of distinctions allows for manipulation. Translations of the New Testament in which missionaries employ visual evidentials are a matter of wonder.

Cultural conventions for the use of evidentials differ even within the same linguistic and cultural family. In some ET languages, dreams are recounted as direct visual experience, e.g. in TAT: *éoríhe ji-~kéé-ge-**ø-wi*** 'Funny (things) I dreamed' (Gomez-Imbert 2007a: 68). The same is reported for KOT and TUY, while in TUK, use of non-visual forms is the norm for the dreams of ordinary humans, and visual is reserved for the dreams of shamans (Aikhenvald 2004a: 346–7). There is little information on how dreams are reported for most of the other ET languages, but one wonders whether the unusual use of the non-visual TUK for dreams might be the result of influence from Tariana.

Reference to knowledge acquired through pictures and written texts can also be coded in different ways. In TAT, inference-marking is used because such knowledge is acquired indirectly through representations or traces. In KOT, on the other hand, visual representations, including drawing, photos, and video images, are spoken of using visual markers. TAT speakers refer to information from the radio or taped recordings using the non-visual *-ki* when imperfective, but use the visual distant *-rahá-* when perfective. For example, a person hearing his or her own recorded speech would say (22a), but would later tell someone else (22b).

(22)

a. ji-wádá-**ki-pi**
1sg-speak-NVIS-IMPERV
I speak, I hear myself speaking.

b. ji-wádá-**rahá-wi**
1sg-speak-VIS.DIST-PERV
I spoke, I heard myself speaking.

(p. 383)

Evidential use in narrations of myths and traditional stories is another context with interesting variation. In a story about evil spirits or mythical creatures, for instance, a TAT narrator uses the reported evidential in conjunction with the epistemic 'stabilizer prefix' *ká-*, indicating that he or she has learned the story indirectly through others and vouches for it. Telling the same story, a BAS narrator would also use the reported evidential, but without the stabilizer prefix, which does not occur with the reported. Likewise, reported evidentials are used in narratives about former times in TUK (Ramirez 1997b: 246), and in traditional oral literature in DES, while non-traditional stories introduced from other cultures are coded as inference (Kaye 1970: 33–5). In contrast, in KOT oral literature, speakers use the assumed perfective suffix *-a* for all utterances in which they take on the role of narrator (in essence, being the conduit for shared, collective knowledge). Stepping out of the narrator role, they often make personal comments on aspects of the story or its protagonists using other evidentials (e.g. the reported in (14) in §18.2.3.6). In narratives in all languages, the speech of protagonists is directly quoted, using whatever evidential is appropriate to the context.

Comparison of two similar situations described by TUY and KOT speakers reveal areas of similarity within in two quite different systems. A TUY man returning from his garden tells Barnes (1984: 263) that a jaguar killed his dog, using a visual evidential. Asked whether he saw the event, he explains that he *heard* the dog bark, then yelp, and then there was silence. The man went to investigate and found the place where a jaguar had apparently killed the dog and saw marks on the ground where the jaguar had dragged him off. Barnes explains that if the man had only heard the dog's yelp, he would have used the non-visual, and if he had only seen the marks on the ground, he would have used inference, but the combination of both hearing the sound and later seeing the marks resulted in use of a visual evidential.

In a similar context, the KOT 'Hunting dog story' (Stenzel 2013a: 385–7), the speaker uses the non-visual construction when he describes how while hunting as a young boy with his father, they heard the sounds of a jaguar catching their dog (23a). They saw no direct evidence of the attack, but a few lines later, the speaker offers a conclusion about the dog's destiny using a visual suffix (23b).

(23)
a. [...] ~ja'á-**ro** **koá-ta-re**
. . . catch-3sg make.noise-come-VIS.PERV.2/3
[While (the dog was) chasing after another animal out there], a jaguar caught him.

b.	~dá-waʾa-kaʾa	waʾá-**re**	chɨ́-ro	waʾá-ro
	get-go-do.moving	go-VIS.PERV.2/3	eat-3sg	go-3sg
	But the jaguar (killed and) took (the dog) away to eat it.			

(p. 384) 18.5. ‘Evidentiality’ in WT languages and some thoughts on the origin of evidentials in the family

Although the preceding sections focused attention on the complex evidential systems of ET languages, we do not mean to imply that there are no evidentials at all in the WT branch. Nevertheless, we will see that in comparison, evidentiality in WT languages is generally much less complex. As a grammatical category, it is incipient in some languages and non-existent in others. We thus begin with an overview of what recent scholarship tells us of evidentiality in WT languages, and then consider the question of its origin within the family on the whole, and its possible diffusion as an areal feature.

18.5.1. WT evidentials

Analyses of WT finite clause type markers do not posit evidentiality as a grammatical category. Indeed, Skilton’s characterization of: ‘… WT languages which have evidentiality *or something like it* …’ (2016: 1, emphasis added) clearly indicates that the WT languages do not share the ET feature of obligatory evidentiality expressed by final portmanteau suffixes.

Schwarz (2013) analyses Sekoya as having sets of epistemically distinct past tense markers, one set having inherent evidential semantics. The first member of this set indicates ‘directly experienced’ information, marked by *-aʼwɨʼɨ* distinguished from ‘secondarily obtained’ information, marked by *-aʼɲe-ɲa*. The second morpheme is a reportative suffix whose origin is the verb *ɲa-* ‘see, recognize, understand’.

In her analysis of Máíhɨ̃ki, Skilton (2016) finds no evidential system *per se*, but notes the use of polar questions to generate epistemic modal and evidential implicatures through reversals of polarity and illocutionary force. Thus, negative polar questions can be read as positive polarity declaratives (24a), and positive polar questions can be read as negative polarity declaratives (24b).

(24)

a. Sentences glossed as ‘*Wasn’t* my sister still a little girl at that time?’ and ‘At that time my sister *was* still a little girl’ are syntactically identical.
b. Sentences glossed as ‘*Does* my brother behave correctly?’ and ‘My brother *doesn’t* behave correctly’ are syntactically identical.

With this relational strategy between evidentials and interrogatives in mind, Skilton examines two Colombian Siona verbal words equivalent to the Ecuadorian Siona words marked by 'non-assertive' morphemes *-kɨ* in (25b) and: *-kɨ-jã̃* in (25c), respectively equivalent to interrogative and reportative sentential modes. She interprets the *-kɨ* suffix in (25b) (p. 385) as interrogative/reportative and the combination of suffixes in (25c) as interrogative/reportative+reportative, wondering which non-assertive meaning came first, the interrogative or the reportative (Skilton 2016: 3–4).

(25) Ecuadorian Siona (Bruil 2015: 387)

a. Assertive: Guja-hi
bathe-3sgm.PRES.ASS
He is bathing (I assert).

b. Interrogative: Guja-kɨ
bathe-2/3sgm.PRES.NASS
Are you (M)/ is he bathing? (I'm asking)

c. Reportative: Guja-kɨ-jã̃
bathe-2/3sgm.PRES.NASS-REP
He is bathing (I'm told).

d. Imperative: Guja-hĩ'ĩ̃
bathe-IMP
Bathe! (I'm ordering)

Ecuadorian Siona was first analysed as having two types of evidentiality—reportative and conjectural—viewed as mutually exclusive in assertions and questions (Bruil 2014: 327–8).[28] In a later analysis in which evidentiality is taken to be the expression of the 'mode of access' and not of the 'source of the uttered information', the same author argues that Ecuadorian Siona does not possess an evidential *system*. Rather, the 'reportative' presents the morphosyntactic and semantic behaviour of a 'sentential force' marker and is analysed as a member of a single system, together with the assertive, interrogative, and imperative clause types exemplified in (25) (Bruil 2015: 386). These four clause types have the sentential forces of *asserting, asking, presenting*, and *requiring* respectively. The 'imperative' has deontic authority while the three others share epistemic authority, but differ in terms of who holds the authority: in the 'assertive' it is the speaker, in 'interrogative' it is the addressee, and for the 'reportative', it is a non-speech-act participant (Bruil 2015: 416).

Finally, Koreguaje has an unmarked conjugation system used to refer to observed events, and otherwise uses two auxiliaries for evidential purposes. The reportative is expressed

by a periphrastic construction with the auxiliary *àsó-* ‘to make someone hear something’, while the auxiliary *koso* (from *kʷàsó* ‘think’) is used in a second construction identified as ‘inferential’ by Skilton (2016: 3) and as ‘assumed’ by Cook and Criswell (1993: 87).

(p. 386) 18.5.2. The origin of evidentials

Until very recently, Tukanoan evidentials were thought to be a genetic feature inherited from Proto-Tukanoan:

> A language may maintain the grammatical categories and forms found in its ancestor language. That is, if a category was present in a protolanguage, the chances are that it will be there in the daughter languages. This is the case … with evidentiality inherited by individual Tucanoan languages from Proto-Tucanoan.
>
> [Aikhenvald 2004a: 355]

Ongoing research on WT languages Máíhɨ̃kì, Ecuadorian Siona, and Sekoya, however, indicates this is not the case.[29] The WT systems outlined in §18.4 display a range of profiles, from the Máíhɨ̃kì case of having no grammaticalized evidentials at all, through Koreguaje’s phase of ongoing grammaticalization of auxiliary verbs in reported and inference constructions, to the direct/indirect distinctions found in Sekoya, and finally to the Siona reportative, analysed as part of a ‘clause type’, rather than ‘evidential’, system. Clearly, WT grammaticalized evidentiality is incipient compared to its pervasive use in ET languages.

The diverse ways evidentiality can be coded reflect equally diverse origins of markers in distinct languages or language families. The diachronic origins of TUK evidentials seem heterogeneous, with categories developing from both lexical and grammatical sources, involving processes of ‘fusion, reanalysis and semantic drift’ (Malone 1988: 120), and likely emerging at different points in time.

Among the possible sources are tense or aspect morphemes, which, according to De Haan (2013b), are the likely origin of evidentials that are part of a verbal system. Malone (1988: 121) proposes that a ±firsthand +tense distinction was part of the Proto-Tuyuka paradigm that gave rise to the visual category markers (c.f. De Haan 2001b: 97). The indirect/non-firsthand evidential formative *-ju* may also have a diachronic link to tense-marking. Synchronically, this morpheme codes indirect access categories (inference, reported) in TAT/BAS, but has no tense reference; in KOT it occurs in both reported forms, equally without tense distinctions. However, in other ET languages it occurs in the past reported forms (TUY, SIR), in assumed (TUY, SIR, DES, YUR), and in inference (MAK, KAR, SIR, DES, YUR) (Malone 1988: 128, 133–4). Such widespread similarities suggest that *-ju* may have derived historically from a past tense marker to a more general marker of indirect evidence (the analysis proposed for BAR, TAT and KAR in Gomez-Imbert 1986, 2003, 2007a; Gomez-Imbert and Hugh-Jones 2000). Interestingly, RET is the only ET language where *-ju* marks present tense (Strom 1992: 72–3), but it is possible that the morpheme went through a diachronic value reversal in this language. Similar cases are found: e.g.

the synchronic visual imperfective *-a* in BAS (Table 18.5), whose cognate *-á* marks visual non-present in DES (Kaye 1970: 45–8).

Perception and speech verbs may be lexical sources for other evidentials, as is clearly the case of the KOT non-visual construction with *-koa* 'to make noise', analysed as the most recent addition to that language's evidential repertoire (§18.2.3.2). The innovative TAT visual (p. 387) distal with *-rahá* (§18.2.4), which exhibits the bimoraic template characteristic of lexical entries, was certainly also grammaticalized through serialization and is likely a recent addition as well. As for the TAT non-visual, the lack of a perfective **kɨ-wɨ* (Table 18.4) is compensated for by the perfective VIS-*rahá+wɨ*, establishing a semantic link between visual and auditory information, and spatial and temporal distance. Schwarz (2013) proposes a lexical link between the SEK reportative *-ɲa*, and the verb *ɲa-* 'see, recognize, understand', while for Skilton (2016), the etymology for *-ɲa* is still unclear and warrants further investigation.

Evidentiality 'strategies', meaning evidential extensions of non-evidential categories (Aikhenvald 2004a: 276), appear to be the source of ET analytic inference constructions with the auxiliary 'be' (§18.2.2.3), as well as the KOR reportative periphrastic construction with the auxiliary 'to make someone hear something', and inferential, with the auxiliary 'think' (§18.5.1).

Finally, non-evidential politeness strategies seem to be the source of emergent evidentiality and epistemic modality in WT languages, following the evolutionary paths from negative polar questions > weak epistemic modal or inferential evidential; and positive polar question > reportative evidential (Skilton 2016). This is a novel source for epistemic modals and evidentials.

Skilton (2016: 10) concludes that for Tukanoan:

> [We] cannot reconstruct either evidential morphemes or existence of evidentiality as a category to Proto-Western Tukanoan; absent evidence of a Central clade entails that evidentiality also cannot be reconstructed to Proto-Tukanoan … [The] large evidential systems characteristic of Vaupés area languages reflect innovation at Proto-Eastern Tukanoan or later.

We will probably never know what initially sparked this fascinating innovation, but we can certainly attest its explosive development and widespread diffusion throughout the languages of the ET branch and beyond. Indeed, the pervasiveness of ET evidentiality is cited as influencing both the emergence and shape of evidential marking in other languages of the region through areal contact: Tariana (Arawak, see Aikhenvald and Dixon 1998; Aikhenvald 2002, 2003b, Chapter 7 of this volume), Hup and Yuhup (Nadahup, see Epps 2005, 2008: 662–3), and Kakua (Bolaños 2016). Our goal here has been to present an overview of the state-of-the-art understanding of evidentiality in Tukanoan languages, but we recognize that our comprehension of these systems, though steadily growing, is

nevertheless still fraught with mysteries and unanswered questions that will undoubtedly fuel scholarship for years to come.

Notes:

([1]) Spellings of group/language names and of the family itself vary both in the literature and in local practice. Alternate ‘c’ and ‘k’ forms abound (e.g. Tucano/Tukano, Coreguaje/Koreguaje, Secoya/Sekoya); we have opted to use the ‘k’ forms currently employed by most scholars and preferred by the groups themselves in their practical orthographies. A number of groups are known by both locally established and traditional (self) names. We opt for self names as explicitly requested by some groups, and otherwise use the denominations most frequently used in the literature. All cases of alternate names are shown on first reference.

([2]) Stenzel’s research on Tukanoan languages has been funded by grants from ELF, NSF (0211206), NSF/NEH DEL Program (FA-52150-05), HRELP/SOAS (MDP-0155), the Brazilian National Council for Scientific and Technological Development (CNPq post-doctoral research grant), and the Brazilian Ministry of Education’s Program for Continuing Academic Development (CAPES post-doctoral ‘Estágio Senior’ research grant). We would like to thank fellow researchers currently working on Tukanoan languages for providing us with materials and valuable insights, Alexandra Aikhenvald for her kind invitation to participate in the volume, and her encouragement and helpful comments, and Adella Edwards for her help with the map.

([3]) According to Rodríguez Preciado (2013: 37–8), only around ten people use the language on a daily basis; the others have switched to TUK and KUB.

([4]) Branch and Language name abbreviations used in the text:

ET=Eastern Tukanoan; WT=Western Tukanoan; BAR=Bará; BAS=Barasana; DES=Desano; EDU=Eduria/Taiwano; KAR=Karapana; KOR=Koreguaje; KOT=Kotiria; KUB=Kubeo; MAI=Máíhɨ̃kì; MAK=Makuna; PIS=Pisamira; RET=Retuarã-Tanimuka; SEK= Sekoya; SIR=Siriano; TAT=Tatuyo; TUK=Tukano; TUY=Tuyuka; WAI=Wa’ikhana; YUR=Yuruti.

([5]) Population estimates for the WT populations are from Bruil 2014; Farmer 2015; Licht and Reinoso 2006; Vallejos 2013; and p.c. from Anne Schwarz and Lev Michael. Statistics for the ET groups are from Eraso 2015; Valencia Pérez 2014; Stenzel 2013a (based on data from the 2005 Colombian census), and the Instituto Socioambiental *Povos Indígenas do Brasil* (PIB online).

([6]) Also known regionally and in some of the older literature as Makú. However, as this name is considered to be derogatory, following Epps (2008) we adopt use of the name Nadahup.

([7]) These profiles are nevertheless still emerging (see Gomez-Imbert 2011a: 1454–5). As more in-depth studies of ET languages become available, we will be able to consolidate understanding of the details that distinguish Vaupés and Pirá languages and evaluate how individual languages fit into what is certainly a continuum.

([8]) The template for stative verbs is simpler, as these rarely occur in serializations.

([9]) To promote comparison across languages and unity throughout the chapter, we have made some adjustments in the representation of data in the examples: /j/ represents a palatal voiced stop or glide, appearing as /y/ or /j/ in the sources; /ʼ/ represents the glottal stop /ʔ/; /~/ morpheme initially indicates morphemic nasality. Tone is not marked in many sources; where tonal information is available, we represent H by /´/ and leave L unmarked. We have also standardized glosses and category labels.

([10]) In some languages we find markers co-occurring as composites e.g. in interrogatives, discussed in §18.4 and some kinds of *irrealis,* e.g. the discussion of TUY in Vlcek (2016).

([11]) The ‘OBJ’ gloss signifies ‘objective case’ (c.f. Zúñiga 2007:212), which *differentially* marks accusative arguments, being sensitive to hierarchies of animacy and referentiality; the marker moreover occurs on other non-subject core arguments and some adjunct NPs.

([12]) There is no similar construction in WAI, the closest sister language to KOT, and neither Malone (1988) nor Waltz and Waltz (1997, 2000) analyse KOT as having a non-visual category or evidential strategy at all.

([13]) The construction in Hup is used (non-obligatorily) for all non-visual sensory sources, speaker’s internal feelings and mental states, and to express mirativity. Ospina Bozzi analyses the Yuhup construction as restricted to auditory information, while according to Silva and Silva, it may be used for auditory and other types of physical, emotional, and sensory information.

([14]) Labelled ‘assertion’ in (Stenzel 2013a) for KOT, and not the equivalent of ‘assertive’ in Bruil (2014, 2015), and Gomez-Imbert (1997: 304–15), which is equated with declarative mode.

([15]) Malone (1988: 136) gives a TAT assumed form with a *-ju* suffix: *kahe-ju-ɨ* /crazy-assumed-sgm/ ‘You are crazy’, an interpretation resulting from misguided segmentation: *ká-héju-ɨ* /STAB-be.awkward-sgm/ ‘the awkward/clumsy/left-handed one’, actually represents an agentive nominalization.

([16]) The BAS stability prefix is polar with respect to the tone of the following root. Thus, BAS has three tonal prefixes, H and HL for person, and polar for stability. However, there is only one prefixal tone slot, in which stability is dominant. It combines with inference, but not with reported, and with visual perfective it appears twice, tonally and as a *-ka* suffix in penultimate position.

([17]) In TAT, KAR, BAR and YUR there is a *ká-* nominal/nominalizer prefix analysed as 'specific referent' (Metzger 1998: 31). It only appears in TAT in finite verbs, where Metzger identifies it as a 'past' morpheme. The 'stabilizer' interpretation covers its functions as both a nominal and verbal prefix (Gomez-Imbert 2001: 393, 2003: 122, 2007a: 68, 75).

([18]) There is an interesting distribution of evidentials in the 'Origin of Pottery' myth (Gomez-Imbert 1990). In the first two parts—on the origin of clay and of the potter's work—marking by reported + stability predominates, with contrasting dialogues and two situations that require inference; in the third part, describing the potter's technique, visual + stability marking occurs to state cultural truths.

([19]) See also the analysis in Epps (2005: §4.1), which fits both the TAT *realis* and *irrealis* paradigms well.

([20]) Kaye recognized this in his pioneering work on DES, differentiating 'non-third person' *-bɨ* from 'non-animate' *-bɨ* (1970: 85).

([21]) TAT left-edge person marking also occurs in sentences with directive (exhortative, optative, permissive) and interrogative mood markers. In interrogatives, agreement for all persons (the same forms used as prefixal object markers) comes in the second slot, since the interrogative marker fills the verb-final slot where non-deictic person would normally occur (Gomez-Imbert and Hugh-Jones 2000: 335, Gomez-Imbert 2011b: 1560).

([22]) BAS H versus HL tones also distinguish proximal and distal deictics versus anaphoric and alterity forms (Gomez-Imbert 2001: 382–3; Gomez-Imbert and Kenstowicz 2000: 438).

([23]) For more on these systems, see Gomez-Imbert 1997, 2000, 2001, 2004; Gomez-Imbert and Kenstowicz 2000).

([24]) Gender marking occurs synchronically only in nominalizing suffixes (used in *irrealis* constructions and complement or subordinate clauses), and index gender only for deictic (first or second singular) subject referents, rather than making the distinction for the non-deictic (third person) category (see Stenzel 2013a: 316–19).

([25]) The coronal consonant marks this distinction for direct evidentials: *-ti* versus *-ri*, but in some contexts such as the negative, interpreted as having a floating *t*, *-ri* is realized as *-ti* as a result of a regular phonological process: BAS *bet-ri* → *beti*, TAT *~ket-ri* → *~keti* (Gomez-Imbert 2004: 59).

([26]) *Nothocrax Urumutum* (Gomez-Imbert 2009, fieldwork data).

([27]) *-tí* → *-té* when shouting.

([28]) Wheeler's analysis of Colombian Siona (2000: 189) does not refer at all to 'evidentiality', but analyses verb-final suffixes as expressing three degrees of 'certainty'; nevertheless, the lowest degree of certainty, marked by *-jã*, is related to information deduced from evidence or received from others.

([29]) Resources include Skilton 2016 and working papers produced by the Máíhɨ̃kì research team headed by Lev Michael.

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Evidentiality in Boran and Witotoan Languages

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Abstract and Keywords

This chapter is the first attempt to explore how evidentiality is expressed in two neighbouring language families spoken in northwest Amazonia, Boran, and Witotoan. The evidentiality systems in Boran and Witotoan languages are not as complex as those found in languages spoken in vicinity of the Vaupés area to the north. Marking of evidentiality is more elaborate in Boran languages, with three choices available in Bora, while evidentiality distinctions in Witotoan languages are less expressive, with only two terms available in Murui. Although evidentiality choices can differ even within a single language family, a reported evidential is present in all Boran and Witotoan languages without exception. In addition to marking evidentiality, all languages show some type of optional marking that is related to expressing speaker's certainty regarding an assertion.

Keywords: northwest Amazonia, Witotoan, Murui, Boran, Bora, evidentiality, reported evidential, marking of certainty

19.1. Introduction

Boran and Witotoan are two language families spoken in northwest Amazonia, in the Caquetá, Putumayo, and Ampiyacu River Basins in southern Colombia and northern Peru. The Boran family consists of two languages, Bora (with its variety Miraña) and Muinane (Echeverri and Seifart 2015). The Witotoan language family is divided into Ocaina, Nonuya, and Witoto. The language name 'Witoto' is a collective umbrella term encompassing four different ethnic groups which speak four mutually intelligible dialects—Murui (known also as Bue), Mɨka, Mɨnɨka, and Nɨpode. In all likelihood, they form a dialect continuum (see Figure 19.1).[1]

Of those languages, only Witoto (Murui and Mɨnɨka) and Bora have a significant number of speakers. The Bora language is spoken by approximately 700 people in Colombia

(Thiesen and Weber 2012). Miraña, a dialect of Bora, has about 400 speakers who reside close to the Bora settlements in Colombia (Seifart 2005). Muinane is spoken by about 250 people in Colombia (Vengoechea 2012). Languages of the Witotoan family have more speakers than those of the Boran family (Wise 1999). The ethnic population of the Witoto (Murui, Mɨka, Mɨnɨka, and Nɨpode) numbers approximately 5,000 people, with about 2,000 Murui, 2,500 Mɨnɨka, 250 Nɨpode, and as few as 100 Mɨka (OIMA 2008; Echeverri 1992; Petersen de Piñeros and Patiño Rosselli 2000; Wise 1999). All Witoto varieties are threatened by the rapidly progressing language shift to Spanish. During my fieldwork among the Murui, Mɨka, and Mɨnɨka, fewer than half of young adults and teenagers, and only a handful of children, were competent Witoto speakers. This suggests that the actual number of Witoto speakers (p. 389) could be much lower than 5,000. There are about 300 ethnic Ocaina who are located principally in Peru but the number of speakers does not exceed fifty individuals (Fagua Rincón and Seifart 2010). Nonuya, a moribund Witotoan language, is spoken fluently by no more than two elders in Colombia (Echeverri 2014). In recent years there has been some effort to document what is left of the Nonuya language (Romero Cruz 2015; Orjuela Salinas 2010). Map 19.1 shows the location of the Boran and Witotoan languages in Colombia and Peru.

Figure 19.1. The Witotoan and Boran language families

Various other languages, many of which are now extinct, have been listed as putative members of the Boran and Witotoan language families (e.g. Mason 1950; Kaufman 1994; Ortiz 1942; Loukotka 1968; Tovar 1961), among them Andoque and Resígaro. Detailed discussion of the linguistic affiliation of Witoto and the history of the Witotoan language family is in Echeverri (1992) and Seifart (2013).

The issue of genetic relationship between the Boran and the Witotoan language families remains a matter of debate. Their relationship was disputed by numerous researchers.[2] In his comparative work on 'Proto-Witotoan', Aschmann (1993) attempted to prove the relationship between the two families. His hypothesis was challenged by a later attempt at reconstruction by Echeverri and Seifart (2011, 2015, forthcoming) who did not find enough evidence to prove a genetic relationship between these language families. The Boran and Witotoan languages do share various structural characteristics (see §19.2) but these ap-

parent similarities could have been the result of areal diffusion rather than genetic affiliation. The languages of the Boran and the Witotoan families are spoken in close vicinity and have been in close contact for a very long time. They form part of a larger group known as the *People of the Centre* within Colombia and Peru (Spanish *Gente del Centro*) (Echeverri 1997). Various (p. 390) (p. 391) ethnolinguistic groups are recognized to belong to this cultural complex: the Boran peoples (Muinane, Miraña, Bora), the Witotoan peoples (Witoto, Ocaina, Nonuya), the Resígaro group of the North Arawak peoples as well as the Andoke people (linguistically, Andoque is an isolate). The *People of the Centre* peoples share particular cultural practices, including elaborate ceremonial discourses and the custom of the ritual ingestion of pounded coca leaves and tobacco in a liquid form (Echeverri 1997; Seifart and von Hildebrand 2009; Seifart and Fagua Rincón 2009; Gasché 2009a,b).

Map 19.1. Approximate locations of Witotoan and Boran languages in Northwest Amazonia

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Quite a few languages spoken in northwest Amazonia, among them Boran and Witotoan languages, share numerous areally spread patterns. These include complex classifier systems, tonality, nominative-accusative patterns, differential case-marking as well as the grammatical category of evidentiality (Aikhenvald and Dixon 1998; Aikhenvald 2001). Compared with other languages in northwest Amazonia such as those of the multilingual Vaupés River Basin (Aikhenvald 2002; Epps 2006, 2005; Stenzel and Gomez-Imbert in chapter 18; and Aikhenvald, §7.2.4 of this volume), Boran and Witotoan languages do not have 'elaborate' evidentiality systems. However, they do have a relatively 'modest' set of grammatical markers for a number of information source types. Existing grammatical descriptions of Boran and Witotoan languages do not treat evidentiality in much detail. The exception is a brief account on Bora evidentials by Thiesen and Weber (2012), given attention to in Aikhenvald (2004a). The present study is the first attempt to explore the expression of information source across Boran and Witotoan languages.[3] The reader should bear in mind that the study is based on available grammatical descriptions as well as my own work on the Murui variety of the Witoto language (Wojtylak 2017). Often, the exact

semantic content of evidentiality-like markers is hard to ascertain based on the existing descriptions.

I start with a brief outline of the typological profile of Boran and Witotoan languages in §19.2. In the following section §19.3, I focus on the expression of evidentiality across Witotoan languages. This is followed by an account of evidentiality across Boran languages in §19.4. Section §19.5 contains a short overview and summary of constructions discussed in this chapter.

19.2. Typological features of languages of Witotoan and Boran language families

From a typological point of view, the phonemic inventories of the Witotoan and Boran languages are not drastically different but their sound systems vary in many respects. Unlike the Witotoan languages, the Boran languages have complex consonant and vowel clusters, as well as two tones. Some varieties of Witoto are also unusual in not having the phoneme [p]. All languages have complex rules of stress-assignment, with the exception of Witoto (Murui and Miika) where stress is predominantly word-initial.

(p. 392) Witotan and Boran languages are nominative-accusative with head marking (on verbs) and dependent marking (through a case-marking system). Their morphology is largely agglutinating with some fusion and predominantly suffixing. Morphosyntactic complexities vary greatly from language to language, with Ocaina having two prefix positions on the verb (S/A and O) and Nonuya appears to have just one (S/A). Witoto has no prefix position; the subject S/A is expressed on verbs by means of suffixes. Muinane as well as Bora and its variety Miraña have one cross-referencing position on the verb S/A. Boran languages have inclusive-exclusive forms for first person pronouns, and a dual number. Witotoan languages have also a tripartite number system (singular, dual, and plural) but lack the clusivity distinction.

Constituent order in Ocaina appears to be very rigid, with strictly SV/AOV order. In Witoto (and apparently in Nonuya) clauses tend to be verb-final (SV/AOV) but pragmatic factors can also influence ordering of constituents (permitting VS and AVO orders). In Bora, constituent order for clauses appears to be quite free. All languages have some kind of differential case-marking. The expression of core arguments in Witoto (Murui) is related to definiteness, focus, topicality, affectedness, and the verb's semantic group where subject and object are subject to differential case marking (Wojtylak forthcoming (a)). In Ocaina, marking of arguments depends on the verb's semantic group (e.g. verbs of knowing). In Bora, animate objects are obligatorily marked for case; inanimate objects are unmarked. The salient feature of all languages across the Boran and Witotoan families are elaborate large systems of classifiers where the same (or almost the same) sets of bound classifier morphemes can occur in numerous morphosyntactic contexts. Depending on a language, there can be from about seventy to several hundred classifiers.[4] The systems of nominal classification are further augmented by the occurrence of repeaters. Repeaters

are partially or fully repeated nouns that occur in classifier slots and ‘classify’ inanimate nouns for which no classifiers exist. Depending on the language, the class of repeaters can be closed, as in Miraña, or open, as in Murui. Murui has a class of verbal classifiers. All classifiers have anaphoric and discourse-pragmatic functions but their main ‘duty’ is derivation of nominal stems. Many of the morphosyntactic characteristics of Witotoan and Boran languages are typical for Amazonian languages generally, and in particular those from northwest Amazonia. I turn now to the expression of evidentiality in Witotoan languages.

19.3. Evidentiality in Witotoan languages

I focus here mainly on evidentiality in Ocaina and Witoto (the Murui variety). Nonuya remains an undescribed language and little is known about its morphosyntax (Echeverri 2014). Description of other Witoto varieties is either lacking or does not address evidentiality specifications. Ocaina (see §19.3.1) and Witoto (§19.3.2) have relatively simple evidentiality systems with just one ‘reported’ evidential available. The reported specification is expressed by optional particles and enclitics. The evidential does not seem to have any additional epistemic overtones, such as doubt like in some other Amazonian languages (Aikhenvald (p. 393) 2004a, 2012a). Ocaina and Murui have ‘certainty markers’ that refer to the speaker’s commitment and ‘attitude’ to the truth of the proposition, and at least in Witoto they may extend to cover evidential like-meanings.

19.3.1. Ocaina

Ocaina has a number of optional particles used to mark modality- and evidentiality-like meanings. Many of those particles occur in the initial position in the clause. They differ from other types of clitics in Ocaina not only in their form (they are monosyllabic and have unstressed short vowels) but also in that they have scope over the whole clause. Their meanings refer mostly to ‘intensity’, ‘imminence’, ‘focus’, and ‘emphasis’ (Fagua Rincón 2013: 111). One of these particles appears to have an evidentiality value. The reported *xaʔ* expresses the source of information and refers to information obtained from another source for whose veracity the speaker does not want to take responsibility (Fagua Rincón, p.c.).[5] Although the examples are not contextualized, *xaʔ* is consistently translated as ‘so-called’. Consider (1) and (2).[6]

(1)

hɯɯ/	**xaʔ**	[[oʔɸo.ɾa=ʔmɯ]]	áá-ʔʃa-tʲo]	/[híogo]/
yes	REP	head=INTENS	come-PAST-NOMZ.AG.SG	woodpecker
tʲá-soɾo-ʔxa				
3INAN-drink.in.one.gulp-PAST				

Yes. (It was said), the woodpecker, the one who arrived first consumed all the beverage. (Fagua Rincón 2013: 331)

(2)

xaʔ	tʃíí	háá-hoa.dʲɯ-ɲo	ɯ́ɯ́-na
REP	all	3PL-work-CONT	COP-PAST

They were (said to be) working. (Fagua Rincón 2013: 270)

In Ocaina, the reported evidential can also occur in interrogative clauses, as in (3), where it appears to introduce an ideophone.

(3)

hãʔdʲa	**xaʔ**	tsiõʔ_tsiõʔ	naaʃíʔ?	ha-nɯm̥ooʔɸi	**xaʔ**	nɯ̃ʔɯ̃
INTER	REP	IDEO	make	3SG-bowels	REP	so
ɲa-tsiõʔ.ɸo-ʔɯ-naʔ			/	tsiõʔ_tsiõʔ_tsiõʔ		
3SG.OBJ-wistle.*tsioʔ*-ITER-PAST			/	INTERJ		

What makes (the sound, so-called) '*tsion-tsion*'? (bowel sound of a hungry person).
Then his so-called bowels whistled to him '*tsionh-tsionh*'. (Fagua Rincón 2013: 141–2)

(p. 394)

The Ocaina reported particle can acquire epistemic overtones. The reading of *xaʔ* in (4) is 'maybe'.

(4)

hɑ́ʔdʲã	míhõʔ	**xaʔ**	ka-bagóóʔja	xõõ	ɯ̃ɯ̃-ʔ
INTER	also	maybe	1SG-chest	POSTP	exist-INTER.ADMIRATION

What may be then there on my chest? (Fagua Rincón 2013: 267)

The marker of reported evidentiality *xaʔ* might have come from a grammaticalized verb of perception. In his dictionary of Ocaina, Leach (1969: 156) lists *xaaxa* as 'listen, understand'. Ocaina has also verbs *axaa* 'see' and *ɑ́ɑ́xa* 'know', which could be related (Fagua Ricón 2013: 81).

Ocaina has a dubitative particle *-bɯʔ*, which refers to the degree of commitment in respect to speaker's own assertion. It seems to belong to the same paradigm as other markers with epistemic meanings. At present, it is not clear if *-bɯʔ* can be regarded as an evidential, or if it simply expresses varying degrees of doubt/certainty, and thus can only qualify as an evidential strategy (in the same manner as in Witoto, see §19.3.2). An example of the Ocaina dubitative particle is given in (5).

(5)

bɯʔ=ʔɯ	haɲɑ́ɑ́hɯʔ	dʲoʔõõhĩ	dʲaaɸo	hádʲa	ĩĩha	naaβína
DUB=RES	two	years	hole	POSTP	3SG	stay

He had maybe spent already two years in the hole. (Fagua Rincón 2013: 67)

19.3.2. Murui (Witoto)

The discussion on evidentiality is based primarily on data from Murui (Wojtylak forthcoming (a)).[7] Although the varieties of Witoto are closely related, there may still be some differences in terms of how evidentiality is expressed. There is no data available on Nɨpode, and the status of information source marking in better studied Mɨnɨka remains unclear (Echeverri and Gasché, p.c.). Mɨka is fairly well described, based on an extensive collection of mythological narratives gathered around 1920s by a German anthropologist Konrad Theodor Preuss (1921, 1923), translated and analysed by Gabriele Petersen de Piñeros (1994b, 1994c). Although this text collection is a remarkable source on Mɨka, it contains texts of just one type of genre; there appear to be no grammatical markers of evidentiality (Petersen de Piñeros, p.c.). In Mɨka mythological texts reported information is always expressed by direct quotation where the quotative verbal root *doi-* 'say' (Mɨka variant of Murui *rei-*, see example (12)) is followed by the sequential *-ta*.[8] The absence of reported evidential in mythological narratives in Mɨka is consistent (p. 395) with its lack in Murui where, for reporting information, Murui traditional texts strongly prefer analytic constructions with a quotative verb. Unfortunately, there is no conversational data available, and we can only be left wondering how Mɨka expresses reported information in everyday discourse. In Murui, conversational data is crucial for identifying and recognizing the reported evidential.

Murui has a two-term system of evidentiality with one reported specification and 'everything else' (unmarked). Marking of the reported value is not obligatory and its usage depends on the speaker. Murui also has two epistemic markers that express the speaker's attitude towards their assertions and commitment to the statement based on some type of tangible evidence. They qualify as evidentiality strategies in that they can be semantically extended to express evidential meanings, those of 'firsthand' and of 'non-firsthand' knowledge. This is somewhat similar to certainty-marking which correlates with the source of information in Cariban languages (see Chapter 16 on Cariban languages).

Murui unmarked forms express assertions which are neutral for both evidentiality and modality values. Unmarked verbal forms typically refer to 'unspecified' information source with no overtones of any kind of 'attitude' of the speaker towards their knowledge of reality. Such unmarked statements can be based on all kind of semantic parameters, e.g. sensory evidence, inference, assumption, general knowledge as well as reported information. The unmarked 'Elver drank' in (6) can be based on a multitude of information sources:

(6)
Elver jiro-d-e
Elver drink-LINK-3
Elver drank (I saw him; I heard him; I assumed he drank because he is sleeping here and the empty bottle lies next to him empty; somebody told me he drank; etc.).

The Murui evidential enclitic =*ta* refers to information obtained from someone else without specifying the exact source or authorship of the report. Reported evidential is illustrated in (7). This was used when Rubio heard about the theft from somebody else, and retold it to Lucio. The exact authorship of the statement is not indicated.

(7)

ñaiño	fi-ka=**ta**
SHORT.CL:DR.F	rob-PASS=REP

(It) was stolen by her (it is said; either she told me herself or somebody else said that).

The reported evidential occurs in principle on any of the clausal constituents. (8) comes from a conversation between a couple; the evidential =*ta* is marked on the adjective *mare* 'good'.

(8)

L:	bi-e	mare!
	this-CL:GENL	good
	This is good!	
F:	mare=**ta**!	
	good=REP	
	It is good! (reportedly)	

(p. 396)

(9)

ri-ño-mo	eroda-t-e,	ie=**ta**	maraiñe-d-e
woman-CL:DR.F-LOC	look.body-LINK-3	CONN=REP	good.NEG-LINK-3

He looks at women. This (reportedly) is not good.

The reported evidential =*ta* can occasionally occur in some interrogative and imperative clauses. (10) comes from a woman's story about her return to the village (she was away for a long time). She and her family travelled with a man called Yonatan. She mentioned him several times and added that Yonatan saw them before picking them up. Another woman, who listened to the story, asked about Yonatan using the evidential =*ta*.

(10)

ah,	y	oo-na	kɨo-d-e=**ta**	yo-t-e?
INTERJ	and[Sp]	2sg-N.S/A.TOP	see-LINK-3=REP	tell-LINK-3

Ah, and he (reportedly) saw you, he told?

Among the Murui people it is customary to ask questions rather than to make assertions about others. For instance, it is a common practice to ask 'are you walking?' when you pass your kinsmen in the jungle rather than to boldly state 'you are walking'. In that light,

the example (10) is a normal Murui way of asserting ‘so (Yonatan) told you he (reportedly) saw you.’

(11) comes from a dialogue between two sisters over the phone. They talked about a list of things to send in a package to the village. The conversation turned to some pictures one of the women had recently found. She asked ‘do you want to see them’ implying that she could send them over in a package together with other items. The other sister answered using the reported evidential.

(11)

K: kɨo-i-aka-dɨ-o nai-e-na?
see-EMPH-DESID-LINK-2sg ANPH.DIST-CL:GENL-NON.S/A.TOP
Do you want to see them? (implying that they can be sent over)

M: jiɨ, ore=ta!
yes, send[IMP]=REP
Yes, send (them) (reportedly)!

Murui reported evidentials are not normally used if the source of information is explicitly stated in the clause. Information with an overt reference to the quoted source has the form of a direct quotation. Direct quotations are analytic constructions with the quotative verbal root *rei-* ‘say’ followed by predicate markers, as in (12).

(12)

jiɨ, [ie diga] bi-zai-dɨ-kai, iadɨ nai-makɨ **rei-t-e**
yes CON WITH come-DIR-LINK-1pl CONJ ANPH:DIST-CL.GROUP say-LINK-3
‘ua ocho-mo jaaitɨ-kai’ **rei-t-e**
truly eight[Sp]-LOC go.FUT.LINK-1pl say-LINK-3
Yes, with him we were going to come. But they said: ‘We’ll go at eight’, they said (so we didn’t go with them).

(p. 397)

For indirect quotation, Murui can also use the demonstrative *akɨ* ‘that’s what’s been heard, as heard’ which indicates auditory information and can be extended to refer to something that was previously said. An example is given (13). Many traditional stories end with *akɨ*. It is also used when telling dreams, e.g. *akɨ kue* (AUDITIVE 1sg) ‘as for me, according to me’.

(13)

Kɨña ui-ga=dɨ, fuirɨ aima-jai-d-e **akɨ**
Kɨña bring-PASS=CONFIRMED up.stream fish-DIR-LINK-3 AUDITIVE
(The canoe) was brought by *Kɨña* (I am certain of it). (Then we heard) he went to fish.

This is however not the rule, as illustrated in (14).

(14)

L:	ni-e-ze	rei-t-e	nai-ño?
	INTER-CL:GENL-SIMIL	say-LINK-3	ANA.DIST-CL:DR.F
	What did she say?		
R:	'jifano-i-to!'	rei-t-e=**ta**	
	play-FUT-LINK.2sg	say-LINK-3=REP	
	'Play!' she said (reportedly).		

The reported evidential can be used with non-third person as well as desiderative and future tense markers but not with the apprehensive. In this example, a woman was repeating after her brother. The repetition is not entirely verbatim as the man said 'these dirty things put by you' and the woman reiterates 'put by me'. The verb 'will burn' takes the reported evidential.

(15)

bi-e	jea-kuai	be-no	kue	joone-ga
this-CL:GENL	be.ugly-CL:ROUND.PL	HERE-CL:SPECIFIC.PLACE	1sg	put-PASS
nana	booit-e=**ta**			
everything	burn.FUT.LINK-3=REP			
These dirty things (trash) put here by me, will all burn (reportedly).				

The Murui reported evidential is not used in traditional stories; rather, it is used to report information in everyday conversation. The meaning of =*ta* is quite transparent. Native speakers can easily reflect on the meaning of the reported evidential; they usually explain it as 'somebody said' or 'it is a comment'.

The expression of the reported evidential is not fused with any other grammatical category. It can however extend to other non-visual sensory information coding other types of auditory information that can be expressed in all types of clauses. This is illustrated in (16) where the interpretation is related to the speaker's assertion based on the question asked.

(16)

A:	oo	urue	gui-re-d-e?
	2sg	child	eat-ATTRIB-LINK-3
	Is your child hungry?		
M:	gui-re-d-e=**ta**!		
	eat-ATTRIB-LINK-3=REP		
	He's hungry! (he appears to be hungry, reportedly)		

(p. 398)

In (17) a woman was calling her brother who was in the communal house singing loudly (everybody could hear him). As her brother would not respond and kept singing, the woman commented using the reported evidential.

	Walter	ro-ro-d-e=**ta**!	aki!
(17)	Walter	sing-REDUP-LINK-3=REP	AUDITIVE
	Walter keeps singing (reportedly). Listen!		

This semantic extension of the reported evidential could be a result of the influence of the Spanish *dizque* 'it is said that' which also marks a type of conceptual distance and doubt in Spanish (Travis 2006: 1293). The fact that the reported evidential is rather restricted in its usage (that is, it does not occur in traditional stories in neither Murui and Mɨka), suggests that it may be a recent innovation rather than an archaic feature of Murui. Notwithstanding language contact and areal diffusion in the area, such a claim could be challenged given that other Witotan and Boran languages have the reported evidential value available in their systems.

In addition to the reported evidential, Murui has two verbal epistemic clitics whose meanings do not directly refer to information source but make reference to the state of knowledge of the speaker as well as their degree of confidence in utterance, willingness to vouch for information, and their attitude towards that information. Epistemic modality is not an obligatory category in Murui. If the speaker is reluctant to express any kind of 'attitude' towards the utterance, the verb remains 'unspecified' (that is, unmarked). Murui epistemic markers can undergo reinterpretation and function as a strategy to refer to the

source of information. They can be used with evidential-like meanings of ‘firsthand’ and ‘non-firsthand’ knowledge. Epistemic markers occur in declarative clauses only and occupy the same slot on the verb as the reported evidential and cover two options: the ‘confirmed’ and ‘unconfirmed’ certainty.

The clitic *=dɨ* indicates the speaker’s conviction that something is true as it is interpreted as ‘confirmed certainty’ where the speaker ‘knows’ something for a fact or believes it to be true. The certainty marker is related to the topic marker *=dɨ,* which marks predominantly S/A arguments. (18) is a reply to a question about what happened to the camera that for unknown reasons was lying on the ground outside the house. Tadave knew that it fell as she was cleaning the house and she pushed it down by accident. She answered as follows.

(18)

camara	jaai-ra-mona	uai-d-e=**dɨ**
camera[Sp]	go-CL:NEUT-ABL	fall-LINK-3=CONFIRMED

The camera fell from the staircase (I am sure of this).

The extension of the semantics of the topic-marker into marking speaker’s conviction that something is ‘certain, confirmed’ is true also for Bora (see §19.4.1). The ‘confirmed certainty’ clitic can gain ‘firsthand’ knowledge meanings and be interpreted as a confirmation that something is true, based on some type of direct evidence (which is usually sensory). In (19), a woman kept looking for her older sister. A woman’s father reassured her twice that her sister went to the jungle garden. When the woman asked again, he got irritated. He had witnessed his older daughter going to the jungle garden in the morning. (p. 399)

(19)

jitɨ-ra-mo	iyɨ-mo	jaai-d-e=**dɨ!**	i-ñe-d-e=**dɨ!**
dark-CL:NEUT-LOC	garden-LOC	go-LINK-3=CONFIRMED	exist-LINK-3=CONFIRMED

She went in the morning to the jungle garden! She is not here! (I know this for certain, I saw her leaving)

In addition to the ‘confirmed certainty’ marker *=dɨ*, Murui has also the clitic *=za* which has epistemic meanings and expresses speakers’ fair conviction that something must be the case based on their own knowledge and experience but it is not yet completely affirmed. Example (20) can be interpreted as ‘I imagine that (the cassava) is in the kitchen but I don’t know for certain (as e.g. I didn’t leave it when I left the kitchen)’.

(20)

pero	be-no-mo	i-t-e=**za!**
but[Sp]	HERE-CL:SPECIFIC.PLACE-LOC	be-LINK-3=UNCONFIRMED

(The cassava) must be there! (certain but unconfirmed)

Murui speakers indicate that in clauses like (20) there is an element of an uncertainty as to whether the sentence corresponds to the truth, so much so that sometimes such a statement can be interpreted as portraying information, being mistaken or not telling the truth. Such interpretations usually occur when the speaker is the first person.

The 'unconfirmed certainty' =*za* can extend to express 'non-firsthand' knowledge, such as assumption and inference. This is based on some type of tangible evidence through seeing or hearing, and also deduction, logical reasoning, and of assumption. In the following example (21), Francisca left the kitchen saying she would go to sleep. After some time Flor called her from the kitchen to come back. Since Francisca did not respond, Flor assumed that she must be sleeping and concluded:

(21)

nai-ño	jai	ɨni-d-e=za
ANA-CL:DR.FEM	ALREADY	sleep-LINK-3=UNCONFIRMED

She must be already asleep. (assumption)

Another example (22) illustrates what can be understood as inference. Flor prepared food for her daughter Rata and left to go to the jungle garden. Upon returning, the food was gone and Rata was nowhere to be found. When Flor was asked what happened to the food, someone answered:

(22)

Rata	gui-t-e=za	bi-e-na
Rata	eat-LINK-3-UNCONFIRMED	this-CL:GENL-N.S/A.TOP

Rata must have eaten this. (inferred)

In addition to =*za*, Murui also has various other means to express uncertainty. They involve periphrastic expressions such as insertion of *izoi-* 'similar, alike'. The use of periphrastic expressions has to do with a speaker's lack of confidence and willingness to vouch for information, as well as their attitude. In the following example Francisca, who did not care for cats, heard a loud meow from the kitchen as the cat Kaiyɨredɨñaiño fell onto the hot coals. (p. 400)

(23)

[Kata	gato]s	irai-mo	uai-d-e	izoi-d-e
Kata	cat	fire-LOC	fall-LINK-3	similar-LINK-3

(It) looks like the cat of Kata fell inside the fire. (why should I care)

19.4. Evidentiality in Boran languages

Bora is particularly rich in modality, evidentiality, and other types of markers. The language has the richest system of evidentials with three terms: the unmarked 'direct evidence', the inferred for 'indirect evidence' and the reported (discussed §19.4.1). Bora evidentials form separate subsystems, with a number of distinct paradigms. This might also be the case for Miraña (§19.4.2). The jury is still out on Muinane, which has the reported evidential and two, apparent (un)certainty-like markers (§19.4.3).

19.4.1. Bora

Bora has three evidentiality terms involving unmarked forms for 'direct' evidence and two enclitics *-ʔhá* 'inferred' and *-βá* 'reported'.[9] Inferred and reported evidentials can co-occur which indicates that the Bora evidentiality system consists of two coexisting subsystems (direct-inferred versus reported). In Bora, various types of aspectual, modal, and evidential distinctions are expressed by enclitics that attach to the first constituent of a clause. Although the ordering of many of the enclitics is not fixed, there are strong tendencies for certain clitics to follow each other (Thiesen 1996; Thiesen and Weber 2012; Seifart 2015).[10]

Bora clauses that are unmarked for an evidential imply a type of information for which the speaker has some type of direct evidence. Because of this association, statements that lack evidentials can be questioned by others as to their information source. As Thiesen and Weber (2012: 306) put it, 'if a speaker fails to include an evidential clitic when reporting an event he or she did not witness, they may be challenged by the hearer'. (24) is an example of an unmarked clause in Bora. (24) is interpreted as a statement conveying the information for which the speaker has 'direct evidence' (Seifart 2015: 1774).

(24)

tsáʔá=i:kɛ	di:-:bɛ	pɛ́:-tɯ́-nɛ
NEG=PROSP	3-CL.SG.M	go.SUBORD-NEG-CL.SG.M

He has not gone yet. (speaker has direct evidence) (Seifart 2015: 1775)

The direct evidential readings do not have epistemic extensions of certainty and speaker's conviction of the truth and responsibility of the statement in Bora (Aikhenvald 2004a: 187). (p. 401)

The evidential *-ʔhá* (spelled also as *-ʔá, -ɦja, -ha*) indicates that the speaker was not witness to the event or state expressed as the speaker did not personally 'see, hear, smell, or have tactile experience regarding what she or he is saying' (Thiesen and Weber 2012: 306). Seifart (2015: 1775) further specifies its reading as 'inferential' for which 'speaker has indirect evidence'. The inferred evidential refers to something not based on evidence which can be easily observed (sensory evidence) and can be deduced through reasoning, general knowledge, and perhaps conjecture. In (25), someone comments that a man went

to his house, but they I did not witness him going inside; there is however direct evidence for his entrance. This is similar to (26), with an inferred reading.

(25)

à:-nɛ̀-ʔ**há**-p^{h}ɛ̀	p^{h}ɛ̀-:pɛ̀	[ɪ$^{G\text{ʔ}}$	h^{j}á]-βɯ̀
CONN-thing/event-INFER-REM	go-CL.SG.M	self	house-GOAL

So he went to his house (but I did not see it). (Thiesen and Weber 2012: 429)

(26)

ɾ́ɾ́kɯ́ui=ʔ**á:**-ka	tsá:-:bɛ
quick=INFER-AFFIRMATIVE	come-CL.SG.M

He must have come quickly. (speaker has indirect evidence) (Seifart 2015: 1775)

(27) is part of a mythological narrative about a woman who went looking for her parents. A man caught her and brought her home in a bag and asked his sister to cook the woman. While he was away, his sister let the woman go and exchanged the weight of the bag for a squash. Upon arrival, when the man wanted to heat the bag on the fire, it popped open and the 'food' was ruined. The man suspiciously looked at his sister. He assumed that she was somehow responsible for this, and said:

(27)

á-ró-ne-má-**vá**-a			ne-ébe:	'muú-lle-j,
CONN-FRUST-thing/event-with-REP-REM			say-CL.SG.M	age.mate-CL.SG.F-VOC
ú-ubá-**hja**-né	[tá-lliiñájaj	táává]	ú	wallóó-hi̓
2SG-PROB-INFER-REC	my-hunt	catch	2SG	sent-CL

(It is said that) then being frustrated he said: 'Sister, I bet you sent away what I caught on my hunt.' (Thiesen and Weber 2012: 512)

The inferred evidential can also refer to the result which is observable but the actual process that led to it had not been seen, heard, smelled, or there is no physical evidence for it. In such contexts, the inferred evidential seems to frequently co-occur in the clause with the verb 'see'. (28) states that I saw a house which was burnt but I didn't witness the burning itself. The remote past marker indicates that I saw the house a considerable time after it had burnt.

(28)

ó	á^{x}t^{jh}ɯ̃mɪ́-ʔ	ts^{h}à-há-**ha**^{H}-a^{L}
1sg	see-CL	that-CL.SHELTER-INFER-REM.PAST
hà:	a^{N}í-:β^{j}ɛ̀-hàʔ	
shelter	burn-once.INTR-CL.SHELTER	

I saw a house that had burnt (but I did not see it happen). (Thiesen and Weber 2012: 307)

The Bora inferred evidential has limited tense distinctions. It can co-occur with either recent or remote past tense but does not occur on verbs marked for 'projected time' and future (p. 402) tense. This is unlike the Bora reported evidential which can occur with any

tense. Examples (29) and (30) illustrate the inferred *-ʔhá* followed by the 'recent' and 'remote' past markers.

(29)

o^{L}:ʔí-:p^{j}ɛ́-**ʔhá**-nɛ̀	ɯ́mɨ̀βá-ʔì
dog-CL.SG.M-INFER-REC	escaped-CL

The dog escaped (recently) (I did not see it). (Thiesen and Weber 2012: 307)

(30)

à:-nɛ́-ʔha^{H}-a^{L}	ɯ́mɨ́βà-:pɛ̀
CONN-thing/event-INFER-REM	escape-CL.SG.M

Then he escaped (some time ago) (I did not see it). (Thiesen and Weber 2012: 152)

Another distinct category of Bora evidentials includes the reported *-βá* (spelled also *-vá*). Reported specification is used when the speaker reports an event on the basis of someone else's report without indicating the exact source of that report. (31) and (32) are interpreted as if 'this information had been passed through a number of speakers' (Thiesen and Weber 2012: 308).

(31)

tì-:p^{j}ɛ́-βá	p^{h}ɛ̀-ɛ́-ʔ	ɯ́:-mà:
that-CL.SG.M-REP	go-FUT-CL	2SG-with

Someone says that he will go with you. (Thiesen and Weber 2012: 307)

(32)

[mó:á	ɯ́níɯ]-rí=βá=pɛ	pɛ-ʔíhká-mɛ́
river	edge-LOC=REP=REM	go-ITER-CL.ANIM.PL

It is said that they walked again and again along the river. (Seifart 2015: 1774)

The Bora reported evidential cannot be used as a marker of indirect quotation, as in (33) (Thiesen and Weber 2012: 307).[11] Specification of the exact author of the information can also involve direct quote with an explicit statement of who provided the information, illustrated in (34).

(33)

ò-k^{h}ɛ̀	nɛ́-:pɛ́	p^{h}ɛ́^{x}k^{h}òɾɛ́	í	p^{h}ɛ́:-ì-:p^{j}ɛ̀		í	ɪ^{G}:ɲɯ́-hɨ̀-βɯ̀
1SG-OBJ.ANIM	say-CL.SG.M	tomorrow	self	dirt-CL.DISK-GOAL		self	go-FUT-CL.SG.M

He said to me that he would go to his country tomorrow. (Thiesen and Weber 2012: 309)

(34)

ò-k^{h}ɛ̀	nɛ̀-:pɛ̀,	['p^{h}ɛ́^{x}k^{h}òɾɛ̀	ó	p^{h}ɛ̀-ɛ́-ʔ	t^{h}á	ɪ^{G}:ɲɯ́-hɨ̀-βɯ̀']	
1SG-OBJ.ANIM	say-CL.SG.M	tomorrow	1SG	go-FUT-CL	my	dirt-CL.DISK-GOAL	

He said to me, 'Tomorrow I will go to my country.' (Thiesen and Weber 2012: 309)

Reported is the only evidential in Bora that can occur in questions (Thiesen and Weber 2012: 321). In (35) the reported evidential is used to inquire about the reported information heard from a third party, not the person who the question is addressed to. (p. 403)

(35)

à-βà	ɯ́	pʰɛ̀-ɛ́-ʔì
INTER-REP	2sg	go-FUT-CL

Is it true (as someone told me) that you will go? (Thiesen and Weber 2012: 321)

The reported *-βá* is used in folkloric narratives and legends, and it appears to be the unmarked choice in Bora traditional narratives.

That the inferred and the reported evidentials can co-occur is evidence that Bora has in fact two coexisting evidentiality systems (unmarked 'direct'—inferred 'indirect' versus reported) rather than a three-term system (Aikhenvald 2004a: 83). Where two evidentials co-occur, the inferred 'determines' the source of reported information. In (36) the reported *-βá* indicates that the speaker knows from somebody else that Joseph had escaped. The inferred *-ʔha* signals that the person who reported this to the speaker had no direct evidence for Joseph's escape (Thiesen and Weber 2012: 309–10).

(36)

hòʦʰéɛ̀-βá-ʔha^{H}-pʰɛ^{L}	ɯ́mɨ̀βá-ʔ
Joseph-REP-INFER-REM	escape-CL

Joseph escaped (some time ago). (Thiesen and Weber 2012: 309)

Bora is particularly rich in modality markers, and also has a mirative. Reported evidential can occur with some of them. (37) illustrates the mirative *-hacá* can co-occur with the reported evidential.[12] The example is taken from a traditional narrative about a girl who became a toucan. As she was restraining herself from taboo food, she would take her cassava to the field to eat it with the *ñejilla* fruit. (37) expresses the reported 'unexpected' information (marked with the spelling variant *-vá)*, something unusual, as the girl eats the cassava with fruit instead of eating it with the meat, which is how customarily done.

(37)

ih-dyú-**vá-hacá**-a	[cátúújɨ́	behjɨ́báá-né]	i	lléhdo-KI
his-CL.LIKE-REP-MIR-REM	ñejilla.fruit	shoot-PL	self	eat-PURP
tsatyé-h	íjcya-lle			
take-SUBORD	be-CLF.SG.F			

Thus, she always takes *ñejilla* palm shoots to eat. (Thiesen and Weber 2012: 477)

In addition to 'dedicated' evidentials, Bora has the enclitic *-hɯ̀kʰhò* that is generally used to mark focus and is related to verbal suffix *-hɯ^{L}kʰho:* 'now'. In Bora, the presence of the

focus-marker =*hʉ̀kʰhò* indicates 'the sentence's veracity' (Thiesen and Weber 2012: 161). In (42) áβʲɛ̀tʰà 'very much' and -*hʉ̀kʰhò* modify *tì-:pʲɛ́* 'he' which is in focus.

(38)

áβʲɛ̀tʰà	tì-:pʲɛ́-**hʉ̀kʰò**
very.much	that-CL:SG.M-FOCUS

It is really HE. (Thiesen and Weber 2012: 161)

Bora has also other types of markers which relate to the speaker's attitude towards information. For instance, the marker -*ʔàhà* is used in questions to challenge 'the hearer to demonstrate the veracity of a previous claim' (Thiesen and Weber 2012: 315). (p. 404)

19.4.2. Miraña

Miraña is a dialectal variety of the closely related Bora language. Similarly to Bora, it has various enclitics that follow the first constituent of the clause and occur in a rather free order (Seifart 2005). One of these enclitics includes the reported evidential -*βa*, which has the same form as the Bora reported evidential (§19.4.1).[13] An example is given in (39).

(39)

té-kahá-gwɯɯ́-nɛ́=βá=pɛ	pitʃápítʃa
3-SPECIFIC.CM.CREEK-DIM-PL=REP=REM.PAST	OMT
mɛ́:nɯ-ʔíhka-:bɛ	
make-HAB-GENL.CM.SG.M	

In the little creeks he always did '*pitʃdpitʃa*' (sound of rubbing a bag with poison for fishing), they say. (Seifart 2005: 72)

Reported can be followed by tense clitics such as the 'remote past' =*pɛ́* as in (39), and can further co-occur with other types of tense-aspect-mood clitics, as in (40).[14]

(40)

á:-nɛ-tɯ́=βá=pɛ́=iʔdɯ	úhkɯ-:bɛ
CONN-GENL.CM.INAN-ABL=REP=REM.PAST=TAM	take-GENL.CM.SG.M

And then, they say, in that time, indeed, he (the snail) took (something). (Seifart 2005: 151)

The reported evidential in Miraña is not a genre-specific feature, like it is in Murui occurring in conversation. Miraña reported occurs in everyday discourse as well as in traditional narratives. This is illustrated in (40) and (41). (41) and (42) are taken from a mythological narrative about two snails, an aquatic one and a terrestrial one. In (41) the terrestrial snail takes a liana to measure the depth of a pool of water.

(41)

í:nɯ́-hɨ́	ɯhtsɯ́-kó		
earth-SPECIFIC.CM.ROUND	snail-SPECIFIC.CM.POINTED		
mó:ʔo-ɯ́=βá=pé=iʔdɯ		i	ɯ́hkɯ́-na:
liana-SPECIFIC.CM.STRING=REP=REM.PAST=TAM		3SG.SUBORD	take-after

The earth snail, after taking [what was said to be] a liana […]. (Seifart 2005: 271)

The example (42) is an excerpt of a conversation between a few men making a mouse-trap. The referent of this dialogue was a strap, which is a part of the trap. In the course of the conversation, a speaker asks whether the strap was already in place. The reported *-βa* occurs on the NP *tɛ:-né=hɯkó* (3-GENL.CM.INAN=PERV) 'it (strap)'. The evidential is within the scope of a question.

(42)

a:	tɛ:-né=hɯkó=βá?
INTER	3-GENL.CM.INAN=PERV=REP

(Is this) it (i.e. strap) already? (still fiddling with the strap) (Seifart 2005: 276)

(p. 405)

The existence of other evidentiality specifications in Miraña remains a question, due to the lack of data.[15] Given that it is a close dialectal variant of Bora, the expression of other information sources, such as 'direct' or 'inferred' in Bora, could be similar in Miraña.

19.4.3. Muinane

The reported evidential in Muinane has the same form as in Bora and Miraña (Walton and Walton 1975). Walton and Walton (1975: 58) interpret the suffix *-va* [-βa] as 'it was said' and 'informed'. Note that the source of information can be exact of the 'she/he told' type as in (43), or hearsay, as in (44).[16]

(43)

dii-bo	kaani-badɨ-va
3-CL:SG.M	padre-SIMIL-REP

(He said that) he is like a father. (Walton and Walton 1975: 43)

(44)

fee-xi	onoono-va
go-FUT	say.REDUP-REP

(It was said) that he said (I'll) go'. (Walton and Walton 1975: 38)

Examples (45) and (46) are taken from a traditional narrative about the orphan *Jɨ̈imudaje* ('armoured catfish') who was a misbehaving boy. As a punishment for stealing and eating the *abiu* fruit, two women twisted his lower lip that contained milk-like sticky sap; as a result the lips of *Jɨ̈imudaje* remained turned downwards.

(45)

xaa-bo-ko	i-faxe-u-va	iki-u-ʔo	fa-xa-ʔadži-ti
so-SG.M-COMP	DEF-tempted-PAST-REP	get-PAST-GENDER	all-house-TOP-OF
ige-ʔika-u-no	feene-vo		
walk-CONT-PAST-INAN	means-GOAL		

(It was said) he was tempted to touch everything in the house. (Walton and Walton 1975: 67–70)

(46)

xaa - maño	dii-bo	xini-ba	fidžere-ki-ni-ʔi
so-CONQ	3-CL:SG.M	lip-CL:ROUND	bend-SIMIL-PERV-GENDER
i-faxe-ua-va	feene-vi		
DEF-tempted-PAST-REP	means-GOAL		

(It was said) he remained with his lower lip turned downwards. (Walton and Walton 1975: 69–70)

(p. 406)

Interestingly, Vengoechea (2012) in her description of lexical categories in Muinane does not mention the reported evidential which is discussed in Walton and Walton's description. In three clanolects of Muinane she studied there is no evidence for a marker with reported-like meanings (Vengoechea, p.c.). This might be suggestive that these particular clanolects of Muinane do not have the reported evidential at all.

Regardless of the absence of the reported evidential, Vengoechea (p.c.) noticed two optional affixes, *-he* and *-te*, that she interprets as markers referring to 'speaker's certainty' towards statements.[17] They appear to be in a paradigmatic relationship. The marker *-he* refers to past actions, processes, or events whose veracity the speaker is certain of. The marker has, therefore, overtones of commitment to the truth of the statement. This is illustrated in (47).

(47)

dV-hî:bi-nɯ-**he**-ʔi

2SG-coca-DENOMINAL-CERTAINTY-PREDICATIVE.MARKER

You [certainly] picked some coca leaf. (Vengoechea 2012: 143)

Similarly, verbs marked with the morpheme *-te* are interpreted as expressing 'uncertainty' regarding the information conveyed by the statement, as illustrated in (48).

(48)

dî:-to	té:-ʔi-ko	mê:kɯ-**te**-hi
3-CL:GROUP	stream-CL:THREAD.LIKE-OBJ	watch-UNCERTAINTY-PROSP

They [supposedly] went to watch the stream. (Vengoechea 2012: 144).

At present the exact number of Muinane evidentiality distinctions are difficult to ascertain, since the status of the verb with the 'certainty' markers and the evidentiality marking remains unclear. So does the status of unmarked clauses in the language.

19.5. Summary

This chapter focuses on the expression of evidentiality in two language families in northwest Amazonia, the Witotoan and the Boran languages. Witotoan languages have a relatively simple system of evidentiality, with two options available, 'reported' and 'everything else'. Grammatical marking of the reported evidential is optional and depends on the speaker's attitude towards assertion. Reported evidential is also genre-specific; its occurrence is predominantly limited to everyday conversation. Marking of evidentiality in Boran languages is much more elaborate. In Bora, there are three options available: unmarked clause refers to direct evidence, inferred implies indirect evidence and reported describes information obtained by hearsay. Table 19.1 at the end of this chapter offers a brief comparison of evidentials and their properties across the Witotan and Boran languages. (p. 407)

Table 19.1. Evidentiality in Witotoan and Boran languages

Parameters		**Ocaina**	**Witoto (Murui)**	**Bora**	**Miraña**	**Muinane**
evidentials (E)	unmarked	evidentiality-neutral	evidentiality-neutral	direct evidence	* direct evidence	unknown
	inferred	unknown	evidentiality strategy (epistemic modality)	*-ʔha*	* *-ʔá*	unknown
	reported	*xaʔ*	*=ta*	*=βá*	*=βá*	**-βa*
epistemic modality (EM)	certainty	unknown	*=dɨ* (‘confirmed’) *=za* (‘unconfirmed’)	*-hɯ̀kʰò* (‘focus’)	unknown	*-he* (‘real’)
	uncertainty	**-buʔ* (‘dubious’)	-	unknown	unknown	*-te* (‘virtual’)
co-occurrence of markers (E/EM)		* no	no	reported with interred	* reported with interred	unknown
optionality of marking (E)		optional	optional	usually used	* usually used	all optional

Restrictions (E)	Tense	* no	no	inferred has fewer tense distinctions; reported is not limited	* inferred distinguishes fewer tense distinctions; reported is not limited	* no
	Clause type	* reported in declarative and questions	reported in declarative, imperative, and interrogative	reported in declarative and interrogative	reported in declarative and interrogative	* declarative
	Person	* third person	mostly third person, but other persons possible	mostly third person, but other persons possible	* third person	* third person
	Genre	* all	everyday conversations	all	all	all
Marking (E/EM)		following verbs and constituents	verbs and constituents	verbs and constituents	verbs and constituents	verbs and constituents

(*) signifies that the analysis is not conclusive

(p. 408) This study has shown that reported evidential appears to be recurrent and the most stable feature throughout all languages of the Witotan and Boran families. Witotoan and Boran reported evidentials have basically the same semantics—to refer to information obtained from someone without indicating the exact source of the report. It is clear that both language families pattern similarly with regard to the marking of the reported evidential. Regardless of how 'rich' the system of the language is, the reported evidential always forms a separate paradigm, is expressed in different slots on the verbal words or within a clause, and cannot be marked twice. Although each language has its own restrictions on co-occurrence of reported with other tense-aspect-mood-evidentiality categories as well as clause types, distribution-wise reported evidentials appear to be much more 'flexible' than any other morphemes with evidentiality or evidentiality-like meanings.

All Witotoan and Boran languages show some type of optional marking that refers to speaker's certainty towards an assertion. Such certainty often translates with markers of a speaker's degree of confidence in an utterance, willingness to vouch for information, and their attitude towards that information. There is a tendency towards languages with 'simple' evidentiality systems ('reported' versus 'everything else') to develop clear distinctions in marking 'certainty' values, whereby epistemic modalities undergo further reinterpretation receiving evidentiality-like meanings. This is the case in Witoto (Murui) where 'confirmed' certainty might acquire meanings of firsthand knowledge and 'unconfirmed' might have overtones of non-firsthand knowledge. The reported evidential, on the other hand, may be extended to cover auditory information. On the other hand, in languages with more 'elaborate' systems of evidentials, such as that of Bora, the expression of 'certainty' does not seem to play as significant role, as it does in Murui. It could be that larger systems of evidentials have simply more options to cover more possibilities of expression, even if it is just an unmarked clause expressing direct evidence in Bora. Note that unmarked clauses in Witotoan languages have evidentiality-neutral meanings. Our study will prove to be particularly valuable to researchers interested in evidentials in language families located 'outside' the 'Vaupés' linguistic area, a region known to be the 'epicentre' of diffusion of evidentiality in northwest Amazonia (Epps 2006, 2005; Aikhenvald 2002, forthcoming (b); and §7.2.4 of this volume).

Notes:

([1]) In the literature the four variants are referred to as dialects of the 'Witoto language'. In fact, 'the Witoto language' does not exist. The names *bue, mɨka, mɨnɨka*, and *nɨpode* refer to the expression 'what' and are used by the people themselves as autonyms. The Murui, Mɨka, Mɨnɨka, and Nɨpode peoples recognize their common ancestry but consider themselves to be separate social groups speaking different languages. Traditionally, the Murui and the Mɨnɨka peoples were the 'major' groups in the Caquetá-Putumayo area. All groups share a rampant resentment towards the name 'Witoto', which was an exonym given by Carijona signifying 'less-human' (David Guerrero Beltrán, p.c.).

([2]) See the linguistic classification proposals such as Ortiz (1942), Mason (1950), and more recently Patiño Roselli (1987), and González de Pérez and Rodríguez de Montes (2000). Various linguists and anthropologists with firsthand knowledge of Boran and Witotoan languages view them as separate language families, see e.g. Minor and Minor (1982), Petersen de Piñeros (1994a), and Wojtylak (2017) for work on Witoto, Rivet, and Wavrin (1953) and Echeverri (2014) on Nonyua, Fagua Rincón (2013) for Ocaina, Thiesen and Weber (2012), Seifart (2015) and Guyot (1969) for Bora, Seifart (2005) for Miraña, and Walton and Walton (1975) and Vengoechea (2012) for Muinane.

([3]) This chapter is further supported by additional information obtained through personal communication with authors of the available works, Maria Consuelo Vengoechea (Muinane), Doris Fagua Ricón (Ocaina), Juan Alvaro Echeverri (Mɨnɨka and Nonuya), Gabriele Petersen de Piñeros (Murui and Mɨka) and Jorge Gaché (Mɨnɨka). I am very grateful for their insights and comments.

([4]) See Wojtylak (2016) and Petersen de Piñeros (2007) on classifiers in Murui. For Boran languages, Seifart (2005, 2009) argues that in Bora and Miraña the classifiers are better analysed as ‘noun classes’.

([5]) Fagua (2013) glosses particle *xaʔ* as ‘reportatif’ in French. Into Spanish *xaʔ* she frequently translates as ‘it is said, they say this’ (*dizque, eso dicen*) (Fagua Rincón, p.c.).

([6]) In order to streamline glossing, all the examples from Witotoan and Boran languages have been reglossed for consistency using the abbreviations employed throughout this volume; numerous Ocaina and Muinane examples have been translated from French and Spanish. To ease understanding of some examples, I have also provided additional explanations between square brackets.

([7]) Information on Murui was obtained during original fieldwork of 12 months on the Cara-Paraná River in Colombia, conducted between July 2013 and April 2016, to collect data for the reference grammar of Murui. My corpus includes approximately 500 pages of texts, consisting of narratives of all kinds (such as traditional stories, historical accounts, everyday conversations volunteered by the consultants, etc.).

([8]) The sequential suffix *-ta* has the same form as the Murui reported clitic *=ta*.

([9]) ‘Inferred’ and ‘reported’ evidential markers are glossed as ‘non-witnessed’ and ‘reportative’ by Thiesen and Weber (2012), and ‘inferential’ and ‘quotative’ by Seifart (2015).

([10]) I follow glossing conventions of Thiesen and Weber (2012) and Vengoechea (2012) when citing examples from their grammars. They gloss Bora and Muinane clitics and affixes in a similar fashion. Seifart (2015) glosses clitics and suffixes differently.

([11]) Thiesen and Weber (2012: 307) state that the reported evidential is used as a marker of indirect quotation but provide a counter example in (37) which is unmarked for *-βá*.

([12]) Thiesen and Weber (2012: 313) gloss the mirative as ‘realize’.

([13]) Seifart (2005) glosses reported as ‘reportative mode’.

([14]) Some tense-aspect-mood enclitics in Miraña, such as =*i?dɯ* in (41), are not well understood yet. They are glossed as ‘TAM markers’ (Seifart 2005: 73).

([15]) The ‘direct’ evidence reading of formally unmarked clauses in Bora could also be true for Miraña zero-marked clauses. Seifart (2005: 73) notes that some of the Miraña tense-aspect-mood enclitics, such as =*ʔá*, are not yet understood and require further study. The enclitic =*ʔá* (example 20, Seifart 2005: 302) could possibly be a cognate with the Bora inferred marker (enclitic) -*ʔha*.

([16]) No interlinear gloss is given in the original for (49)–(54). The subsequent glossing follows my own analysis.

([17]) Vengoechea (2012: 143–4) glosses them as ‘real’ and ‘virtual’ but examples are few. Walton and Walton interpret those affixes as markers of ‘movement’ (*he-* for ‘comes from’ and *te-* for ‘goes’) (Walton and Walton 1975: 44).

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Abstract and Keywords

The expression of evidentiality is quite diverse among the languages of the Uto-Aztecan family. This diversity is seen both in the number of terms and associated functional distinctions and in the formal means used to express them. The purpose of this chapter is to synthesize and describe evidential expression across the family, both as a contribution to a typology of evidential systems in the world's languages and to an understanding of the diachronic development of such systems. All the languages surveyed in this chapter mark, at a minimum, reported information, and most of them also carry some means for marking inference. The grammaticalization and renewal of reportative evidentials is considered. Most of the languages treat direct evidence either as the default or unspecified case. The overt marking of direct, firsthand evidence is rare, and just a few languages express perceptual evidence, either visual or auditory.

Keywords: Uto-Aztecan languages, evidentiality, diachrony, grammaticalization, quotative particle, reportative, inferential, perceptual, mirativity, contact influence

20.1. Introduction

20.1.1. Preliminary remarks

Evidentiality, the grammatical expression of the information source for a proposition, is quite diverse among the languages of the Uto-Aztecan family. This diversity is manifest both in the number of terms and associated functional distinctions and in the formal means used to express evidential functions. The purpose of this chapter is to synthesize and describe properties of evidential expression across the family both as a contribution to a typology of evidential systems in the world's languages and to an understanding of how such systems develop in the context of a well-established, but underrepresented and lesser-known, language family[1].

Evidential systems in Uto-Aztecan range from the single term expression of the non-eyewitness, indirect, or reportative type to those that have been purported to express four or more distinctions. At least two languages in the family, Cupeño (Takic) and Southeastern Tepehuan (Tepiman), are reported to carry morphological markers of mirativity[2] as well (Hill 2005; García Salido 2014b). All the languages surveyed in this chapter appear to mark, at a minimum, reported information, either with a dedicated reportative marker or as the extension of a quotative particle. Most of the languages also carry an overt (p. 410) marker of inference as the information source. Very few languages express firsthand perceptual experience as a dedicated grammatical category, and only two in this survey are known to overtly mark direct evidence. Rather, the majority carry no marking either as the default for direct, firsthand experience or as simply demonstrating that the nature of the evidence is unspecified.

As a point of clarification, I utilize the term ‘quotative’ when referring to an element, usually a particle, whose function is to mark directly quoted material when the author of that material is known. Quotative particles frequently accompany an actual speech act verb, and often derive historically from such a verb. In contrast, I take ‘reportative’ to indicate a form that is more clearly evidential in function in that it may not indicate an actual speech act, but rather the source of information as indirect, involving hearsay. Such forms are often translated as ‘it is said’ or ‘they say’ without a definite or clearly specified source. The same form may carry both quotative and reportative functions, as in Northern Paiute (§20.2.1), but there may also be a formal distinction between the two, as we see in Yaqui (§20.7.1).

Mode of expression of evidentials in Uto-Aztecan is also somewhat heterogenous, both within a single language and across the family, where we find forms as 1) part of the verbal inflectional complex (generally as suffixes in the same inflectional zone as aspect and mood marking—that is, following the stem and any derivational affixes, but preceding any subordinating morphology), 2) part of the (mostly) pan-Uto-Aztecan auxiliary (AUX) complex (frequently appearing in syntactic second position), and 3) part of a set of non-inflecting particles, sometimes phonologically bound as clitics (mostly following their hosts) at clausal or prosodic boundaries.

20.1.2. Uto-Aztecan languages

The unity of the Uto-Aztecan language family has been well-established, and the unity of the major subgroups is reasonably well settled. There remains, however, a degree of inconclusiveness as to mid-level groupings, and so the relationships between the branches remain a topic of ongoing research and debate. The idea of a primary split of the family into two main branches, Northern and Southern, has long held sway. The details of the family’s internal structure lies well outside the scope of this chapter. I will organize my discussion of evidentials in Uto-Aztecan languages around six established subgroups, consisting each of at least two (Coracholan) and as many as seven (Numic) languages, as well as two singletons (Tübatulabal and Hopi[3]).

Uto-Aztecan languages span a large geographical area stretching from eastern Oregon in the United States to the north, to El Salvador in the south. Figure 20.1 illustrates the approximate distributional range of the major subgroupings of the Uto-Aztecan family. (p. 411)

Figure 20.1. Geographical distribution of the Uto-Aztecan languages (from Merrill 2013)

On the whole, I have aimed for balanced coverage in terms of the inclusion of material on evidentiality in languages from each of the subgroups. Truly balanced coverage has been hampered by the fact that 1) my own knowledge and experience with the languages of the family favours its northernmost, Numic branch, and 2) my ability to derive reasonably detailed information about evidentiality and evidentials from the available descriptive material results in a certain degree of unevenness.

The latter problem is addressed at various points in this chapter by critically assessing whether or not a form defined in a source as a marker of evidentiality truly has evidentiality as its primary function, or whether, as is often the case, epistemic modality is primary, with evidentiality 'coming along for the ride,' as it were. Alternatively, it is sometimes also the case that what is clearly an evidential marker is not identified as such. (p. 412)

20.2. Numic

The Numic branch of Uto-Aztecan represents the family's northernmost reach. It, in turn, consists of three sub-branches, Western, Central, and Southern, each consisting of two or three languages. The discussion that follows includes information from all three branches of Numic.

Of the three branches, Southern Numic languages have received the most attention where evidentiality is concerned. Munro's (1978) study of Chemehuevi as a point of departure for describing the development and renewal of quotatives across Uto-Aztecan as well as Bunte's (1979) important work on Southern Paiute notwithstanding, there remains a need for more intensive, discourse-centered work on evidentiality across Numic.

I will proceed north to south, however, beginning with a look at the Western branch through Northern Paiute—the language I know best and upon which I have conducted ongoing documentary field and archival work.[4]

20.2.1. Northern Paiute (Western Numic)

Northern Paiute, according to Thornes (2003), has no dedicated system of evidentiality. In the context of more recent, definitive typological work, however, it is clear that the language does, in fact, grammatically mark information source in two distinct subsystems—its second position clitics and its discourse particles.

In Northern Paiute, the evidence for the quotative particle *mi(ʔi)* developing properties of a reportative evidential stems from examples like the following, where one occurrence fulfills its role as a quotative and a second is left to carry the (presumably newer) reportative function.

(1)

'óoʔno=saʔa	nɨ	ka=tiipɨ	atasu	yɨkʷi-tua-tɨ,'
at.the.time=MOD	I	OBL=earth	different	make-INCH-NOMZ
mí=yaisi	ɨnakʷi	**mi**		
QUOT =then	reply	QUOT/REP		

'Then I shall change the earth,' is what he said, they say.

(p. 413)

In its typical quotative function, *mi(ʔi)* appears in concert most frequently with an utterance verb, like 'tell' or 'say.' This is a defining property of the quotative construction as described in languages across the family. In Northern Paiute, we find *mi(ʔi)* with thoughts ('internal speech') as well, in which case it appears with verbs of cognition.

(2)

owi-u	watsi-kwɨ	**mi**	sunami-na
DEM-U	hide.SG-FUT	QUOT	think-PARTIC

'(I) will hide in there,' so (she was) thinking.

Reportative evidentials can develop into carriers of epistemic uncertainty or doubt, thereby allowing speakers to 'shift responsibility' (Aikhenvald 2004a: 193) away from themselves for the information contained in the message. The frequent use of the quotative particle in traditional storytelling in Northern Paiute may actually serve to assign that re-

sponsibility to a higher authority. That authority is the story itself, or perhaps its ancestral source. This helps explain in part why the best raconteurs use the particle so frequently and invoke authenticity (and veracity) as a result.

(3)

u-su	isa	ka=tiipɨ	manimɨtu	noo?o-ko	**mi**
3-NOM	wolf	OBL=earth	create	all-OBL	QUOT/REP

That one, Wolf, created the earth, all of it, they say.

(4)

hauka	ya?i-si	pi-k^{W}ai-tu	ti=mia-na	**mi**	ti=natɨk^{W}iŋa-na
somehow	die.SG-SEQ	RESTR-AREA-LOC	1.INCL=go-PARTIC	QUOT	our=stories -PARTIC

(It) may be, when we die, that is where we go to, our stories say.

In the first example, authority is unassigned. It is later clarified by the second example as the story itself. Without this stylistic device, one risks sounding as though the claim for authority rests with the teller, rather than with the myth or its ancestral source.

Evidentiality in Northern Paiute also involves a modest set of second position enclitics. At least two forms, =*ka* (=*ga*) and =*kaina* (=*gaina*), express inference as the source of information for the proposition. The shorter form, =*ka*, expresses both inference and at least some degree of epistemic uncertainty. In the context of example (5), the narrator has been describing the sound a mother antelope makes when signalling danger to her offspring. The source of the inference is some form of sensory evidence, either visual or auditory.

(5)

tami=ga	u=tsagi-?yu-na
we.INCL=INFER	3=near-NOM-PARTIC

We must be close to it(s baby) …

Example (6) involves inference based upon common knowledge, as opposed to sensory input.

(6)

uu=tia?	kassa-ga?yu	mi?i,	paba-?yu=ga
so=thusly	wing-HAVE	QUOT	big-NOM=INFER

… they say (it, the Flying Creature) had wings like that; must be big ones …

(p. 414)

In Thornes (2003: 329), I describe the longer =*kaina* form as involving a 'reaction to an inferred possibility,' as demonstrated by the following examples from narrative:

	kidɨ=**gaina**	mayɨ-u-si.
(7)	groundhog=INFER/MIR	find-PNC-SEQ
	(She) may have found a groundhog!	

(8)

oo=**kaina**	mɨ=tɨya?i-pɨ	miu	ta	na-ni-naka-kɨ-ti
SO=INFER/MIR	PL=die.SG-PFV	QUOT	1.DU	MID-IP/speech-hear-APPLIC-TNS

Perhaps those who have passed on want us to hear them.

In example (7), the speaker is recounting past events, quoting herself in the context of suddenly hearing the family dog's bark during a root-digging expedition with her family. The speaker in example (8) is describing for the benefit of her listeners how she and others had heard the voices of their ancestors conversing on the wind. In both of these examples, the speaker was not necessarily hedging on certainty, but rather was expressing that the information contained in the main proposition was newly realized or surprising—a very mirative-like function.[5] Sapir (1930: 89) analyses a similar form, *-gainia*, in Southern Paiute as indicating 'unexpected inference,' a description that also strikes a mirative chord. The proper analysis of the Northern Paiute forms appears to be as evidentials marking inference, with one also analysable as a mirative strategy in certain contexts. Mirativity has been attested in at least two other Uto-Aztecan languages, namely, Cupeño (Takic) and Southeastern Tepehuan (Tepiman). These are discussed in §20.5.1 and §20.6.2, respectively.

20.2.2. Shoshoni and Comanche (Central Numic)

Dayley's (1989a) description of Tümpisa Shoshone includes, among a set of 'modal adverbs,' the quotative particle *mii*, clearly cognate with Northern Paiute *mi(?i*), and carrying a similar set of functional and distributional properties. The particle follows either 1) direct quotes (the quotative function) or 2) 'generally accepted truths which people talk about (Dayley, 1989a: 313).' The use of the quotative following direct quotes and in combination with a following speech act verb appears most frequently in the data Dayley provides, but one does find that it has crossed the line into reportative evidential territory in examples like the following from Dayley (1989b: 101):

	so?oppüh	üma-na	toyapi	mii
(9)	much	rain-PARTIC	mountain	QUOT
	They say it rains a lot in the mountains.			

(p. 415) In Western Shoshoni, the cognate particle *mee* (alt. *mai*) is ubiquitous in narrative. Silver and Miller (1997: 38) claim that, as a reportative evidential particle, it is an

obligatory marker of every clause in traditional Shoshoni narrative. This stylistic feature is similarly described for reportatives across Uto-Aztecan (e.g. Tübatulabal and Southeastern Tepehuan). In most cases, the reportative appears to be used when the speaker wishes to abdicate or displace responsibility for the veracity of the information being conveyed. In Southeastern Tepehuan, the reportative particle pervades all genres of speech, from traditional narrative to casual conversation and gossip. In Northern Paiute, as previously stated, the use of the reportative particle may actually serve to strengthen the veracity of the information by assigning a higher authority as source of information, in keeping with a set of cultural beliefs that strongly values the knowledge contained in traditional stories.

Comanche is described by Charney (1993) as having both an obviously cognate quotative particle *me* and a particle marking inference of the form *kia*.[6] As *me* 'occurs with and without verbs of speaking,' (Charney 1993: 189), one may assume that, as described elsewhere in Numic, it covers both quotative and reportative evidential functions. The inferential *kia* is associated with varying degrees of epistemic uncertainty, reflecting a speaker's judgement, but, like inferentials elsewhere, does not occur with the first person singular. As we will see in the next section, however, such a co-occurance may nevertheless lend a mirative reading to the proposition.

Interestingly, analysis by McLaughlin (1984) of an older corpus of Comanche texts focuses on the suffix *-kï*, which McLaughlin finds with great frequency in texts that regard situations outside the speaker's direct experience. Although also found suffixed to *me* (the quotative discussed in Charney (1993)), McLaughlin's focus is on the development of *-kï* as both quotative and what he calls a 'discourse evidential' across the four subgroups that constitute Northern Uto-Aztecan. His work provides important support for the cycle of development and renewal described throughout the family by Munro (1978).[7]

20.2.3. Colorado River Numic

Miller, Elzinga, and McLaughlin (2005) advocates for the renaming of the Ute-Southern Paiute-Chemehuevi dialect chain as 'Colorado River Numic'(CRN). This eliminates the artificial separation of what, by some measures, are mutually intelligible, if quite divergent, regional varieties. The evidential forms found in one or another variety most certainly predate CRN, and likely Southern Numic (perhaps even Numic) as well. Sapir's classic (1930) Southern Paiute work, amplified and clarified in later work by Bunte (1979), (p. 416) demonstrates the presence of an inference-based evidential with tinges of mirativity as well as a quotative-reportative.

Quotative particles and their historical relationships to one or another Proto-Uto-Aztecan word for 'say' have been thoroughly and convincingly described in Munro (1978), with Chemehuevi as a starting point. The Southern Paiute particle *y'a* functions as a quotative. The evidence for its functioning as a reportative evidential is scant, but a more thorough exploration of texts would clarify whether its broader patterns of use are in keeping with pan-Numic and general Uto-Aztecan trends.

Inferential particles are also found in Southern Paiute. Under a section entitled 'enclitics of modal and sentence-connective significance,' Sapir (1930: 89) describes a form *-gainia* 'too; also' as having a 'frequent modal use … to indicate a somewhat unexpected inference,' making it both formally and functionally akin to Northern Paiute *=kaina*, described in §20.2.1.

Bunte (1979) describes at least one of a set of verbal suffixes (or enclitics) that mark evidentiality in Southern Paiute. Featured prominently in her thesis is the verbal suffix/enclitic *-kai* (likely a contracted version of *-kainia*), whose function is that of an inference-based evidential, illustrated by contrasting pairs such as the following:

(10)

a. aipač-uŋ kamunci pakaŋu-**ka**
boy-ART rabbit.OBL kill.SG-EVID

b. aipač-uŋ kamunci pakaŋu-**ča**-ŋw
boy-ART rabbit.OBL kill.SG-PAST-3sg.INV
The boy killed the rabbit.

In (9a), the evidence upon which the speaker bases her statement is inference, perhaps seeing the visual evidence of the dead rabbit coupled with knowledge of the shooting habits of a particular boy. By contrast, (10b) is based upon the fact that the speaker actually saw the boy shoot the rabbit and is simply relaying the fact of this past event to the listener. Direct experience, Bunte assumes, is simply unmarked in Southern Paiute.

It is interesting that Bunte (1979: 131) also describes the enclitic *-ča* 'PAST' as referring 'to information learned through direct sensory experience,' thus providing a functional counterpart to the inferential *-kai*, and what one finds in many three-term evidential systems. Since all of her examples of *-ča* corroborate an interpretation as a past-tense marker, however, it is unclear whether it can indeed be described as a direct visual/sensory evidential.

Note the following contrastive pair with a first person participant:

(10)

c. taxuyai-**ča**-ni.
thirsty-PAST-1sg
I became thirsty.

d taxuyai-**kai**-ni.
thirsty-EVID-1sg
I was obviously thirsty.

In (10c), the speaker has direct sensory evidence of their own physical state. The (10b) example, by contrast, is described by Bunte as follows. '… when a Paiute friend picked up a glass of water … [and] … quickly drank up the water' (1979: 131) without being fully aware that they would do so. It would therefore appear to be the case that the Southern Paiute inferential marker takes on a very mirative-like function in conjunction with a first person participant. Presumably, the speaker otherwise has direct evidence for states ex-

perienced (p. 417) firsthand, and so when the experience is unexpected or surprising, the speaker refers to it as gained through inference.

Bunte's observations regarding the inferential *-kai* extend to its distribution. Firstly, she observes that it commonly occurs with verbs of perception. This makes sense, she concludes, since one cannot readily bear witness to the perceptions of others. As we have seen, one also requires inference in matters pertaining to one's own experience when that information is somehow unexpected, new, or surprising.

The inferential in Southern Paiute is also not restricted with respect to tense. In particular, one finds it co-occurring with the future, essentially casting a future possibility as a prediction based on an assessment of the available evidence.

Secondly, Bunte (1979: 134) explores the distribution of *-kai* against clause type or speech act. She notes that '*-kai* is not usually used with the negative … (T)he only exception to this seems to be that some negative imperatives do use *-kai*.' As far as I can determine from the discussion and examples she provides, the function of inferential *-kai* in the context of the prohibitive is to stop the addressee from continuing to do something the speaker has evidence to infer that they have already begun doing. Compare:

	kaču-ak	kani-ar	pini-ʔap
(11)	not-3.VIS	house.NOM-ART	see-NEG
	Don't look at the house.		
	kaču-ak	kani-ar	pini-**kai**-ap-ak
(12)	not-3.VIS	house.NOM-ART	see-EVID-NEG-3.VIS
	Stop looking at the house.		

The contrast is thus between a prohibitive 'don't V(erb)' and an arrestive 'stop V(erb)ing.' The interaction of evidentiality and non-declarative speech acts merits a great deal more exploration, as does its use with future/*irrealis* situations more broadly.

20.3. Tübatulabal

Tübatulabal has historically been considered a singleton within Northern Uto-Aztecan and is not described as carrying a system of evidential markers *per se*. This stems mainly, perhaps, from the lack of a modern, comprehensive grammatical description. Voegelin (1935: 171) does describe, however, in a section on 'Particles,' what he calls a 'quotative conjunctive particle, *-k/gidža* … attached to some (*sic*) word in the sentence for indirect discourse.' This particle, or, perhaps more properly, enclitic, is translated in the description as 'it is said', as one might expect of a reportative evidential. From a distributional standpoint, we see it appearing in second position following a connective ('then' or 'and') and clause-finally following the main verb, as in the following:

(13)

hani:-p	kima-kidža
house-his	come-QUOT

It is said he is coming home.

(p. 418)

This distribution is similar to that described for Cupeño's main reportative evidential enclitic *-ku'ut* (Hill 2005: 64).

Also of interest in Voegelin's (1935: 171) description is another particle, *-gït*, (actually, a contracted speech act verb) that is, in narrative speech, 'attached with a frequency which gives a peculiar stylistic effect; generally every third word, sometimes every word or every second word directly quoted.' This 'peculiar stylistic effect' is of course reminiscent of that described for Shoshoni and other languages (both within and without the Uto-Aztecan family), but to an even higher degree of frequency.[8] The available material on Tübatulabal is not complete enough to determine with certainty whether or not other evidential distinctions, in particular, ones marking inference, are present in the language. Munro (1978) draws a connection between this frequent conjunctive particle *-gït* in Tübatulabal and the Cupeño reportative evidential enclitic *-ku'ut*.

20.4. Hopi

The Hopi language, another singleton under Northern Uto-Aztecan, carries both a hearsay/quotative particle *yaw* (14c) in contrast with an inferential particle (14b) *kur* (Hill and Black 1998: 892). Hill and Black also include the particle *kya* (14d) in the set as marking a statement that is based on conjecture—a variety of inferential that does not require physical evidence. Direct, firsthand evidence is unmarked (14a) in Hopi.

(14)

a. isikwi hovàati
My meat spoiled.

b. isikwi **kur** hovàati
My meat seems to have spoiled.

c. isikwi yaw hovàati
I hear my meat spoiled.

d. isikwi kya hovàati
(I'm afraid) my meat may have spoiled.

It is important to note that these 'modal' particles may appear anywhere in the sentence and are not restricted to second position. Further, to this point I have addressed the unmarked case in evidential systems as the unspecified case, where information source is concerned. Aikhenvald (2004a: 75ff) discusses this concern in some detail. In this chapter, I am mainly reporting from the available resources on the languages, and so do not claim an evidential value for the unmarked case unless the source explicitly expresses one.

The quotative *yaw* is clearly cognate with Southern Paiute *y'a* and with speech act verbs elsewhere in Uto-Aztecan, e.g. Cupeño (cf. example (15) in §20.5.1) and Luiseño *yax*. It is also very likely the case that the Northern Paiute conjunctive particle *yaisi* also fits within this complex historical scenario involving a Proto-Uto-Aztecan verb of speaking. In the Northern Paiute case, such a verb rendered in its non-final form (the suffix *-si* marks a sequential converb) has come to mean 'and then; so' and is, like reportative evidential (p. 419) particles elsewhere, ubiquitous in narrative, but without the evidential associations typical of them. The rise of *mii* as a quotative/reportative particle in the Western and Central branches of Numic can thereby be motivated.

It is interesting to note that there is also possible cognacy between Hopi's inferential *kur* and the Cupeño reportative enclitic *=ku'ut*, despite their seemingly disparate functions. Michael (2015) describes a taxonomy of evidential systems similar to that of Willett (1988) within which the reportative and inferential functions fall under a broader category of information source, namely that of *indirect* evidence.

20.5. Takic

Takic consists of two branches, Cupan and Serranan, and possibly a third, if one distinguishes Tongva (Gabrielino) from Serranan (Jane Hill p.c.) The following analysis is based upon the most detailed descriptive material currently available.[9]

20.5.1. Cupeño (Cupan)

In her comprehensive description of Cupeño, Hill (2005) notes evidentiality appearing as part of the language's elaborate system of second position (en)clitics in a zone often characterized as the auxiliary (AUX) complex in Uto-Aztecan studies.[10] In initial position of this clitic complex one finds the reportative evidential *=ku'ut*, the mirative *=(a)m*, and the dubitative *=ʂhe*. Although Hill (2005: 66) places all three into a single evidential category, appearing in first position of the auxiliary clitic complex, only the reportative appears to have information source as its primary function. The mirative is used to express 'unimpeachable firsthand knowledge where the speaker is usually speaking at the moment of discovery.' The dubitative appears primarily to express a low degree of epistemic certainty.

There are several formal-distributional properties that distinguish the truly evidential *=ku'ut* from the others as well. Firstly, it does not (cannot) appear with other clitics in the same auxiliary complex, but can appear more than once in a single sentence. It favours second position, and is found 'most commonly … cliticized to the discourse particle *me*' (Hill 2005: 64) translated as 'and.'[11] (p. 420)

	Mu=ku'ut	'Isi-ly=am!'	pe-yax=ku'ut.
(15)	and=REP	coyote-NPN=MIR	3SG-say=REP
	And it is said, 'It's Coyote!' he said it is said.		

This example, from Hill (2005: 66), illustrates two patterns of reportative clitic distribution, syntactic second position and clause-finally. When it appears clause-finally in narrative, it serves a cohesive purpose by chaining one clause to the next. Also, as described in §20.2.1 for Northern Paiute, the reportative can serve to boost the veracity of narrative content. In discourse, as Hill (2005: 461ff) describes, the frequent presence of the reportative and the variability of its use are tied to genre and point of view, which can be shifted through its strategic deployment. Further, when narratives of certain genres reach their peak, reportatives are symbolically absent, lending a sort of firsthand immediacy to the description of unfolding events in Cupeño. More detailed descriptions of such usage patterns in discourse are essential for a comprehensive typology of evidentials.

20.5.2. Luiseño (Cupan)

Under a section describing 'syntactic enclitics,' Kroeber and Grace (1966: 66ff) describe the quotative *kunu-* (with allomorphs *kono-* and *kun-*), cognate with the Cupeño reportative enclitic *=ku'ut* and carrying the same reportative evidential function, as in the following:

	pi?=**kunu**?	nakmuk	pom-teela-y
(16)	and=REP	hear	3.PL-speech-ACC
	It is said he understood their speech.		

Luiseño *=kunu* (listed as *kuna* 'it is said' in Hyde (1971: 225)), along with other clitics pertaining broadly to mood, appear in the first of four positions within the system of 'composite enclitics,' a phrase that captures well the widespread auxiliary (AUX) complex in Uto-Aztecan. This composite, in turn, appears in syntactic second position in the clause, as in the sister Cupan language Cupeño and numerous other Uto-Aztecan languages.[12]

20.5.3. Serrano

Kenneth Hill, in work with some of the last speakers of Serrano (Hill 1967: 17), applies the term 'evidential' in a very broad sense, thus including forms whose primary functions lie beyond the coding of information source. As a strategy for unifying a subset of formal

categories, appearing as verbal suffixes with fixed rules of attachment, boundary phenomena, morphophonemic properties, etc., Hill defines evidentials as '… specify[ing] the validity of the statement.' (p. 421)

If one restricts the definition of evidential to those forms that have as their primary function the coding of information source, a simpler subsystem emerges that also accounts for some of the distributional facts. Chief among these are restrictions on the co-occurrence of the quotative *kwənə* and inferential *xa* particles. Although they may both co-occur with the dubitative *ta*, they may never themselves co-occur—a formal restriction explicable on a functional basis. The dubitative, from a functional perspective, centres more on epistemic modality rather than information source. On this basis, I would assume only that Serrano has a system of evidentiality that is typical of what we see elsewhere in the family, namely a two- or three-term system, reportative and inferential, with direct evidence formally unmarked.

20.6. Tepiman

The Tepiman branch of Uto-Aztecan includes two major sub-branches, Piman and Tepehuanic. Here we explore one language from each branch, one of which appears to have a more fine-grained evidential system than any other language in the family.

20.6.1. O'odham

O'odham[13] sentences often begin with a clitic complex (the AUX, cf. fn.10) which includes the evidential marker *-ki*. This form follows the subject pronominal and tense marking. The complex itself forms a constituent that may include the second position modal enclitic, as in examples (17)–(18) (Saxton 1982: 128).

	n-t-**ki**	hɨms	wo	čikp-ø
(17)	I-TNS-EVID	MOD	FUT	work-PFV
	I evidently should have worked.			

The actual information source associated with the evidential *-ki* in (18a) is not specified in the description, although there are clues, comparative and language internal, to infer its general function. Contrasting it with the quotative *-š* in (18b) and the ø-(un)marked 'experiential' forms in (18c) (plus a comparative analysis of O'odham's nearest relatives) provides the necessary background to support a reasonably clear analysis of evidentiality in O'odham.

	a. am	a-t-**ki**		ǰuu-ø
(18)	LOC	MOD-TNS-EVID		rain-PFV
	It evidently rained there.			

b. am a-t-š ǰuu-ø
LOC MOD-TNS-QUOT rain-PFV
It reportedly rained there.

c. am a-t-ø ǰuu-ø
LOC MOD-TNS-DIR rain-PFV
It rained there (directly experienced by the speaker).

(p. 422)

Based on these examples and what is found throughout the family, in particular in other Tepiman languages like Southeastern Tepehuan (cf. García Salido 2014a,b), I would assume that *-ki* functions primarily as an inferential evidential marker. Example (18a) would be uttered if the speaker had witnessed evidence of rain, but not the actual occurrence. In case the source of information is second hand or hearsay, (18b) is appropriate. Lastly, (18c) exemplifies the unmarked direct experience case.[14]

20.6.2. Southeastern Tepehuan

García Salido (2014b) describes the Southeastern Tepehuan (also known as O'dam) language as having five particles that distinguish information source plus *pɨx,* a marker of mirativity. The different evidential functions include two reportative particles—*sap* for unknown information and *sak* for information known to the speech act participants—*bak (~tak)*, a particle marking inference, a direct evidential particle *dhu (~dho)*, and *pui'*, indicating that the information source involved sensory input.[15]

Examples from this system include the following, taken from Willett (1988, 1991):

(19)

ma?n	mupai?	sap	kioka?	gu	ma?nkam
one	over.there	REP1/EVID	lived	the	person

It's told that a man once lived in those parts.

(20)

pai?	na	sak	pui?	tɨtɨ?	Jaaraʃʧa?m
there	that	REP2/EVID	thus	called	crab.on

There where it's called Crab Place.

(21)

vahii	bak	kugi
COMPL.went	INFER	AFFIMATIVE

Then he must have left.

	tukua?	dho
(22)	DISTR.eat	DIR.EVID
	He's eating (reponse to question).	

(p. 423)

The reportative (unknown to listener) *sap*, is used to indicate that the information was acquired indirectly, and is otherwise unreliable. The uncertainty expressed by the speaker is enhanced iconically by its frequency in the discourse (García Salido 2014b: 101). This particle is also used in combination with a speech act verb to indicate an indirect quotation. A second reportative, *sak*, somewhat unusually indicates that the information being conveyed, although acquired secondhand, is already known to both the speaker and the listener, and therefore its validity is not in question, as it is with *sap*. Willett (1988: 69) calls this 'thirdhand evidence.'

The particle *bak* (or *tak*) is used to indicate that the speaker infers the truth of the information based upon firsthand experience, generally of some sort of sensory input (seeing, hearing, smelling, etc.). The 'direct evidential' particle *dhu/dho*, by comparison, appears to be used with firsthand statements of fact and is, García Salido claims, mandatory unless the actor in the proposition is first person. Presumably, the speaker would not be reporting their involvement in the proposition as hearsay. This particle appears closest to what Aikhenvald (2004a) describes as an eyewitness evidential.

The particle *pui'*, glossed by Willett in example (20) simply as 'thus', properly belongs to a 'modal' category, according to García Salido (2014b: 105–7). Its use entails the sensory experience of the speaker as participant in the events coded or certainty on the part of the speaker that the events involving a third person actually occurred. This latter use provides a kind of counterpoint to the reportative-unknown particle *sap*, which may rather be used to defer responsibility. Although atypical as a marker of evidentiality, elsewhere (García Salido 2014a; García Salido and Reyes 2011) it is included in the evidential system of Southeastern Tepehuan (but see fn. 15). It is formally distinct from the other evidentials in its capacity to be encliticized to other particles.

The mirative particle *pɨx*, although not evidential *per* se, is included here, since miratives often exhibit functional overlap with evidential markers of inference. It marks surprising or unexpected information (often interpreted as a sudden occurrence).

(23)

Dai	na-gu'	añ	na=ñich	mu	xi-chitɨ	na-pai'
only	SUBORD-ADVZ	1SG.SU	SUBORD=1SG.SU.PFV	DIR	IMP-see	SUBORD-ADVZ

gu	sudai'	gu	tu'	marui	**pɨx**	ba=x-mɨjɨ
DET	water	DET	something	cockroach	MIR	COMPL=COP-inside

Then I looked out where the water was (coffee), and there was a cockroach!

García Salido reports that the sensorial *pui'* particle and the mirative frequently co-occur in discourse, apparently to assert both the speaker's responsibility regarding the veracity of the information and the unexpected nature of it.

	pui'	**pɨx**	jup-tu-ja-ajim
(24)	SENS	MIR	ITER-DUR-3R/R/M-arrive.sick
	They got sick suddenly.		

In summary, then, Southeastern Tepehuan appears to be unusual among languages of the Uto-Aztecan family, both in the number of terms (four plus a mirative) and in the fact that direct, eyewitness evidence is overtly marked in the language. (p. 424)

20.7. Taracahitic

The following discussion incorporates information from the two main branches of Taracahitic, Tarahumaran, and Cáhita.[16] We will look first at Yaqui (also known in the literature as Yoeme) before turning to available information from several sources on Tarahumaran languages.

20.7.1. Yaqui

Dedrick and Casad (1996) label two verbal suffixes in Sonora Yaqui 'quotative,' *-tea* and *-roka*. The quotative suffix *-tea* (143ff) is variously translated as 'they say' or 'is named.' I was able to find only one example of the suffix supporting a clearly reportative function.

(25)

'au	bamíh-tua-me	láuti	muk-née-'e-**tea**
REFL	hurry-CAUS-NOMZ	soon	die-FUT-E.V.-QUOT
They say that one who hurries will die soon.			

Based upon the available material on the language, however, the primary function of *-tea* is not clearly one that identifies information source. In closely related Mayo, there appears to be a cognate particle *'teewa*, which carries a reportative function in two of the first three lines of an illustrative text (Burnham 1984: 57), one which appears here as example (26):

(26)

xu?	'gwo?i	ii'xan	'tuisi	te'ba?ore-y	**'teewa**
DEM	coyote	COP	much	hunger.have-IMPERV	QUOT
The Coyote was very hungry (it is said).[17]					

17

Another Sonora Yaqui verbal suffix, *-roka,* is labelled quotative as well, but appears only to mark the main verb in an indirect quote complement, and so does not appear to carry a reportative evidential function. Given the cycle of renewal in the speech act verb > quotative > reportative sequence of development described by Munro (1978), I include it here, particularly since it could bear a historical relationship to the reportative evidential enclitic =*ra* in Tarahumara. The two Yaqui suffixes labelled 'quotative' by Dedrick and Casad (1996) would thus represent an early stage in the renewal of a reportative evidential.
(p. 425)

20.7.2. Tarahumaran

Urique Tarahumara (Rarómuri), according to Valdez Jara (2013) has three clear evidential distinctions, which she treats as verbal enclitics. These are a reportative =*ra*, and inferential =*re*, and an auditory =*cane*, which Caballero (2008: 109), in her description of Choguita Rarámuri, associates historically with a verb form meaning to 'make noise; say.'

The reportative =*ra* demonstrates typical quotative functions with specified information sources and accompanying speech act verbs as well as evidential functions with unspecified, secondhand information through hearsay. Caballero (2008: 427) illustrates the rather unusual same subject versus different subject allomorphs of the reportative enclitic (=*ro* versus =*ra*, respectively), and Valdez Jara (2013: 197) demonstrates the co-occurrence possibilities of the reportative and auditory evidentials in examples like the following:

(27)

ramué=ka	we	rolo-**cane**=**ra**-e	be'áriko
1PL=FOC	a.lot	snore-AUD.EVID=REP-PAST	last.night

We snored a lot last night, people said.

In this and other examples, the speaker is reporting on the auditory experience of a third party to the hearer. The reportative, therefore, has scope over the proposition, whose information source was the sound of snoring. Caballero (2008: 157ff) describes some of the unique formal properties of the auditory evidential that impact both its phonological form (it has mono- and di-syllabic allomorphs) and its morphological distribution (it may appear either preceding or following the desiderative suffix).

In addition to these unusual distributional and phonological facts, the system itself violates an implicational universal proposed in Willett (1988), namely that sensory evidentials would consist, at a minimum, of a visual component. Tarahumara appears only to have an auditory evidential marker encoding sensory evidence.

Valdez Jara (2013: 198) also describes an inferential evidential marker *=re*, which is restricted in its distribution to the copula *ka* only, as in the following:

(28)

ye=ka	rokosóli	ká-**re**
this=FOC	spider	be-INFER

It seems a spider/parece una araña.

For Western Tarahumara, Burgess (1984: 52) identifies a suffix *-le* on verbal and adjectival stems that he translates as 'appear; evidence of.' Based upon a small example set, it would seem that *-le* codes inference based upon visual evidence.

(29)

go'-lé-le
eat-EVID-PAST
There is evidence that he ate. (It can be seen that an animal got into the garden)

The form is clearly cognate with *=re* in Urique Tarahumara, as [r ~ l] is a common, if not regular, sound correspondence across Tarahumaran. As such, Western Tarahumara *-le* does not appear to carry the same distributional restrictions as Urique Tarahumara *=re*. (p. 426)

20.8. Coracholan

The Cora language, along with Huichol (Wixarika), make up the Coracholan branch of Uto-Aztecan. It is analysed by Casad (1984) and discussed in Aikhenvald (2004a) as having a four-term evidential system. These terms consist of one form, *ku*, indicating direct, usually visual, evidence, the particle *séin* coding evidence based upon inference, and two forms labelled as quotative particles, *nú'u* and *yée*. All four terms appear as particles, although the *ku* direct form appears frequently in syntactic second position and as a host to other clitics.

The main differences between the quotatives appears to be that *nú'u* is closer to what one may consider a true reportative evidential, indicating that the source of information is more or less underspecified, generally third person narrative or hearsay. The particle *yée* and its allomorphs, on the other hand, appear mainly in first and second person contexts. Willett (1988: 68) interprets the difference as thirdhand reported versus second-hand evidence. Compare:

(30)

ma-tɨ'ɨh	**nú'u**	m-í	šúušu'u	ra-ta-píi-tya-'a
they-then	QUOT/REP	they-RES	flower	DISTR-PERV-carry-make-APPLIC

And then, they say, they were giving him a flower.

	šaatauhka’anye	yee	heice’e
(31)	you:PL.COMPL.PERV.REFL.exert	QUOT	more
	Pour on the coals, you all, harder!		

As we find repeatedly throughout Uto-Aztecan, the quotative particle *yée* finds its diachronic roots as a verb of speaking in the protolanguage, and so could be on track for developing reportative properties. At this point, it is not entirely clear to me that *yée* is functioning as an evidential, although Casad (1992) presents a detailed analysis of its various semantic extensions, some of which have been grammaticalized. Both Southeastern Tepehuan and Cora have two quotative/reportative particles, but the available resources do not align their patterns of distribution and functions as clearly as one may be led to believe by Willett’s (1988) survey. More detail and examples than I have found are needed to truly assess the functional (dis)similarities holding between the Cora and Tepehuan systems.

The particle *séin* is labelled as an evidential in Casad (1984) but without further descriptive detail as to its function, which appears to be inferential in nature.

(32)

ah	pú-’i	há’a=hi-(y)a’-a-káa-va-ci	**séin**	i
then	SU.PRONOUN-SEQ	be.loc=NARR-away-outside-down-fall-PAST	INFER	ART
tyaška				
scorpion				
Apparently the scorpion dropped down from there.				

The evidential particle *ku*, according to Casad (1984: 179), is ‘used by the speaker to emphasize the veracity of the content of his utterances.’ (p. 427)

	a?ačʉ	**ku**	rɨ?ɨ	naarɨh
(33)	somewhat	EVID	well	me.COMPL.do
	It made me a little better.			

The label ‘evidential’ would seem to be misleading by this definition, which otherwise would be subsumed under a modality of epistemic certainty, rather than primarily coding information source. Willett (1988), citing data from Casad (1984), states that *ku* marks eyewitness evidence, making it one of just two languages (the other being Southeastern Tepehuan) in the Uto-Aztecan family I have found that overtly mark direct evidence. Again, it is impossible to fully assess these claims without more contextual examples.

Cora *ku* may be cognate[18] with Cupeño *=ku’ut,* which, although clearly a reportative, is also used to bolster the strength of the assertion. I have not found any more detail regarding the discourse properties of evidential markers in Cora, although it may be the case that the association of reported information with the assertion of epistemic certainty

is widespread in Uto-Aztecan. Nonetheless, the claim of a four-term evidential system in Cora may require some revision.

20.9. Aztecan

Although no explicit mention is made in Tuggy (1979) of evidentiality in Tetelcingo Nahuatl, two particles, under the broad label ‘quotatives’ are present that carry some by now familiar functions. The form *neli* is translated ‘they say’ and *mati*, as ‘evidently; I guess.’ The latter of the two, derived from the verb ‘know’ appears to be primarily a marker of epistemic modality, with some inferential uses. It will therefore not be given more consideration here, and the source does not exemplify it further.

The quotative particle *neli*, on the other hand, bears the key properties of a reportative evidential, while also maintaining properties more narrowly associated with a quotative. Tuggy (1979: 14) analyses it as bimorphemic *ne-li* (REFL/PASS-say) and further describes it as a ‘disclaimer … [that is] … used by some older speakers to introduce a direct quote.’

Sullivan (1998), in a section entitled ‘adverbios de afirmación, negación, y duda’ (adverbs of affirmation, negation, and doubt) glosses the particle *nelli* (*nel*) as ‘in truth; truthfully’ and briefly describes its high frequency of use in *huehuetlatolli* or ‘the speeches/tales of old/the elders.’ After inspecting the examples closely, however, I find that the reportative function would readily work in the (admittedly decontextualized) examples given, and fit with the general pattern.

The use of the quotative particle both 1) in contexts aside from marking directly quoted material, and 2) as a disclaimer of responsibility for the truth of the statement in which it appears are the properties that signal its use as a reportative evidential found throughout Uto-Aztecan. Pittman (1954: 38), in an earlier description of Tetelcingo Nahuatl, also appears to assign the reportative function as primary by describing *neli* as the means by which a (p. 428) ‘narrator disclaims responsibility for a statement or narration.’ The quotative use is described as secondary, a means for connecting a particular utterance verb to quoted material (and, presumably, a particular source).

Mention of a quotative/reportative evidential in Aztecan is found in Hill’s (2005) Cupeño grammar, where the particle *kil* is described as such in Tlaxcalan Nahuatl, and used to support the reconstruction of a Proto-Uto-Aztecan quotative **kul* ‘with a meaning implying that the information so marked is not verifiable by speaker observation (99).’

Classical Nahuatl (Andrews 2003: 158) carries the particle *kil*, translated 'it is said,' whose function is expressed in indirect speech wherein 'the reporter takes no responsibility for the information reported.'[19] This form is exemplified in the following, preserved in the orthography of the source (*quil* = *kil*) with the exception of vowel length, represented here with a colon:

(34)

quil	mach	mo:	yahqueh
it.is.said	notably	it.is.(not).quite.likely	they.went

It is said they did not go.

Hill proposes cognacy between Tlaxcalan Nahuatl (or general Aztecan) *kil* and a Takic reportative **kun* (possibly also related to the Tübatulabal *gɨt* reportative, as suggested by Munro (1978: 157). Further studies are needed to explore the properties of evidentials more comprehensively in the Uto-Aztecan languages, in particular with regard to 1) conceptual and distributional restrictions on their use, 2) discourse-pragmatic functions in expanded corpora of naturally occurring speech, and 3) the reconstruction of evidentiality within the family and beyond. Toward this latter end, the next section briefly summarizes some of the historical developments in the family.

20.10. Growth and renewal in Uto-Aztecan evidential systems

Much of what has been presented here, in terms of historical developments, expands on the general trends identified in Munro's (1978) discussion of the 'quotative pattern' in Uto-Aztecan. The facts appear, upon closer examination, to be even more nuanced, whereby the same set of reconstructable speech act verbs can be shown to have developed quotative and reportative evidential functions across the family, while in at least one case (Northern Paiute) developing into a discourse conjunctive particle. The individual languages illustrate various points along a developmental continuum from speech act verb to quotative to reportative evidential marker, with renewal occurring when a new (or repeated) speech act verb enters the continuum.

(p. 429) From the descriptions consulted for the present chapter, those of three languages from three distinct subfamilies make explicit mention of mirativity or mirative marking. Although widely accepted to be both formally and functionally distinct from evidential systems, they often appear to interact with such systems. In two cases, it appears that mirativity (the encoding of unexpected, new information) is the primary function of the enclitic (Cupeño) or particle (Southeastern Tepehuan). In Northern Paiute, mirativity appears to be an extension of one of two inferential second position clitics. These observations are in keeping with Aikhenvald's (2004a: 200ff) generalization that an inferred evidential often 'acquires mirative readings in many three-term systems.'

As noted previously, there are important properties of the evidential systems described for Cora (Coracholan) and Southeastern Tepehuan (Tepiman) that set them apart from the rest of the Uto-Aztecan language family. Both languages exhibit specific marking for direct (firsthand) information source. Elsewhere in the family, the norm appears to be that direct evidence is the unmarked case. Also, Cora and Southeastern Tepehuan carry two reportative markers, distinguished mainly by the nature of prior knowledge of the information reported upon. The territorial proximity of the languages suggests a possible areal feature. As it turns out, there are even more grammatical properties specific to these languages that distinguish them from other Uto-Aztecan languages, such as finite (as opposed to nominalized) dependent clauses, rich directional systems, and similarities in place name formation (Gabriela García Salido p.c.), among others. Therefore, their evidential systems are not alone in demonstrating possible contact influence between them or with neighbouring, unrelated languages. Such issues merit significantly more exploration than can be taken up here.

20.11. Summary of evidentiality in the Uto-Aztecan languages

Although not widely known for having elaborate systems of evidentiality, the Uto-Aztecan languages nonetheless exhibit a heterogeneity of dedicated evidential morphemes as well as a range of forms that are primarily epistemic in function, but also carry some evidential features.

The range of functions associated with dedicated evidential markers includes, in order of frequency, reportative, inferential, perceptual eyewitness, and direct perception/firsthand evidence. Again, I distinguish quotative from reportative functions in that the latter is about general indirect or hearsay sources of information, while the former marks particular speech acts where the author of the information is known and explicit. The tipping point from one to the other occurs when the speaker is displacing authority for the information without identifying it.

Evidential markers may co-occur, as we have seen in Southern Paiute, Cupeño, O’odham, and Tarahumara. In all cases of evidential sequences, one appears always to be a reportative. Given that the reportative is also the most common evidential type found in the family, the observation does not make for a robust generalization, but is only suggestive as an avenue for exploration with a wider array of languages.

(p. 430) The expression of evidentiality in the Uto-Aztecan language family is manifested in a diverse array of forms and functional extensions. One of the major challenges in conducting a survey like this lies not only in the uneven nature of the extant documentation of the languages, but also in how the information is organized within that documentation. First, whether the functional range of a particular form is primarily concerned with information source must be determined, while at the same time considering whether or how an evidential strategy may be developing into an evidential proper. This presents a partic-

ular challenge since, as is often the case in the grammaticalization of a particular functional domain, cognate forms may be at different stages of development as evidentials or renewal in distinct, but related, languages. As Mithun (1986) points out in her survey of evidentiality in Northern Iroquoian, there also exists broad synchronic variability in the function assigned the forms.

There is a related, but perhaps more practical, challenge for the typologist and comparativist. Where does one look for markers of evidentiality in the available descriptions, particularly since such markers are not often so identified? Reportatives may be found in discussions of quoted or indirect speech acts, or in sections relating to clause combining in narrative or other genres of connected speech. Determining their value as reportative evidentials, as opposed to quotative markers requires their use without an accompanying speech act verb or a unit of quoted speech. Inferential evidentials, on the other hand, may be found most commonly within discussions of modality, epistemology, and doubt. Their value as true evidentials may be too nuanced without more extensive study of texts and work with native speakers to determine whether the veracity of the information is a primary or secondary function of the form in question. The introductory chapters of this volume take up these and other issues surrounding the identification of evidential markers in more detail (see also Aikhenvald 2004a; Nuckolls and Michael 2014, *inter alia*).

Finally, in many instances of a quotative taking on reportative evidential functions, analysts working with the languages sometimes forgo representing their presence in translation, either in individual examples or actual text corpora, presumably due to the stylistic awkwardness involved in doing so. Although understandable from an interpretive perspective, it is clear that in many cases such a seemingly minor omission may carry consequences for the description in that it masks the subtle role markers of evidentiality may play in conveying contextual information. Again the careful study of the role of evidentials in a variety of discourse contexts is needed if we are to approach a full understanding of evidential systems in Uto-Aztecan languages.

Notes:

([1]) I would like to thank Sasha Aikhenvald, Willem de Reuse, Gabriela García Salido, Jane Hill, John McLaughlin, and Yolanda Valdez Jara for their supportive and insightful comments on earlier drafts of this chapter, while taking full responsibility for any mistakes or misguided interpretations that remain.

([2]) Mirativity indicates typically that the information expressed is new and generally surprising to the speaker (DeLancey 1997). Although often described as part of an evidential system (and can functionally overlap with it), miratives have been demonstrated in a number of languages to be agnostic with regard to information source.

([3]) Little is known about the extinct language Tubar, a purported singleton nestled geographically amid Taracahitian languages, and nothing I have found bears directly on the issues at hand, so it will not be discussed further.

([4]) Primary work to document and record texts of various genres from some of the last remaining fully fluent native speakers has taken place in the Burns Paiute community since 1998. A portion of that field work was supported by a grant from the National Science Foundation (BCS #0418453). Work on archival materials, both from an earlier generation of Northern Paiute speakers and from speakers of different varieties, has found support through the Sven and Astrid Liljeblad Fund for Great Basin Studies.

I am extremely grateful to my friends and language teachers who have patiently helped me with my study of Northern Paiute, in particular Rena Adams Beers, Ruth Hoodie Lewis, Yolanda Manning, Phyllis Miller, Patricia Teeman Miller, and Shirley Tufti. I am humbled by the generosity of members of the Burns Paiute Tribe for welcoming me to their community. I am fortunate to have had the opportunity to learn as well from the late Irwin Weiser (1909–96); Maude Washington Stanley (1913–2000); Myrtle Louie Peck (1934–2006); Nepa Kennedy (1918–2010); Justine Louie Brown (1918–2011); and Lloyd Louie (1936–2013).

([5]) Recently, in discussing a traditional narrative involving the monster *nɨmɨdzoho* (lit. People-Crusher), one of the conversants exclaimed: *haʔu pabaʔyu=gaina, usu nɨmɨdzoho?* ‘How big was that People-Crusher?’ asserting both surprise and dismay at what the creature was capable of, as opposed to making a simple request for information.

([6]) A third particle, *tɨa*, is discussed by Charney (1993: 186–8) as a ‘narrative onset particle,’ while Canonge (1958) typically translates it as ‘it is said.’ (Thanks to John McLaughlin for alerting me to this.) I include it here for comparative interest, since one also finds a similarly formed quotative suffix, *-tea*, in Sonora Yaqui (cf. §20.7.1)

([7]) McLaughlin’s proposed reconstruction of the quotative-reportative *mii* in Northern Paiute (and its cognates across Numic) as a combination of a demonstrative **ma* plus one of several reconstructed verbs of speaking **ya* in Uto-Aztecan is intriguing, but still merits more support. Bethel et al. (1993), for example, list *mihee* in Western Mono as a full verb meaning ‘say,’ thereby completing a developmental pathway along which the demonstrative is not needed and is in keeping with patterns of renewal noted elsewhere in the family.

([8]) One cannot help but wonder here whether or not this high frequency of use of what I would term the *quotative particle* in Tübatulabal might not be an artifact of the recording of the texts, which were dictated to Voegelin. It is at least possible that the speaker’s rate of speech was meant to accommodate the linguist, and that the particle marks a prosodic (phrasal) or phonological word boundary.

([9]) I would like to thank Jane and Ken Hill for sharing their work-in-progress manuscript on Takic clitics. This section owes a great deal to their diachronic insights and to the section on ‘the Cupeño auxiliary complex in comparative perspective’ in Hill (2005: 93–104).

([10]) From Steele (1979: 446), ‘the AUX of Proto-Uto-Aztecan contained elements marking the notional categories of Modality (modal particles), Tense (tense clitics), and the num-

ber and person of the subject of the sentence (clitic pronouns).' The reconstruction of AUX to Proto-Uto-Aztecan is challenged in Hill (2005: 94), who assesses it as an areal phenomenon. The issues involved are very complex and lie well outside the scope of the present paper.

([11]) One cannot help but remark upon the formal similarity this particle has to the Numic quotative-reportative particle and whose pattern of distribution is strikingly similar to Tübatulabal's conjunctive particle *-k/gidža*. The vowel of the particle is subject to vowel harmony, as seen here.

([12]) Notably, in O'odham, the composite itself serves as the host to other second position enclitics, namely, the modals.

([13]) A cover term for both Papago and Pima within Upper Piman, the data in this section are from Papago.

([14]) Jane Hill, in personal communication, suggests another one, *=p*, meaning something like 'must have' as in this lovely AUX clitic string *at=t=š=p=ki* 'I guess they say we must have … (lived there).' The documentation of two (or in this case, three) evidential markers is somewhat uncommon in Uto-Aztecan, as elsewhere, but not unheard of, as Valdez Jara (2013: 197) also reports for Urique Tarahumara.

([15]) Gabriela García Salido, in personal communication, hesitates to assign *pui'* to 'true evidential' status, indicating that it seems to encode 'veracity of information' instead, which, as we see in other evidential systems, may impinge upon the evidential domain by extension from its primarily epistemic value. Willett (1991: 162) does not include *pui'* among the evidential particles he describes for the language.

([16]) A third branch, consisting of the extinct language Ópata (also known as Tegüima), has received extensive treatment in Lombardo's (1702) grammar, recently edited by Guzmán Betancourt (2009). The source appears promising, and ought to provide, upon closer inspection, some fruitful insights for comparison. A particle *ma* is described (Libro Quinto, Section XVIII, p. 265) as following the first word and is approximated to the archaic Spanish expression *dizque,* 'it is said,' a reportative evidential function. Subject pronouns also appear attached to it as suffixes or enclitics, forming an AUX-like structure. I am profoundly grateful to Willem de Reuse for making me aware of this interesting resource, although, due to time and space constraints, I will not discuss it further.

([17]) In this and other resources, especially those involving texts, one finds that reportative evidentials often go unrepresented in the translation, presumably for stylistic reasons.

([18]) Were this the case, however, one would expect a different vowel [ɨ] to appear in the Cora form (Jane Hill p.c).

([19]) Again, my indebtedness to Jane Hill for bringing this form to my attention cannot possibly be overstated. The form *quil = kil* is also discussed in Hill and Hill (1986) as 'appear(ing) with evidentiary force even where there is no locutionary verb' (1986: 325) in spontaneous Mexicano (Nahuatl) speech, converging with Spanish *que* in certain functional contexts.

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Abstract and Keywords

This chapter surveys three representative chunks of the Algonquian family: the Cree-Innu-Naskapi continuum, Ojibwe, and Eastern Algonquian. After noting the very productive role of lexical means of expressing perception (the closest Algonquian gets to sensory evidentials), it highlights how some of the Cree-Innu-Naskapi continuum languages show affixal morphology that contrasts (Direct versus) Indirect evidentiality, Inferentiality, and the distinctive ‘dream-witnessed’ Subjective—with the remainder of the family showing essentially subsets of this range of contrasts. At the phrasal-syntactic level, it examines how the use of uninflected particles and quotative verbs pay special attention to encoding the information source. It shows that evidentiality has traditionally been overlooked due to the treatment of relevant phenomena as essentially epistemic.

Keywords: Indigenous language, Algonquian, Cree-Innu-Naskapi, Ojibwe, Eastern Algonquian, Evidentials, Epistemic modality, Dream, dubitative

21.1. Introduction

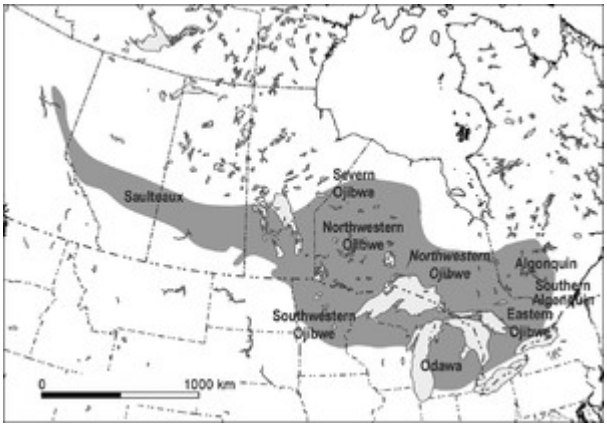
AT the time of European contact, the Algonquian languages were spoken widely over the eastern coast of North America from Labrador to as far south as the Carolinas, extensively around the Great Lakes, across the Canadian Shield from Labrador to Alberta, and in isolated pockets elsewhere. Algonquian languages include, among others, Arapaho, Blackfoot, Cheyenne, Cree, Menominee, Ojibwe, Potawatomi, Sauk, Fox, Kickapoo, Shawnee, Miami, Illinois, Mi’kmaw, Abenaki, Maliseet-Passamaquoddy, Penobscot, and Delaware. The only widely accepted genetic subgrouping within Algonquian is that of Eastern Algonquian languages, which share a set of innovations from Proto-Algonquian. Some languages are today spoken in single communities, while others, such as Cree and Ojibwe, form dialect and language chains across vast geographical spaces. The languages vary immensely in their vitality, with some having only a few speakers, and others, such

as Cree and Ojibwe, having tens of thousands. We have chosen to present data from a set of Cree, Ojibwe, and certain Eastern Algonquian languages because of the relative availability of information on evidentiality in these languages.

The *Cree* languages (Map 21.1) form a continuum ranging across northern Canada, from Innu (formerly called Montagnais) in Labrador and Quebec, to Plains Cree, spoken as far west as Eastern British Columbia and north into the Northwest Territories, where it is one of eleven official languages. Other named languages/dialects include, from east to west, Naskapi, East Cree, Innu Atikamekw, Moose Cree, Swampy Cree, and Woodland Cree (MacKenzie 1980) (languages marked in grey are non-palatalized variety). The Cree-Innu continuum represents the geographically most widely spoken indigenous language system in North America, and is among the most robust, having around 125,000 speakers.

Ojibwe (Map 21.2) has many dialects, spread over the northern Great Lakes, west through Wisconsin, Minnesota, and North Dakota in the United States, and north in Canada from Quebec to British Columbia. These dialects include Algonquin, Odawa/Ottawa, Eastern Ojibwe, Southwestern Ojibwe, and Oji-Cree. There are currently about 50,000 fluent first language speakers of all dialects. (p. 432)

Map 21.1. Central Algonquian: Cree-Innu continuum



Map 21.2. Central Algonquian: Ojibwe continuum

(p. 433)

The original territory of the *Eastern Algonquian (EA)* languages centres along the Atlantic coast of North America, from the Maritimes region of Canada to at least as far south as current-day North Carolina in the USA. They divide into a variety of regional subgroups. Only Mi'kmaw and Maliseet-Passamaquoddy have substantial numbers of first-language speakers.[1]

Algonquian languages are polysynthetic, having extremely rich derivational and inflectional morphology. Syntactically, they are predominantly head-marking, with relatively free constituent order. Word classes include verbs, nouns, pronouns, and particles. Clause types are distinguished by three inflectional orders (systems): Independent, Conjunct and Imperative. Relevant grammatical features will be introduced in more detail as they are pertinent.

We have identified evidential markers in Algonquian languages at the following three levels, which are treated in sequence for each language subgroup:

- Structured Lexical level: Sensory
- Inflectional level: Direct, Indirect, Subjective, and Inferential
- Syntactic level: Particles, Quotative verbs

Until recent decades, evidentiality was not identified as a core grammatical concept in Algonquian languages. When relevant phenomena were discussed, they were almost always treated within the conceptual and analytic space of epistemic modality. Nonetheless, we show in this survey that source of information and modes of perception are grammaticized (to one degree or another) in all the languages presented here (as in the majority of Algonquian languages[2]). In particular, we observe that certain evidential particles are of such persistent frequency that they should probably be considered grammaticized even when not affixal in form.

21.2. Lexical Expression of Information Source

Meanings related to information source can be expressed through lexical forms (Table 21.1). Most Algonquian languages have a productive way of indicating the sensory source of information based on perception with the following senses: hearing (1), sight (2), smell (3), and taste (4). Touch is strikingly absent from the series. There is also perception by mind (5). These senses are expressed through complex final morphemes, used to derive a large number of verbs. There is also a very productive initial element indicating ‘heard but not seen’ (6) indicating a general cultural concern with auditory source of information. (p. 434)

Table 21.1. Sensory Lexical Components in Cree, Ojibwe, and Eastern Algonquian

	East Cree-Southern	SW Ojibwe	Penobscot (EA)	English gloss
1	-htâku	-taagw	-əhtɑkʷ	sound, be heard
2	-nâku	-naagw	-nɑkʷ	seen, appears, looks like
3	-mâku	-maagw	-mahte	smell
4	-spaku	-pogw	-hpok	taste
5	-eyihtâku	-end-aagw[4]	-eləməkʷ	perceived by mind
6	matwe-	madwe-	mate-	heard but not seen (preverb or initial)

The verbs formed with the complex suffixes (1)–(5), like Ojibwe *minw+**imaagozi*** ‘s/he smells good, has a good smell’ are not subject to any person restrictions, and negation,—as test of at-issue content for evidentiality,—applies to the propositional content, not the mode of perception (i.e ‘she does not smell good’), making them good candidates for sensory evidentials. However, for the verbs derived as in (6), like Ojibwe ***madwe**-mawi* ‘s/he is heard crying’, negation applies to the perception (i.e. ‘she is not heard, but she is crying’).

21.3. Inflectional Evidentials

An essential locus of evidentials in Algonquian is in verb inflection. Evidentiality is found in the inflectional suffixes for some, but not all Algonquian languages; we will see that most of the relevant morphology is suffixal, but some prefixal/infixal and preverb elements can also play important constructional roles.

The Algonquian verbal complex can be described templatically as consisting of a verb stem that can be preceded by so-called ‘preverbs’ (loosely attached prefixes which indicate categories such as tense, aspect, direction, and mode), and followed by inflectional suffixes indicating valency, voice, mode/evidentiality, gender, transitivity, diminutivity, and person agreement. Some templatic descriptions include up to fourteen slots for the suffixes themselves (Nichols 1980).

Figure 21.1 illustrates the structure of an East Cree (Northern dialect) Indirect evidential form: *chichî tikushininâtik* ‘it looked like you were arriving in the distance’.

Algonquian verb inflection is organized in terms of three orders: Independent, Conjunct and Imperative. The Independent order is used for verbs in main clauses, is characterized by the presence of personal prefixes, and has its own set of suffixes. The Conjunct order is used mainly in subordinate clauses and in content questions. It lacks personal prefixes, having its own distinct set of person/number suffixes, and also can show an ablaut process (p. 435) which affects the first vowel in a word (which may include preverbs), called initial change. Conjunct verbs showing initial change are typically referred to as Changed Conjunct. The Imperative order also lacks personal prefixes, again having its own distinct set of person inflections.

Person prefix	Preverbs	Verb stem	Suffixes (theme, person, obviative, plural,...)
chi	chî	tikushin	(i)nâtik
you	past	arrive	2sg.Indirect

Figure 21.1. The Algonquian Verb with Person Prefix, Preverb, and Inflectional Suffixes

The inflectional category relevant to evidentiality found in most languages is customarily referred to as ‘Dubitative mode’ in Algonquian linguistics. The Dubitative has functions

that are evidential in nature, as an inferential evidential, plus sometimes overlapping epistemic functions. A striking example of the tendency of speakers of European languages to interpret Ojibwe dubitatives as epistemic rather than evidential comes from the grammar of Frederic Baraga, published in 1850. Baraga was a Catholic priest and missionary, a widely respected speaker of Ojibwe, and authored an excellent grammar (Baraga 1850) and dictionary (Baraga 1853, 1878), both of which are still used today. In his grammar, Baraga makes the following observations about the Dubitative:

> This *Dubitative* is peculiar to the Indian languages, and in some respect bears testimony to the fact, that the habit of lying is a strong trait in the lndian character, which induced the Indians originally to establish the *Dubitative* in their languages. Being aware of this habit themselves, they much mistrust each other; and consequently, when something is related or narrated to an Indian by his fellow-Indians, (or other men;) he will indeed remember the narration, but with the idea in his mind of possibly being imposed upon. He will speak in the *Dubitative*, and give the hearer to understand that the narrative may not be true in all of its parts. This mode of speaking being now in their language, they will even apply it, (without any evil intention,) to the relating of Scriptural facts, or to Eternal truths. They will, for instance, say of a small child, (speaking of Christian Indians,) that died after baptism in angelic innocence, '*Aw abinodji mino aiádog gijigong*;' which properly says, 'I think that child is well in heaven, but I am not certain.' … So also I heard a good, faithful Christian Indian, who firmly believes in the Omnipresence and Omniscience of God Almighty, say thus, using his *Dubitative*: '*Mi gaie nongom nondawigwen Kije-Manito ekitoián;*' which, if taken strictly, means: '*I suppose,* God hears me also now what I say.'
>
> (Baraga 1850: 95–6)

It seems clear, assuming Baraga's assessment of the devoutness of these nineteenth-century Christian Ojibwe speakers, that they are using the Dubitative evidentially, indexing the source of their knowledge, in a manner consistent with their use of the Dubitative and Preterit Dubitative in Ojibwe oral traditional contexts. Comparable usage pattern holds for liturgical texts in most Algonquian languages.

The Dubitative is in structural paradigmatic contrast with Preterit aspect. Preterit is essentially completive aspect, and both Preterit and Dubitative can occur with tense preverbs, negation, etc. Some Cree languages have additional evidential categories called Indirect and Subjective, also combining with Preterit, as we will see in the following section.

(p. 436) 21.3.1. Evidential affixes in the Cree-Innu continuum

Innu, Naskapi, and East Cree (Northern dialect) have the richest set of affixal distinctions involving three values of evidentiality: direct, indirect, and inferential. (They also display a noteworthy distinction called the 'Subjective', discussed in §21.3.1.1.) We therefore be-

gin our discussion with these systems, as they showcase the richest range of affixal evidential and epistemic morphology.

Other languages in the Cree-Innu continuum tend to only exhibit a direct versus inferential distinction. The inferential evidential is traditionally called the Dubitative, and traditionally described as being used to express epistemic modality, but also for hearsay (see e.g. Ellis 2016). The further west one moves across the Cree continuum, the less the languages utilize affixal distinctions, increasingly relying on particles to express evidentiality. Wolfart (1973: 41–4) already noticed how rare Dubitative suffixes were at the time of his fieldwork on Plains Cree, and that a particle (*êtikwe* or *êtokwê*) was used instead of the verbal suffixes *-kwê* and *-tôkê* (see §21.4).

Tables 21.2–21.4 provide a general overview of the attested combined inflectional suffixes for several Cree-Innu languages, ranging from East to West (Innu, Northern East Cree (NEC), Southern East Cree (ESC), Moose Cree (MC), Swampy Cree (SC), Atikamekw (Atik), Plains Cree (PC), Woods Cree (WC))[3], with the most common names for the modes in general Algonquianist usage. For convenience, the numbers in the left-most column will be used in the rest of the chapter to refer to these paradigms. Light grey cells indicate that the forms are now very rare, darker ones that they are not attested.

The Independent (I) order can contain up to three general so-called mode distinctions: Indicative, Indirect, and Dubitative, plus the Subjective and the Preterit. The Conjunct (C) and the Imperative (Imp.) orders have a maximum of two mode distinctions, as indicated by the thick lines between the numbers in the tables.

Since Innu has the richest attested sets of evidential distinctions, we will describe its evidential system first, and then explain the differences with the other languages. Our description of Innu is mainly based on Drapeau's (2014) grammar written in French, but since her examples do not have interlinear glosses, these are ours, along with the English translations.

21.3.1.1. The Innu evidential system

Innu is a language that exhibits three values of evidentiality in its Independent order affixes: direct (unmarked, Indicative mode), indirect, and inferential (traditionally called Dubitative). The Subjective mode is another dimension that cuts across both the Indicative and the Indirect Independent modes. The Conjunct and Imperative order affixes exhibit only two values: direct and indirect/inferential, and have no Subjective mode. Since each (p. 437) order has its own sets of suffixes, we describe each order in turn. We then turn to the nouns and pronouns that carry the same evidential suffixes as verbs.

Table 21.2. Independent Order (I.)

Evidentiality in Algonquian

#	Mode names	Innu	EC-N	EC-S	MC, SC, Atik	PC, WC
01	I. Indicative Neutral	-n -u	-n -u	-n -u	-n -u	-n -u
02	I. Indicative Neutral-Subjective	ka … -nâwâ -uâ	iski … -nâwâ -uâ	iska … -nâwâ -uâ		
03	I. Indicative Preterit	-ti -pan	(chi)ki … -h -h	(chi)ka … -htî -pan	-htay -pan	
04	I. Indicative Preterit-Subjective	ka … -tâ -panwâ	Use 02 with Past Preverb			
05	I. Indirect Neutral	-nâtak -tak	-nâtik -tik			
06	I. Indirect Neutral - Subjective	ka … -nâtakâ -takâ	iski … nâtikâ -tikâ			
07	I. Indirect Preterit	-nâshapan -shapan	Use 05 with Past Preverb			

08	I. Indirect Preterit-Subjective	-nâshapanwâ -shapanwâ				
09	I. Dubitative Neutral/ Present	-nâtshe -tshe	-nâchâ -châ	-nâch -che	-nâtok(w)e -tok(w)e	-nâtoke -toke
10	I. Dubitative Preterit *(requires past preverb)*	-tâkupan -kupan	-htâkupin -htâkupin	-htâkupane -htâkupane	-nâkopan -okopan	

A. Evidentiality on verbs in the Independent order

There are three main modes in the Independent order, whose suffixes help distinguish between direct and indirect testimonies, and statements obtained by deduction. The (p. 438) (p. 439) Indicative mode is used for direct testimonies, to indicate that the speaker was present, fairly close and a conscious witness of an event, or for talking of established truths or common shared knowledge. The Indirect mode is used when the speaker or the main participant in a story is not a direct witness, i.e. was not present or not conscious when the event took place, but found out later and indirectly, later. It can also express spatial distance, which does not allow clear or direct witnessing. The Dubitative (or Deductive) mode is used for facts that the speaker thinks are true, but cannot affirm with complete certainty. This mode has inferential overtones but appears to be essentially epistemic. Furthermore, there is an additional Subjective mode for both Direct and Indirect modes, as well as a tense contrast between Preterit and Neutral for all Independent modes.

Table 21.3. Conjunct Order (C.)

#	Mode Names	Innu	EC-N	EC-S	MC, SC	PC, WC
11	C. Indicative Neutral	-iân -t	-yân -t	-yân -t	-yân -t	-yân -t
12a	C. Indicative Neutral-Subjunctive	-iânî -tî	-yânâ -châ	-yâne -te	-yâne -te	-yâni -ci
12b	C. Indicative Neutral-Habitual/ Iterative *(changed form of stem used)*	-iânî -tî	-yânh -chh	-yânh -th	-yâni -ti	-yâni -ci
13	C. Indicative Preterit			-yâpan -span	-(y)âpan -span, -kipan	
14	C. Dubitative Neutral/C. Indirect Present *(Innu)*	-uâne -kue *2 forms: regular and changed*	-wânâ -kwâ *changed form of stem used*	-wâne -kwe *changed form of stem used*	-wâne -okwe, -kwe *2 forms: regular and changed*	

15	C. Dubitative Preterit		-chii … -wâpânâ -kupinâ	chii … -wâpâne -kupane	-wâpâne -okopane *2 forms: regular and changed*	
16	C. Dubitative Preterit 2/Hypothetical *(Innu)*	-iânâkue -tâkue	-yânâkwâ -tâkwâ			-? -kwe

Table 21.4. Imperative Order (Imp.)

#	Mode Names	Innu	EC-N	EC-S	MC, SC	PC, WC
17a	Imp.-Immediate	-	-h	-h	-y	-
17b	Imp.-Delayed	-kan	-hkin	-hkan	-hkan	-hkan
17c	Imp.-Indirect	-me				

Direct–Indirect Distinction

Independent Indirect Neutral suffixes (#05) *-natak* (for persons 1, 2) and *-tak* (3, 4) are quite productive to report on events happening at a distance from the speaker or the main character, either outside, in the dark, heard without seeing, by hearsay, or, for modern contexts, for knowledge acquired by phone, radio, tv, or internet. Here is a modern example, contrasted with Indicative forms (Yvette Mollen, p.c.). Note the differences in context:

(1)

ishkuate-**tak**	anite	Ekuanitshit
there.is.fire-**INDIRECT**(#05)	there	Ekuanitshit

There is a fire in Ekuanitshit.
(Context: she has seen it on the news, or someone called her to tell her)

(2)

ishkuate-**u**	anite	Ekuanitshit
there.is.fire-**DIRECT**(#01)	there	Ekuanitshit

There is a fire in Ekuanitshit. (Context: she was there, saw it herself)

Independent Indirect Preterit suffixes (#07) *-(a)shapan* are used when something is figured out later and, indirectly, after the fact. The narrator (or the main character) was not conscious of these facts when they took place, as illustrated by the following example:

(3)

… pineshish-a …	pipaminashini-**shapan**-**i**	anite	pitakamit
bird-OBV	it(ANIM).flew around-**INDIRECT**(#07)-**OBV**	there	inside

nitshinat
our.place
It turned out that a bird had flown around in our tent.
(Adapted from James, Clarke, and MacKenzie 2001: 239, ex. (14), SSVP, text 32: 13)

Dubitative as an Inferential Evidential

Independent Dubitative (deductive) suffixes*-(a)tshe* for Neutral (#09), and *-(a)kupan* for Preterit (#10) are used for events that have been deduced by the speaker. Such types of information are not as reliable as the ones drawn from direct or indirect experience (Drapeau 1996, 2014). They complement the Indirect forms in asserting facts that have less certainty. In the following example,with the *Dubitative Neutral* (*#09*) the main character is following the tracks of a porcupine, and did not witness the events. He makes a deduction on a probable situation and then speculates on the fate of his wife. (p. 440)

(4)

« Mishta-mishisht**itshe**	ne kak^{u} »,	iteu. […].	« Kaȟapua
big-he.is-**DUB**(#09)	that porcupine,	he.says	obviously
nipaie-**tshe**	tshessinat,	nipaie-**tshe**	nana
he.kills-**DUB**(#09)	surely	he.kills.her-**DUB**(#09)	that.absent
nitishkuema »,	iteȟimeu	eshpishtiȟiti	neȟua	kakua.
my.wife,	he.thinks	be.such.a.size	that	porcupine

‘This porcupine must be very large’, he says to himself, ‘Of course, it likely killed her,

In the next example, with the *Dubitative Preterit* (*#10*), the narrator makes an estimation about her own age when an event she remembers took place.

(5)

Ni-kutuṅnuepipuneshi-**takupan**	ashu	peikushteu	napauian.
1-be.10.years.old-**DUB**(#10)	plus	nine	IC.I.married.(#11)

I must have been nineteen when I married.

(Adapted from Drapeau 2014: 182; Extracted from Joséphine Picard 1980, Pessamit)

The Independent Dubitative is also typically found in contexts for second or thirdhand narratives, usually introducing or framing them.

Subjective Mode

Cree-Innu languages have a special inflection for dreams, visions, and perceptions. This correlates with the cultural significance of dreams for accessing parallel levels of existence, for providing guidance, and for foretelling the future (Ford 1979; Martin 1983; Baraby 1984; Drapeau 1986; James et al. 1998). It is called the Subjective or Perceptive mode and appears only in the Independent order. In Innu, the subjective suffix can be added to the Indicative and Indirect suffixes, both Neutral and Preterit, thus creating four distinct forms: # 02, 04, 06, and 08. Critically, it does not combine with the Dubitative mode, nor is it ever found in the Conjunct order. The suffixes are *-ua* or *-aua*. It is always marked by a particle *ka*. In the following Innu text the narrator alternates between the Direct and Indirect Subjective modes, using the Indirect Preterit Subjective (#08) to describe the scene before the dream starts or facts that she was not conscious of, like the existence of windows, and the Indicative Neutral Subjective (#02) to describe events happening in the dream. Events happening outside the dream are not in the Subjective.

(6)

Description of the scene before the dream: INDIRECT-SUBJECTIVE

Aiamieutshuap-it,	[…]ṅakap-it	anite	**ka**-nit-ap**inanashapanua**
church-LOC	basement-LOC	there	**PART**-1-sit.1pl.(#08)
nana	nikaui.[…]		
this.absent	my.mother		

At church, in the basement, we were sitting, my mother and I.

The story starts: DIRECT-SUBJECTIVE

Ka-n-uapate-**naua**	tshekuan	anite	ni-pa	tetishi-kapau-n.
PART-1-see-(#02)	something	there	1-can	elevated-stand.up-(#01)

I see something on which I could be standing up elevated.

Eukuan	ne	ka-ni-natenaua	kie	ka-pashpapuakani-shapanua,
So	that	PART-1-get.it-(#02)	and	PART-be.windows-(#08),
nit-ishinen				
1-perceive.(#01)				

So I go get it and I see that there were windows.

Talks outside the dream: DIRECT

Ek^{u}	ma	apu	pashpapuakanut	uesh	an	ṅakapit	tshia?
And	then	not	be.windows.(#11)	because	there	basement.LOC	right
Muk^{u}	ashinikate-pan						
Only	be.rock-(#03)						

But there are no windows in the basement, right? It was all concrete.

Description of a scene anterior to the time of action in the dream: INDIRECT-SUBJECTIVE

Ka-nishumui-**shapanuani**	pashpapuakana.
PART-be.two.installed-(#08)	windows

Two windows **had been installed**.s

(Adapted from Drapeau 2014: 184; Extracted from Denise Jourdain 1994, Uashat mak Mani-utenam)

(p. 441) B. Evidentiality on verbs in the Conjunct order

There are two main mode contrasts for evidentiality in the Conjunct order in Innu: Direct, expressed with the Indicative, and Indirect, expressed by the Indirect/Dubitative.

The following pair of examples, one in the Conjunct Indicative (#11) and the other in the Conjunct Indirect (#14), have a minimal contrast about the presence or absence of the narrator when the facts took place. While the narrator witnessed the event in (7a), in (7b) he only heard it from someone, possibly Edward himself.

(7)

a.	ek^{u}	ne	Ituaṅ	ekue	uapama-**t**	anite	iṅnua
	and.then	this.one	Edward	then	he.saw.him-**DIRECT(#11)**	there	Innu.OBV

And Edward saw an Innu there.

b.	ek^{u}	ne	Ituaṅ	ekue	uapama-**kue**	anite	iṅnua
	and.then	this.one	Edward	then	he.saw.him-**INDIRECT(#14)**	there	Innu.OBV

And Edward saw an Innu there.

(Adapted from Drapeau 2014: 193)

The existence of Conjunct Indirect suffixes has been debated. From a comparative perspective, forms #14 *(-uâne* for person 1, 2 and *-kue* for person 3), are traditionally called 'Conjunct Dubitative Neutral' in the Algonquian literature, except in Innu, as it has been claimed by Drapeau (1984, 1996, 2014) that they function as the Indirect evidential forms

for conjunct clauses.[4] In the following example, we see this Conjunct form (#14) clearly alternates with an Independent Indirect form (# 07): (p. 442)

(8)

Apu	uinipeku-t	ut	iǹni-**uane** …	le huit avril
Not	coast-LOC	like.this	I.was.born-(#14) …	the eight April
nit-iǹniuna-**shapan**		mille huit cent quatre-vingt trois		
1-be.born-(#07)		thousand eight hundred four-twenty three		
etashtet		pipun		
it.is.so.marked(#11)		winter/year		

I was not born at the sea, I was born 8 April 1883. (Adapted from Drapeau 2014: 193; Extracted from Pierre Fontaine 1980, Pessamit)

Epistemic uses are also attested when contextually driven, for example, by a main clause with the verb 'not to know':

(9)

Apu	ut	tshissenimak	**ia**kushi-**kue**
NEG	like.this	I.know.of.her.(#11)	IC.be.sick-3.(#14)

I do not know if she has been sick. (Adapted from Drapeau 2014: 195)

The most convincing argument for claiming that Conjunct Dubitative forms (#14) are in fact Conjunct Indirect forms in Innu, rests on the fact that the Independent Dubitative forms (#09, #10) can be found in conjunct contexts where a Conjunct form is expected[5]. In the following example the Independent Dubitative Neutral (#09) is found after a particle (*ekue*) that normally requires the Conjunct order.

(10)

Ekue	upipaǹǹi**tsheni**	neǹua	upiuaishipa …
and.then	they.lifted.(#09)	those	duck.feathers

And then the duck's feathers must have lifted … (Adapted from Drapeau 2014: 183; Extracted from Desneiges Mestokosho-Mollen 2004, Ekuanitshit)

C. Evidentiality on verbs in the Imperative order

Innu is the language that exhibits the richest suffixal evidentiality system, as it has indirect evidential marking in the Imperative order.

Baraby (2009, 2017) analyses the three Imperative order modes of Innu as being part of an evidential system where the presence or absence of the speaker plays a crucial role. There are three distinctions in the Imperative: an immediate imperative (11a), a delayed imperative (11b) and an indirect imperative (11c).

(11)

a. Nipa 'Sleep!'

b. Nipa-**kan** 'Sleep later!'

c. Nipa-**me** 'Sleep (when I am not there)!'

(p. 443)

The less marked imperative (11a) is used to express an order for an action that must be accomplished in the presence of the speaker fairly soon. The second type of imperative (*-kan*) refers to an action that must be accomplished later, regardless of the presence of the speaker. The third type (*-me*) targets a fulfillment of the order in the absence of the speaker, as illustrated by the following examples (from Baraby 2009: 5):

(12)

«Muk^{u}	tshin	tshiue-**me**,»	nitau,	«ekute	nin
just	you	go.back-2sg.INDIRECT(#17c),	I.tell.him,	here	me
nika	tanaukue» [tm: 79-80f37]				
I.will	stay				

I told him/her: 'Go back by yourself, me, I am going to stay here.'

Baraby shows that indirect imperatives are often used with verbs of movement, providing the context for the absence of the speaker who will not witness the action s/he ordered. This absence of the speaker (or the one giving the order) is typical of the Indirect mode, found in the other orders: Independent and Conjunct[6].

A summary of the rich Innu evidential system is given in Table 21.5, excluding Neutral/ Preterit contrasts that show up in the Independent. The arrow indicates the paradigm extension of the Dubitative Independent into the Conjunct.

D. Evidentiality on pronouns

Innu pronouns can carry the same evidential (Independent) suffixes as verbs (Table 21.6). All seven personal pronouns can inflect for Indirect and Dubitative modes. Table 21.6 gives the evidential inflection of the personal pronouns forms found in the example sentences. Indefinite and Interrogative pronouns can be inflected with the Dubitative Neutral, mostly since forms in *-shapan* and *-kupan* are rare, according to Drapeau (2014) (For a full set, see Drapeau 2014: 95–6).

Table 21.5. Summary of the Innu Evidential system (Verbal suffixes)

Orders	**Modes**				
Independent	Indicative	Indicative Subjective	Indirect	Indirect Subjective	Dubitative ↓
Conjunct	Indicative	–	Indirect	–	
Imperative	Indicative (Immediate/Delayed)	–	Indirect	–	–

(p. 444)

Table 21.6. Some Innu pronouns with Evidential Inflections

	Base form	**Indirect Neutral (#05)**	**Indirect Preterit (#06)**	**Dubitative Neutral (#09)**	**Dubitative Preterit (#10)**
‘I’ (1sg)	niǹ	niǹi-tak	**niǹi-shapan**	niǹi-tshe	niǹi-kupan
‘you’ (2sg)	tshiǹ	tshiǹi-tak	tshiǹi-shapan	**tshiǹi-tshe**	tshiǹi-kupan
‘them’ (3pl)	uiǹuaua	**uiǹuaua-tak**	uiǹuaua-shapan	uiǹuaua-tshe	uinuaua-kupan
[…]					
someone, who?	auen	-	(auen-shapan)	aueni-tshe	(auen-kupan)
something, what?	tshekuan	-	(tshekuan-shapan)	**tshekuan-itshe**	(tshekuan-kupan)

Indirect Inflection: (Adapted from Drapeau 2014: 89)

(13)

niṅi-**shapan**	piakutitaian	tshiṅashietim
me-**INDIRECT**(#06)	I.broke.it(#11)	your.plate

It is **me** who broke your plate [but I did not realize at the moment].

(14)

uiṅuaua-**tak**	e	pitutsheht
them-**INDIRECT**(#05)	PREVERB	they.come.in.(#11)

It is **them** coming in [I do not see them, but I hear their voices].

Dubitative inflection: (Adapted from Drapeau 2014: 93)

(15)

tshiṅ-**itshe**	ka	tshitimut	nitepatem
you-**DUB**(#09)	PREVERB	you.eat.it(#11)	my.pie

It **must be you** who ate all my pie.

(16)

tshekuan-**itshe**	ka	aiain?
what-**DUB**(#09)	PREVERB	you.buy.(#11)

What on earth did you buy?

21.3.1.2. Other languages of the Cree-Innu continuum

Moving west from Innu, the next languages to have a rich inflectional evidential system are Naskapi and Northern East Cree, with an Independent Indirect mode and a Subjective mode. The next pattern, exemplified by Southern East Cree, is to have only the Dubitative, (p. 445) but with a Subjective mode; the third pattern is to have only the Dubitative, as in Moose Cree, Swampy Cree, and Atikamekw, and finally, to have lost the Dubitative, as in Plains Cree and Woods Cree. Note that these generalizations could be subjected to some micro-dialectal variations.

A. Indirect Evidentials

We see much the same contrast we saw in Innu between the Indicative and the Indirect Independent modes in Northern East Cree and Naskapi. The **Independent Indirect Neutral mode** (#05) is attested in the Northern dialect of East Cree (Junker, Salt, and MacKenzie 2015) but is not as productive as it is in Innu in all Northern subdialects, according to Collette (2014)[7]. Suffixes are *-nâtik* (for persons 1, 2), and *-tik* (3, 4)) for Indirect Neutral. It usually indicates some distance in perception, and/or an 'after the fact' awareness. In the following East Cree example, the narrator is describing a seal hunt with a friend: their plan, as understood by the narrator, is for both to try to get closer to a

seal that is quite far away by crawling on the ice. But instead, his friend keeps standing, while he crawls ahead. The seal disappears from view while he is crawling towards it, thinking that his friend was crawling along as well. The verb *nîpû* 'to stand' thus bears the Indirect Neutral inflection:

(17)

Northern East Cree (from Junker, Salt, and MacKenzie 2015)

utâh	â	îshi	chîwâkâpuwi-yân	utâh	nâh
over.here	PREVERB	so	turn.around-1.(#11)	over.here	that.one
â	iyihtât,	nâshtiyich	mushâ	pâchi	
PREVERB	be.3.(#11)	absolutely	in.the.open	toward.here	

nîpuwi-**itik**
stand-3.**INDIRECT**(#05)
When I turned around to where he was (i.e my friend), there he was, just standing in full view. (CD03Track02CouncilofElders2002 00043)

Independent Indirect Past suffixes (#07) are attested in **Naskapi**, but not in East Cree, which combines a past preverb with the Indirect Neutral suffix (#05) instead. The suffix is *-sipin* for Naskapi.

(18)

Naskapi (James, Clarke, and MacKenzie 2001: 240, ex. 17)

a:kw,	pa:yikw	mikw	tikusini:-**sipin**
so	one	but/only	s/he.arrives-**INDIRECT**(#07)

Well, only one of them arrived (back home), it turned out. (WNTP, text 19)

As far as we know, apart from Innu, Naskapi, and Northern East Cree, the indirect evidential grammatical markers are not attested elsewhere. The Southern dialect of East Cree for example, does not have the Independent Indirect suffixes found in the Northern dialect (#05, #06). (p. 446)

B. Subjective

The Subjective mode is found in Innu, East Cree (Northern and Southern), and Naskapi, but no longer in Western dialects (MacKenzie 1980; Lacombe 1874), as shown in Table 21.2. It is found only in the Independent order, and can combine with all or some Indicative and Indirect modes, depending on the language. It does not combine with the Dubitative mode. East Cree suffixes are *-nâ* or *-wâ*. Like in Innu, this mode is also always marked by a particle *ishka*.

(19)
Southern East Cree (from Junker, Blacksmith, and MacKenzie 2015)
ishka mihkwâ-wâ
PART it.is.red-(#02)
It seems red. (Context: in a dream, or in the fog, or from a distance, as it appears to the speaker)

Given the well-attested cultural importance of dreams in Algonquian culture, this distinctive grammaticalization is perhaps not surprising. Notably, however, nothing like it is reported for most other Algonquian languages.

C. Dubitative or Inferential evidential?

The Dubitative has always eluded grammarians with its wide range of uses, for example, older grammarians, like Howse (1844) called it the Suppositive.

'From the great caution which the Indian observe in narrating events, … of which he has not a personal knowledge, these Sub-positive forms are of very frequent occurrence in discourse' (Howse 1844: 205; cited by Ellis 2016).

For languages that do have an Indirect mode, the Dubitative can constitute a third value in evidential marking when it indicates reported discourse or secondhand information obtained by inference. This use of the Dubitative to frame narratives obtained by indirect sources (except for legends, which do not seem to require such precaution) is found across the languages of the continuum, whether they have indirect evidential suffixes or not.

Ellis (2016) provides an in-depth analysis of the Dubitative for Moose and Swampy Cree, languages that do not have indirect evidentials. The following pair of examples shows a contrast between the Independent Indicative Neutral (#01) and Dubitative Neutral (#09). Notice how the second example (21) expresses indirect/inferential evidence.

(20)
DIRECT: âsay maci-kîsikâw.
now bad-it.is.day
It is a bad day now.

(21)

INDIRECT:	âsay	maci-kîsikâ**tokwê**	walawîtimihk
	now	bad-it.is.day.**DUB**(#09)	outside
	ê-papihtikwêk		
	PREVERB-it.is.thundering		

It must be a bad day outside now from the sound of the thunder. (from Ellis 2016: 11, ex. 2)

(p. 447)

The Independent Dubitative Preterit can also have evidential inferential overtones, as shown by the following Southern East Cree example. The speaker was not conscious of crying, but can tell after the fact from, say, his puffy eyes. Note that there is no first person restriction.

(22)

nichî	matû-**htâkupane**	kâ	ninipâyân
1.PAST	cry-**DUB**(#10)	PREVERB	I.sleep.(#11)

(I look like) I must have been crying during my sleep. (From Junker 2007)

Conjunct Dubitative forms are mostly found in epistemic contexts, but it is worth noting different patterns of meaning related to preverbs. Ellis (2016) observes that when the conjunct verb in the Dubitative is preceded by the preverb *ê*, the meaning is about hearsay: 'reported speech where the speaker takes no responsibility for the truth of the statement' (Ellis 2016: 114).

(23)

N'kî-pêhtên	ê-pakwâshi.wanê
1.PAST.PREVERB-hear(#01).1sg	**PREVERB**-you.dislike.me.**DUB**(#14)

I heard that you don't like me. (Ellis 2016: 115 ex. 11)

The exact range of meanings of the Dubitative and its evidential overtones remains a matter for further study. This is especially so for languages with no Indirect evidentials.

21.3.2. Evidential affixes in Southwestern Ojibwe

Standard analysis of Ojibwe so-called mode identifies four categories: Neutral, Preterit, Dubitative, and Preterit-Dubitative, i.e. two marked modes, Preterit and Dubitative, which may be absent, occur singularly, or occur together[8]. The Dubitative seems to function as an inferential evidential. All modes can be positive or negative. Tense is independent of this system, being marked with verbal prefixes/preverbs.

The range of meanings of the so-called Dubitative inflectional system has not been researched with sufficient rigour in Ojibwe, and our understanding is somewhat restricted by analysts' lack of native speaker intuition, and thus, reliance on contextual textual cues and English glosses. Nichols (1980: 125) states of the Dubitative, that verbs carrying it 'mark the inability or unwillingness of the speaker to vouch for the certainty of the occurrence of the event of the verb'. This may be due to lack of personal observation, supposition or inference, (p. 448) forgetfulness or [the] traditional nature of the speaker's knowledge'. Traditional narratives are often framed at their beginnings, and, less often, at their ends with verb forms in the Dubitative or Preterit Dubitative, indexing not the predicates they occur on, but rather the entire text as representing a traditional source.

Table 21.7. Markers for the Dubitative and Preterit Dubitative in Southwestern Ojibwe

Order	**Mode**		
	Dubitative	Preterit Dubitative	Preterit
Independent	-dog$_{12}$ + (-en$_{13}$)	-w$_{10}$ + -ban$_{12}$	-ban$_{12}$
Conjunct (with initial change)	-w$_{10}$ + -en$_{13}$	-w$_{10}$ + -ban$_{12}$ + -en$_{13}$	-ban$_{12}$
Imperative	-	-	-

The markers for the Dubitative and Preterit Dubitative in Southwestern Ojibwe are shown in Table 21.7, where subscripts refer to occurrence in the fourteen suffix positions described in Nichols (1980). There is no marking in the Imperative order, and Initial change is required in Conjunct Dubitative. In the Independent order the marker of the Dubitative is primarily *-dog*, with an extended form *-dog-en* in forms followed by a third person plural or obviative suffix. The primary marker of the Dubitative in the conjunct order is the combination *-w* and *-en.* This *-w* also occurs in the Independent Preterit Dubitative, where the slot for *-dog* is filled by the preterit suffix, *-ban*.[9]

A few examples of the Dubitative and Preterit Dubitative will show their range of meanings pertinent to evidentiality in Ojibwe.

The **Independent Preterit Dubitative** can indicate the speaker's indirect knowledge, as in the following example, where the indirectness is due to the speaker having heard the story from her grandmother. There is also an evidential particle, discussed in more detail in §21.2.4.1.2: *giiwenh*.

(24)

Bezhig	**giiwenh**	a'aw	mindimooyenyish	**gii**-ayaa**goban**,
one	**PART**	that.ANIM	old.woman.PEJ	**PAST**-she.was.**PDUB**
maji-mindimooyenyish				
bad-old.woman.PEJ				

There was said to have been an old woman, a witch. (Kegg 1983: 61–2)

The **changed Conjunct Dubitative** can indicate inference, along with an evidential/epistemic particle, *iidog*, as in the following example involving a man who accidentally cuts himself while skinning a rabbit, and almost becomes a windigo (cannibalistic spirit):
(p. 449)

(25)

Miish	**iidog**	maagizhaa	gaye	**gaa**-taangandam**ogwen**	i'iw	miskwi
so.then	**PART**	perhaps	also	**IC.PAST**-he.tasted.it.**DUB**	that.INAN	blood

He must have tasted the blood. (Kegg 1983: 12–13)

Traditional stories are often framed with **Independent Preterit Dubitative.** This is seen in the following example, a famous chartering myth in which a woman goes on a vision fast and marries a beaver, creating an important bond between beavers and humans:

(26)

Ningoding	bezhig	oshkiniigikwe	gichi-gii'igwishimoo**goban**
once	one	young.woman	greatly-she.fasted.**PDUB**
makadeked			
she.blackens.herself			

Once on a time a certain young woman **went into a long fast**, blackening (her face). (Jones 1919: 250–1)

21.3.3. Evidential affixes in Eastern Algonquian languages

For affixal evidentials, the northern Eastern Algonquian languages all draw from a set of two basic forms, which we can call the P- and S-forms. The primary elements involved are as follows (-X = word-final, -X- = word-medial), as shown in Figure 21.2.

With the exception of Inglis (2002) and Loughran (2012) for Mi'kmaw, the evidential and/or epistemic functions of the S- and P-forms have not been very systematically studied for

Eastern Algonquian languages, such that relevant data consists mainly of nonce-glossed forms rather than precise comparisons/minimal contrast examples.

Within these limits, however, a few key generalizations can be offered. Both P- and S-forms appear to refer exclusively to past events, with the P- and S-forms respectively expressing direct and indirect evidential perspectives on the event. (Compare this limitation to the past with the Innu-Cree dialects that distinctively also contrast indirect evidentiality for temporally present events.)

	WAb	EAb/Pb	PsmMl	Mw
P–form	–(e)b	–(ə)pan	–(ə)pən	–(')p
	–(e)ban–	–(ə)pan–	–(ə)pən–	–(')pn–
S–form	–(e)za	–(ə)sa	–(ə̀)s(s)	–(')ss
	-(e)za(h)an	–(ə)sa(a)n–	–(ə)s(ə)pən–	–(')sn–

Figure 21.2. Eastern Algonquian Affixal Evidentials

Since speakers in most cases have direct-evidential access to events they participated in, P-forms are much more common with the 1s, with S-forms limited to instances where (p. 450) speaker memory is faulty (motivating a question) or lacking (due to unconsciousness, etc.), as seen in Penobscot (27a) and Mi'kmaw (27b):

(27)

a. ččìke nənámihɑ-ssa?
when I.see.him-S
When have I seen him?

b. n=eht nəpəsəkihlɑ́ne-ssa, èhsəma péčihlɑhkʷ
then=DUB I.fall.asleep-S not.yet (IC).he.arrives
I evidently had fallen asleep before he arrived.

c. nepaya-s
IC.I.sleep-S
I slept (so I'm told) (Adapted from Inglis 2002: 57)

Past-based questions posed to and regarding an addressee also use the S-form:

(28)

a. Second person S-forms (Penobscot (a–b)
kəpečóhsep-**əsa**, àla kəpečípəyep-**əsa**?
you.walk.here-S or you.paddle.here-S
Did you walk here, or come by canoe? (S:60:56 (#204))

b. ččìke kəpečíhl[ɑ]p-**ə**sa?
when you.come-**s**
When did you come? (PD; sic ms. [a])

The overall pattern—that questions about past events involving the addressee typically use an S-form, while assertions about past events involving the speaker typically use an P-form—is well-illustrated in the following Maliseet pairing:

(29)

Maliseet S- and P-form usage across 1s and 2s (Quinn 2016a)
kèkw ktiyà-**ss**?
what you.tell.him-**s**
What did you tell him/her?
ntiya-**hpən** . . .
I.tell.him-**P**
I told him/her . . .

A speaker is generally a direct witness to their own earlier utterances. Asking about an addressee's experience is most common precisely when the speaker was not a direct witness already. This predicts what Maliseet speakers confirm: that this distribution of S- versus P-forms is the most natural default.

The Indirect-evidential use of S-forms often attracts glosses that appear to be inferential ('must have … ', 'it is believed …'), while the corresponding P-form is simply a (direct) preterit, as in these Penobscot Dictionary entries: (p. 451)

(30)

P-forms versus S-forms and inferentiality[10] (PD)
a. tkɑpánoppan 'it had been a cold morning'
tkɑpánossa 'it must have been a cold morning'
b. etaloténekəpan 'where there had once been a village'
etaloténekəsa 'where it is believed there had been a village'

10

Often, however, glosses do not explicitly convey this distinction. The following Penobscot S-form is simply given a preterit gloss—but from the context (the woman was the lone witness of a terrifying event, and is now reporting it) it seems that an indirect (or inferential) reading is intended:

(31)

Penobscot S-form: indirect/inferential (PL)

awáhkɑč=àkʷa=tte,	kisí-kəloso	owa	phènəm,
barely=REP=INTENS	can-she.speak	this.ANIM	woman
etotpáwəlo-sa			
IC.she.is.so.frightened-S			

The woman could hardly speak, **she had been so frightened.**

In some cases, it is not clear whether the indirect-knowledge perspective is attributed to the speaker or to the characters themselves, as in (32), where the earlier actions of a bear are inferred based on tracks left near a stream:

(32)

Penobscot S-form: indirect/inferential perspective (PL)

… wənamihtonɑ=àkʷa	etali-katonke-**sa**,		owa	áwehsohs,
they.see.it=REP	IC.where-she.hunts-S		this.ANIM	bear
wič=àkʷa	iyo	čihčikʷtəkʷehso		
since=REP	here	it.is.very.narrow.river		

… they saw where the bear **had been hunting** (S) since at this point the stream was very narrow.

nàkʷa	olapíne-**ssa**	sipóhsisək	owa	kči-áwehsohs …
then=REP	she.sits-SBD-S	brook-LOC	this.ANIM	great-bear

Then the large bear **had sat down** (S) in the brook …

Regarding Maliseet, Sherwood (1986: 144–5) reinforces an evidentially-marked interpretation for the S-form (= 'Dubitative-Preterit') versus the P-form (= 'Preterit'):

> *- Dubitative-Preterit: 'express[es] assertions involving doubt or uncertainty, lack of direct knowledge, or some conclusion or inference on the part of the speaker.'*
>
> *- Preterit: 'indicate[s] action in the past, and generally has emphatic or contrastive force … may refer to a single past event, to an occurrence prior to some succeeding past event, or to repeated or continuous past action not extending [to] the present.'*

(p. 452)

This characterization again conflates under the S-form's three distinguishable elements: indirect knowledge, uncertainty, and inferentiality.

One noteworthy feature of S-forms is its use in Catholic liturgical texts. The Mi'kmaw text *Teliamaskwiplnuss Westau'lkw Se'sukuli Ksaqmaminu* (The Passion of Our Lord; Schmidt and Marshall 1995: 151–76) showcases a general pattern of S-forms being used for nearly all events, including the title itself: *teliamaskwiplnuss* 'how He was tortured (S)'. Given a religious context, it seems less likely that these express speaker uncertainty/doubt about these events, and more likely that these simply reflect the speaker not having directly witnessed them. Similar usage is found in catechismal texts: Mi'kmaw *wen kisi'sk's?* 'Who created you (S)?' and Penobscot *áwen kisihóskəsa´* 'Who made you (S)?' both use S-forms, presumably because people are not direct witnesses to their own creation. (As this is pervasive across several neighbouring languages, in written and oral sources alike, it is unlikely to simply reflect translationese.)

For Mi'kmaw in particular, Inglis (2002) glosses P-forms as 'attestive', S-forms as 'suppositive', but notes that they correspond with the Direct Attested and Indirect Reported of Willett (1988). She further clarifies that 'speakers use the suppositive evidential [= S-form] ending when the source of information is indirect evidence (as in hearsay – second-hand information), when the speaker is making reference to mythical or legendary figures, or when a speaker wishes to verbally hedge.' (Inglis 2002: 42). In contrast, the P-form refers to direct knowledge, hence the following contrast:

(33)

Mi'kmaw P-form versus S-form (Inglis 2002: 49)

Nepayap.	'I fell asleep/slept.'
	(I, speaker, can attest to it – I remember going to sleep.)
Nepayas.	'I fell asleep/slept.'
	(I, speaker, cannot attest to sleeping, as I do not remember dozing off – I only remember waking up.)

where the P-form can reflect knowingly going to sleep, versus the S-form reporting accidental dozing off. We can see this contrasted in full with a plain neutral form (34a) versus the P-form (34b) and S-form (34c):

(34)

Mi'kmaw P-form, S-form, and Deferential evidential (Inglis 2002: 64–5)

a. wape'k
IC.it.is.white
[It is] white.

b. I'-wape'k-**ɨp** na amskwes
IC.HAB-it.is.white-**P** then first
It used to be white before.

c. I'-wape'k-**ɨs** na amskwes
IC.HAB-it.is.white-**S** then first
It used to be white, so I'm told.

d. I'-wape'k-**sɨp** na amskwes?
IC.HAB-it.is.white-**SP** then first
It used to be white, was it not?

(p. 453)

Here (34d) reflects a further contrast reported by Inglis, one apparently uniquely innovated by Mi'kmaw: the DEFERENTIAL EVIDENTIAL, which appears to combine the S and P elements. This form invites/invokes the knowledge of the addressee (somewhat comparably to a tag-question), 'in a sense … deferring to the evidential knowledge of the addressee' (Inglis 2002: 68 = 35a), and contrasts with the simple S-form suppositive, which marks the statement 'as secondhand information' (35b), like an indirect evidential.

(35)

Mi'kmaw deferential evidential vs. simple S-form (Inglis 2002: 68)

a. Kesinukwa-**sɨpn**-ik?
IC.be.sick-**SP**-3pl
They were sick, weren't they?

b. Kesinukwa-**sn**-ik
IC.be.sick-**S**-3pl
They were sick, so I'm told.

Mi'kmaw also apparently uniquely retains a DUBITATIVE, morphologically similar (and related) to those seen in Central Algonquian languages, i.e. based on an element *-tuk(w)* (36a). It can even collocate with the deferential evidential (36b):

(36)

Mi'kmaw Dubitative (Inglis 2002: 89)

a. Alasutma-**tuk**
pray-**DUB.3sg**
S/he might pray.

b. Alasutma-**tuk-sɨp**
pray-**DUB-SP.3sg**
Perhaps s/he prayed, did s/he?

The glossing and forms reported by Inglis 2002 seem to be significantly different from that attested for the Listuguj dialect of Mi'kmaw (37), where the attested forms are always glossed with 'must have' rather than 'might', and have an interesting contrast of a preceding *-w-* element in 1/2 forms (37a) versus none in the 3s (b). This paradigm requires further documentation and more precisely targeted investigation.

(37)

Mi'kmaw dubitative evidential, Listuguj dialect (Quinn 2014)

a. ki'l nmia-**wtukun**-i'k maljewe'jk awtiktuk
2s see-**DUB.1/2**-them children road.LOC
You must have seen the kids on the road.

b. nekm nmia-**tukun**-n
3s see-**DUB.3**-OBV
S/he must have seen him/her.

The overall picture for the affixal evidential system in the Eastern Algonquian languages surveyed is that all have a basic Direct (P-forms) versus Indirect (S-forms) evidential contrast. On top of that, Mi'kmaw maintains a version of the Dubitative found in Central (p. 454) Algonquian languages and an innovative 'deferential evidential' which acknowledges the addressee's take on the proposition in question.

21.4. Other evidentials

21.4.1. Particles

21.4.1.1. Evidential particles in Cree: reportative and dubitative

Evidential particles are well-documented for Plains Cree, a language that has lost most of its mode suffixal distinctions. Two particles are especially salient in texts, the Reportative *êsa* and the Dubitative *êtokwê* or *êtikwê* (Wolfart 1998: 178). Their use is mandatory and they seem to have replaced evidential inflection. (Blain and Déchaîne 2007; Déchaîne et al. 2017).

(38)

wahwâ,	kitâpamêw		**êsa**,
O.my!	she.looked.at.it(ANIM)		**REP**
'Nikâh-~	nikâh-mowâw	awa	noon,'
Able-~	able-I.eat.it(ANIM)	this	noon

Oh my, s/he [**reportedly**] looked at it, 'I could eat this at noon . . .'
(Ahenahkew 2000: 112, lines 16–17; cited by Blain and Déchaîne 2007: 265, ex. 14a)

(39)

. . . , mâk	**êtikwê**	miyâkosiyiwa, . . .
But	**DUB**	it(ANIM).is.smelling

. . . , but it **must** have been smelling already, . . .
(Ahenakwew 2000: 94, line 9, cited by Blain and Déchaîne 2007: 270 ex. 22b)

Wolfart and Pardo's (1972) statistical analysis of the Plains Cree dubitative particle *êtokwê* showed that it occurred ten times more frequently in the Alberta texts they studied than in Bloomfield (1930, 1934, 1946, 1958) texts. Wolfart (1973) makes the hypothesis that the loss of the dubitative inflection correlate with the rise of the use of the particle that formally resembles it.

21.4.1.2. Evidential particles in Ojibwe: reportative

Southern Ojibwe dialects (Odawa and Southwestern) have a reportative particle, *giiwenh*, often very common in third-person narrative, though there is a range of relative frequency among speakers, and among speakers telling different narratives. Note that this word too could possibly have an etymological dubitative element in it, */en/*. It is especially common with verbs signalling direct quotation, e.g. *ikido*, 'say,' or *izhi*, 'say (something) to someone' In such cases it always comes directly after the verb. It is also very common as a general clause or sentence-level modifier, in which case it typically occurs in second position. The following examples illustrate its usage. (p. 455)

With a verb of speaking:

(40)

'Maagizhaa	gaye	ga-debibinigoom,'	**ikido**	**giiwenh**	a'aw
maybe	also	you'll.be.caught	**he.says**	**REP**	that.ANIM
gichi-mookomaan					
white.man					

'Maybe you'll be taken prisoner,' that white man (allegedly) says. (Kegg 1983: 7–8, Southwestern)

As a sentence-level modifier:

(41)

Gichi-mewinzha	**giiwenh**	Zagwaandagaag	gii-inaawag	iwidi
long.ago	**REP**	Zagwaandagaag	PAST.they.be.called	over.there
akeyaa	waasa			
direction	far.away			

Long ago a people way far away were (apparently) called Zagwaandagaag. (Kegg 1983: 15–16, Southwestern)

There is also a dubitative particle, *iidog* in all Ojibure dialects, with the form *iidig* in Odawa. This particle is often glossed in dictionaries with a decidedly epistemic function. For Southern Algonquin, for example, McGregor (1987: 88) glosses it as: 'denotes doubtfulness; supposedly; seemingly; an assumption or conclusion, i.e. *mì ìdog* – it must be so; that must be it.' As an example of such usage, the following sentence is from a narrative (related to Valentine) by an Oji-Cree speaker, the late Swanson Mekanak, describing an event he witnessed in his youth, the exact details of which he has difficulty recalling:

(42)

E-ani-maajii-dibikaag	idash	naanda,	naanda	**iidog**	gaawin
It.was.getting.dark	then	maybe	maybe	**DUB**	not
ningikendasiin,	naanda	**iidog**	Jaaniwen,	Bebiwen	biisim
I.know.it	maybe	**DUB**	January	February	month

It was beginning to get dark then maybe, maybe it could be not, I don't know, maybe the month of January or February.

Here *iidog* indexes the speaker's uncertainty. It is also very commonly used with particles indexing uncertainty, as in the set expression, *amanj iidog*, 'I don't know,' and the common phrase, *dibi iidog* 'I don't know where; wherever.' It is used by some speakers, however, with a much more reportative feel, as illustrated by the following opening portion of a narrative by Maude Kegg (Southwestern), a consistent user of *giiwenh*, in a manner that is quite similar to her usage of *giiwenh* in third-person narrative.

(43)

Miish	i'iw	gaa-**ikidod**	iwidi	**iidog**	ayi'ing
So	that	PAST.**she.said**	over.there	**REP**	such.place
niingidawitigweyaang	ogii-izhi-wiindaanaawaa		iwidi		gichi-ziibiing,
where.river.forks	they.called.it		over.there		at.big.river
gaa-ondinamowaad	iko	anooj gegoo	wiisiniwin		
where.they.got.it.from	HAB	various.kinds	food		

She said that it must have been over there at what's called Niingidawitigweyaang 'River Fork' (Crow Wing) on the Mississippi where they got all kinds of food.

(p. 456)

(44)

Anooj gegoo	gii-ashamaawag	**iidog**	iwidi
various.things	PAST.they.were.fed	**REP**	over.there

They must have been fed with all sorts of things over there. (MK01.04)

The late Maude Kegg's stories also show use of both *giiwenh* and *iidog* in the same sentence, as in the following examples. Note that the two sentences show these two particles complementarily in virtually identical reportative-particle structures, following the sequencing particle, *miish*, 'so, and then.'

(45)

Miish	**giiwenh**	mewinzha	niizh	ininiwag,	bezhig	**giiwenh**
So	**REP**	long.ago	two	men	one	**REP**
wiitaan	**iidog**,	nibaawaad,	maagizhaa	gaye		
his.brother-in-law	**REP**	they.sleep	perhaps	also		
baa-wanii'igewaad						
they.go.around.setting.traps						

Once long ago there were two men sleeping, one being the other's brother-in-law, perhaps they were setting traps around there. (MK13.03)

(46)

Miish	**iidog**	imaa	nibaawaad	imaa,	mii	imaa	mazhii'iganing
And	**REP**	there	they.sleep	there	it's	there	at.Garrison
ezhiwiindeg,	gaa-izhi-gichi-animikiikaanig					**giiwenh**,	
as.it's.called	that.there.was.a.heavy.thunderstorm					**REP**	
gichi-nichiiwadinig	**giiwenh**						
there.is.a.great.storm	**REP**						

When they were sleeping there at the place called Garrison, a heavy thunderstorm came up, a great storm. (MK14.06)

North of Southwestern Ojibwe, in Ontario, the particle *iinzan* is used in a fashion similar to *giiwenh* and *iidog* in the south, i.e. in third person narratives, though perhaps not as consistently. This word, too, as with *iidog*, is also used to indicate uncertainty, and one finds English glosses such as *supposedly, apparently, evidently,* and *seemingly* associated with it. But its usage as a reportative is evident in the narrative style of many speakers, such as that of William Fobister, of Grassy Narrows, Ontario (Northern Ojibwe), who begins a humorous fictional story in the following fashion:

(47)

Aabiding	**iinzan**	odedeyimaa	gii-inendam	e-wii-gikinoo'amawaad
One.time	**REP**	a.father	PAST.he.thought	he.would.teach.him
ini	aya'aan	ogozisan		
that	one	his.son		

Once it seems a father thought that he would teach his son.

'Aaw,'	odinaan	**iinzan**	ini	ogozisan
'Okay'	he.says.to.him	**REP**	that	his.son

'Okay,' he says to his son, it seems.

Aa,	booziwag	**iinzan.**	
well	they.board	**REP**	

Well, they get into the boat, it seems.

(p. 457)

	WAb	EAb/Pb	PsmM	Mw
REPORTATIVE	*=agwa*	*=ak^{w}a*	*=yàq*	*=to'q*
DUBITATIVE	*=ato*	*=eht*	*=(k)àl*	*=etug*

Figure 21.3. Northern Eastern Algonquian Evidential Particles

These particles do not require dubitative marking on the verb, unlike dubitative pronouns. As shown here, they clearly have a reportative function, thus making them part of a system marking source of information.

21.4.1.3. Evidential particles in Eastern Algonquian

The northern Eastern Algonquian languages appear to all share a contrast between reportative and dubitative particles, both of which appear primarily as second-position clitics (Figure 21.3).

Usage of each is described in the following, drawing examples primarily from Penobscot and Mi'kmaw; unless otherwise specified, comparable examples for Western Abenaki and Passamaquoddy-Maliseet are readily attested.

Reportative particle

Like Ojibwe *giiwenh*, Penobscot use of the reportative particle includes pervasive use in traditional-narrative texts:

(48)

Penobscot reportative particle: traditional received-narrative use

ni=àkʷa,	iyo	nàwat	ítɑsik,	kči-ótene	atóthote,
then=**REP**	this	long.ago	IC.it.is.said	great.village	it.is.situated
etali-sákətehtəkʷek	sìpo				
IC.where-it(river).opens	river				

It was long ago, it is said, that a large village was situated at the mouth of a river. (PL:k&t#2:1)

Similar uses are attested for Western Abenaki, Passamaquoddy-Maliseet, and Mi'kmaw. Penobscot *=akʷa* also has a use in relaying more immediate secondhand information: Siebert (p.c. 1996) reports having one Penobscot speaker translate his real-time utterances to another who was hard of hearing, following them with the reportative particle. The very same usage was also witnessed by one author (Quinn) for the Mi'kmaw reportative particle *=to'q* (with speaker K. Sorbey 2014).

The Mi'kmaw reportative particle *=to'q* is also used as 'an indication by the speaker that the proposition of the sentence … is common knowledge' (Inglis 2002: 63)

(49)

Mi'kmaw reportative evidential as 'common knowledge' (Inglis 2002: 53)

Ewi'kikɨl	wi'katiknn.
IC.she.writes.them	letters

S/he writes letters.

Ewi'kikɨl	wi'katiknn **to'q**.
IC.she.writes.them	letters=**REP**

It is common knowledge that s/he writes letters.

(p. 458)

This has so far not been documented for reportative particles in other Eastern Algonquian languages.

It has also been noted by at least one Passamaquoddy speaker (D. Soctomah, p.c. 2006) that their reportative particle =*yàq* can also be used in a '… or so S/HE says' sense, i.e. to cast doubt on a proposition by framing it as (just) one source's claim.

Dubitative particle

For all Eastern Algonquian languages surveyed here except Passamaquoddy-Maliseet, the dubitative particle is clearly cognate to Central Algonquian dubitative particles (Ojibwe *iidog*, Cree *êtokwê*), which in turn appear to share a core element with their Dubitative affixal-form paradigms. The same holds for Mi'kmaw particle *etug*/=*etug* versus affixal *-tug(un-*).

The Penobscot dubitative particle =*eht* has a strong association with inferential use (50).

(50)

'… owa	kčì-skok	wəkisi-=**eht**-mətewələnəwíhpənalɑl	wàləskal …'
this.ANIM	great.snake	3.has-=**DUB**-magically.harmed.her	Pretty.Legs.OBV

… This serpent had **evidently** cast a magic spell on Pretty Legs … (PL)

It is also used in simple hedging (or admitting total lack of knowledge about) degree/precision (51):

(51)

mehč=**eht**	yéwahtəkʷe	alí-tkikʷəl
almost=**DUB**	400	thus-it(ANIM).weighs

It (= a bear) weighed about 400 [pounds]. (A.N. Texts:1)

The dubitative particle very often collocates with the S-form, as in (52).

(52)

Penobscot dubitative particle: collocation with S-form

'… ow[a]=**eht**	na	kčì-skok	nepəwɑklɑ**sán**əhi,
this.ANIM=**DUB**	that.ANIM	great-snake	IC.it.cause.death.to-**S**-OBV.PL
iyòhi	kətákəhi	wənisəwihətíčəhi.'	
this.OBV.PL	other.OBV.PL	her.spouse-OBV.PL	

… this serpent is **evidently** the one who **had** caused the death of her other husbands. (PL wələske:21)

Compare (52) to (50) above, which directly precedes it in the source text. The first sentence is a simple inference about an immediate situation (and one which still holds): it has neither S- nor P-form, just a perfective *kisi-*.

This second sentence, in contrast, makes an inference about entirely unwitnessed, explicitly past events; hence the corresponding verb is marked with S-form. The frequent co-occurrence of S-forms and the dubitative particle makes it difficult to pin down the exact contributions of particle versus affixal element to the overall meaning.

Overall, it appears that reportative particles (at least as exemplified by Penobscot and Mi'kmaw usage) simply pass on secondhand information, be it immediate restatements (p. 459) of a still-present source, or more commonly, traditionally/communally received information. Dubitative particles are closely associated with inference, but may simply be hedging certainty and/or informational precision.

21.4.2. Hearsay/Quotative verbs

Some Algonquian languages make extensive use of quotative verbs, which can be considered grammaticalized because of their high frequency. These verbs are made of a relative root initial, *it-ew* (Cree), *iN-gido* (Ojibwe) 'say (such),' which licenses the actual quotation. Blain and Déchaîne (2007) consider this to be a quotative evidential.

21.4.2.1. Cree-Innu

Reported discourse is omnipresent in Innu and Cree narratives. It consists of direct quotations, frequently interspersed with a verb equivalent to English 's/he said'. The citation process is fully recursive, to accommodate the careful account of repeated transmission of information. In the following example (from Drapeau 1984: 26), three levels of discourse are embedded: 1) original interactions between A and B, 2) the report by the witness—who can be A or B or another person—given to the narrator, 3) the narrator quoting the other two levels of discourse.

(53)

$_3$[Ekue	'enregistrer'	tûtuâkue	ukâui	utekâkussîshikâlit.]$_3$	
And.then	'to.record(French)'	it.is.made	her.mother	last.night	
And so she recorded her mother last night.					
-$_3$[$_2$[$_1$[Eukuan	ume	tshika	tshîuân	anutshîs,]	**nitâu,**]
There	here	you.will	return.home	soon,	I.said.to.her,
îteu	ukâui.]				
she.said.to.her	her.mother				
There, you are going to return home soon, I said to her, she said to her mother.					

This rigorous direct citation style underscores the cultural importance of citing the source of information. According to Drapeau (1984) impersonal forms of the quotative (*înânûn* 'it is said', and *îtâkanu* 'it is said of him/her') are used when the speaker did not acquire the knowledge by direct personal experience, but rather by oral transmission, and thus has to be neutral about the source of information. Such use is also attested throughout the Cree-Innu continuum, as shown by the following Plains Cree example:

(54)
Plains Cree

ayi,	'mistahi,	mistahi	ayi	kaskêyihtam	ayisiyiniw,	'…**itw**-âniwiw mâna…'
Ah	much	much	ah	be.lonesome(3)	person	**say**-IMPERS usually

Ah, 'A person gets very lonesome,' it is usually said …
(Whitecalf 1993: 66, line 4; cited by Blain and Déchaîne 2007: 264, ex. 12b).

(p. 460)

21.4.2.2. Ojibwe

Ojibwe has a means of indicating a traditional source, or received opinion, by use of a verb of speaking inflected in the impersonal. For example, the verb *ikido*, 'say (such),' has the impersonal form *ikidom* in southern dialects, and *ikidonaaniwan* in Oji-Cree and Algonquin. The following examples illustrate its use to indicate traditional or general knowledge.

	Ikidom	gii-amodiwaad	mewinzha
(55)	it.is.said	PAST.they.ate.each.other	long.ago

It is said that long ago they ate each other. (MK04.08)

Especially in traditional stories, one finds verbs of quotation used to frame direct speech, occurring both before and after a direct quote, as in the following:

(56)

O'ow	idash	ogii-inaan	iniw	ookomisan:	'Ambe sa noo,	
this	then	he.said.to.her	that	his.grandmother	please	
ninganaazikaan	i'iw	ishkode,'	ogii-inaan	iniw	ookomisan	
I.will.fetch.it	that	fire	he.said.to.her	that	his.grandmother	

Now, this was what he said to his grandmother: 'Please let me go fetch the fire,' he said to his grandmother.

It is only quotation that shows this framing structure, not other types of action in narrative, giving direct speech a special status.

21.4.2.3. Eastern Algonquian

Eastern Algonquian languages also attest at least some limited uses of quotative verbs in similar fashions, as can be seen in example (48), repeated here, where Penobscot impersonal *itɑsi-* 'it be said' acts comparably to Ojibwe *ikidom*:

(57)

ni=àkʷa,	iyo	nàwat	**ítɑsik,**	kči-ótene	atóthote,
then=REP	this	long.ago	**IC.it.is.said**	great.village	it.is.situated
etali-sákətehtəkʷek	sìpo				
IC.where-it(river).opens	river				

It was long ago, **it is said**, that a large village was situated at the mouth of a river. (PL:kandt#2:1)

Note again that reportative clitic *=akʷa* also appears in the same utterance, without explicit translation. Cases of extensive framing of direct speech with overt verbs of speech (SAY, TELL), comparable to those discussed for Innu and Ojibwe (§21.4.2.1 and 2 respectively), are also found.

21.5. Conclusion

In this chapter we have demonstrated the importance of evidentiality as a conceptual construct in understanding a range of important grammatical phenomena in Algonquian (p. 461) languages, as exemplified by three representative chunks of the family: the Cree-Innu-Naskapi continuum, Ojibwe, and Eastern Algonquian. After first noting the very productive role of lexical means of expressing perception (the closest we get to sensory evidentials in Algonquian) we focused on highlighting how the richest end of the spectrum, the Cree-Innu-Naskapi continuum, shows affixal morphology that contrasts Direct versus indirect evidentiality, inferentiality, and the very distinctive 'dream-witnessed' Subjective —with the remainder of the family showing essentially subsets of this range of contrasts. At the phrasal-syntactic level, we examined how evidentials (and epistemics) also realize as still-grammaticalized uninflected particles, and how certain uses of quotative verbs in Algonquian languages show a special attention to the encoding of information source.

The motivation for this work is that for most Algonquian languages—even many that are otherwise well-documented—evidentiality remains still underexplored, with only brief, superficial, or sometimes even perhaps inaccurate documentation. A major problem is the traditional treatment of relevant evidential phenomena as essentially epistemic.

Problematic and/or only sketchy documentation of these phenomena especially hinders addressing basic questions about their historical origins and development throughout the family. For example:

- Why (and how) has Innu and its immediate neighbours (East Cree, Naskapi) developed such a rich set of affixal evidential and epistemic distinctions—contrasting indi-

rect evidentiality for present events as well as past, and offering a seemingly unique Subjective modality—while the remainder of the Algonquian family displays a more restricted set?

– The exact boundaries between individual Algonquian languages and dialects are fluid in areas of mutual influence, e.g. between Ojibwe and Cree in the western part of the Innu-Cree continuum. What role, then, might this kind of contact (and contact with non-Algonquian neighbours) play in the spread or shift of evidentiality contrasts in these languages?

– Even our basic distinction of affixal versus clitic-/particle-marking poses diachronic questions. As yet, no evidence allows us to say confidently whether affixal marking developed from original clitics fusing into the verbal complex, or if the particles have instead developed from original affixes attached to light 'filler' verbs.

And indeed, across the family we identify recurrent elements that suggest that most of the basic morphological markers may reconstruct to Proto-Algonquian, or at least are later-shared innovations: *-*(e)pa(n)*, *-*(e)saha(n)*, and *-*(e)toke·h* (cf. Goddard 2007). But from there, exact usage descriptions vary greatly. The all-important question of usage remains challenging. Beyond our preliminary characterizations of direct versus indirect evidentiality, and (epistemic) inferentiality—the Subjective notwithstanding, these two appear to be all the contrasts needed to account for the attested systems—our semantic/pragmatic understandings of these elements still fall short of a solidly predictive account of their individual distribution, much less their relations to each other, and to the rest of these linguistic systems. Simultaneous use of both particles and affixal forms (especially between inferentials and indirect evidentials) are common: but the nature of their interaction and relative distribution remains largely unstudied, as does the interaction between structured (p. 462) lexical means of expressing perception (as in §21.2) with evidential (and epistemic) inflection and particles.

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Notes:

([1]) Certain sources are abbreviated in example citations: Siebert ca. 1998c as *S:notebook number*; Siebert 1998a as *PL*; Siebert 1998b as *PD*; and Quinn 2016b as *A.N. Texts*.

([2]) See e.g. recent work by Murray (2014, 2016) on Cheyenne evidentials.

([3]) The suffixes are for Intransitive verbs with Animate subject, vowel stem (exemplified for 1s and 3s respectively, and 2s for Imperative). Such a comparative table was first proposed by MacKenzie (1980). Note the spelling variants of /*tʃ*/: *tsh, ch, c*. Sources used: Innu: Baraby and Junker (2014); EC-N, EC-S: Junker and MacKenzie (2015); MC, SC: Ellis (2016); Atik: Sarazin and Petiquay (2009); PC: Wolfart (1996); Wolvengrey (2011); WC= MacKenzie (1980).

([4]) James, Clark, and MacKenzie (2001: 250) refute this claim observing that Conjunct Dubitative Neutral suffixes (#14) are also used with a dubitative meaning and that they can only indicate Indirect evidentiality in the past. However Drapeau's grammar (2014: 194–5) gives crucial examples of uses for past, present, and future events.

([5]) The other option would be for independent Indirect forms to extend into the Conjunct, but this is not happening. Such paradigmatic 'transfers' from Independent to Conjunct are also attested for the Independent Conditional forms (obtained with a preverb on the Indicative). See Drapeau's (2014: 188) analysis of Conditional forms.

([6]) Baraby also observes that some Eastern Innu dialects have replaced the Delayed Imperative with analytic forms based on future ***tshe*** *atusse****in*** 'Work (later)!' (lit.: you will work!) while keeping a productive Indirect Imperative. On the other hand, Western dialects of Innu either still have the three distinctions, or younger speakers drop the Indirect and favour the Delayed Imperative forms.

([7]) Collette (2014: 207) reports that this form was judged to be archaic by his older informants and that he did not find any example *in vivo* during his fieldwork in the Northern Cree community of Waapmagoostui.

([8]) Formally, the Dubitative interacts with the preterit to produce four so-called verb modes (Nichols 1980: 121): Neutral (–Dubitative, –Preterit), Dubitative (+Dubitative, –Preterit), Preterit (–Dubitative, +Preterit) and Preterit Dubitative (+Dubitative, +Preterit). While in some formal configurations Preterit and Dubitative markers fill the same verb template slot, multiple exponence of the Dubitative allows it to be co-indexed with the Preterit as well, creating the four modes. In a templatic analysis of Ojibwe (as in Nichols 1980), *-w* occurs as an affix in the same slot (10), separately marking Dubitative, negative, and Delayed Imperative. Nichols notes the homonymy and mentions the possibility of these forms actually representing a single morpheme 'sharing a general meaning' (Nichols 1980: 206). A natural question is what that general meaning might be, especially with regard to how the dubitative relates to negativity. Perhaps *-w* marks non-assertion.

([9]) Delayed imperatives are used for commands to be carried out at a later time than the time the command is given.

([10]) Note that the use of P- and S-forms here in both Independent (30a) and Conjunct (30b) modes is in contrast to the restriction noted earlier for Cree.

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Abstract and Keywords

This chapter presents a sketch of the grammatical evidential system and related epistemic meanings in Gitksan, a critically endangered indigenous language of the Tsimshianic language family spoken in the northwest interior of Canada. A number of basic syntactic and semantic tests utilizing presupposition, negation, and dissent are applied that provide a nuanced description of the meanings of the individual evidentials. A specific feature of the Gitksan evidentials which is examined in detail involves how they can be used to express epistemic modality, and how a speaker's choice of which evidential to use in a particular speech context is conditioned by her evaluation of the information acquired in that context. One of the effects of this choice is the expression of what can be translated as modal force.

Keywords: epistemic modality, modal force, presupposition, Tsimshianic, Gitksan, embeddability, negation and dissent, semantic tests, syntactic tests

22.1. Introduction

THIS chapter presents a sketch of the grammatical evidential system and related epistemic meanings in Gitksan, a critically endangered indigenous language of the Tsimshianic language family spoken in the northwest interior of Canada. In addition to providing a description of the kinds of evidential meanings the individual evidentials encode, I apply a number of basic syntactic and semantic tests that provide a more detailed picture of the individual evidentials. A specific feature of the Gitksan evidentials, which is examined in detail, is how they can be used to express epistemic modal meanings, and how a speaker's choice of which evidential to use in a particular speech context is conditioned by her evaluation of the information acquired in that context. One of the effects of this choice is the expression of what can be translated as modal force.

22.1.1. The Tsimshianic language continuum

The Tsimshianic languages are spoken on the northwest coast of Canada, almost entirely within the province of British Columbia, adjacent areas of the interior, and the southern tip of the Alaska panhandle (Map 22.1). (p. 464)

Map 22.1. The Three Tsimshianic Territories (and neighbouring languages): Coast Tsimshian (Sm'algyax), Nisgha'a, and Gitksan.

Source: maps.fphlcc.

There are four linguistic and sociocultural divisions that make up the Tsimshianic family, given in (1):

(1)

The Tsimshianic languages (Rigsby 1986; Mulder 1994; Tarpent 1997)

COAST TSIMSHIANIC (CT)

- Coast Tsimshian (Sm'algya̲x)
- Southern Tsimshian (Sgüü̲xs)

INTERIOR TSIMSHIANIC (IT)

- Nisga'a or Nisgha
- Gitksan or Git̲xsan

The Coast Tsimshian (Sm'algyax) reside to the north and south of the Skeena River delta, and the South Tsimshian (Sgüüxs) were reported to live to the south of this area, primarily (p. 465) in the villages of Klemtu and Hartley Bay. The Nisga'a reside in the Nass River Valley and along Observatory Inlet, and the Gitksan reside in the easterly adjacent upper Skeena and Kispiox valleys, and the Skeena watershed. The word *gitksan* is morphologi-

cally complex, meaning ‘people of the Skeena River’ (*git-* ‘people of’, *xsan* ‘(to) gamble’; ‘Skeena River’). The Gitksan often refer to their language as *sim'algax*, which means ‘the real or true language’ (*sim-'algax* ‘true-language’). The language has been referred to as Gitxsan or Gitksan by scholars, or Gitxsanimx or Gitxsanimax by native speakers when distinguishing it from Nisga’a (Nisga’amx) or Coast Tsimshian (Ts’imsanimx). However, the Nisga’a and Coast Tsimshian people also refer to their languages using *sim'algax*. This has created some confusion, as many publications on Coast Tsimshian simply refer to the language as S’malgyax.[1] With respect to the Interior Tsimshianic languages, the names Gitksan and Nisga’a are more significant for political and sociocultural reasons than linguistic ones: aside from some lexical and pronunciation differences, the two languages are mutually intelligible.

While there are no exact or official figures, in my own estimation, based on the reports of several community members, there are approximately 350–400 speakers of Gitksan, most of whom are over the age of fifty. Although there are some teaching materials (e.g. Powell and Stevens 1977), as well as recent efforts to introduce the Gitksan language into the public school system using materials developed by community teachers, children are no longer acquiring the language. These facts place Gitksan on the list of the world’s many endangered indigenous languages.

22.1.2. Methodology

There are unique challenges in documenting evidential and modal meanings in languages with grammatical evidentials, where there is often no obvious lexical counterpart in a translation such as English. In this chapter I adapt the semantic fieldwork methodology of Matthewson (2004), a central feature of which is the use of contexts to test both felicity and grammaticality judgements of speakers. I also show that we can further enrich our understanding of the individual grammatical evidentials by utilizing a number of standard, pre-theoretical syntactic and semantic tests. Much like we use minimal pairs to discover what a phoneme is in a language, or constituency tests to show, for example, what a noun phrase is in a language, I demonstrate how a number of simple tests can further deepen the description of the syntactic, semantic, and pragmatic features of a grammatical evidential in declarative sentences. Specifically, in this chapter I examine how each of the individual evidentials in Gitksan behave with respect to negation, syntactic and semantic embeddability, and what effect the speaker’s knowledge has of the proposition expressed by an evidential sentence. Additionally, I look at what effect the insertion of an evidential or modal has when inserted into a different clause type, such as a Gitksan question.

Fortunately, there are still places in the Gitksan communities and family households where one can hear the language used on a daily basis. This afforded me the opportunity to observe the language and how it is used spontaneously and creatively in a natural setting (p. 466) between fluent speakers of the language. Not surprisingly, evidentials were abundant in natural conversation. Thus, with the permission of my language consultants, I made notes of these overheard conversation fragments. Later I would identify relevant

sentences containing evidentials and re-elicit them from the same speakers. Additionally, data was gathered from the transcriptions of personal narratives and stories of several of my consultants. The tests mentioned here, taken together with language observation and transcriptions all contribute different but complementary aspects to the descriptions of the evidentials.

Data was collected from sixteen speakers, representing each of the six major Gitksan speaking communities in northern British Columbia (BC) (excluding Kitwancool), plus two urban speakers in Vancouver, and across the two main dialects of Gitksan: Western and Eastern Gitksan. I found that there are no discernible differences relevant to evidential or modal meaning between these dialects or communities.

22.1.3. Grammatical evidentials in Gitksan

This study of grammatical evidentials in Gitksan has its roots in Tarpent (1987), who identifies three morphemes which encode epistemic and evidential meanings in Nisga'a. These are what Tarpent characterizes as the 'reportative' *=kat*, the 'dubitative' *=ima*, and the modal/evidential *'nakw*.[2] Both *=ima* and *=kat* are described by Tarpent as verbal enclitics; however, the modal/evidential *'nakw* has the syntactic distribution of an auxiliary verb (a feature discussed in detail in §22.4). Table 22.1 summarizes Tarpent's original glosses and types of information source for the Nisga'a evidential system.

Tarpent's descriptions of *=kat*, *=ima*, and *'nakw* in Nisga'a generally hold for their cognates in Gitksan, but in this chapter I further refine their meanings by applying the methodology outlined in §22.1.2. In anticipation of this, I have replaced Tarpent's original glosses in Gitksan: *=ima* is re-glossed as 'MOD' (modal), and the MODAL/EVIDENTIAL gloss for *'nakw* is now 'EVID' (evidential). However, I've maintained Tarpent's original gloss for the reportative, *=kat*. The glosses used in the remainder of this chapter, and their corresponding types of information source, are given in Table 22.2.

Table 22.1. The grammatical evidential system in Nisga'a (Tarpent 1987)

	Tarpent's gloss (Nisga'a)	**Type of information source**
=kat	REPORTATIVE	Report
=ima	DUBITATIVE	Indirect/direct
'nakw	MODAL/EVIDENTIAL	Direct

(p. 467)

Table 22.2. The grammatical evidential system in Gitksan (Peterson 2010a)

	Gloss	**Type of information source**

=*kat*	REPORTATIVE (REP)	Report
=*ima*	MODAL (MOD)	Not specific
'*nakw*	EVIDENTIAL (EVID)	Inferential

In the following section I show that =*kat* encodes an information source in the form of a report, much like a standard reportative evidential. However, =*ima* requires more explanation: =*ima* does not encode any specific type of information. Rather, =*ima* expresses epistemic modal meaning that is *compatible* with a variety of information sources, hence the designation ‘not specific’. This feature and the epistemic modal properties of =*ima* are examined in detail in §22.3. Evidential '*nakw*, on the other hand, encodes a speaker’s inference based on information acquired through the senses, such as sight, smell, and touch. However, Gitksan speakers also use '*nakw* to express what is translated as modal meaning, especially in contexts where =*ima* would also be felicitous. The evidential meanings of '*nakw* and its interactions with =*ima* are examined in §22.4.

22.2. The reportative =kat

Reportative =*kat* combines the meanings of a reported evidential with inference (similar to other languages with few grammatical evidential, including the ones described for Turkic: see Johanson, Chapter 24 of this volume), whether that source is known to the speaker or not. Examples (2) and (3) involve contexts where the source of the information is 'once removed' (or secondhand) from the speaker of the sentence:[3]

(2)
Context: Louise is telling her friends at the coffee shop that Mary had her long hair cut recently. Louise hasn't seen Mary's new haircut herself yet, but Louise has evidence in the form of a report, from the hairdresser who did it. Louise says

gungojigas	Mary-hl	gest
kwin-kots-i-(t)=kat=s	Mary=hl	kes-t
CAUS-cut-TR-3sg=REP=PND	Mary=CND	hair-3sg

[I heard] Mary had her hair cut.

(p. 468)

(3)
Context: John isn't at work today. Bob asks one of his co-workers where John is. None of them have seen John, but their boss—the source of the report—told one of Bob's co-workers earlier in the morning. Bob's co-worker replies

siipxwgatit	John
siipxw=kat=t	John
sick=REP=PND	John

[I heard] John is sick.

Reportative =*kat* can also be used in contexts where the original source of the information isn't precisely known, as with the parent's report in (4):

(4)
Context: All of the children in the neighbourhood are excited about a new dog in the neighbourhood, which belongs to a man down the street. A parent is talking to a neighbour about the new dog after overhearing that the children call the dog Sammy; the parent responds

siwatdigathl	gyathl	'os	'ahl	Sammy
si-wa-t-i-(t)=kat=hl	gyat=hl	'os	'a=hl	Sammy
CAUS-name-T-TR-3=REP=CND	man=CND	dog	OBL=CND	Sammy

[I heard] The man named his dog Sammy. (adapted from Rigsby 1986: 291)

The grammatical reportative in many languages is often translated into English using 'I hear/heard …'. This is also common in Gitksan. However, =*kat* is also frequently translated using a modal adverb such as *apparently*, as in (5) (see also Hunt 1993; and Tarpent

1987: 499 for other examples of epistemic modal translations of =*kat* in Gitksan and Nisga'a):

(5)

'majigathl	ha'niiguy'paxˆ	'ahl	lo'op
'mats-i-(t)=katˆ=hl	ha-'nii-kuy'paxˆ	'a=hl	lo'op
hit-TR-3=REP=CND	INST-in-light	LOC=CND	rock

(i.) I hear he hit the window with a rock (and broke it).
(ii.) Apparently, he hit the window with a rock.

Rather than treating this simply as an effect of translation, this observation provides additional insight into the meaning of =*kat*, as speakers will choose one translation over the other depending on how reliable they perceive the source of the report to be. With translation (5i), the speaker is using the report of an adult who happened to be working across the street in their yard when they saw the window of the speaker's house being broken. The speaker judges this to be a reliable source, and this sentence receives an 'I hear/heard …' translation. However, in translation (5ii), the speaker either holds a neutral attitude towards the report, or has less confidence in the report. This would be the case if the speaker uses the report from one of the children who were there but wanted to avoid punishment or blame. As such, the modal translations of =*kat* indicate that it combines meanings of inference and the speaker's assumptions about the context of the =*kat*-utterance. This contrast can also be observed in (6): (p. 469)

(6)

lumakdigas	Johnhl	daala
lumakt-i-(t)=katˆ=s	John=hl	daala
donate-TR-3=REP=PND	John=CND	money

(i.) I heard John put in money (for the feast).
(ii.) It seems John put in money. (cf. Tarpent 1987: 499)

In the context of (6) a group of people are counting up the contributions after a feast, and speculating about the different contributions people made that night. A speaker may translate (6) as (6i) if they overheard the information from one of the people who are responsible for the final accounting, thus normally a reliable source. On the other hand, if someone simply overheard from an unknown voice in a crowded room that John also contributed, the translation in (6ii) is felicitous. It is important to note that this is not necessarily an unreliable source: by using the evidential-like construction *it seems*, a speaker is conveying a neutral attitude towards the proposition—maybe the report is reliable, maybe it is not.

22.2.1. Knowledge of the proposition embedded under =*kat*

A speaker's use of =*kat* in a particular speech context is conditioned by two factors: (i) the speaker's belief in—or at least the plausibility of—the reported evidence in that context, and (ii) a lack of knowledge of the truth (or falsity) of the proposition (*p*) embedded under =*kat* in that context. In other words, the speaker cannot know that the proposition embedded under =*kat* is true or false. For example, (7) is felicitous in a context where the speaker was standing outside the bingo hall having a cigarette when they overheard the announcer inside announcing John's winning. As such, (7) expresses the assertion of *p*, that John won at bingo last night, and that the speaker has reported evidence for *p*.

	xstagas	John	go'ohl	bingo	gaxxw
	xsta=kat=s	John	ko'=hl	bingo	kaxxw
(7)	win=REP=PND	John	LOC=CND	bingo	last.night

[I heard that] John won at bingo last night.

p = John won at bingo last night

However, if a speaker knows for a fact that John won—or that John did not win—then the use of =*kat* is infelicitous, as the minimal pair of contexts in (8) show:

(8)

#*xstagatit John go'ohl bingo gaxxw*

Context where *p* is true: Louise was at bingo last night where she witnessed John win the jackpot (she saw him go up to the stage to accept the money). The next day a friend asks her who won the jackpot.

Context where *p* is false: Louise is telling her friend that she heard at the coffee shop that John won at bingo last night, but Louise knows that is not true because she was also there playing and witnessed the confusion about a number that was incorrectly called.

(p. 470)

When a speaker witnesses an event first hand, or they know the truth of a proposition, a simple evidentially neutral assertion is made. The strategy to report something a speaker believes or knows is false is to use the embedding sensory verb *lax*ni 'hear', as in (9):

(9)

lax̲'ni'y	wil	x̲stas	John	go'ohl	bingo	gax̲xw
lax̲'ni-'y	wil	x̲sta=s	John	k̲o'=hl	bingo	kax̲xw
hear-1SG	COMP	win=PND	John	LOC=CND	bingo	last.night

ii	'ap	wilaa'y	wil	needii	x̲stat
ii	'ap	wilaa-'y	wil	needii	x̲sta-t
CONJ	ASSERT	know-1SG	COMP	NEG	win-3

I heard that John won at bingo last night, but I know he didn't win (because I was there too).

These tests show that *=kat* is a reportative evidential. However, these facts, combined with observed modal translations of *=kat* in (5) and (6), show that *=kat* combines the meanings of speech report with assumption and inference, which give it modal-like overtones. Note that the same infelicity arises if a modal auxiliary in English such as *might* or *must* is used in either of the contexts in (8), as in *#John must've won*. I elaborate on this claim in §22.3.1.

A comment about evidentially neutral assertions in Gitksan is necessary at this point: in many languages with grammatical evidentials sentences that do not have an evidential can be analysed as a zero exponent of firsthand evidentiality (Aikhenvald 2004a: 72–8, and Chapter 1 of this volume). However, sentences in Gitksan—at least synchronically—that do not have an evidential do not express that the speaker witnessed firsthand, for example, the ripeness of the berries in (10):

(10)

mukwhl	maa'y
mukw=hl	maa'y
ripe=CND	berries

The berries are ripe.

Evidence for this claim comes from the fact that a speaker can know the berries are ripe based on knowledge that is not the result of direct visual (or other sensory) evidence (i.e. seeing the ripe berries): the assertion of (10) may be based on witnessing the ripe berries, but it could also be expressing the belief that the berries are ripe because of the speaker's past experiences in berry-picking.

22.2.2. Embeddability

In more complex sentences the attachment of *=kat* to either the matrix or embedded clause corresponds to whether the speaker of the sentence has reportative evidence, or

the subject of the matrix clause is reporting what someone else said. In (11), which does not contain =*kat*, the speaker was present when Mark made the statement, and the speaker is directly reporting what Mark said, that John would leave for the coast:[4] (p. 471)

(11)

mahldis	Mark	ʻahl	gimxdit	dim	wil	saa
mahl-t-i-(t)=s	Mark	ʻa=hl	kimxt-t	tim	wil	saa
tell-T-TR-3=PND	Mark	OBL=CND	sister-3	FUT	COMP	away

daa'whls	John	go'ohl	laxmo'on
taa'whl=s	John	ko'=hl	lax-mo'n
leave=PND	John	LOC=CND	GEO.LOC-coast

Mark told/said to his sister that John is leaving for the coast. (Rigsby 1986: 324)

In example (12) =*kat* attaches to the verb within the matrix clause, and the speaker is now reporting that she heard about Mark telling his sister that John would leave for the coast. In this case, the reportative evidence is oriented towards the speaker: she heard from Mark's co-worker that Mark told his sister that John would leave for the coast.

(12)

REPORT: The speaker is asserting, based on evidence in the form of a report, that Mark told his sister John would leave for the coast.

Context: Louise heard from Mark's co-worker that John was going to be away for the weekend, and the co-worker overheard Mark talking to his sister on the phone about John going to the coast.

mahldigas	Mark	ʻahl	gimxdit	dim	wil	saa
mahl-t-i-(t)=kat=s	Mark	ʻa=hl	gimxt-t	tim	wil	saa
tell-T-TR-3sg=REP=PND	Mark	OBL=CND	sister-3sg	FUT	COMP	away

daa'whls	John	go'ohl	laxmo'on
taa'whl=s	John	ko'=hl	lax-mo'n
leave=PND	John	LOC=CND	GEO.LOC-coast

Reportedly, Mark told/said to his sister that John is leaving for the coast. (adapted from Rigsby 1986: 324)

However, if =*kat* is attached to the verb in the embedded clause, as it does in example (13), the reportative evidence is now re-oriented to the subject of the matrix clause, Mark, and not to the speaker of the sentence: in other words, it is Mark who has reported evidence that John will leave for the coast, not the speaker of the sentence. In (13) the speaker is simply reporting what Mark said, which includes Mark's reportative evidence:

(13)
REPORT: John is leaving for the coast (as a report heard by Mark).
Context: Louise had lunch with Mark. While at lunch his sister came up and Mark told her that he heard John would leave for the coast.

mahldis	Mark	ʻahl	gimxdit	dim	wil	saa
mahl-t-i-(t)=s	Mark	ʻa=hl	kimxt-t	tim	wil	saa
tell-T-TR-3sg-PND	Mark	OBL=CND	sister-3sg	FUT	COMP	away

daaʼwhltgatit	John	goʼohl	laxmoʼon
taaʼwhl=t=kat=t	John	koʼ=hl	lax-moʼn
leave=3sg=REP=PND	John	LOC=CND	GEO.LOC-coast

Mark told/said to his sister that he was told that John is leaving for the coast.

It is generally understood that we can test a word to determine whether its contribution is to the illocutionary force of an utterance or its propositional content (Faller 2002). First, if a word contributes only to the illocutionary force of an utterance, then in an indirect speech (p. 472) context that word cannot be understood as part of the propositional content of the indirectly described speech act. In other words, we do not expect illocutionary operators to be embeddable. This effect can be observed with illocutionary adverbials such as *frankly, honestly*, and with attitudinal adverbials such as *unfortunately, sadly* (Ifantidou-Trouki 1993). However, what tests in (12) show is that =*kat* can be both syntactically and semantically embedded. An expression is semantically embedded if it is interpreted in the scope of some other semantic operator, in this case the matrix verb: the embedding of =*kat* orients the reported evidence to the matrix subject. As such, =*kat* contributes to the propositional content of an utterance.

22.2.3. Negation

In a majority of the world's languages that have grammatical evidentials evidential meaning is not within the scope of negation (see Aikhenvald 2004a: 256–7 for details). This is also the case in Gitksan. Negation in Gitksan is the sentence-initial word *nee=tii*, which is composed of the negation particle *nee* and what is glossed in the Gitksan literature as the contrastive enclitic =*tii*. Although at the moment we do not have a complete picture of the relative orderings of the numerous clitics in Gitksan, a robust observation is that the negation particle *nee* serves as a host for =*kat*, which is followed by the contrastive enclitic =*tii* (and then, depending on the transitivity of the clause, an agreement enclitic such as the third person enclitic =*t*). As such, morphosyntactically =*kat* displays all of the hallmarks typical of a second-position clitic. However, negation also reveals an important semantic feature of =*kat*: the insertion of negation into a =*kat*-sentence does not negate

the reported evidence; rather, negation only negates the asserted content of the utterance—despite the fact the negation precedes =*kat* morphosyntactically.

(14)

neegatdiit	sdilis	Leiwat	Fern
nee=kat=tii=t	stil-i-(t)=s	Leiwa=t	Fern
NEG=REP=CONTR=3sg	go.with-TR-3sg=PND	Leiwa=PND	Fern

[I have reported evidence that] It **wasn't** Leiwa who went with Fern.
≠ [**It's not the case that** I have reported evidence that] Leiwa who went with Fern.

(15)

neegatdii	hliskwhl	gahahlal'stdiithl	haanak
nee=kat=tii	hliskw=hl	kahahlal'st-tiit=hl	haanak
NEG=REP=CONTR	IMPERV=CND	REDUP.pl-work-3pl=CND	woman.pl

[I have reported evidence that] The women are **not** finished working.
≠ [**It's not the case that** I have reported evidence that] The women are finished working.

The reason why this observation is significant is that negation is a standard test for presupposed meaning: in examples (14) and (15) the reported evidence projects through negation, and thus cannot be a part of the asserted content. As such, the evidential meaning of =*kat* is presupposed, and not asserted.

In sum, the tests regarding a speaker's lack of knowledge of the proposition in (7) and (8), taken together with the embeddability tests in (12) and (13), support the claim that =*kat* is a kind of epistemic modal. The negation tests show that the reported evidence is presupposed, (p. 473) and not a part of the asserted content. We can now draw these together into a unified analysis of =*kat*: a speaker's use of a =*kat*-sentence presupposes evidence in the form of a report and asserts the possibility of *p*. Using (2) as an example, repeated in (16), we can represent this analysis in the following way, using the logical symbol '◊' to represent the weak, *might*-like modal force =*kat*-sentences are often translated with:

(16)

gungojigas	Mary-hl	gest
kwin-kots-i-(t)=kat=s	Mary=hl	kes-t
CAUS-cut-TR-3sg=REP=PND	Mary=CND	hair-3sg

[I hear that] Mary had her hair cut.
p = Mary had her hair cut
The speaker presupposes evidence for p in the form of a report
The speaker asserts ◊p

22.3. Modal =ima

The uncertain or dubitative nature of =*ima* that Tarpent describes in Nisga'a can be observed in Gitksan when someone is speculating about future events, as in (17), or in the spontaneous exchange between family members in (18).

(17)

Context: Feeling lucky, Leiwa is thinking about going to bingo tonight. She remarks to her daughter

xstayima	'nii'y
xsta=ima	'nii'y
win=MOD	1sg

I might win. I'll probably win.

(18)

Alvin makes regular trips to Smithers in the morning. He is almost always back from these trips in time for lunch.

GS:	daxguhl	witxws	Alvina?
	daxkwi=hl	witxw=s	Alvin=a?
	when=CND	arrive=PND	Alvin=INTER
	When is Alvin arriving?		
LW:	witxwima	'nit	silkwsax
	witxw=ima	'nit	silkwsax
	arrive=MOD	3sg	noon.time
	He'll probably arrive around noon.		

The speculative nature of the assertions in response to the contexts in (17) and (18) show how a speaker is likely relying on general knowledge (that winning money is possible if you play bingo), or LW's experience with similar situations (I've won at bingo before, or the fact that Alvin usually returns in time for lunch whenever he goes to Smithers). These examples indicate that =*ima* does not encode any specific information source; rather, it displays many of the characteristics of an epistemic modal and not an evidential. This section argues (p. 474) that =*ima* is indeed a epistemic modal which combines reference to inference (based on a variety of information sources), and assumption (based on similar experiences or general knowledge).

An important feature of =*ima*-sentences in Gitksan is that they are usually translated into English using a variety of modal-like words, such as *must, might, maybe, probably*, etc. Paying closer attention to these translations we find that these modal-like words include the range of modal forces, from weak end of the scale *might/maybe*, to the stronger *must/probably*. The type of information available to a speaker and what they can infer from it naturally influences the strength of belief in the truth of the proposition, and this exercise in translating a grammatical evidential into an (epistemic) modal shows this. This is important for another reason: =*ima* is also compatible with sensory evidence, but in sensory

evidence contexts =*ima* is usually translated as having only a weaker modal force. For example, in Context 1 of (19) and (20) the speaker is inferring from past experience from similar situations or general knowledge. However, Context 2 involves an inference based on sensory evidence, in both cases, observable evidence. When faced with the task of translating an =*ima*-sentence involving sensory evidence, the Gitksan speaker will almost always use a weaker modal word.

(19)

Context 1: Inference from a speaker's experience with similar situations: You need to ask John for a favour. You're sitting at John's friend's place and you ask her if she knows if John is back from work yet. She says that he is always back from work by 5pm, so John will be home by now.

Context 2: Inference from observable evidence: You need to ask John for a favour. You drive by his place with a friend and notice the lights are on and his truck is in the driveway.

t'ayimat	John
t'a=ima=t	John
at.home=MOD=PND	John

Translations in Context 1: John **may/must** be at home. John's **probably** at home.
Translations in Context 2: Maybe John's at home. John **might** be at home.

(20)

Context 1: Inference from general knowledge: You're sitting at home talking about going berry-picking. It is August, and the berries are usually ripe at this time of year on the Suskwa.

Context 2: Inference from observable evidence: People are arriving home after a day of berry-picking up in the Suskwa. They are carrying buckets of berries, and their hands are all purple.

mugwimahl	maa'y
mukw=ima=hl	maa'y
ripe=MOD=CND	berries

Translations in Context 1: The berries **might be/are likely** ripe.
Translations in Context 2: Perhaps the berries are ripe. The berries **could** be ripe.

This is a robust generalization in the translations of =*ima*-sentences, and I return to examine more closely the significance of the variable modal of =*ima* in §22.4, which is easier to make sense of when =*ima* is compared with the evidential *'nakw*. (p. 475)

22.3.1. Knowledge of the proposition embedded under =*ima*

As with reportative =*kat*, a crucial property of =*ima* is that it cannot be used if the speaker knows that the proposition expressed by the sentence is either true or false. It is perhaps a little odd under most circumstances for a speaker to make a statement, evidential

or not, that she knows to be false (except perhaps in cases involving lying or deception). Nonetheless, example (21) shows the infelicity of an *=ima*-sentence in a context where the speaker knows the proposition embedded under *=ima* to be false, just as it is in English.

(21)

John is in Vancouver visiting his sister; L knows this because she just spoke to him on the phone. As such, L knows John is in Vancouver and not at home in Kispiox:

#t'ayimat	John
t'a=ima=t	John
at.home=MOD=PND	John

#John may/must be at home.

Cases where the speaker knows the proposition is true are somewhat more complicated. Example (22) shows the infelicity of an *=ima*-sentence where the speaker knows the proposition embedded under *=ima* is true; in this case the speaker actually sees the deer in the forest.

(22)

#ye'eyimathl	wan	asun,	ii	gya'a'y	loot	'ahl	spagaytgan
ye'e=ima=hl	wan	a-sun,	ii	kya'a-'y	loo-t	'a=hl	spakaytkan
walk=MOD=CND	deer	LOC-here	CONJ	see-1SG	OBL-3	LOC=CND	forest

#A deer might be around here, and I see it in the forest.

Consultant's comment: 'There's no point saying it might be around here if you can see the deer yourself.'

The infelicity of (22) arises from the modal semantics of *=ima*, just as it did with *=kat*. A clue to this can be found in the modal translation of (22) in English, which is also infelicitous in this context: '#A deer *might* be around here …'. This is because English epistemic modals are subject to the restriction again asserting $\Diamond p$ if the speaker knows that p is true.

Let us examine this claim a little more closely: example (23) involves speculation about a future possibility, based on previous experiences in the past:

(23)

Context: L has won something every time she went to bingo this month; F suggests that L is on a winning streak, and that she should go again to bingo tonight because

xstayima	'niin
xsta=ima	'niin
win=MOD	2SG

You might win. Maybe you'll win.

Recall that =*ima* can be used in speculative contexts such as these. The =*ima*-sentence in (23) asserts that a 'you *might* win'—a modal assertion of the form $\Diamond p$. I claim that this is not just an effect of translation. Evidence for claiming that =*ima* has a modal semantics comes from (p. 476) coordination, a standard test for modality: if a sentence expressing a proposition is coordinated with a sentence expressing the negation of that proposition, we expect a logical *contradiction*. This is sketched out in (24a) using the proposition *the horse ran away*. However, when a modal with weak force takes wide scope over negation, the resulting coordinated sentences are logically *contingent*, as in (24b).

(24)

a. #The horse ran away and the horse didn't run away. $p \wedge \neg p$

b. Maybe the horse ran away and maybe the horse didn't run away. $\Diamond p \wedge \Diamond \neg p$

The Gitksan sentence in (24a) is a contradiction, just as it is in English. However, if =*ima* did not have a modal semantics, then we would expect (25) to also be a contradiction; however, it is contingent.

(25)

guxwimahl	gyuwadan	ii	neeyimahl
kuxw=ima=hl	kyuwatan	ii	nee=ima=hl
run.away=MOD=CND	horse	CONJ	NEG=MOD=CND

guxwimahl gyuwadan
kuxw-(t)=ima=hl kyuwatan
run.away-3sg=MOD=CND horse
Maybe the horse ran away, and maybe the horse didn't run away. $\Diamond p \wedge \Diamond \neg p$

This shows that a speaker using an =*ima*-sentence asserts $\Diamond p$, and not simply p, just as we observed with reportative =*kat*.

22.3.2. Embeddability

Example (26) shows that the same results found with *=kat* obtain with *=ima* when it is attached to the embedding verb *mahl*: the indirect evidence is now oriented towards the speaker, and not the subject of the matrix clause, Granny. In (26) the speaker was learning how to can berries with Granny, and in this context she can infer from the fact she had this learning experience, that it is possible Granny told her that a certain berry will taste better once it is left until autumn:

(26)

Context: You learned from your aunt how to can berries last autumn. Several people were also there, including Granny, who also has experience in canning berries.

mahliyimas	nits'iits'	loo'y	dim	ixst'a	ji	hla	xwsit
mahl-i-(t)=ima=s	nits'iits'	loo-'y	tim	ixst'a	tsi	hla	xwsit
say-TR-3sg=MOD=PND	grandmother	OBL-1sg	FUT	taste	IRR	INCEPT	autumn

Granny might've said to me that it will taste better in the autumn.

By contrast, when *=ima* is embedded in the complement of a verb, it has the same effect as it does with *=kat*: the evidence is related to the matrix subject, and not to the speaker. In example (27), a speaker is asserting that Granny has indirect evidence, based on her experience in canning berries, that the berries might taste good in the autumn. (p. 477)

(27)

Context: You are learning how to can berries, and you are telling a friend that Granny suggested that the particular berry you were canning might taste better the longer it is left to sit, maybe by the autumn.

mahlis	nits'iits'	loo'y	dim	ixs'tayima	ji	hla	xwsit
mahl-i-(t)=s	nits'iits'	loo-'y	tim	ixs'ta=ima	tsi	hla	xwsit
say-TR-3sg=PND	grandmother	OBL-1sg	FUT	taste=MOD	IRR	INCEPT	autumn

Granny told me it might taste better in the autumn.

What these examples show is that *=ima*, like reportative *=kat*, can be both syntactically and semantically embedded: *=ima* contributes its modal semantics to the propositional content of the utterance.

22.3.3. Negation

The exact same results found with =*kat* with respect to negation obtain with =*ima*: when negation is inserted into an =*ima*-sentence the evidential meaning takes wide scope, as (28) shows:

(28)

neeyimahl	mukwhl	maa'y
nee=ima=hl	mukw=hl	maa'y
NEG=MOD=CND	ripe=CND	berries

[I have indirect evidence that] The berries might **not** be ripe.
≠ [**It's not the case that** I have indirect evidence that] The berries might be ripe.

As with =*kat*, this test shows that the evidential meanings of =*ima* are presupposed (the content in the square brackets), and not a part of the asserted content. I return to examine in more detail the negation facts with =*ima* in §22.4.

The tests regarding a speaker's lack of knowledge of the proposition in (7) and (8), taken together with the embeddability tests in (12) and (13), support the claim that =*ima* is a kind of epistemic modal. The negation tests show that the indirect evidence is presupposed, and not a part of the asserted content. We can now draw these together into a unified analysis of =*ima*: a speaker's use of a =*ima*-sentence presupposes information (including speculative and sensory evidence), and asserts the possibility or probability of *p*. Using (17) as an example, repeated in (29), we can represent this analysis in the following way:

(29)

mugwimahl	maa'y
mukw=ima=hl	maa'y
ripe=MOD=CND	berries

The berries might/must be ripe.
p = The berries are ripe
The speaker presupposes indirect evidence for p
The speaker asserts ◊*p* or □*p* (where '□' symbolizes modal necessity)

(p. 478)

Note that the core proposition in (29) is *the berries are ripe* and not *the berries might/must be ripe*. This is precisely what the semantic contribution of =*ima* is: as a semantic operator it inserts modality into the assertion of that proposition, with evidential overtones—analysed as presupposition—based on assumptions, experience with previous situations, and general knowledge.

The presupposition analysis also accounts for the minimal pair in (30), which shows how the modal meanings of *=ima* are restricted to epistemic contexts:

(30)
Context: You're up in the Suskwa and notice a burnt patch of forest. You know that huckleberries typically take seed in burnt alpine areas.

a.	#limxsimahl	maa'y	go'osun
	limxs=ima=hl	maa'y	go'osun
	grow=MOD=CND	berries	LOC.here
	Berries might/must be growing here.		
b.	da'akhlxwihl	maa'y	dim limxst go'osun
	da'akhlxw=hl	maa'y	tim limxs-t go'osun
	CIRC=CND	berries	FUT grow-3 here
	Berries might grow here.		

The context in (30) involves facts about alpine climates and soil conditions; this is not an evidential nor epistemic context. As such, the circumstantial modal *da'akhlxw* grammatically encodes this kind of modal meaning.

22.4. Inferential evidential 'nakw

Tarpent (1987: 354) describes '*nakw* in Nisga'a as an evidential-modal that turns a sentence into 'a highly probable statement based on direct evidence'. Tarpent translates '*nakw* as the epistemic modal *must*, but does not include with her examples contexts which illustrate how its evidential meaning encodes 'direct evidence'. Nonetheless, Gitksan consultants corroborate this translation of '*nakw* in Gitksan. One consultant provided a typical evidential-like context for its use, given in (31):

(31)
Context: After being put to bed, Baby kept crying most of the evening. However, it has been quiet for the past little while.

'nakwhl	woks	beebii
'nakw=hl	wok-(t)=s	peepii
EVID=CND	sleep-3sg=PND	Baby

Baby must be sleeping. It sounds like Baby is sleeping. (BS)

In (31) the speaker is making an inference based on audible information specific to that speech context (the silence). In this section I claim that '*nakw* is an inferential evidential that encodes a speaker's inference based on information acquired through the senses, which (p. 479) includes audition (31), vision (32), touch (33), and olfaction (34) (see Chapter 1 of this volume for more details).

(32)

Context: Bob needs to ask John a favour, so Bob and a friend drive by John's place to see if he is home. John's lights are on and his truck is in the driveway. Bob's friend says

'nakwhl	ta'as	John
'nakw=hl	ta'a-(t)=s	John
EVID=CND	at.home-3=PND	John

John must be home.

Looks like John's home.

(33)

Context: You touch your daughter's forehead and it is very hot.

'nakwhl	siipxwin
'nakw=hl	siipxw-n
EVID=CND	sick-2sg

You must be sick!

(34)

Context: You're chopping wood out by the smokehouse, and you smell smoke and fish.

'nakwhl	sihons	Bob
'nakw=hl	si-hon-(t)=s	Bob
EVID=CND	CAUS-fish-3sg=CND	Bob

Bob must be smoking/preparing/doing up fish.

In fact, *'nakw* is felicitous only in contexts where a speaker can make an inference based on the sensory acquired information in the context, such as those in (31)–(34). Given the lack of observable evidence in (35) and (36), both of which involve speculation based on speculation or a speaker's experience with similar situations, *'nakw* is infelicitous:

(35)

Q.	gaxguhl	witxws	Alvina?
	kaxwi=hl	witxw=s	Alvin=a?
	when=CND	arrive=PND	Alvin=INTER
	When is Alvin arriving?		

A1.	witxwima	'nit	t'aahlakw
	witxw=ima	'nit	t'aahlakw
	arrive=MOD	3	tomorrow
	He might arrive tomorrow.		

A2.	#'nakwhl	witxwt	t'aahlakw
	'nakw=hl	witxw-t	t'aahlakw
	EVID=CND	arrive-3	tomorrow
	He must arrive tomorrow.		

(p. 480)

(36)

Inference from a speaker's experience with similar situations: There was a terrible storm earlier in the day, which can spook the horse. Alvin knows that the horse is prone to escaping from the field whenever it gets startled by the weather; he speculates

a.	guxwimahl	gyuwatan
	kuxw=ima=hl	kyuwatan
	run.away=MOD=CND	horse
	The horse might've/must've run away.	

b.	#'nakwhl	guxwhl	gyuwadan
	'nakw=hl	kuxw-(t)=hl	kyuwatan
	EVID=CND	run.away-3sg=CND	horse
	The horse must've run away.		

Recall from §22.3 that modal *=ima* is compatible with a range of information sources, including contexts that provide sensory evidence as in (31)–(34). One of the effects of this is what is translated as variable modal force. This creates a kind of overlap, where in sensory evidence contexts both *=ima* and *'nakw* can be used. In order to uncover what conditions both the variable modal force of *=ima*, and the choice a speaker makes in using either *=ima* or *'nakw* in these sensory evidence contexts, an alternative elicitation strategy was used: *=ima* was directly contrasted with *'nakw* by constructing minimal pair sentences that express the same proposition. Then, the consultants were asked to differentiate between them by constructing the appropriate contexts that match the sentences. This was done in (37) and (38):

(37)

mugwimahl	maa'y
mukw=ima=hl	maa'y
ripe=MOD=CND	berries

The berries **might/must** be ripe.

Consultant's comments: 'When you say *mugwimahl maa'y* to someone it's like you're sitting at home talking about it, trying to decide if you go picking or not.' (BS; LW)

(38)

'nakwhl	mukwhl	maa'y
'nakw=hl	mukw=hl	maa'y
EVID=CND	ripe=CND	berries

The berries **must/#might** be ripe.

Consultant's comments: 'When you say 'nakwhl *mukwhl maa'y* you see people running through the forest with buckets all happy, or people coming home from the Suskwa with buckets full of berries. Not really good when you're just thinking about it.' (BS; LW)

Consultants consistently comment that this sensory evidence makes *'nakw* carry more 'force', which is why they frequently translate *'nakw*-sentences using stronger modals such as *must* and *probably*. Thus, the translation in (38), 'The berries *might* be ripe', is not typically an acceptable translation of a *'nakw*-sentence.

Notice how in example (37) *=ima* expresses variable epistemic modal force, as discussed in §22.3. By adjusting the context to include visually acquired information that supports an (p. 481) inference that the horse must have run away, as in (39), *'nakw* is felicitous. In these visual information contexts, the modal strength interpretations are 'split' between *=ima* and *'nakw*, where *=ima* expresses *might*, and *'nakw* expresses *must*:

(39)

Inference from observable evidence: You see there are tracks in the snow that lead through a hole in the fence.

a. guxwimahl gyuwatan
kuxw=ima=hl kyuwatan
run.away=MOD=CND horse
The horse **might've** run away.

b. 'nakwhl guxwhl gyuwatan
'nakw=hl kuxw-(t)=hl kyuwatan
EVID=CND run.away-3sg=CND horse
The horse **must've** run away.

This effect on the translation of *=ima* is corroborated by the Gitksan consultants, where they describe how the choice of *=ima* over *'nakw* in these contexts is meant to express how they evaluate the information their inference is based on. Example (40) shows this effect:

(40)

Context: You and a friend are going fishing. You notice blood on the rocks ahead of you where your friend is walking.

a. k'ojinimahl 'o'nin
k'ots-i-n=ima=hl 'o'n-n
cut-TR-2sg=MOD=CND hand-2sg
You **may've** cut your hand.

b. 'nagwimi g'otshl 'o'nin
'nakw=mi k'ots=hl 'o'n-n
EVID=2sg cut=CND hand-2sg
You **must've** cut your hand.
Consultant's comments (paraphrased): When you say *k'otsinimahl 'o'nin* you might've cut your hand, or I think you cut your hand. When you say *'nagwimi g'otshl 'o'nin* it looks like you cut your hand, you must've because there's blood on the rocks.

In (40a), a speaker is expressing that it is not necessarily the case that the blood on the rocks is from your friend's hand—it could be blood from the bait you were cutting up, whereas in (40b) the speaker is committing to the claim that blood they observe on the rocks is indeed from your hand.

In sensory evidence contexts, where both forms are felicitous, =*ima* can only express a *might*-like modal, whereas '*nakw* can only express *must*-like force. Peterson (2009, 2010a, 2012) analyses this as a case of *lexical blocking*: the function of expressing *must*-like force is fulfilled by '*nakw* because it is more specialized than =*ima* for this function. The effect is that the use of =*ima* in sensory evidence contexts can only express weak modal force. This approach can be connected to the notion of *preferred evidentials*. Aikhenvald (2004a: (p. 482) 307–9) discusses the primary importance of visual evidence (and other kinds of firsthand evidence) and how this is preferred over information that is reported or assumed. This preference is manifested in the choice of an evidential a speaker makes in a language that has grammatical evidentials encoding these kinds of information sources, which are placed on a hierarchy of preference: the speaker will use the evidential highest on the hierarchy that is supported in that context (see also Barnes 1984; Oswalt 1986 for a description and analysis of similar phenomena). This would predict that a speaker evaluating the visual information in the context in (39) (tracks in the snow that lead through a hole in the fence) would prefer the use of *'nakw* over the modal =*ima*, as the latter only involves assumption or the speaker's previous experiences with similar situations that is *compatible* with the visual evidence. However, the use of =*ima* in this context still fills an expressive space: to implicate that the speaker does *not* believe the visual (or other kinds of sensory acquired) information in that context supports the stronger claim made by *'nakw*.

22.4.1. Knowledge of the proposition embedded under '*nakw*

Evidential '*nakw* is also quite different from *=ima* or *=kat* with regards to knowledge of the proposition embedded under it. First, when a speaker uses '*nakw* knowing the embedded proposition is false, a non-literal (metaphorical) use is intended, or an expression similar to a *must*-type rhetorical question/statement in English, as in (41a). Conversely, when a speaker uses '*nakw* knowing a proposition is true a *mirative* meaning is expressed, as in (41b). Mirativity is the marking of a proposition that represents information which is new and possibly surprising to the speaker (DeLancey 1997; Aikhenvald 2012b; and see Peterson 2010b, 2015 for more details on mirativity and the non-literal uses of '*nakw*):

(41)

a. 'nakwhl sinst
'nakw=hl sins-t
EVID=CND blind-3
He must be blind! Is he blind or something? Looks like he's blind!
Context A – Sensory evidence: You see a man walking down the street with a white cane.
Context B – The proposition is known to be false (non-literal): You're watching a baseball game. The star batter on the speaker's favourite team keeps missing the ball and striking out, jeopardizing the outcome of the game.

b. 'nakwhl bagwdiit
'nakw=hl pakw=tiit
EVID=CND arrive.pl=3pl
They're here! Looks like they made it!
Context A – Sensory evidence: You see a pickup in the driveway.
Context B – The proposition is known to be true (mirative): You see your friends standing in the doorway.

In contrast, *=ima* in example (42) is also felicitous in the context in (41), but it cannot have this pragmatic effect: *=ima* must express that the batter is literally blind, or indirect evidence of the arrival of people: (p. 483)

(42)

a. sinsima 'nit
sins=ima 'nit
blind=MOD 3
He might/must be blind. (always literal)

b. bagwima 'nidiit
bakw=ima 'nidiit
arrive.pl=MOD 3pl
They might be here. (always non-mirative)

22.4.2. Embeddability

The embedding facts of *'nakw* are also markedly different from *=kat* and *=ima*. Recall that both *=kat* and *=ima* can be embedded in a complement clause, where the evidence is oriented to the subject of the matrix clause and not the speaker of the sentence. However, (43) shows that *'nakw* cannot embed in a complement clause—even if the sensory evidence predicts felicity:

(43)
Context: You are talking with your friends about the soccer game that morning. You weren't there yourself, but you were talking earlier with Louise, who was there. Louise knew that Tony made the winning goal, but she wasn't sure if he was assisted by John—who is the striker on the team—or another player.
mahlis Louise loo'y wilt* [*'nakw**hl hlo'oxsis John-hl hlit 'as Tony*]$_{\textit{embedded clause}}$

In order to better understand the significance of this observation, we need to delve a little deeper into the basic morphosyntax of a Gitksan clause and the syntactic properties of *'nakw*. Peterson (2010b) claims that *'nakw* has the same morphosyntactic distribution as the Gitksan auxiliary verbs *yukw* (progressive), and *hliskw* (imperfective).[5] When auxiliary verbs such as *yukw* and *hliskw* are inserted into an intransitive sentence they appear sentence-initially, before the verb, and also serve as a host for the common noun enclitic determiner *=hl*. This is sketched out in (44):

(44)

a. yukwhl gahahlal'stdiithl haanak
[yukw]$_{aux}$[=hl kahahlal'st-tiit=hl haanak]
PROG=CND REDUP.pl-work-3pl=CND women.pl
The women are working.

b. hliskwhl gahahlal'stdiithl haanak
[hliskw]$_{aux}$[=hl kahahlal'st-tiit=hl haanak]
IMPERV=CND REDUP.pl-work-3pl=CND women.pl
The women finshed working.

c. 'nakwhl gahahlal'stdiithl haanak
['nakw]$_{aux}$[=hl kahahlal'st-tiit=hl haanak]
EVID=CND REDUP.pl-work-3pl=CND women.pl
The women must be working.

(p. 484)

As *yukw* and *hliskw* are propositional operators (encoding progressive and imperfect meanings respectively), we expect them to be able to be semantically and syntactically embedded within, for example, a conditional. Example (45a) shows the basic structure of a conditional in Gitksan, and the embeddability of the progressive *yukw*. (45b) shows that *=ima* – which was also shown to be a propositional operator—can also embed in the consequent, while (45c) shows that *'nakw* cannot appear in this same embedded position:

(45)

a.

ji	da	yukwhl	wis	go'ohl	ansbayaxw	ii
tsi	ta	yukw=hl	wis	k̲o'=hl	ansbayaxw	ii
IRR	COND	PROG=CND	rain	LOC=CND	Kispiox	CONJ

hodi	yukwhl	wis	go'ohl	gitwangak̲
hoti	**yukw**=hl	wis	ko'=hl	kitwangak̲
COMP	**PROG**=CND	rain	LOC=CND	Kitwanga

If it's raining in Kispiox, then it's raining in Kitwanga.

b.

ji	da	yukwhl	wis	go'ohl	ansbayaxw	ii	hodi
tsi	ta	yukw=hl	wis	k̲o'=hl	anspayaxw	ii	hoti
IRR	COND	PROG=CND	rain	LOC=CND	Kispiox	CONJ	COMP

yugwimahl	wis	go'ohl	gitwangak
yukw=ima=hl	wis	k̲o'=hl	kitwangak
PROG=MOD=CND	rain	LOC=CND	Kitwanga

If it's raining in Kispiox, then it might/must be raining in Kitwanga.

The embedding test shows that, unlike *=kat* and *=ima*, which contribute their modal meanings to the asserted content, *'nakw* cannot be a propositional operator. This also entails that *'nakw* cannot be a modal, and suggests that *'nakw* contributes its evidential meaning at the illocutionary level.

22.4.3. Negation and dissent

ʻnakw also diverges from other the auxiliaries and other propositional operators with respect to negation: *ʻnakw* and negation cannot occur in the same sentence. Example (44) shows the basic (and well-documented) sentence-initial position of *nee=tii*, which is then followed either by the auxiliaries *yukw* or, in this example, *hliskw*:

(46)

needii	hliskwhl	gahahlal'stdiithl	haanak
nee=tii	hliskw=hl	kahahlal'st-tiit=hl	haanak
NEG=CONTR	IMPERV=CND	REDUP.pl-work-3pl=CND	woman.pl

The women are not finished working.

Unlike *yukw* and *hliskw, ʻnakw* cannot appear under negation, as shown in (47a). Example b. shows that placing *ʻnakw* before negation also does not rescue the grammaticality of the sentence:

(47)
a. *needii *ʻnakw*hl gahahlal'stdiithl haanak
b. **ʻnakw*hl needii gahahlal'stdiithl haanak

(p. 485)

These restrictions taken together are interesting because they suggest the possibility of an expressive gap: why would a language that has evidentials not provide a grammatical strategy for negating evidential meaning, or at least negating the propositional content of a sentence containing the evidential? I suggest that this may not be so much about grammatical negation, but more of a question of *dissent*. In order to observe the effects of dissent, suppose someone looks out of their kitchen window in Kispiox and makes the following claim with *=ima* in the matrix clause of the conditional in (48) (see also Faller 2002: 130–3):

(48)

ji	da	yukwhl	wis	go'ohl	Kispiox	ii	hoti
tsi	ta	yukw=hl	wis	ko'=hl	Kispiox	ii	hoti
IRR	COND	PROG=CND	rain	LOC=CND	Kispiox	CONJ	COMP

yugwimahl	wis	go'ohl	gitwangak
yukw=ima=hl	wis	ko'=hl	kitwangak
PROG=MOD=CND	RAIN	LOC=CND	Kitwanga

If it's raining in Kispiox, then it might/must be raining in Kitwanga.

The antecedent of the conditional sets up a premise for the modal claim made in the consequent. In Gitksan a listener may agree with the modal claim as in (49a), or disagree as

in (49b), using =*ima*, or challenge it as in (49c), which is the Gitksan equivalent to a 'That is (not) true' dissent, or 'I don't think you're right':

(49)

a. 'nidima
'nit=ima
3sg=MOD
Maybe.
Consultant's comment: True, it's possibly raining because those are the usual weather patterns.

b. neeyima
nee=ima
NEG=MOD
Maybe not.
Consultant's comment: You don't really know for sure— I was there once, and while it was raining in Kispiox it wasn't raining in Kitwanga.

c.

neediihl	ha'nigood'y	ji	hugwaxn
nee=tii=hl	ha'nigood-'y	tsi	hugwax-n
NEG=CONTR=CND	think-1sg	IRR	correct-2sg

I don't think you're right (it's not true that it must/might be raining in Kitwanga).

Recall that the evidential and epistemic meanings of =*kat* and =*ima* take wide scope over negation: the insertion of negation into a =*kat*- or =*ima*-sentence negates the epistemic modal claim expressed by the sentence, and not the evidential meaning encoded. (49) shows that a modal claim (as expressed by =*ima*) can either be assented to or dissented from, the latter of which involves negation. Statements involving any kind of dissent and '*nakw* are judged by speakers to sound, at best, odd and unnatural, and at worst ungrammatical. In example (50), a speaker is making a '*nakw* statement based on the visual and auditory (p. 486) evidence of someone sneezing. While not technically ungrammatical, the response in (50a) with '*nakw* cannot be used to assent to the claim in (50). A stronger effect is observed in another response in (50b) using negation. The negative response used in (50c) cannot be used to dissent from the meaning of '*nakw*:

(50)

	'nakw=hl	siipxw-t
	EVID=CND	sick-3sg

He must be sick.

a.

#ee'e,	'nakw=hl	'ap	wil-t
No	EVID=CND	ASSERT	do.something-3sg

≠ Yes, this must be what's happening. (I agree because his face is all red.)

b. *nee=tii 'nakw=hl siipxw-t
NEG=CONTR EVID=CND sick-3sg
≠ No, he can't be sick. (I saw him at work today and he looked fine.)

c. #nee=tii=hl ha'nigood-'y tsi hugwax-n
NEG=CONTR=CND think-1sg IRR correct-2sg
≠ I don't think you're right. (cf. 49c)

Peterson (2010b) explains the divergent embedding and negation/dissent properties of *'nakw* by analysing it as an *evidential sentential force specifier*. It is beyond the scope of this paper to further evaluate the details of this analysis, but in a nutshell, Peterson claims that *'nakw* has clause-typing properties that prevent it from syntactically and semantically embedding.

22.5. Gitksan evidentials and modals in questions

Both *=ima* and the reportative *=kat* have a productive use in questions. When *=kat* is used in a question, a speaker is not reporting a question, but is asking the addressee what she knows about something on the basis of reported evidence. In other words, a speaker asking a question with a reportative is targeting an answer that the addressee may know, or may only have reportative evidence for. This can be observed in example (51), where a speaker is enquiring about when the bus will arrive in Prince George. By using *=kat* in the question, the speaker implies that the answer to this question, given in (49c), is going to be secondhand, since they know their companion is not the one who determines the bus schedule:

(51)

Context: You and a friend are taking the overnight bus to Prince George. You can't remember what time you arrive, but your friend who was the one who booked the tickets and she might know.

a. gaxgwi dim bagwi'ma
kaxgwi tim pakw-'m=a
when FUT arrive.pl-1pl=INTER
When is it we'll get there?

b. gaxgwigat dim bagwi'ma?
kaxgwi=kat tim pakw-'m=a
when=REP FUT arrive.pl-1pl=INTER
When is it (did they say) we'll get there?

c. silkwsax t'aahlagwigat
silkwsax t'aahlakw=kat
noon tomorrow=REP
(I heard/They said) at noon tomorrow.

(p. 487)

In questions, =*kat* is oriented towards the addressee's knowledge: the speaker is enquiring about the reported evidence the speaker assumes the addressee has for an answer (i.e. from the ticket agent).

The insertion of modal =*ima* into a question has a different effect from that of =*kat*: it takes an interrogative clause type, which has the speech act of requesting information, and creates a non-interrogative utterance, roughly translatable using 'I wonder …', as in (52):

(52)
Context: You're sitting around with friends discussing life. You know that you need to find another job, but you also have the possibility of going back to college.

gwiyimahl	dim	jab'y	jox'k'uuhl
kwi=ima=hl	tim	tsap-'y	tsox'k'uuhl
what=MOD=CND	FUT	do/make-1sg	next.year

I'm wondering what to do next year.

(53)

Context: Someone unfamiliar pulls into the driveway to talk to your uncle.

a. naa tuna?
naa t=xwin=a
who PND=this.one=INTER
Who is this person?

b. naayima tun
naa=ima t=xwin
who=MOD PND=this.one
I wonder who this this person is.

The use of modal *=ima* in questions and the effect it has in reducing the interrogative force of a question is something akin to a rhetorical question (Littell et al. 2010).

As we've seen with the other tests, *'nakw* diverges significantly from *=ima* and *=kat:* *'nakw* cannot be inserted into an interrogative clause. Example (54) is a yes/no question, formed by adding the sentential interrogative enclitic *=a* to the sentence. Even with not having to compete with a sentence-initial *wh*-word occupying the clause-initial position (cf. (44)) *'nakw* is ungrammatical:

(54)

*'nakwhl	x̲'miyeenis	Jasona?
'nakw=hl	x̲-'miyeen-(t)=s	Jason=a
EVID=CND	consume-smoke-3sg=PND	Jason=INTER

≠ Must Jason be smoking?

(p. 488)

Comparing (55a) with (55b) shows how the progressive auxiliary verb *yukw* can occur within a question; '*nakw*, despite having the same syntactic behaviour in declarative clauses as *yukw*, cannot. Example (55c) shows how moving *ʻnakw* to the first position of a wh-question is also ungrammatical:

(55)

a.

nayukw	'ant	sdils	Claraa
na=yukw	'an-t	sdil=s	Clara=a
who=PROG	S.REL-3sg	go.with=PND	Clara=INTER

Who is going with Clara?

b. *na=*ʻnakw* 'an-t sdil=s Clara

c. **ʻnakw*=na 'an-t sdil=s Clara

This test provides further support that both *=ima* and *=kat* are propositional operators, while *ʻnakw* is incompatible with interrogative speech acts of any syntactic kind. Peterson (2010b) uses this observation to support an analysis of '*nakw* as typing its own clause (an evidential sentential force specifier): a clause typing analysis predicts that '*nakw*-sentences should not be able to co-occur with other clause types, such as interrogatives.

22.6. Discussion and summary

This chapter presented a semantic and morphosyntactic description of the three grammatical elements that encode evidential and epistemic meanings in Gitksan. Some discussion of the translations of these elements into English is in order, especially as *=kat*, *=ima*, and '*nakw* are frequently translated into English using the modal auxiliaries *might* and *must*. A plausible criticism of these translations is that they might simply be an effect of translating from an object language that lacks grammatical elements that encode modal force distinctions (i.e. *must* and *might*) into a metalanguage that does, like English. However, I argue that this is not simply an effect of translation; rather, the modal translations of *=kat*, *=ima*, and '*nakw* provide a view on how reliable a speaker views the evidence they are using to base their inference on. With *=kat*, a more reliable source is translated with 'I hear/heard …' while less reliable source is translated as a weak epistemic modal such as *might*.

One of the other aims of this chapter was to demonstrate how the application of basic syntactic and semantic tests can enrich our descriptions of a grammatical evidential. The effectiveness of these tests can be measured not only in the generalizations they produce, but also in the further questions they lead us to. For example, the coordination test applied to *=ima*-sentences in §22.3.1 showed that *=ima* introduces an epistemic modal into the proposition content of a sentence. However, what does this test predict when applied

to the reportative =*kat*? Are coordinated =*kat* sentences logically contingent in the same way? This also generates another related question: if the evidential meaning of =*kat* and =*ima* is presupposed and not asserted (as shown by the negation test), then what happens to this presupposition in an embedded context, such as (13): does the presupposition attached to =*kat* project through the matrix clause? The results so far are inconclusive and require further study. Nonetheless, (p. 489) we have an independently motivated guide—the coordination, negation, and embedding tests—that leads to new insights.

Finally, these tests also provide an independently motivated methodology for connecting languages that have grammatical evidentials, thus widening the scope of cross-linguistic generalizations. For example, we now have a way of testing whether a grammatical evidential contributes to the illocutionary or the propositional content of an utterance (Waldie et al. 2009). This has proven to be a fruitful strategy that has generated new insights into the semantic and pragmatic properties of evidentials, as well as providing an additional empirical foundation for theoretical analyses of evidentiality. This is not to suggest that these tests replace time-tested and proven methods of working with texts and language observation (both of which were used in this chapter); rather, they complement each other.

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Notes:

([1]) Further discussion of the use of these terms can be found in Rigsby (1986), and see Brown (2010) for a detailed discussion of Gitksan and Tsimshianic relations and language scholarship.

([2]) Tarpent alternates between glossing ‘*nakw* as a modal and evidential in her grammar. Additionally, Tarpent includes =*ima* and =*kat* as part of a system of ‘evidential postclitics’ (1987: 489). See also Brown et al. (2016) for details on the other postclitics in this paradigm.

([3]) The edges of the enclitic =*kat* are subject to the phonological rules of obstruent voicing and deletion. This results in the various allomorphs =*gat,* =*kas*, and =*gas*, which are often written at the orthographic level.

([4]) There is a class of verbs called ‘T’-class verbs in Nisga’a and Gitksan. The meaning or function of the morpheme *-t-* has not been determined (although see Tarpent 1987 for details on its morphosyntactic distribution); thus, I follow the convention in the Gitksan/Nisga’a literature and maintain the ‘T’ glossing.

([5]) See also Tarpent 1987, p. 350, who describes ‘*nakw* as an auxiliary verb, along with *yukw* and *hliskw.*

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Abstract and Keywords

This chapter is focused on the formal expression of evidentiality in Nakh-Daghestanian languages (Russia, Caucasus) and on the semantic distinctions available for evidentials. The vast majority of Nakh-Daghestanian languages express evidentiality in one way or another through grammatical means, but there are also many evidential strategies attested. Verbal evidentiality mainly shows up as one meaning of the perfect series and in inferential constructions with light verbs such as ‘find’, ‘stay’, or ‘be, become’. In addition, some languages have evidential enclitics and suffixes. The evidential meanings expressed are mostly indirect evidentiality, including hearsay and inference. The chapter also presents a short overview of related constructions such as conjunct-/disjunct-marking and epistemic modality.

Keywords: Nakh-Daghestanian languages, East Caucasian languages, grammaticalized evidentiality, perfect, evidential clitics, hearsay, inferential, epistemic modality

23.1. Introduction

THE Nakh-Daghestanian (or East Caucasian) language family is the largest and the most diverse of the three autochthonous language families in the Caucasus, the other two being West Caucasian (or Abkhaz-Adyghe) and Kartvelian (or South Caucasian). The more than forty Nakh-Daghestanian languages are spoken in the southern parts of Russia, in northern Azerbaijan and in a few speech communities are found in Georgia (Map 23.1). The family can be divided into several sub-branches: Nakh (Chechen, Ingush, Tsova-Tush), Avar-Andic (Avar, Andi, Godoberi, Bagvalal, and more), Tsezic (Tsez, Hinuq, Khwarshi, Hunzib, and Bezhta), Lezgic (Lezgian, Agul, Tsakhur, Tabasaran, Kryz, Rutul, Budukh, Archi, and Udi), Khinalugh (sometimes grouped together with Lezgic), Dargi

(traditionally considered to be one language, but consisting of several varieties that are mutually incomprehensible), and Lak (sometimes grouped together with Dargi).

The largest language of this family is Chechen with more than one million speakers and enjoying official status in the Autonomous Republics of Chechnya and Daghestan. Yet most of the Nakh-Daghestanian languages are rather small and exclusively used for oral communication within villages, e.g. Hinuq, Archi, or many Dargi varieties.

From a typological point of view, the languages have rather large consonant inventories, including ejectives and pharyngealization. Their morphology is agglutinating/fusional and the complexity strongly varies from language to language, with Ingush being the most complex, Lezgian the simplest language according to Nichols (2013).[1] The languages are predominantly dependent-marking with rich case inventories, including ergative case and usually a vast array of spatial cases. In most of the Nakh-Daghestanian (p. 491) (p. 492) languages gender is an important grammatical category realized as gender/number marking on verbs and other parts of speech triggered by the absolutive argument. The languages have rich inventories of finite and non-finite verb forms (converbs, participles, infinite, and *masdar*—a deverbal noun). Common valency classes are: (i) intransitive (having one single argument in the absolutive), (ii) extended intransitive (one absolutive argument and a further argument in a spatial case), (iii) transitive (one absolutive and one ergative argument), (iv) extended transitive (one absolutive, one ergative, and one further argument in the dative or a spatial case), and (v) affective (one experiencer argument in the dative or a spatial case and one stimulus argument in the absolutive). The most common constituent orders are SV and AOV at the clause level and head-final order at phrase level. For recent overviews see van den Berg (2005); and Daniel and Lander (2011).

Map 23.1. Nakh-Daghestanian languages

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This chapter focuses on the formal expression of evidentiality in Nakh-Daghestanian languages and the semantic distinctions available for evidentials. The vast majority of Nakh-Daghestanian languages express evidentiality in one way or another through grammatical

means. However, the Lezgic language Udi is a notable exception. In the other languages one finds grammaticalized evidentiality as well as many evidential strategies within the verbal paradigm (§§23.2.2–5). There are periphrastic light verb constructions (§23.2.4) and evidential enclitics and suffixes (§23.3). §23.4 contains a short overview of related constructions (e.g. conjunct-/disjunct-marking, epistemic modality).

There are no comparative studies of evidentiality in Nakh-Daghestanian languages, and older grammars often do not provide information about this topic. However, all recent comprehensive grammars include sections on evidentiality. In addition, a number of case studies of individual languages have been published in recent years, including Molochieva (2011) on Chechen; Tatevosov (2007b) on Bagvalal; Comrie and Polinsky (2007) on Tsez; Forker (2014) on Hinuq; Khalilova (2011) on Tsezic; Maisak and Tatevosov (2007) on Tsakhur; Tatevosov (2001a) on Archi, Bagvalal, and Dargwa; Mallaeva (2007) on Avar, and Maisak and Merdanova (2002) on Agul.

23.2. Verbal evidentiality

23.2.1. General characteristics

In Nakh-Daghestanian verbal evidentiality mainly shows up in two ways: (i) as one meaning of the perfect series, and (ii) in periphrastic light verb constructions. Furthermore, two languages have special constructions not attested in any other language of the family (evidential copula auxiliary in Chechen, past participle in Avar).

These constructions usually express only indirect evidentiality (though see the discussion in §23.2.5 on direct evidentials); that is, predominantly hearsay and inference from sensory evidence. Occasionally, one can find examples illustrating inference from general knowledge or pure reasoning.

Evidential systems belonging to (i), i.e. having at least a formal connection with the perfect, are often evidential strategies since they also have non-evidential readings (p. 493) (resultative/perfect).[2] Most of the systems share a couple of properties so that we can describe a typical Nakh-Daghestanian verbal evidential system as being:

- small with marked indirect versus neutral (i.e. unmarked) verb forms
- confined to the past tenses and conflated with the tense system
- restricted to main indicative clauses (but see the counterexamples from Ashti Dargwa and Chechen in §23.2.2 and 23.2.3)
- not conflated with modality, i.e. the use of an indirect evidential does not mean or imply that the speaker is uncertain or not committed to the truth of his/her utterance
- interaction with person (‘first-person effect’, see §23.2.2)
- negation has the proposition in its scope, not the evidential

- in questions, the same forms are available as in indicative clauses, and the information source of the addressee is at issue

Speakers are highly aware of the evidential semantics and comment on it (cf. Nichols 2011: 243 on Ingush). Evidentials are found in various speech styles, though some forms largely seem to function as genre markers for traditional folktales. The origins of the evidentials vary: evidentials originate in perfects, the past participle (as in Avar), and complement construction (e.g. an inferential construction, as shown in §23.2.4).

23.2.2. Evidential strategies: The perfect series

Most if not all of the Nakh-Daghestanian languages have verb forms comparable to perfects in other languages, both from a formal as well as from a functional point of view. These verb forms are typically analytic, made up of a (perfective/past) converb or participle and a copula or a similar auxiliary (e.g. 'be in' in Agul and Lezgian). If the copula/auxiliary can itself be inflected for other tenses we get a series of verb forms that I will refer to as *perfect series*.[3] This series is mostly in opposition to another series of past tenses that do not express evidentiality, often called aorist.

In many of the surveyed languages (Bagvalal, Godoberi, Avar, Lak, Dargwa varieties such as Sanzhi, Ashti, Kubachi, Icari, and Standard Dargwa, Ingush, Agul, and Tsakhur) a perfect-like verb form and eventually other verb forms from this series (e.g. pluperfect) express past time reference with some additional meaning components including indirect evidentiality. Which additional meaning component is at stake depends on the individual verb forms. For perfect-like forms it is normally resultativity and/or perfect meaning. In the case of the pluperfect, it is relative past time reference, and for other verb forms it may be imperfective aspect. Only in a few languages some or all verb forms of the perfect series have developed into grammaticalized indirect evidentials (see the discussion of Tsezic in §23.2.3). (p. 494)

Whether indirect evidential meaning is expressed by the perfect or not depends on the lexical semantics of the verb in the utterance as well as on the context, i.e. telic verbs that describe actions with results may enhance the resultative reading. For instance, in Bagvalal (Tatevosov 2007b) verbs can be divided into three groups:

i. verbs with no evidential meaning (*q'očã* 'want, love, fall in love', *b-ič'ã* 'look, wait, try', *b-iɬɬi* 'concern, seem'). When *q'očã* is inflected for the perfect, the result is a reading with present time reference. The same is observed for verbs with similar meanings in Hinuq (Forker 2013: 222) and Avar (Forker in preparation (a)).
ii. verbs with only evidential meaning (around two-thirds of the verbs, e.g. *ešše:* 'put on' hats, headscarves, etc.)

iii. verbs with a resultative or indirect evidential meaning (around 33% of the verbs, e.g. *heǰ'ã* 'dress' for lower-body cloths and shoes, *b-išši* 'keep, catch, hold'). For instance, depending on the context (1) has two different readings.

(1)

Bagvalal (Tatevosov 2001a)

oš:ur	ǰ'anč'a	**b-iš:i-b-o**	**ek'^{w}a**
he.ERG	young.hare	N-catch-N-CONVB	COP.PRES

He holds a young hare (as I see). *or* He has caught a young hare. (and the speaker did not see this)

Similarly, the Kubachi perfect of the intransitive verbs 'sit', 'stand', 'get tired', 'get hungry', 'become full', and 'convalesce, recover' has only the resultative reading and no evidential value whatsoever (Magometov 1963: 196). The same is true for certain Avar intransitive verbs (e.g. 'get sick', 'die') which can therefore freely be used with first person subjects (2). These verbs never express indirect evidentiality when inflected for perfect. See also Maisak and Merdanova (2002, 2016) for similar observations on Agul.

(2)

Avar (Mallaeva 2007: 200)

dun	unt-un	w-ugo
1SG	be.ill-CONVB	M-COP.PRES

I am sick.

For Lak, Friedman (2007: 362) claims that the meaning expressed depends on the alignment. The ergative construction triggers the evidential reading (3a). In contrast, the bi-absolutive construction triggers the resultative meaning (3b). In these two sentences, the constructions are only evident from the form of the copula since the first person singular pronoun does not distinguish ergative from absolutive. In the ergative construction, the copula agrees with O (prefix *b-*, no person marker) in gender and number. In the bi-absolutive construction, the copula agrees with the agent in person (suffix *-ra*) and in gender and number (zero prefix for masculine singular gender).

(3)

a. Lak (Friedman 2007)

na	**b-a<w>x̌:-unu**	**b-ur**	čwu
1SG.ERG	III-sell<III>-CONVB	III-COP.PRES	horse(III)

[Apparently] I sold the horse.

(p. 495)

(3)

b.

na	**b-a<w>x̌:-unu**	**Ø-ur-a**	čwu
1SG	III-sell<III>-CONVB	MASC.SG-COP.PRES-1SG	horse(III)

I (masculine) have sold the horse.

This claim needs to be checked because it would go against the general meaning of the bi-absolutive construction. Normally, bi-absolutive constructions topicalize the transitive subject, and the object (semantic patient) is often an indefinite NP and backgrounded (Forker 2012). To the contrary, for a resultative reading the patient NP is central since it is the resulting state of the referent of this NP that is expressed.

The resultative meaning is semantically close to an impersonal construction. In written languages such as Avar or Standard Dargwa it is frequently used in newspapers and journalistic writings. In this genre, transitive verbs are used without an overt agent and the focus of the described action is on the result. Example (4) is taken from a newspaper article about the opening of a new kindergarten.

(4)
Standard Dargwa

haril	q'uq'aˁ-la	qali	džaga-li	**b-alq'-aq-ur-li=ri**
every	group-GEN	house	beautiful-ADV	N-prepare-CAUS-AOR-CONVB=COP.PAST

The room of every group was beautifully prepared. (newspaper *Zamana* 8 July 2011, p. 5)

When the perfect-like and related verb forms express indirect evidentiality, then it is inference based on sensory (visual) evidence or hearsay. The sensory evidence can be a result of the action referred to by the verb or some other evidence that does not automatically count as a result. Thus, (5a) exemplifies inference from visual evidence and (5b) hearsay since it is part of the oral knowledge about the history of the Godoberi village. I did not find any clear examples of indirect evidentiality expressing inference based on pure reasoning or general knowledge.

(5)
a. Agul (Maisak and Merdanova 2002)
[Judging from scratching and other marks on the window the speaker concludes]

dak'ar	**daquna-a**
window	open.CONVB-BE.IN

(Somebody) opened the window. [though it is closed at the moment of speech]

(5)
b. Godoberi (Kibrik 1996: 259)

ssé<b>a	hanq'u-ʔí	hinú	**bu-k'-ída**	**bu-k'-á=da**
formerly<N>	house-INTER.LOC	in	N-be-HAB	N-be.PAST-CONVB=COP
tɬ́ːwχa				
fireplace				

Houses used to have a fireplace.

The indirect evidential function of the perfect shows up in different genres, especially in traditional folktales, accounts of historical events, religious texts, anecdotes, etc. In many examples, the indirect evidential reading is only an implicature and can be cancelled. For example, in Sanzhi Dargwa the perfect can be used when the speaker is judging from some (p. 496) traces (e.g. a lot of water on the kitchen floor and a wet towel) that some-

body has washed the dishes. To express or better imply that s/he did not observe this event but inferred it based on evidence s/he would use the perfect. However, the same verb form can be used with a follow-up clause stating explicitly that the speaker saw the dishwashing event, in which case the evidential implicature is cancelled (6).

(6)
Sanzhi Dargwa

Sanijat-li	t'alaʕħ-ne	**d-irc-ib=ca-d.**	dam=q'ar	il
Sanijat-ERG	dishes-PL	NPL-wash.PERV-PRET=COP.PRES-NPL	1SG.DAT=PT	3SG

či-b-až-ib=da
SPR-N-see.PERV-AOR=1
Sanijat has washed the dishes. I saw it myself.

In most of the languages, the perfect series can only occur in independent main clauses. This is to be expected because cross-linguistically evidentials are often restricted to main clauses and may have scope over, but cannot occur themselves within subordinate clauses (Aikhenvald 2003a: 17). Yet there is at least one exception to this rule. In Ashti Dargwa the perfect can be used as part of periphrastic conditional clauses and preserves its indirect evidential reading. When these clauses are used without the apodosis they express wishes. Example (7) can be used by a speaker who gave his clothes away in order to have them washed, but he does not see himself the process of washing.

(7)
Ashti Dargwa (Belyaev 2012)

čawal-li-j	d-i:s-**ippi**	d=uχ-a:-dil	li<d>he:	paltar
tomorrow-OBL.ST-ABL	NPL-wash.PERV-PER	NPL=be.PERV-3-IRR	all<NPL>	clothes

If she would wash all the clothes until tomorrow!

In the same language, we find a correlation between indirect evidentiality and aspect that is at the first glance surprising. In Ashti Dargwa, as in all other Dargwa varieties, aspect is marked through stem allomorphy. Almost all verbs have an imperfective and a perfective stem. Imperfective verbs preferably express non-firsthand evidentiality (cf. Sumbatova and Mutalov 2003 on Icari; Belyaev 2012 on Ashti). This is typologically unexpected since it is frequently the perfect or perfective tenses that acquire evidential meanings or develop into indirect evidentiality markers (Aikhenvald 2004a: 112–16: 264). For instance, in Icari only the perfect and the pluperfect (called ‘evidential present’ and ‘evidential past’ respectively) of imperfective verbs convey indirect evidential meaning (Sumbatova and Mutalov 2003: 88–9). If the same paradigmatic forms are used with perfective verbs the evidential meaning is absent. Belyaev (2012) proposes the following explanation: the paradigmatic verb form (i.e. suffix(es) plus copula) conveys perfectivity as part of its meaning and optional non-firsthand evidentiality as it is typical for the perfect. When it is used with an imperfective verbal stem perfectivity cannot be conveyed, due to the imperfective aspectual semantics of the stem and only the non-firsthand evidential value remains and is therefore more prominent with imperfective verbs. This explanation is plausible for Ashti since in this language the perfect and the pluperfect of imperfective

and perfective verbs express indirect evidentiality and the perfect/resultative meaning can be expressed only with perfective verbs. Nonetheless, this analysis does not work for Icari because it would (p. 497) imply that the perfect and the pluperfect when used with perfective verb stems also carry indirect evidential meaning. This does not seem to be the case according to the full grammar of the language (Sumbatova and Mutalov 2003: 86–8). For Icari, it rather seems that perfect and pluperfect when used with imperfective verbs have evolved a special resultative meaning that has acquired an evidential extension. The latter is unavailable for the perfective verbs.

When the perfect series is used with the evidential meaning we get the 'first-person effect'. Normally, indirect evidentials cannot be used with first-person arguments. If they are used, the reading must change and the first-person argument is interpreted as an unconscious or involuntary actor that only post factum got to know about his/her actions (8).

(8) Bagvalal (Tatevosov 2001b: 307)

den	muwa	šeː-b-o	ekʼʷa
1SG.ERG	rye	SOW-N-CONVB	COP.PRES

(Apparently) I sowed rye. (I thought it would be wheat!)

In Sanzhi Dargwa, the referent of the first person pronoun is not necessarily the subject or a subject-like argument, but can be an oblique argument. This appears to contradict Curnow's (2003: 43) claim on the correlation between indirect evidentiality, person, and volitionality. Curnow states that 'The notion of non-volitionality arises only in sentences which have a first person subject'. However, the first person singular pronoun in the comitative case in (9) cannot be analysed as the subject, but only as an involuntary, unintentional participant in the situation.

(9) Sanzhi Dargwa

dučːi	du	keple,	ʔaˤli	di-cːella	**w-iħ-ib-le=de**
night	1SG	drunk	Ali	1SG.OBL.ST-COMIT	M-fight.IMPERV-AOR-CONVB=COP.PAST

(Last) night I was drunk and Ali fought with me. (But I don't remember it. I got to know about it only afterwards.)

In most of the languages, the indirect evidential meaning does not imply that the speaker is uncertain about the uttered situation or does not vouch for the truth of his/her utterance. Hence, it is not the degree of speaker commitment that is at stake but only the source of the information. Yet Tsakhur seems to be an exception to this rule. The verb forms from the perfect series are used in certain contexts with direct evidence, for instance when referring to unexpected situations. Example (10) was uttered by someone who personally attended the situation but was surprised and maybe even shocked about the fact that he received only a scarf and not woollen socks, because woollen socks are

considered to be more valuable than a scarf and would be an appropriate gift for a close relative.

(10)

Tsakhur (Tatevosov and Maisak 1999: 231)

za-s	ja:luʁ	wo-b	qa<b>ɨ;	turs-ubɨ
1SG.OBL.ST-DAT	scarf.III	COP.PRES-III	come<III>.PERV	sock-PL
qal-es-di		ǯigʲ-e:	ja:luʁ=o-b	qa<b>ɨ
NPL.bring-POT-A.OBL.ST		place-IN	scarf.III=COP-III	come<III>.PERV

They brought me a head scarf; instead of woollen socks, they brought a head scarf.

(p. 498)

Maisak and Tatevosov (2007) claim that what both contexts (i.e. indirect and direct evidentiality) have in common is a distancing effect that has also been described by Slobin and Aksu (1982: 196–7) for Turkish *-miş*. The speaker wants to distance herself/himself from the event referred to. At the same time, s/he implies that the proposition does not denote undoubted and well-established facts. In other words, these verb forms also express epistemic modality. In the appropriate context, they can also have mirative connotations as is the case for (10). In addition, they are used for recounting dreams which are described as seen during sleep and with negated verbs of knowledge, thought, perception, or liking (Maisak and Tatevosov 2007).

23.2.3. Grammaticalized verbal evidentiality

In Nakh-Daghestanian languages, grammaticalized evidentiality as part of the verbal paradigm is rather rare and all of the discussed verb forms up to now are instances of evidential strategies. However, a few languages have verbal forms conveying indirect evidentiality. These are the Tsezic languages, some Dargwa varieties, Ingush, Chechen, and Avar.

In the Tsezic languages, most or even all verb forms from the perfect series have developed into genuine indirect evidentials.[4] In Bezhta, Khwarshi, Hinuq, and Tsez, the perfect is formed by simply adding an inflectional suffix to the verb without making use of the present tense copula.[5] In Bezhta and Khwarshi, the copula can be added to the inflected verb, but then the meaning is perfect/resultative and the indirect evidential reading is lost (Khalilova 2011). The meaning of the indirect evidentials is inference, usually from visible results or traces (11a,b), and hearsay. When used with first person subjects we get the expected shift in the semantics towards an involuntary agent, often with a mirative flavour. For instance, (11b) is part of a traditional story about Mullah Nasreddin who much to his surprise discovers that he did not die after his donkey had brayed three times, though he expected this to happen.

(11)

a. Bezhta

[The police are investigating a burglary. Seeing an open window and footprints beneath it, the police inspector says:]

c'ohor	žüɣ-ü-ʔ-ƛ'ä:	biƛo-ʔ	Ø-eƛ'e -na
thief	window-OBL.ST-IN-TRANSL	house-IN	I-go-UWPST

The thief has entered the house through the window.

(11)

b. Khwarshi (Khalilova 2011: 40)

do	Ø-uh-un	Ø-eč-un-aj=ko
1SG	I-die-CONVB	I-be-UWPST-NEG=INTENS

I have not died (after all)!

For Khwarshi, Bezhta, and Tsez, the opposition between the perfect series and the other past forms has been described as *marked indirect* versus *marked direct* (Khalilova (p. 499) 2011)[6] whereas for Hinuq an analysis by Forker (2014) shows that it is in fact *marked indirect* versus *unmarked neutral*.

In all four languages, the marked direct/unmarked forms occasionally occur in traditional fairy tales and other unexpected places, and similar switches from indirect to unmarked have been reported for Bagvalal (Tatevosov 2007b: 372). Comrie and Polinsky (2007) argue for Tsez that the switch between indirect evidentials and direct evidentials is at least partially motivated and can be explained through the assumption of several layers of witnesses. For instance, the marked direct may be used to add more vividness, and when a referent that is part of the story has seen the narrated situation and later talks about it. However, their claim is not supported by the data that they present in the appendix: one story is told from a first-person perspective, so obviously the marked direct is used exactly in the expected way. In the other story, there appears to be an arbitrary variation between indirect and direct evidentials with no clearly identifiable rules.

The Ingush Non-witnessed Inferential and the Non-witnessed Inferential Past have indirect evidentiality as part of their core meaning and can only occur in non-firsthand contexts. They are not only used in inferential contexts, but also express other types of indirect evidentiality. Example (12) has been uttered by an interviewer in a reply to a description of a place from A's childhood. The interviewer (=B) infers from A's description that the brother must have been at the place they were talking about and has seen it firsthand.

(12)
Ingush (Nichols 2011: 260)
[A: 'It's overgrown with trees, it's not like it was when we lived there', my brother said.
B replies:]

yz	vaxaa	**xannaxugvy**
3SG	M.go.CONVB	INFER.M

He must have gone there.

Similarly, the pluperfect in Sanzhi Dargwa and in Ashti Dargwa when formed with imperfective verbs (see example (9) in §23.2.2 and subsequent discussion) always expresses indirect evidentiality (Belyaev 2012).

Avar has an evidential construction not attested in any other Nakh-Daghestanian language. The past participle when heading an independent clause and other periphrastic forms derived from it can be used to express hearsay evidentiality.[7] The indirect evidential meaning of the past participle is reserved for planned and organized stories such as traditional fairy tales, and is not very common even there (13).

(13)
Avar (Charachidzé 1981: 172)

ʕarac-mesed-gun	šː^{w}-**ara-j**	jas	insul	roqʼo-e
money-gold-COMIT	return-PARTIC.PAST-F	girl	father.GEN	house.IN-LAT

With wealth the girl returned to her father's house.

(p. 500)

Lastly, the verbal evidential system of Chechen deserves a short discussion since it is unique among the Nakh-Daghestanian languages. Chechen has a specialized copula *xilla* that conveys indirect evidentiality (hearsay, inference from visible evidence) as part of its core meaning (Molochieva 2011: 213), thus representing grammaticalized verbal evidentiality. The copula is inflected for the perfect or the remote past, but these inflectional forms are described as expressing direct evidentiality that is overridden by the lexical meaning of the copula. The periphrastic verb forms generated by employing the evidential copula occur in main clauses and can also be used in three different types of subordinate clauses: (i) in the protasis of *irrealis* conditionals; (ii) in certain adverbial clauses such as temporal (simultaneous), concessives, comparative, locative, and a few other adverbial clauses (see Molochieva 2011: 234 for the complete list); and (iii) in headless rela-

tive clauses. Sentence (14a) illustrates a headless relative clause with the nominalized participle of *xilla*. The use of *xilla* indicates that the speaker did not see the shooting. Molochieva (2011: 239) also notes that indirect evidentiality in Chechen can be expressed in imperatives of causativized verbs. For example (14b) can be uttered in a situation in which the speaker requests the addressee to prepare the cheese bread while she (the speaker) is absent. The process of making cannot be observed by the speaker, but the result should be obtained before her return.

(14)

a. Chechen (Molochieva 2011: 235)

ca:ra	top	toex-na	**xilla**-rg	di:na	v-isi-na
3PL.ERG	gun	hit.PERV-CONVB	be.PER-NMLZ	alive	M-stay.PERV-PER

The one that they shot was alive.

(14b)

b. Chechen (Zarina Molochieva p.c.)

č'e:palg-aš	d-i-na	xil-it-aħ,	so
bread.with.cheese-PL	PL-do-CONVB	be-CAUS-IMP.SG,	1SG
c'a-j-a:lie!			
home-F-come-CONVB.POST			

Let (her/him) have made the cheese bread, before I (fem.) come home.

23.2.4. Inferentiality

Many Nakh-Daghestanian languages have periphrastic indirect evidentials with an auxiliary or light verb meaning either ‘find, come across, discover’ or ‘become, be, be at, stay, remain, stand’. The precise morphosyntactic properties, the functional range and the frequency with which the constructions are attested in natural texts differ from language to language. But since there is nevertheless a sizable number of common properties across the various languages, I assume that it is possible to speak of a construction type and treat the language-specific instances together. In Avar and the Tsezic languages the construction is not very common. In contrast, in Dargi languages it is rather frequent and a characteristic stylistic device in folktales. Examples of the languages and the involved light verbs are: Ingush (the auxiliary *xu(r)g-*, called delimited ‘be’ in the grammar by Nichols (2011)), the Lezgic languages Archi (*χos* ‘find, come across, discover’: Kibrik 1977: 238–43, 1994: 338–9) and Agul (*xas* ‘become, stand, get’: Maisak and Merdanova 2002), the Andic language Bagvalal (*-isã* (p. 501) ‘find’: Maisak and Tatevosov 2001), Avar (*-at-* ‘find, happen, be, turn up’: Forker in preparation (a)), Khwarshi (*-us -/-ɨs -* ‘find’: Khalilova 2009: 231–7), Hinuq (*-aši-* ‘find (out), come across’: Forker 2014), and the Dargi languages Icari (Sumbatova and Mutalov 2003: 109–10), Sanzhi, Kubachi (Magometov 1963: 196), Kajtag (Temirbulatova 2004) that have the verb *-už-* ‘be, be at, stay, remain’,

and Standard Dargwa (van den Berg 2001: 45), and Mehweb Dargwa that have *-u?-* 'be, be at, stay, remain' (Magometov 1982: 96).[8]

The light verbs are also used as lexical verbs with their literal meaning. Verbs translating with 'find, come across, discover' belong to the valency class of affective verbs. This means that they typically take an experiencer subject marked with the dative case or another oblique case, and a stimulus or theme-like object in the absolutive case. In many languages, the light verbs are additionally used in epistemic probability constructions (Forker in preparation (b)), in conditionals and in concessives (e.g. Archi, Hinuq, Tsez, Bezhta, Avar, Bagvalal, Ingush).

Typically, the indirect evidential constructions involving these light verbs have the meaning of inferentiality from direct, visible evidence. This means that the speaker directly observed or discovered the result of an event and then made an inference about that event (15a,b).

(15)

a. Hinuq (Forker 2014)

rok'o	gosme	aže	Ø-iɬi	Ø-aši-š	me
root	without	tree	I-similar	I-find-PAST	2SG

You (male) turned out to be like a tree without roots.

(15)

b. Archi (Kibrik 1977: 243)

tow	w-irχ^{w}ni-li	**χu-t'u-šaw,**	ž^{w}en	towmus	arsi
he	M-work.PERV-CONVB	find.PERV.M-NEG-CONC	2PL.ERG	he.DAT	money

kłaba!
give.IMP
Though (it turned out that) he did not work, give him money!

In some languages such as Bagvalal the construction can therefore not be used for hearsay evidentiality. It is possible, but by no means necessary, that the observation or discovery of the evidence and the connected inference correlates with surprise on the part of the speaker. This is reflected in the standard Russian translation of this construction with the verb *okazyvat'sja* 'find (oneself), turn out, prove, appear' which can also indicate surprise alongside its indirect evidential meaning. Thus, in some descriptions it is called 'admirative' (cf. the Archi grammar by Kibrik (1977) and the account of Agul by Maisak and Merdanova 2002).

In the Dargi languages, the situation is slightly different, probably due to the literal meaning of the light verb. For Standard Dargwa the construction has been described by van den (p. 502) Berg (2001: 45) as expressing that 'the activity is inferred from general knowledge or from hearsay'. In other Dargi varieties, we can observe that this construction expresses hearsay evidentiality and inference from general knowledge or observable

results. It is frequently used in traditional narratives (16a), but also in historical narratives about (presumably) real events. It regularly occurs at the beginning of fairy tales and traditional stories, e.g. in the phrase 'once upon a time' (16b) and in similar formulaic expressions. Then the story can continue without the auxiliary.

(16)

a. Kajtag Dargwa (Temirbulatova 2004: 288)

ileli	q'ur?an	d-arh-uli	**už-iw-li**	akku
he.ERG	Quran	NPL-know.IMPERV-CONVB	stay.M-AOR-CONVB	COP.NEG

(It turned out) he did not know the Quran.

(16)

b. Kubachi Dargwa (Magometov 1963: 333)

ti-w-le	**už-ib-i=sa-w**	sa	Malla	Rassittin
exist-M-CONVB	stay.M-AOR-CONVB=COP.PRES-M	one	Malla	Nasreddin

Once upon a time there was one Mullah Nasreddin.

Ingush has two special verb forms involving not the normal present tense copula, but the future tense/finite conditional form of delimited 'be' as auxiliary ('delimited' is a special *Aktionsart* type). These forms express inference not from sensory evidence but based on pure reasoning and logic (17). They are often used in consequence (apodosis) clauses of *irrealis* conditionals.

(17)

Ingush (Nichols 2011: 259)

dwa-oaghuora	voallazhie='a	Daala	twaisiitaa	xugvy
DX-recline	M.be.located.IRR=ADD	God.ERG	sleep.INDCAUS	M.INFER.PER

yz,	twaissav	yz
3SG	fall.asleep.NW.M	3SG

Right while he was lying there he fell asleep—God must have made him fall asleep.

23.2.5. Direct evidentiality within the verbal system

According to accounts of Khwarshi (Khalilova 2009: 221–9, 240–1), Tsez (Comrie and Polinsky (2007), Ingush (Nichols 2011: 249–50), Chechen (Molochieva 2011: 216–18), Archi (Kibrik 1977: 238–43, 1994: 338–9), and Bagvalal (Maisak and Tatevosov 2001: 307–12), these languages have verbal forms that express direct evidentiality. The meaning is often described as giving preference to visually acquired knowledge, i.e. the speaker is an eyewitness of the described situation (cf. Khalilova 2009: 221; Nichols 2011: 249).

For Khwarshi, Tsez, Ingush, and Chechen, the direct evidential verb forms are part of the verbal paradigm and have past time reference. They are predominantly used in everyday conversations, autobiographical narrations (18), and in reported speech within traditional narratives. (p. 503)

(18)

Tsez (Khalilova 2011: 38)

di	Ø-oy-s	ʕazar=no	očino	bison=no	ɬʕoraqura
1SG	I-do-WPST	thousand=ADD	nine	hundred=ADD	seventy
oc'ira	äƛiru	ƛʕebaɬ	Kidero	ʕaƛ-a:	
ten	ORD	year.CONTACT	Kidero	village-IN	

I (male) was born in Kidero in 1970.

Remarkably, Tsez as well as Hinuq have a special suffix used only with verbs inflected for the witnessed/unmarked past series in questions (cf. Comrie and Polinsky 2007 on Tsez, and Forker 2014 on Hinuq).

Nonetheless, the analysis of the mentioned verb forms as markers of direct evidentiality remains slightly doubtful. In Khwarshi, Tsez, and Chechen, the direct evidential forms occasionally occur in contexts where one would expect indirect evidentials, e.g. in traditional folktales (see the remarks in §23.2.3 on Comrie and Polinsky 2007), accounts of historical events that the speaker did not witness personally (Khalilova 2009: 224–5), or when drawing inferences from evidence. For instance, the following example (19) from Chechen has been uttered by a speaker who was sitting at the table drinking tea with another person. The speaker turned away from the table, and then back again after a few moments, when s/he saw that his cup was empty. Therefore, it might be possible to analyse these forms as semantically not expressing direct evidentiality, but as strongly implying such a meaning that nevertheless can be overridden.

(19)

Chechen (Molochieva 2011: 217)

ahw	dwa-miel-i	sa(n)	chai
2SG.ERG	away-drink.PERV-WPST	1SG.GEN	tea

You have drunk my tea.

The verbal forms labelled ‘direct evidentials’ (or marking direct evidentiality) in Archi and Bagvalal are reminiscent of the inferential evidentials since they make use of the same auxiliaries *χos* ‘find, come across, discover’ (Archi) and *-isã* ‘find’ (Bagvalal), but the two constructions differ in a few morphosyntactic properties. For example, if the lexical verb takes a converb suffix, the future participle suffix, or the preterite suffix (20), then the construction expresses direct evidentiality (Maisak and Tatevosov 2001: 308).

(20)

Bagvalal (Maisak and Tatevosov 2001: 309)

[The speaker went to the house of his friend with whom he wanted to go to the city. In contrast to what they had planned]

eheli=la	partal=la	b-uhe:-č’i	w-is-in-o:-w
today=ADD	stuff=ADD	N-gather-PRET.NEG	M-find-IMPER-PARTIC-M

As I found out, (he) had also not packed his stuff today.

However, the analyses of both languages can be called into question. Some of the provided examples contain overt subjects of the auxiliaries that are distinct from the subject of the lexical verbs. Consequently, they may better be analysed as complement constructions of (p. 504) the verb ‘find’ (cf. Kibrik 1994: 339). For other examples it is unclear if the speaker actually witnessed the event or rather its result(s). In the latter case we would have an instance of the inferential construction. Thus, example (20) permits both interpretations. In fact, Kibrik (1994: 338) provides the following description of the Archi construction ‘Someone is witnessing part or the result of P’ (= the event/situation). Therefore, a plausible hypothesis seems to be to suppose that Archi and Bagvalal like the other languages discussed in §23.2.4 have only one construction with the light verb ‘find’ conveying indirect evidential semantics based on visual evidence. As a borderline case, its meaning can include the end of the relevant situation and always includes its later visual traces.

23.3. Evidential enclitics and suffixes

A number of Daghestanian languages have evidential enclitics and suffixes in addition to their verbal evidential systems (Avar, Godoberi, Tsakhur, Archi, Kryz, Mehweb Dargwa, Hinuq, Tsez, and Khwarshi). The origins as well as the functions of these enclitics and suffixes are quite diverse. Therefore, most of them will be discussed individually.

Archi (Lezgic) has the indirect evidential suffix *-li* that can be added to past tenses only (e.g. to the aorist) leading to the meaning 'speaker and/or addressee were not eyewitness to the action X before the moment of speech' (Kibrik 1977, 1994: 329). The dominant meaning is inference, but it is frequently used in traditional narratives with hearsay evidentiality (21).

(21)

Archi (http://www.philol.msu.ru/~languedoc/rus/archi/corpus.php, ex. 02.006)

ju-w	lo	t'al	uw-**li**	jamu	bošor-mi	w-irχ^{w}mu-s	os
this-I	lad(I)	send	do.I.PER-INDEVID	that	man-ERG	I-work-INFIN	one
biq^{w}-ma-ši							
place-IN-LAT							

The man sent the boy to work in one place.

The language also has a perfective converb marker *-li*, which is used in adverbial clauses and for the formation of the perfect. According to Tatevosov's (2001a) analysis, there is only one suffix *-li* with the (perfective) converb meaning that occurs as part of the perfect series with the copula dropped or, if one likes, headed by a zero copula. Thus, the Archi evidential suffix is also an exponent of the perfect series that was presented in §23.2.2 as the typical verbal evidential strategy attested in many Nakh-Daghestanian languages.

Under certain circumstances the suffix has only the meaning of a proper perfect and can therefore be used with first persons: if the speaker participates in an action/situation that is unknown to the addressee or whose reasons or causes are unknown to the addressee. For instance, (22a) can be uttered when the addressee does not know that the speaker hates her, and (22b) as an explanation to the audience who does not know why the speaker brought the people.

(22)

a. Archi (Kibrik 1977: 231)

un	d-ez	beχ:$^{\varsigma}$e	e<r>t:i-**li**
2SG	II-1SG.DAT	be.black	become<II>.PER-INDEVID

'I hate you (fem.).' (lit. 'You became black to me')

(p. 505)

(22)

b. Archi (Kibrik 1977: 231)

za-ri	je-b	adam-til	χir-a-bu-**li**
1SG.OBL.ST-ERG	that-HPL	man-PL	after-HPL-make.PERV-INDEVID
b-ela<b>u	kumak-li-s		
HPL-1PL<HPL>.DAT	help-OBL.ST-DAT		

I brought these people here to help us.

Kryz, another Lezgic language without grammaticalized verbal evidentiality, has borrowed the Turkic evidential suffix *-miš* from Azeri for the expression of inference and hearsay. The suffix is added to verbs. In converb constructions it is only suffixed to the finite verb and has scope over the whole utterance. It is compatible with most verb forms, but not with the aorist, perfect resultative and progressive constative, which generally have direct evidential value. The suffix is almost exclusively found at the margins of texts (beginning or end), or to report narrative setbacks. The indirect evidential suffix can also convey surprise (23).

(23)

Kryz (Authier 2009: 278)

wun	lap	namussuz-a	adami-ya-**míš**=ki!
2SG	very	faithless-ADJZ	person-COP.M-INDEVID=PT

You are (therefore) a real lawless man (outlaw)!

Tsakhur (Lezgic) has an evidential enclitic *=ji* that indicates the acquisition of knowledge about a situation on the part of the speaker. It does not imply doubt. To the contrary, the speaker is committed to the truth of the proposition marked with *=ji*. It is compatible with past and present time reference. The enclitic has two evidential meanings: (i) indirect evidentiality with an obligatory mirative interpretation, and (ii) direct evidentiality.

The first meaning is only available in combination with perfective verb forms. When used with the first meaning the enclitic expresses hearsay (24) or inference based on tangible consequences. There is a clear first-person effect to the extent that a first person subject is reinterpreted as unconscious or involuntary agent.

Tsakhur (Tatevosov and Maisak 1998: 84)

[I have been told that]

(24)

ak:a	a:q-ɨ=**ji:**	wo-d
door(IV)	open.IV-PERV=HSAY	COP.PRES-IV

The door is/was open.

When used with the second meaning, *=ji* highlights the resultant state after the acquisition of knowledge (25). The information expressed in such an utterance must be within the personal knowledge sphere of the speaker. For example, the enclitic can only be employed to denote situations that took place during the lifetime of the speaker.

(25)

Tsakhur (Tatevosov and Maisak 1998: 74)
[You came back from Mikika, as I know. How is Mahammad?]
Maʿhaʿmmad qekʾa=**ji**
Mahammad die.IMPERV=DIR.EVID
Mahammad (as I found out) will die.

(p. 506)

This combination of contradictory meanings (direct and indirect evidentiality) expressed by one and the same enclitic seems to be somewhat inconsistent and unusual, and it is not attested in any other Nakh-Daghestanian language (though see the discussion in §23.2.5 on the possible relationship of the inferential construction with direct evidentiality). However, it can occasionally be found in other languages outside of the Caucasus. For instance, the St'át'imcets particle *lákw7a* expresses a direct non-visual information source and indirect inference from evidence (Matthewson 2011). Similarly, Korean *-te* combines direct and inferential evidentiality (Lim 2012).

The evidential enclitics in Avar, West Tsezic, Mehweb Dargwa, and Lezgian express only hearsay. They are clearly distinct from the quotative markers and can co-occur with them. The enclitics in Lezgian, West Tsezic, and Mehweb Dargwa probably originate from inflected forms of the verb ‘say’. For instance, the Mehweb Dargwa hearsay enclitic *=k’ʷan* has grammaticalized from *-ik’ʷ-* ‘say.IMPERV’ plus general tense suffix for third person *-an*. In the traditional folk tales published in Magometov (1982), *=k’ʷan* occurs frequently at the beginning of the stories (26).

(26)

Mehweb Dargwa (Magometov 1982: 201)
il ɣira-li-ču uk-es w-aʔ-ib=kʾʷan
he enthusiasm-OBL.ST-COMIT eat-INFIN I-begin-AOR=HSAY
He began to eat with joy.

The Lezgian hearsay marker is *=lda* (Haspelmath 1993: 148) and goes back to the verb *luhun* ‘say’, just like the quotatives *luhuz* and *lahana* (Haspelmath 1993: 367). The West Tsezic hearsay evidential enclitics are *=ƛo* in Khwarshi, *=ƛax* in Tsez, and *=eƛ* in Hinuq. In Hinuq and Tsez, the enclitics often occur together with the unmarked/direct evidential verb forms (27). According to speakers of Hinuq, this adds more vividness to the narra-

tive. As can also be seen in (27), the Tsez quotative enclitic *=ƛin* can freely co-occur with the hearsay evidential and only marks reported speech.

(27)

Tsez (Abdulaev and Abdullaev 2010)

howži	ʕoƛno=n	esnabi	yisi-q	hardizi	b-oq-si=ƛax,
now	seven=ADD	brother.PL	he.OBL.ST-AT	request	HPL-become-WPST=HSAY
ʻaħin-yo-qo-r=no		b-ici-n	eli	iħu-ɬ-xor	
rock-OBL.ST-AT-LAT=ADD		HPL-tie-CONVB	1PL	river-CONTACT-VERS	
kur-oʼ=ƛin					
throw-IMP=QUOT					

Now the seven brothers asked him: 'Tie us to a rock and throw us into the river!'

Khwarshi has an additional hearsay construction with the fossilized general tense form *čʼaːl* of the affective verb 'to inform, to hear' (28). The construction forbids the use of certain verb forms such as the witnessed past (a direct evidential form with past time reference) and the definite future. The quotative particle can optionally occur together with the hearsay construction.

(28)

Khwarshi (Khalilova 2009: 239)

ise	mašina	b-ez-un	čʼaːl
he.ERG	car(III)	III-buy-UWPST	HSAY

(They say) he bought a car.

(p. 507)

The Avar enclitic *=ila* can be added to all verbal forms, including the verb forms that already express indirect evidentiality (perfect series, past participle) and verb forms not having past time reference and/or not having an evidential meaning. According to Charachidzé (1981: 135), it indicates that the congruence between the assertion and the reality is uncertain. It is frequently found in traditional folk tales (29), but also in other contexts expressing hearsay evidentiality. It is probably a cognate of the quotative particle *=ilan*.

(29)

Avar (Axlakov 1976: 26)

čʼago-ɬi	hab-ula-an=ila	qizam-aɬ
living-NMLZ	do.N-PRES-HAB=HSAY	family-ERG

(Like this) the family lived.

Finally, for a number of Nakh-Daghestanian languages what looks like quotative particles have been analysed as markers of hearsay evidentiality. To these languages belong Agul

(Maisak and Merdanova 2002), Archi (Chumakina 2011), and Ingush (Nichols 2011: 249, 279–80, 559–60). However, since in all these languages the same particles are also used as markers of reported speech without any necessary implication of indirect evidentiality, and in Archi and Ingush the markers still inflect like other verbs because they originate from verbs of speech, I do not consider them to have hearsay evidentiality as part of their meaning.

23.4. Expressing knowledge by other means

Some Nakh-Daghestanian languages have constructions whose meaning does not directly evoke the information source, so they cannot be said to express evidentiality. However, they make reference to the state of knowledge of the speech act participants (speaker and addressee) and their possible status as epistemic authority. These constructions can be said to partially overlap with evidentiality and therefore deserve a short discussion.

In Axaxdərə Akhvakh (Andic), the affirmative perfective participle *-ada* is used in independent declarative clauses with first person agentive subjects and in independent interrogative clauses with second person agentive subjects. In contrast, second and third persons in assertions as well as first and third persons in questions take the regular affirmative perfective suffix *-ari* (30a, b). According to Creissels (2008b) in assertive clauses the affirmative perfective implies that the speaker has direct knowledge of the situation.

(30)

a. Axaxdərə Akhvakh (Creissels 2008b: 315)

mene	čũda	w-ošqq-**ada**?	šuni	w-ošqq-**ada**
2SG	when	M-work-PERV	yesterday	M-work-PERV

When did you work? I worked yesterday.

(30)

b. Axaxdərə Akhvakh (Creissels 2008b: 315)

hu-we	čũda	w-ošqq-**ari**?	šuni	w-ošqq-**ari**
DEM-M	when	M-work-PERV	yesterday	M-work-PERV

When did he work? He worked yesterday.

(p. 508)

This is commonly called *egophoric marking* or a *conjunct/disjunct* system (Creissels 2008b). In conjunct/disjunct systems, the speaker is the epistemic authority in assertions and the addressee is the epistemic authority in questions. A similar system is attested for Mehweb Dargwa (Magometov 1982: 119–20) and Zakatal Avar (Saidova 2007).

The Nakh languages Chechen and Ingush have phonologically reduced second person (and in Chechen even first person) pronouns in the dative and in Ingush also in the genitive that have morphosyntactic and semantic properties not typical for dative and genitive case (Nichols 2011: 280–3, Molochieva 2011: 244–8). The pronouns bear some similarity to ethical datives and have evolved from free non-argument benefactives (Molochieva and Nichols 2011). They are used to announce something new or important and unexpected for the addressee or the speaker or to indicate an important generalization that is known to both speaker and addressee but not in the addressee's immediate consciousness. Thus, the information is usually not new for the addressee and the speaker seeks confirmation of her/his assumptions. For instance, (31a) has been uttered by a man who informed his wife that he did not like the future bride of his son. Example (31b) states a fact about livestock breeding that is part of the general knowledge. By uttering this sentence the speaker invites the addressee to agree with her/him on that fact.

(31)

a. Chechen (Molochieva 2011: 247)

vai	kiarta	ca-b-oogh-u	**hwuun**	i	moelq'a
1PL.GEN.INCL	yard	NEG-B-come.IMEPRV-PRES	2SG.DAT	DEM	lizard(B)

This lizard will not come into our court. (Meaning: This girl will not marry our son (for your information)).

(31)

b. Ingush (Nichols 2011: 282)

aara	zhei-doaxan	lielado=i	**vaina?**
outside	sheep-cattle	keep.D.CAUS.PRES=Q	1PL.INCL

Well, sometimes livestock are kept outside after all, aren't they?

As a final point, I briefly mention epistemic modality because it is often discussed together with evidentiality. In Nakh-Daghestanian languages, evidential constructions are usually formally and functionally distinct from epistemic modals. The latter occur in a number of different constructions (see Forker in preparation (b) for a short overview):

- epistemic probability with a light verb/auxiliary (in some languages this is the same verb also used in the inferential construction)
- epistemic necessity with the verb 'must'
- within the verbal paradigm (*irrealis* verb forms, future-in-the past, etc.)
- other constructions (e.g. Lak and Avar have so-called 'assertive' forms when the speaker emphatically asserts the utterance and/or vouches for its truth, see Friedman 2007, Bokarev 1949: 69–80)
- particles

As was mentioned throughout this chapter, evidentials normally do not imply any doubts on the part of the speaker concerning the truth of the proposition, and the speaker is not less (p. 509) committed to his/her utterance when s/he uses an indirect evidential. The only exception seems to be the perfect series in Tsakhur (see §23.2.2).

23.5. Summary

In a nutshell, the expression of evidentiality in Nakh-Daghestanian can be summarized as follows: grammaticalized evidentiality as well as evidential strategies show up as part of the verbal inflectional system, usually conflated with tense. Most languages have fairly standard indirect evidentials based on the perfect series. Another common trait is inferential constructions with light verbs ‘find’, ‘stay’, or ‘be, become’ and some languages have evidential enclitics or suffixes. The verbal evidential systems usually express indirect evidentiality (hearsay and inference), though some authors claim that a number of languages also have direct evidentiality. Promising topics for future research include, among others, the relationship between the imperfective aspect and indirect evidentiality attested in Dargwa varieties and the connection between alignment and evidentiality found in Lak.

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Notes:

([1]) Nichols measures the overall complexity, including phonology, morphology and syntax.

([2]) By resultative, I mean reference to the state that obtains as a result of a preceding action, and by perfect I mean reference to a past action that is relevant at the moment of speech.

([3]) Note that the individual descriptions and grammars may use different labels for these forms. Thus, in Agul the verb forms treated here as belonging to the perfect series are called *resultative* and *past resultative general factive* (Maisak and Merdanova 2002).

([4]) Nevertheless, even in these languages one or two verbs represent exceptions to this rule (e.g. ‘want’ plus perfect indicating a present state of wanting in Hinuq (Forker 2013: 222), Bezhta and Hunzib).

([5]) To be more precise, in Bezhta the copula is optional (Khalilova 2011) and in Hinuq its use is obligatory in negative clauses though prohibited in affirmative clauses (Forker 2013: 221–2).

([6]) Khalilova (2011) analyses Hunzib along the same lines. This contrasts with the Hunzib grammar by van den Berg (1995) according to which not the perfect itself but only verb forms containing the perfect form of the copula *zuq'on lo* as auxiliary have indirect evidential value.

([7]) Other functions of the past participle are the formation of (i) relative clauses, (ii) interrogative clauses, (iii) term focus constructions, and (iv) assertive modality.

([8]) In Icari and Standard Dargwa, there are other light verbs in addition to the light verbs described that can also convey evidential meanings: Icari *elɣ-* 'remain', Standard Dargwa *kal-* 'remain' (Sumbatova and Mutalov 2003: 109–10). For Standard Dargwa, Mutalov (2002) writes that there is a small difference in the semantics between the two constructions depending on the auxiliary, but he does not provide arguments or examples in favour of his claim.

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Turkic Indirectivity

Lars Johanson

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Abstract and Keywords

This chapter deals with various Turkic evidential categories, which typically express the notion of indirectivity. The primary task of indirectivity is not to express an external origin of the addresser's knowledge of an event, but to indicate that a narrated event is stated in an indirect way, by reference to its reception by a conscious subject. The reception may be realised through hearsay, inference, or perception. Some more elaborate Turkic systems distinguish between reported and non-reported indirectivity. The various evidential notions are realized morphologically by two types of markers. One type consists of post-terminal inflectional markers that sometimes tend to vacillate between evidential and non-evidential readings. The other type consists of copular particles that are more stable markers of evidentiality.

Keywords: Turkic, indirectivity, post-terminal, evidentiality, hearsay

24.1. Introduction

THIS survey summarizes the essential features of the grammatical categories of evidentiality found in Turkic languages, with special regard to the distinctive devices of particular system types. It follows the principles laid down in Aikhenvald (2004, 2015b).

Turkic evidential categories state the existence of a source of evidence for a given propositional content. The specific kind of evidentiality typical of Turkic is indirectivity, translatable as 'obviously', 'evidently', 'apparently', 'reportedly', 'as it appears/appeared', 'as it turns/turned out', etc.

Turkic evidential categories do not express epistemic modality in the sense of the addresser's attitude towards the truth of this content. Nonetheless, brief sections on epistemic and rhetorical stance markers will conclude this survey.

24.2. Turkic

Since the survey concerns evidentiality as expressed in a whole language family, numerous language-specific details will be omitted. The reader may have to be reminded of the fact that today's Turkic-speaking world (Map 24.1) extends from Turkey and its neighbours in the Southwest, to Eastern Turkistan and further into China in the Southeast. From here it stretches to the Northeast, via Southern and Northern Siberia up to the Arctic Ocean, and finally to the Northwest, across Western Siberia and Eastern Europe. Most Turkic languages may be classified as belonging to a Southwestern, a Northwestern, a Southeastern or a Northeastern branch. Khalaj in Central Iran and Chuvash in the Volga region constitute separate branches. Of the peripheral languages in the Southeast, Yellow Uyghur and Fu-yü are related to dialects of the Northeastern branch, and Salar to the Southwestern branch.

24.3. Indirectivity

Despite system differences, almost all known older and recent stages of Turkic possess grammatical means of expressing indirectivity, covering various notions traditionally (p. 511) referred to as 'hearsay', 'inferential', etc. Evidential statements are indirect in the sense that the narrated event is not stated directly, but in an indirect way, by reference to its reception by a conscious subject, a recipient. This seems to be basic to many evidentiality systems and may even qualify as a partial cross-linguistic definition of evidentiality (Comrie 2000: 1). The recipient may be the speaker as a participant of the speech event or a participant of the narrated event, e.g. a protagonist in a narrative. The result is two-layered information: 'It is stated that narrated event is acknowledged by a recipient'.

Map 24.1. Turkic languages

24.3.1. Sources of information

Specification of the source of information, the way in which the event is acknowledged by a recipient, is not criterial for indirectivity as such. The reception may be realized through (i) hearsay, (ii) inference, or (iii) perception.

> **(i)** Reportive (or quotative) uses: 'The narrated event or its effect is reported to the recipient'. The basis of knowledge is a foreign source, reported speech, hearsay. English translation equivalents include *reportedly, allegedly, as they say/said*, etc.
> **(ii)** Inferential uses: 'The narrated event or its effect is inferred by the recipient'. The basis of knowledge is pure reflection, logical conclusion. English translation equivalents include *as far as one understands/understood*, etc.
> (p. 512) **(iii)** Perceptive (or experiential) uses: 'The narrated event or its effect is perceived by the recipient'. The basis is firsthand knowledge, direct sensory perception of the event or indirect perception on the basis of traces or results. English translation equivalents include *it appears/appeared that, it turns/turned out that, as one can/could see, hear*, etc.

All these readings can be translated by *evidently, obviously*, etc.

Indirectivity markers do not fit into evidential schemes distinguishing between 'the speaker's non-firsthand and firsthand information'. Their primary task is not to express the external origin of the addresser's knowledge.

In their perceptive uses, indirectives express that the event or its effect turns out to be the case, becomes manifest, visible, or apprehended through one of the senses and thus open to the recipient's mind. Note that these usages cannot be derived from reportive or inferential meanings or be subsumed under 'non-firsthand knowledge'.

Some more elaborate Turkic systems distinguish between 'reported' and 'non-reported' (inferential/perceptive) indirectivity. There are, however, no systematic differences relating to other types of sources, e.g. visual versus other kinds of sensory information.

24.3.2. Marked and unmarked terms

Turkic displays basic contrasts between marked indirectives and their unmarked counterparts. Marked terms, expressing evidential notions explicitly, stand in paradigmatic contrast to non-evidentials. Thus, Turkish *Gel-miș* 'X has obviously come/obviously came' and *Gel-iyor-muș* 'X is/was obviously coming, obviously comes' have corresponding unmarked items such as *Gel-di* 'X has come/came' and *Gel-iyor* 'X is coming/comes'.

The unmarked terms exhibit neutral uses in cases where the distinction in question is inessential. The widespread claim that unmarked items such as *Gel-di* 'X has come/came' consistently signal 'direct experience' or 'visual evidence' is clearly fallacious. Clauses unmarked for evidentiality do not necessarily denote situations that are personally known

to the addresser. They simply do *not* signal that the event is stated in an indirect way, i.e. acknowledged by a recipient by means of report, inference, or perception.

24.3.3. Formal types of markers

The coding of indirectivity in Turkic is scattered, i.e. morphologically realized by two types of markers. One type consists of post-terminals that tend to vacillate between evidential and non-evidential readings. The other type consists of copular particles that are stable markers of evidentiality.

- Inflectional markers are suffixes occurring after verbal stems, comprising the types *MIš*, *GAN*, and *IB-DIR*. The Turkish simple inflectional marker {*-mIš*} carries high pitch and has mostly past time reference, e.g. *Gül-müṣ* (laugh-*MIš*) 'X (has) evidently laughed'.
- Copula particles are enclitic elements added to nominals, the main types being *ÄR-MIš* and *ÄR-KÄN*. Turkish *i-miṣ* has the suffixed variant {*-(y)-mIṣ*}. The copula particles are (p. 513) unable to carry high pitch and are ambiguous between past and non-past time reference, e.g. Turkish *Hasta-y-mıṣ* 'X is/was evidently sick', *Türkiye'de-y-miṣ* 'X is/was obviously in Turkey', *Gel-iyor-muṣ* 'X is/was evidently arriving', *Gel-ecek-miṣ* 'X will/would evidently arrive'.

Some written shapes of the Turkish copula particle coincide with those of the inflectional marker {*-mIš*}. Thus *Gül-müṣ* (laugh-*MIš*) is written in the same way as *Gül-müṣ* (rose *-miṣ*) 'It is/was evidently a rose'. In spoken language, the allomorphs are distinguished by different pitch patterns. The deceptive similarity of certain allomorphs has led linguists to confuse the two markers, referring to both as 'the suffix *-miṣ*', allegedly attachable to both verbal and nominal stems. Uzbek *e-kȧn* is frequently cliticized as *-kȧn*, sometimes also written as a bound element.

24.4. Inflectional markers as post-terminals

The inflectional markers are of post-terminal nature. Post-terminality is a marked aspectual way of envisaging events with respect to their limits, grammaticalized in Turkic as well as in many other languages (Johanson 1996a, 2000b). It is typical of perfects in British English or Scandinavian languages, expressing past events of present relevance.

It is possible to distinguish degrees of focality depending on the focus of attention. High-focal post-terminals focus on the aspectual orientation point and the relevance of the event at this point, whereas low-focal post-terminals are more event-oriented, stressing the relevance of the event at the time of its realization (Johanson 2000b: 106–36).

High-focal post-terminals often tend towards indirective readings (Johanson 1971: Chapter 8, 2000b: 121–3). Even if the event is wholly or partly outside the range of vision, traces, results, or other forms of present knowledge of it may obtain at the aspectual vantage point. These secondary meanings are pragmatic side effects that can be used as 'evi-

dential strategies’. The development of more stable indirective meanings may be seen as a semantic extension in the sense of conventionalized implicatures. Their indirect kind of envisaging events has been reinterpreted as indirectivity.

The oldest known post-terminal marker type is *MIš*, and the second one is GAN. In certain languages, the expression of focal post-terminality has later been renewed by means of *IB-DIR* and some other markers (Csató 2000a).

24.4.1. The type *MIŠ*

East Old Turkic {-*miš*} has clearly indirective functions, mainly expressing past actions known from hearsay, e.g. *Ölür-miš* ‘X reportedly killed’. The marker {-*mIš*} is still used in West Oghuz, South Oghuz, Khorasan Oghuz, Khalaj, Salar, and North Siberian Turkic. It has strong evidential connotations, covering hearsay, inference, surprise, etc. (‘reportedly’, ‘obviously’, ‘surprisingly’), e.g. Turkish *Gel-miș* ‘X obviously came/has obviously come’, *İç-miș-im* ‘I obviously drank/have obviously drunk’, Gagauz *Gör-müš-ük* ‘We obviously saw it/have obviously seen it’. The markers {-*mIš*} and {-*DI*} exclude each other.

(p. 514) Under the influence of the Persian present perfect, Azeri {-*mIš*} exhibits more perfect-like functions without evidential connotations, e.g. *Gäl-miš-äm* ‘I have come’, corresponding to Turkish *Gel-di-m* rather than to *Gel-miș-im* (Johanson 1971: 289–90). The same is true of many {-*mIš*} forms in Old Anatolian Turkish and Old Ottoman. Standard Azeri has a mixed perfect paradigm, with {-*mIš*} in the first person and {-*(y)Ib*} in the second and third persons. This paradigm is also found in other dialects of Iran (Johanson 1998). Certain South Oghuz varieties have a perfect with {-*miš*} in all persons, whereas some other varieties use {-*(y)Ib*} for all persons. Khalaj has a {-*mIš*} perfect for all persons, e.g. *Käl-müš-äm* ~ *Käl-miš-äm* ‘I have come’, corresponding to the Persian present perfect *Man aːmade am*.

The Yakut post-terminal marker {-*BIt*} is an archaic feature, etymologically corresponding to {-*mIš*}. It forms post-terminals with evidential connotations, e.g. *Käl-bit* ‘X has obviously come’, negated {-*BA-tAG*}, e.g. *Käl-bä-täχ-χit* ‘You (PL) have obviously not come’ (Buder 1989).

24.4.2. The type *GAN*

The type GAN, which is lacking in East Old Turkic, replaced MIŠ in East Middle Turkic (Chaghatay). It is now used in the Northwestern and Southeastern branches as well as in the West and South Siberian languages. It corresponds phonetically to the Turkmen participant nominal marker {-*An*}//{-ːn}, e.g. *oḳoː-n* ‘having read’ ← *oḳo-* *oka-* ‘to read’. The {-*GAn*} perfects of Tatar and Bashkir have evidential connotations, e.g. Bashkir *Al-ɣan-dar* ‘They have obviously taken it’, Tatar *Min al-ɣan-man* ‘It turns/turned out that I have/had taken it’.

West and South Kipchak {*-GAn*} expresses past events of current relevance, often on the basis of results or indirect evidence, e.g. Karachay-Balkar *Ayt-ɣan-sa* ‘You have said’, *ƫaz-ɣan-ma* ‘I have written’, Kumyk *Bar-ɣan-man* ‘I have gone’, *Bar-ma-ɣan-man* ‘I have not gone’, Crimean Tatar *Al-ɣan-mïz* ‘We have taken it’, Kirghiz *Ḳal-ɣan* ‘X has stayed’, Kazakh *Men kör-gen-min ~ kör-ge-m* ‘I have seen it’, *Men oḳï-ɣan-mïn* ‘I have read’, *Men bul ki-tap-tï oḳï-ɣan-mïn* ‘I have read this book’, *Men özger-ge-m* ‘I have changed’. It has perfect, resultative, experiential, and constative (summarizing) functions.

Uzbek {*-Gȧn*} and Uyghur {*-GAn*}, so-called ‘indefinite past’ markers, form a present perfect, presenting the event in a post-terminal perspective and signalling its current relevance, sometimes with slight evidential connotations, e.g. Uzbek *Kel-gȧn-mȧn* ‘I have come’, *Yåz-ɣȧn* ‘X has written’, Uyghur *Kir-gän-män* ‘I have entered’, *Yäz-il-ɣan* ‘It is written’, *Kir-mi-gän-siz* ‘You have not entered’, *Bu kitap-ni män oḳu-ɣan* ‘I have once read this book’.

The Chuvash so-called perfect in {*-nI̬*} is an indirective post-terminal lacking person-number markers, e.g. *ĂBi̬ vula-nï̬* (Эпĕ вуланă) ‘I have read’. It is traditionally described as a non-eyewitness form found in narrative styles, especially of folktales, e.g. *Ḳur-nï̬* (*Кур-нă*) ‘X has obviously seen it’. Its indirective meaning may be corroborated by the particle *mi̬n* мĕн, e.g. *Pi̬l-ni̬ mi̬n (Пĕл-нĕ мĕн)* ‘X has obviously known it’. The Upper Chuvash counterpart is {*-sA*}.

(p. 515) 24.4.3. Origins

The types *MIŠ* and *GAN* are of unknown origin. They may, however, have emerged in postverbial constructions with auxiliaries developed from lexical verbs, with deletion of the original converb suffix. Thus *MIŠ* may go back to a form of an original verb *bïš-* ‘to ripen’, ‘to mature’, i.e. to attain a final state as ‘ripe’, ‘cooked’, or ‘done’; cf. Turkish *piş-* (Johanson 2003: 287). The type *GAN* may go back to a postverbial construction with an auxiliary verb developed from the lexical source *ḳaːn-* ‘to be satisfied, satiated, repleted’, ‘to do/be well (sufficiently) done’. The origin of the Chuvash marker {*-nI̬*} is unknown. Upper Chuvash {*-sA*} is connected with the hypothetical marker {*-sA*}.

24.4.4. The type *IB-DIR*

Many evidentials are based on the type *IB-DIR*. It goes back to the periphrasis *⟨B⟩ *tur-ur*, which served to renew the expression of post-terminality. It originally consisted of a converb of the lexical verb plus *tur-ur* ‘stands’, e.g. *Yaz-ïb tur-ur* (lit. ‘stands having written’) ‘X is in the state of having written’, ‘X has written’. The auxiliary *tur-ur* was reduced to {*-dUr*}, {*-dI*} or *Ø*. This type is predominantly an indirective past, often of inferential and perceptive nature (‘as I understand’, ‘as I observe’). In the traditional grammatical literature it is often mistaken for a pluperfect.

This type includes Noghay *Yaz-ïp-tï* ‘X evidently wrote/has written’, Kazakh *Kel-ip-ti* ‘X evidently came/has evidently come’, *Sen özger-me-p-siŋ* ‘You have (as I see) not changed’, *Men bar-ïp-pïn* ‘It turned out that I had gone’. *Ol kel-ip-ti* ‘It turned out that X had come’.

Men onï kör-ip-pin ‘It turned out that I had seen him’, Kirghiz *Ber-be-p-tir* ‘X has evidently not given it’, Uzbek *Kel-mȧ-p-ti* ‘X has evidently not arrived’, *Unut-ip-mȧn* ‘I have (as it turns out) forgotten it’, *Å-p-ti* < *Ål-ip-ti* ‘X has evidently taken it’, Uyghur *Yez-ip-tu* ‘X evidently wrote/appears to have written’, *Tamaḳ oχša-p-tu* ‘The food is (as I taste) delicious’; cf. Turkish ‹Yemek güzel olmuṣ›, Altay *Bar-ïp-tur* ‘X has evidently left’, Salar *Gel-du* ‘X evidently came’, Tuvan *Bär-ip-tir* ‘X evidently gave’, Tuvan *De-p-tir* ‘X has evidently said it’, Khakas *Uzu-p-tïr* ‘X has obviously slept’, *Par-tïr* ‘X has obviously gone’. Azeri {*-(y)Ib*} < *⟨B⟩ *tur-ur* forms a mixed perfect paradigm together with {*-mIš*}, e.g. *Yaz-mïš-am* ‘I have written’, *Gäl-ib-sän* ‘You have come’, *Gäl-ib ~ Gäl-ib-dir* ‘X has come’, *Bil-mä-yib-lär ~ Bil-mä-yib-dir-lär* ‘They have not known it’.

A few languages have produced a second renewal of focal post-terminality by means of the periphrasis ⟨B⟩ converb + present tense of *tur-*, e.g. Karachay *Ket-ib tur-a-dï* ‘X has gone’, Kumyk *Gel-ip tur-a* ‘X has come’. These markers do not convey evidential connotations.

24.4.5. The types *ÄR-MIŠ* and ÄR-KÄN

The particles *ÄR-MIŠ* and *ÄR-KÄN* are derived from the defective verb *är-* ‘to be’. Both may be of post-terminal origin, if *är-* was originally an initiotransformative expressing (i) an initial dynamic phase ‘to become’ and (ii) a subsequent stative phase ‘to be’ (Johanson 2000b: 62–3). (p. 516) The post-terminal perspective thus envisages the event as still going on at the aspectual vantage point, e.g. *är-miš* ‘has appeared’, ‘has become evident’, ‘is evident’. The particles *ÄR-MIš* and *ÄR-KÄN* have now lost their relationship to the post-terminal value and cannot be considered perfect markers.

24.4.6. The type *ÄR-MIŠ*

The type *ÄR-MIŠ* is documented in East Old Turkic, where it takes part in various analytic constructions, e.g. with the aorist, the optative, and the prospective. In later languages it combines with post-terminal bases and other nominals, e.g. *Kel-gän är-miš* ‘X has reportedly arrived’, Chaghatay *Baha꞉dur e-miš siz* ‘You are said to be a hero’. It often suggests secondhand information in the reportive sense. The Yakut equivalent is *ä-bit*, combinable with various thematic bases. The Turkish marker is *i-miṣ ~ {+(y)mIṣ}*, e.g. *Zengin-miş* ‘X is/was evidently rich’, *Çık-ıyor-muş* ‘X is/was obviously leaving’, *Gel-miṣ-miṣ* ‘X is said to have come’ (Johanson 1971: 66), *Gel-ecek-miṣ* ‘X will/shall evidently come’, *Gel-meli-ymiṣ* ‘X evidently ought to come’. Gagauz examples are *Gid-är-miš-im* ‘They say I will go’, *Ḳal-mïš-mïš* ‘X has evidently remained’, *Lȧ꞉zïm-mïš bäklä-yä-siniz* ⟨necessary-IND.PART wait-OPTATIVE-2PL⟩ ‘You evidently must wait’. The Turkmen particle {+*mIš*}, which mostly expresses reportive indirectivity, combines with numerous thematic bases, e.g. *Tap-an-mïš* (Tapanmyş) ‘X is said to have found it’, *Gel-ip-miš-in* (Gelipmişin) ‘X has reportedly come’, representing reported past events. Khalaj *ä(r)-miš ~ {+A(r)-miš}* has non-evidential perfect and pluperfect functions (‘has/had been’) as a result of Persian influence. It combines with intraterminal markers, signalling that an intraterminal situation has been the case, e.g. *Ä꞉t-äyo꞉r-amiš*, interpretable as ‘It has been the case that X was do-

ing’; cf. Persian *Miː-karda-ast*. Combined with {*-miš*}, it forms a pluperfect signalling that a post-terminal situation has been the case, e.g. *Äːt-miš ä-miš*, interpretable as ‘It has been the case that X had done’; cf. Persian *Karda buːda ast.*

Some languages have just preserved remnants of ÄR-MIŠ. For instance, Kazakh possesses the rare form {*-(I)p-tI-mIs*} < *⟨B⟩ *tur-ur är-miš*, which expresses rumours or gossip with mocking overtones, e.g. *Ol ayt-ïp-tï-mïs* ‘X has reportedly said it’; cf. Turkish {*-mIş-mIş*}.

24.4.7. The type *ÄR-KÄN*

Many older and more recent Turkic languages display indirective particles of the type *ÄR-KÄN*. The functional development is somewhat unclear, since *ä(r)-kän* is not a phonetically regular post-terminal form in {*-GAn*} (Johanson 1996b: 91). The particles tend to convey the meaning ‘as is/was obvious’ or ‘as it turns/turned out’. Of the older languages, Kuman exhibits the form *ä-gän*. Modern phonetic variants include Tatar *i-kän* (икэн), Kazakh *e-ken,* Uzbek *e-kȧn*, Uyghur *i-kän*, Tofan *är-gän*, negated *ä-mäːn* < *ärmä-gän.* Turkmen *e-ken* tends to express evidentiality in the perceptive sense, such as ‘It turns out that …’, ‘I recognize/see/understand that …’, e.g. *Muɣallïm eken-θiŋ* ‘I understand you are a teacher’, *Gel-en e-ken* ‘X has obviously arrived’.

Exampes of combinations: Noghay *Kele-yat-ïr e-ken* ‘X is apparently coming’, Kirghiz *Ište-čü e-ken* ‘X obviously used to work’, Kazakh *Bil-e-di eken* ‘X obviously knows/knew’, *Ol* *(p. 517)* *žaman e-mes e-ken* ‘X is/was obviously not bad’, *Kel-üw-de e-ken* ‘X is/was obviously coming’, *Kel-gen e-ken-siz* ‘You have (as I see) arrived’, *Kel-mek-ši e-ken* ‘X obviously intends/intended to come’, *Kel-etin e-ken* ‘X obviously used to come’, *Žaŋbïr žaw-ɣan e-ken* ‘It has (as I see) rained’ (cf. Turkish *Yağmur yağ-mış*, Uzbek *Kȧsȧl ekȧn* ‘X is obviously ill’, *Yåz-gȧn e-kȧn* ‘X has/had obviously written’, *Bår-mȧ-gȧn e-kȧn-sȧn* ‘You have/had apparently not gone’.

A marker with functions similar to those of *ÄR-KÄN* is *BOL-IB-DIR*, e.g. Noghay *bol-ïp-tï*, Uzbek *bol-ip*, Uyghur *bo-p-ti*, Altay *bol-up-tïr, bol-tïr,* Khakas *pol-tïr*, Kazakh *Ḳal-ɣan bol-ïp-tï* ‘X has/had obviously stayed’. Another marker is *BOL-GAN*, e.g. Tatar *Bar-a bul-ɣan* ‘X is/was evidently going’, *Bar-ɣan bul-ɣan* ‘X has/had evidently gone’, *Bar-ačaḳ bul-ɣan* ‘X will/would evidently go’. The verb *(b)ol-* is used here in the sense of ‘to turn out to be’.

24.5. Types of systems

24.5.1. System type 1

The most comprehensive evidentiality systems are represented by languages such as Uyghur and Uzbek of the Southeastern branch, Kazakh of the Northwestern branch and Turkmen of the Southwestern branch.

They possess an inflectional past in *IB-DIR*, a stable indirectivity marker, e.g. Uyghur *Yez-ip-tu*, Uzbek *Yåz-ib-di* ‘X has evidently written/evidently wrote’, Kazakh *Tüs-ip-ti* ‘X has evidently fallen/evidently fell’, Turkmen *Gid-ip-dir* ‘X has evidently gone’. They possess a post-terminal in *GAN*, displaying perfect-like meanings with occasional indirective connotations, e.g. Uyghur *Yaz-ɣan*, Uzbek *Yåz-ɣan* ‘X has written’, Kazakh *Öltir-gen* ‘X has killed’, Turkmen *Öylön-ön* ‘X has married/is married’.

Languages of this type possess two indirective copula particles, *ÄR-KÄN*, which tends towards non-reportive (inferential and perceptive) uses, and *ÄR-MIŠ*, which tends towards reportive uses, e.g. Tatar *i-kän* (икэн) versus *i-mịš* (имиш), Chuvash *i-kän* (иккен) versus *i-mịš* (имĕш), Uzbek *e-kȧn versus e-miš,* Uyghur *i-kän* versus *i-miš*.

ÄR-KÄN combines with intraterminals (presents, imperfects), prospectives, non-verbal predicates, etc., e.g. Uyghur *Yez-ivat-ķan i-kän* ‘X is/was evidently writing’, Kazakh *Kel-edi e-ken* ‘X is/was evidently coming’, *Üy-de e-ken* ‘X is/was obviously at home’. It combines with post-terminals, e.g. Uyghur *Tügät-kän i-kän* ‘X has/had obviously finished’, Uzbek *Yåz-ɣan e-ken* ‘X has/had obviously written’, Kazakh *Tüs-ken e-ken* ‘X has/had obviously fallen’.

ÄR-MIŠ expresses corresponding reportive meanings, e.g. Uyghur *Yez-ivat-ķan-miš* ‘X is/was reportedly writing’, Kazakh *Kel-e-di-mis* ‘X is/was reportedly arriving’, Uyghur *Yaz-ɣan-miš* ‘X has/had reportedly written’, Turkmen *Gid-ip-miš-in* ‘X has/had reportedly gone’.

Items of the structure *IB-DIR+ÄR-MIŠ* apply reportive meaning to inferential or perceptive statements, e.g. Uyghur *Yez-ip-ti-miš* ‘X has/had allegedly written’, Kazakh *Kel-ip-ti-mis* ‘X has/had allegedly come’.

In certain systems, the two copula particles divide the area of indirectivity between themselves according to the pattern reportive versus non-reportive (inferential + perceptive).

The opposition is sometimes limited to certain dialects or registers. Thus, *ÄR-MIŠ* is not used in all varieties of Uyghur and Uzbek, and its role in Kazakh is rather limited.

(p. 518) 24.5.2. System type 2

Some languages such as Noghay, of the Northwestern branch, exhibit two inflectional markers, e.g. *Kel-ip-ti* ‘X evidently arrived’ and *Kel-gen* ‘X has arrived’, but only one indirective copula particle, *ÄR-KÄN*. The latter is a general indirective marker covering both reportive and non-reportive meanings. It combines with intraterminals, e.g. *Kel-e-di e-ken* ‘X is/was obviously coming’, and with post-terminals to form indirectives signalling relative anteriority, e.g. *Kel-gen e-ken, Kel-ip-ti e-ken* ‘X has/had obviously come’.

24.5.3. System type 3

Certain languages exhibit a simplified subsystem of inflectional markers, while maintaining a richer subsystem of copula particles, distinguishing between reportive and non-reportive. In Tatar and Bashkir, of the Northwestern branch, GAN is used without a competing *IB-DIR*. It displays normal post-terminal uses but may also suggest indirectivity, e.g. *Yaz-ɣan* ‘X has (evidently) written’. As noted in §24.4.2, the neighbouring language Chuvash has a similar marker {*-nI̯*} with post-terminal and indirective meanings, e.g. *Ḳala-nï̯* (Каланӑ) ‘X has (evidently) spoken’. Tatar, Bashkir, and Chuvash possess indirective copula particles of the *ÄR-MIŠ* (reportive) and the *ÄR-KÄN* (non-reportive) type, e.g. Chuvash *Kil-nį i-mäš* (Килнĕ имеш) ‘X has reportedly arrived’, *Kil-nį i-kːän* (Кил-нĕ иккен) ‘X has evidently arrived’.

24.5.4. System type 4

A few systems consist of one inflectional marker and one copula particle. An inflectional marker of the type *MIš* is used in the western subgroup of the Southwestern branch, e.g. Turkish {*-mIš*}. The cognate item {*-BIt*} is used in Yakut, the northernmost Turkic language of the Northeastern branch, spoken in the opposite extreme part of the Turkic world.

The languages in question possess particles of the type *ÄR-MIŠ*, e.g. Turkish *i-miș*, Yakut *ä-bit*. Thus MIŠ lacks a competing *IB-DIR*, and *ÄR-MIš* lacks a competing *ÄR-KÄN*. The inflectional markers allow reportive, inferential, and perceptive readings, thus corresponding to several items in more comprehensive systems. A Turkish complex item *MIŠ+ÄR-MIŠ* applies an explicitly indirective type of evidentiality to a post-terminally envisaged event and is often used for rumours and gossip, e.g. *Gel-miș-miș* ‘X has/had reportedly arrived’.

The Yakut inflectional marker {*-BIt*} conveys reportive, inferential, and perceptive nuances, e.g. *Kel-bit* ‘X has (obviously) arrived’. The temporally indifferent indirective particle *ä-bit* allows combinations with intraterminals and post-terminals, e.g. *Tur-ar ä-bit* ‘X evidently stands/stood’, *Kel-bit ä-bit* ‘X has/had evidently arrived’.

24.5.5. Smaller systems

There are still smaller evidentiality systems. The status of the Azeri inflectional marker {*-mIš*}, which forms a mixed paradigm with {*-(I)b*}, differs considerably from that of Turkish {*-mIš*}. It represents a type with mainly post-terminal, non-evidential perfect (p. 519) meanings, e.g. *Gäl-miš-äm* ‘I have arrived’, *Yaz-ïb-sïn* ‘You have written’. It is a post-terminal with occasional secondary indirective readings. The unmarked term {*-DI*} thus tends towards preterite functions, e.g. *Gäl-di* ‘X came’ versus *Gäl-ib* ‘X has come’. However, Azeri possesses, like Turkish, an indirective copula particle of the type *ÄR-MIŠ*, namely *i-miš*. The combination *MIš +ÄR-MIŠ* thus unambiguously applies indirectivity to post-terminally envisaged events, e.g. *Yaz-miš-miš* ‘X has/had reportedly written’.

24.6. Contextual interpretations and semantic extensions

The motives for using Turkic indirectives may vary. They may get various contextual interpretations and display various pragmatic extensions of their central meaning.

Indirectives may evoke the impression that the recipient does not/did not witness the event or participate in it consciously, not being in control of it or directly involved in it. However, despite the indirect way of presentation, these meanings are not signalled explicitly.

The recipient may apprehend the event through the senses or take part in it consciously. Lack of participation or control is limited to certain contexts and cannot be the common core meaning. The source of information may be direct evidence, personal, even visually obtained knowledge. Uyghur *Äχmät kä-p-tu* 'Ahmed has (as I note) arrived' can also be uttered by somebody who has witnessed the arrival. The indirective statement just expresses the conscious reception. It does not tell us how something is in reality, but rather how the addresser chooses to present it.

Evidentially unmarked terms may suggest that the source of information is direct experience, but they may also be used for unwitnessed events, e.g. Turkish *Büyü-dü-n* 'You have grown'. They just lack the two-layered information typical of indirectives, and may be used whenever this information seems unessential.

Turkic indirectives may have epistemic connotations in the sense of reservations about the validity of the event as a fact. The indirect way of referring may create uncertainty concerning the realization of the event. Indirectives can be used to disclaim direct responsibility for the truth of the statement, suggesting that the addresser does not vouch for the information. By contrast, unmarked terms may suggest that the addresser is certain of the truth of the information and responsible for it. However, indirectives are not presumptives or dubitatives reducing the factuality of the statement.

As a pragmatic extension of their central value, indirectives may suggest a certain dissociation from the narrated event, i.e. a cognitive or emotional distance to it. Some kind of distance is certainly involved if the addresser does not refer directly to the event, but rather to its reception. Thus *MIŠ* and its counterparts, e.g. in Old East Turkic, have been referred to as 'preterites of distance'. One kind of dissociation from the event may be an ironic relation to it, a reservation interpretable as sarcasm or disdain. An indirective statement may be motivated by caution, modesty, need for a summarizing view, etc., e.g. Turkish *Ben her zaman vazife-m-i yap-mış-ım*, Uyghur *Män daim väzipä-m-ni ada ḳi-pti-män* 'I have (as it appears) always done my duty', Turkish *Önemli bir konu el-e al-mış-sın* 'You have (if I may summarize) addressed an important topic'. Readings of these kinds derive from the indirect post-terminal perspective.

(p. 520) Indirectives of the types *IB-DIR*, *MIš*, *ÄR-KÄN*, and *ÄR-MIš* may, in particular contexts, convey mirative connotations, i.e. be interpretable in terms of new knowledge, discovery, sudden awareness of revealed facts, surprise, mental unpreparedness, perception contrary to one's expectations, admiration, etc. Such readings naturally follow from the notion of indirectivity; what the recipient turns the mind to may come as a surprise. The conscious reception may be sudden or unexpected. The statement that Turkish indirectives may convey new information that is not yet part of the speaker's integrated picture of the world (Aksu-Koç and Slobin 1986) is compatible with the central value of indirectivity. This does not mean that mirativity is their central meaning from which the other uses may be derived (DeLancey 1997). Surprise, novelty, and contrariness to the speaker's expectation are not necessary elements of indirectivity. On the contrary, so-called 'hot news' is typically expressed by the direct preterite marker *DI*. The indirective marker just adds the meaning 'as I am/become aware of', e.g. Kazakh *Ol ket-ip ḳal-ïp-tï*, Uyghur *U ket-ip ḳa-p-tu* 'X has left (as I note)', Turkish *Bu kız ne güzel-miș!* 'How beautiful this girl is!', Uyghur *Bu ḳiz čirayliḳ i-kän!* 'This girl is beautiful!'.

24.7. Differences between grammatical persons

Though evidential specifications are possible in all grammatical persons, certain interdependencies with the person systems may be observed. The semantic interpretations vary according to the degree of the recipient's involvement in the event. There are often differences between the first person singular and other persons. Reportive or inferential uses are naturally most common with third persons.

The narrow definition of indirectivity as the expression of 'the speaker's non-firsthand information' is obviously incorrect. The use of indirectives when speaking of oneself would then necessarily imply lack of awareness, consciousness, or control due to inattention, sleep, drunkenness, coma, etc. However, a definition based on the presentation of the event 'by reference to its reception by a conscious subject', is by no means contradictory to the use of indirectives with first-person subjects.

In Yellow Uyghur, a small Turkic language spoken in Western China, the second and third persons of the past tense tend to take on the evidential marker *IB-DIR*, whereas the first person takes on the non-evidential marker *DI* (Tenišev 1976: 92–3). Roos (2000: 105–6) suggests a unified past tense paradigm, in which first and non-first persons take on different suffixes, e.g. *Män pa^{h}r-tï* 'I went' (*DI*), *Sän part-t-tï* 'You went' (*IB-DIR*).

24.8. Correlations with other grammatical categories

Turkic indirectives are limited to main clauses with a contradictable content, e.g. Turkish {*-mIš*} in *Git-miș* 'X has apparently gone'. Other uses of {*-mIš*}, e.g. in the pluperfect marker (p. 521) {*-mIš-tI*}, cannot express evidentiality. In certain constructions governed

by postpositions such as *gibi* ‘like’, ‘as’, evidentials can, however, occur as non-finite forms, e.g. *git-miș gibi* ‘as if … having gone’.

Indirective copula particles do not combine with the preterite in DI and the related copula particles *e-di, i-di* ‘was’ etc. They are at variance with each other: it would be contradictory to combine indirective markers with items conveying a direct perspective.

Combinations with imperatives are excluded since they would indicate that a direct appeal is expressed in an indirect way, as based on some source. Evidentials may, however, co-occur with necessitatives or debitives, e.g. Turkish *Git-meli-ymiș-sin*, Uyghur *Sän ket-iš-iŋ keräk i-kän* ‘You evidently ought to go’.

In negative sentences, indirectives are not within the scope of negation. The narrated event itself is negated, not its reception by a conscious subject, e.g. Uyghur *U käl-mä-ptu* ‘X has not arrived (as I note)’.

Indirectives may occur in interrogative sentences, e.g. Turkish *O böyle de-miș mi?,* Uyghur *U mundaḳ de-ptu-mu?* ‘Did X reportedly say so?’, Kazakh *Kel-e mi e-ken?* ‘Is X, as it appears, coming?’, *Üy-de mi e-ken?* ‘Is X, as it appears, at home?’, Noghay *Ne-ge kel-gen e-ken-ler?* ‘Why have they, as it appears, come?’. Indirectives may also be used in questions asked on behalf of someone else than the addresser.

24.9. Indirectivity and discourse

Indirectives play various roles according to different discourse types. Both as genuine indirectives and as indirectively interpretable post-terminals the markers *MIŠ*, *GAN*, and *IB-DIR* often serve as propulsive (‘plot-advancing’) basic items in certain narrative styles. In traditional storytelling, e.g. in fairy tales and other folklore texts, indirectives tend to create a specific narrative key, e.g. Uyghur *Burun bir padiša öt-üp-tu, un-iŋ bir bali-si bar i-kän* ‘Once there was a king, he had a child’. On traditional *MIŠ*-based narratives in Turkish see Johanson (1971: 79–80). For similar forms in Shor folk tales see Nevskaya (2002). On the other hand, indirectives are not typically used for recounting dreams or imaginary events in fictional texts.

24.10. Contact-induced code-copying

Indirectives play a central part in almost all Turkic languages. However, owing to influence from Indo-European languages such as Persian, Greek, and Slavic, a few languages only exhibit evidentiality strategies. The tendency of Azeri {*-mIš*}/{*-(I)b*} towards pure perfect readings is a result of Persian influence, e.g. *Yap-ïb* ‘X has done’, cf. Persian *Kard-a ast* (Johanson 1988: 249). Evidentiality systems are lacking in Karaim of Lithuania, under Slavic and Lithuanian impact (Csató 2000b), and in the Turkish dialects of the Trabzon province on the east Black Sea coast, under the impact of Greek (Brendemoen 1997).

Features of Turkic evidential systems have proven highly attractive in language contact situations and have been copied into non-Turkic languages of Southwestern and Central (p. 522) Asia, Southeastern and Northeastern Europe. Indirective categories similar to the Turkic ones typically appear in contact areas such as the Balkans, Anatolia, Caucasus, the Volga region, and Central Asia, e.g. in Bulgarian, Macedonian, Albanian, Kurdish, Western Armenian, Georgian, Tajik, and eastern Finno-Ugric. Northern Tajik has developed a comprehensive evidential system on the Uzbek model. Indirective functions have been copied onto post-terminals of the perfect type and also onto related participles, on the model of the temporally indifferent *ÄR-KÄN* and *ÄR-MIŠ*, e.g. Western Armenian *eɣer* and Bulgarian *bil* (Johanson 1996b). Hungarian *igen* 'yes' may go back to a Turkic form *ÄR-KÄN* 'evidently' (Johanson 2004).

Differences in markedness sometimes seem to speak against the assumption of contact influence. The basic evidential oppositions of Bulgarian and Macedonian are described as relying on marked 'confirmative' items indicating unequivocal and direct assertion, whereas the corresponding unmarked items convey indirective meanings in particular contexts. Have systems based on marked confirmatives emerged through areal contact with Turkic systems based on marked indirectives? Comrie considers the possibility that the semantic distinction can be reduced to a single prototype with markedness inversion: 'one of the systems, almost certainly the Balkan one, has undergone a shift whereby an old indirective was reinterpreted as unmarked, with the originally unmarked non-indirective then becoming a marked confirmative' (Comrie 2000: 8).

24.11. Relations to modal categories

Evidential categories are sometimes difficult to distinguish from presumptive categories. The value of the enclitic element *DIR* < *tur-ur* frequently oscillates between affirmation and presumption. For instance, Turkish *Alanya güzel-dir* may mean 'It is a fact that Alanya is beautiful' or 'I assume that Alanya is beautiful'. The presumptive meaning of Turkish {+*DIr*} is typical of the informal spoken language, e.g. *Zengin-dir* 'I guess X is rich', *Umar-ım iyi-siniz-dir* 'I trust you are well', *İç-miş-tir* 'I guess X has drunk' (Johanson 1971: 294).

The type *DIR* is added to post-terminals, intraterminals, and other forms, e.g. Turkish *Uyu-yor-dur* 'X is presumably sleeping', Turkmen *Oka-n-nïr (Oka-n-dyr)* 'X must have read it', *Oḳo-yaːn-nïr (Oka-ýan-dyr)* 'X is presumably reading it', *Bar-an-nïr (Barandyr)* 'X has presumably gone', *Düš-en-nir (Düş-en-dir)* 'X must have fallen', Bashkir *Kil-ä-lịr* 'X is presumably coming', *Xat-ịm-dï al-ɣan-hịn-dịr* 'You have probably received my letter', Chuvash *Pịl-män-Dịr (Пĕлментĕр)* 'X probably does not know', Kirghiz *Oyɣon-ɣon-dur* 'X has presumably waken up', Uyghur *Kir-i-di-ɣan-di-men* 'I am supposed to enter', *Išlä-vat-ḳan-du* 'X is presumably working', Uzbek *Ket-gȧn-dir* 'X has presumably gone'; cf. Northern Tajik *Rȧftȧgist*.

The East Old Turkic inscriptions display an epistemic particle *är-inč*, an uninflected utterance-final presumptive marker. It may follow preterite forms, which is impossible with evidentials, e.g. Karakhanid *Ol kel-di ärinč* 'X presumably came/has presumably come'. Its counterpart in Old Uyghur and Karakhanid is *är-ki(n)*, expressing speculation and scepticism, e.g. *Män kärgäk är-di-m är-ki* 'I guess I was useful', and often used in interrogative sentences, e.g. *Ol käl-ir mü är-ki* 'I wonder whether X is coming'. This type is reflected by Tuvan *ir-gi*, e.g. *Bar ir-gi bä?* 'I wonder if X is there' (Isxakov and Pal'mbax 1961: 433). Compare Turkish constructions such as *Var mı ki?*, where *ki* is preserved as a rhetorical particle.

(p. 523) In some Turkic languages, the type *ÄR-KÄN* may be used as a modal particle with emphatic uses, meaning 'indeed', 'actually'. In this function, it is an utterance-final stance particle lacking person-number markers. It is a result of contamination with *är-ki(n)*, e.g. Chaghatay *e(r)kin ~ e(r)kän ~ ikin*. Modern markers include Uzbek *-kin*, Uyghur *ikin*, Tuvan *ir-gin*. It is highly improbable that *är-ki(n)* developed to *i-kin* and later to *i-kän*, so that Kuman *ä-gän*, Uzbek *e-kȧn*, etc. are "corrupt" forms of *är-ki(n)* (Gabain 1945: 149, 1959: 68). Uzbek *-kin* cannot possibly be described as a phonetic variant of *e-kȧn*. Uzbek *mi-kin* is a combination with the question particle. Combinations with the preterite are represented by *-di-y-kin, -di-mi-kin*, etc., e.g. *Ket-di-mi-kin* 'I wonder whether X left'. The type *är-ki(n)* is clearly represented by Yellow Uyghur *i^{h}-kin, mi^{h}-kin mi*, utterance-final stance particles expressing subjective evaluation.

The modal type *ÄR-KÄN* may express speculation and scepticism, and is used in questions with the same rhetorical nuances as expressed by *är-ki(n)*. Unlike the evidential *ÄR-KÄN*, it combines with preterites, e.g. Kazakh *Kel-di e-ken*, Uzbek *Kel-di e-kȧn* 'X has indeed arrived'; cf. Turkish *Gel-di ki!*.

It also combines with conditional markers to form modal sentences expressing polite or timid wishes, e.g. Noghay *Yaz-sa-ŋ e-ken*, Kazakh *Ket-se-m e-ken* 'I wish I could go', Uzbek *Yåz-sȧ e-kȧn* 'If only X would write', Uyghur *Yaz-sa-ŋ i-kän* 'What if you would write it?'.

The modal particle *ÄR-KÄN* is commonly used in rhetorical questions with readings such as 'I wonder', e.g. Kuman *Kay-da ä-gän*? 'Where may X be?', Uyghur *Nämišḳa bol-ma-y-di-kän*? 'I wonder why it does not come about'. This is an attenuating usage in order to tone down a question, giving it meditative, sceptical, or timid connotations of wondering and hesitation, similar to the use of *är-ki(n)*.

Kazakh exhibits constructions with the interrrogative suffix {*-mA*} and question words such as *ne?* 'what?', *kim?* 'who?', *ḳay-sï?* 'which?', *ne-ge, ne üšin?* 'why?', *ḳalay, ḳan-day?* 'how?', e.g. *Kel-e-di me eken?* '(I wonder:) Is X coming?', *Kel-di me e-ken?* '(I wonder:) Did X come/Has X come?', *Ne et-ti-m e-ken*? '(I wonder:) What may I have done?', *Ne bol-dï e-ken?* '(I wonder:) What may have happened?', *Xat kim-den e-ken?* '(I wonder:) From whom might the letter be?', *Ḳašan kel-e-di eken?* '(I wonder:) When might X come?'. Noghay distinguishes rhetorical questions such as *Nege kel-gen-ler e-ken?* '(I wonder:) Why have they come?' from evidential questions such as *Nege kel-gen e-ken-ler?* 'Why, obviously, have they come?' (Karakoç 2005: 28–30). The Uyghur rhetorical particle {+*mi-kin*} can

co-occur with the evidential particle {-*(i)kän*}, e.g. *Käl-gän-kän-mi-kin* ‘I wonder if X appears to have come’. Uzbek displays rhetorical questions such as *Kėl-gȧn mi-kȧn*? ‘I wonder if X has come’, whereas the marker {+*mi-kin*} rather expresses doubt in the sense of ‘Has X really come?’.

Utterance-final particles of the types *i-yin* and *i-yän* have exclamatory, emphatic functions, often with mirative overtones, e.g. Dukhan *Gäl-di i-yän* ‘X has indeed arrived’. Tofan *i-yän* displays both evidential and modal functions, which cannot always be clearly distinguished from each other (Rassadin 1978: 271).

Notes on transcriptions and translations

Types of evidential markers are noted in small caps, e.g. *MIŠ, GAN*. Quotations from individual languages are given in italics and in traditional Turcological transcription, e.g. Azeri (p. 524) *Gäl-miš.* Formulas summarizing bound morphemes are placed between brackets of the type {}. Here, capital letters indicate morphophonemic variation, e.g. {-*mIš*}, {-*GAn*}. {*I*} and {*A*} stand for harmonic variation of high and low vowels, respectively. In glosses, indirective inflectional markers are abbreviated as IND.INFL and indirective particles as IND.PART. In examples, constituent segments such as morphemes are divided by hyphens, contrary to the orthographic practices in the respective languages. In translations, X is used for ‘he/she/it’, e.g. Turkish *Gel-miș* ‘X has evidently come’.

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Abstract and Keywords

This chapter gives an overview of Uralic evidential systems: of the type A3 in Finnic, A2 in Mari and Permic, A1 and A2 in Ob-Ugric (with strong mirativization), of B3, C3, and higher types in Samoyedic, i.e. very different in different branches of the Uralic family. Due to this and to similarities in both semantic values and coding with their geographical neighbours, grammatical evidentiality cannot be considered an inherited feature of Uralic languages—but rather appeared due to areal diffusion and independent innovations with different sources, from past tenses to desubordination. Uralic evidentials are not used in commands and tend to be incompatible with non-indicative moods; they are rarely found in negative clauses and questions, in which case they are outside the scope of the negative/interrogative operator; i.e. the content of the clause is negated/questioned, not the information source.

Keywords: Uralic languages, Finnic, Mari, Permic, Ob-Ugric, Samoyedic, evidential systems, sources of evidentiality, language contact

THIS overview of grammaticalized evidentiality in languages of the Uralic family focuses on evidential values, types of coding, structural and stylistic restrictions on the occurrence of evidentials, geographic distribution of evidentiality systems, and the effects of language contact. The discussion is based both on published research on these topics and on the authors' own research.[1] In cited examples we have primarily retained transcriptions and transliterations used by the authors, so this aspect is not quite consistent throughout the chapter; in some cases, the glosses have been changed slightly.

The first general overview that addressed a number of Uralic languages (Haarmann 1970) introduced the term '*indirekte Erlebnisform*' (indirective); since that time a large number of publications have appeared on evidentiality covering practically all Uralic languages. Previous research has identified three geographic hotbeds of grammaticalized evidentiality in the areas where Uralic languages are spoken: the Baltic region (covering

the Uralic languages Estonian and Livonian, and the Baltic languages Latvian, Latgalian, and Lithuanian), the Volga-Kama region (covering the Uralic languages Mari, Komi, and Udmurt and the Turkic languages Chuvash, Tatar, and Bashkir), and Northwestern Siberia (covering the entire Ob-Ugric and Samoyedic branches of Uralic) (e.g. Kehayov 2008: 25–6; Plungian 2010; Csepregi 2014; Urmanchieva 2015).

This chapter is organized as follows: after a short overview of the Uralic language family in §25.1 (classification, sociolinguistic background, typological characteristics, and areal contacts), §25.2 presents the ways of expressing evidentiality in Uralic: lexical markers, evidential strategies, and verbal morphology. §25.3 discusses the evidentiality systems of each branch of Uralic where evidentiality proper has been attested—that is, in Finnic, in the branches of the Volga-Kama area, in Ob-Ugric, and in Samoyedic. §25.4 presents the conclusions and some challenges for future research on evidentiality in Uralic.

(p. 526) 25.1. Uralic languages

The Uralic languages (Map 25.1) include according to different classifications at least thirty languages (Abondolo 1998: 1). The main branches are Finnic, Saami, Mordvin, Mari, Permic, Ugric (Hungarian and Ob-Ugric Khanty and Mansi), and Samoyedic (this classification, including the traditional division into Finno-Ugric and Samoyedic, is still controversial; see Janhunen 2001 for a survey).

Saami (formerly known as Lapp) varieties (see Sammallahti 1998), spoken in Finland, Sweden, and Norway, as well as on the Kola peninsula in Russia, form a continuum of dialects in which perhaps the clearest border separates the Western group (Southern Saami, Ume, Pite, Lule, and Northern Saami) from the Eastern group (Inari, Kemi, Skolt, Kildin, Akkala/Babino, and Ter). The largest variety is Northern Saami with ca. 30,000 speakers; Kemi Saami died out in the nineteenth century, Akkala Saami quite recently, and all the other Saami varieties are endangered to varying degrees.

The Finnic branch of Finno-Ugric comprises seven languages according to Laanest (1982): Veps, Karelian (with three major dialects), Finnish, Ingrian, Votic, Estonian, and Livonian. Estonian includes two genetically quite distant dialect groups, Northern (the basis of the standard language) and Southern Estonian (Viitso 1998; Grünthal 2007). Additionally, some Finnish and Estonian varieties are considered minority languages: Kven in Norway and Meänkieli in Sweden, and Võru and Setu in Southern Estonia (also Setu in Russia).

In the Volga region of European Russia, the Mordvin and Mari (formerly known as Cheremis) languages are each represented by two main dialect groups and two standard literary languages: Erzya and Moksha Mordvin, and Hill (Western) and Meadow (Eastern) Mari.

The Permic languages are Komi (formerly Zyrian) in the northeast of European Russia (with two standard languages: Komi-Zyrian in the Komi Republic and Komi-Permyak in

the former Komi Permyak district), and Udmurt (formerly Votyak) in the eastern part of the Volga region.

Hungarian is the westernmost Ugric language, spoken in Hungary and neighbouring countries; its sister languages in Western Siberia on the Ob river (Ob-Ugric) are Khanty (formerly known as Ostyak) and Mansi (formerly known as Vogul), each with a set of strongly differentiated dialects, many of which are already extinct.

Samoyedic is traditionally divided into the Northern and the Southern group. Of the Northern Samoyedic varieties, Nenets (or Yurak) and Enets (or Yenissei Samoyedic) are closely related; both have two varieties, Forest and Tundra. Nganasan (or Tawgi) differs considerably from both of them. Of the Southern Samoyedic languages only Selkup (or Ostyak-Samoyedic) is spoken today; Mator became extinct in the first half of the nineteenth century and Kamas in 1989 with the death of the last ‘rememberer’.

25.1.1. Sociolinguistic background

Until the nineteenth century all Uralic languages were spoken by minority peoples in larger states. Hungarian was the first Uralic language for which a standard written variety was (p. 527) (p. 528) created in the period between the thirteenth and fifteenth centuries. The original alphabet (called Abur) for Komi was created in the fourteenth century. Estonian and Finnish literary languages were codified in the sixteenth century.

Map 25.1. Uralic languages

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The independent nation states Hungary, Finland, and Estonia appeared after World War I. The national and language policy of the Soviet Union in the 1920s and 1930s led to the creation of new written languages for many Uralic-speaking minorities. The newly created orthographies were based on phonemic principles and utilized the Latin alphabet. The reform of 1937 introduced the Cyrillic alphabet; later additional symbols for phonemes such as long vowels or /ŋ/ were added.

None of the Uralic languages spoken on the territory of the former Soviet Union have a full range of functions outside the domestic sphere; many are spoken mainly within traditional rural communities. Russian remains the dominant language in all other spheres, including schools. All Uralic-speaking minorities are bi- or multilingual; many languages are endangered and some have recently become extinct (see Table 25.1). The earliest and most efficient (p. 529) revitalization projects in the modern sense began with the Saami in Northern Scandinavia and Finland in the last decades of the twentieth century (Huss 1999).

Table 25.1. 2010 Census on Uralic peoples of Russia

	national population	**language proficiency**
Veps (Finnic)	5933	1638
Ingrian (Finnic)	265	63
Vote (Finnic)	64	8
Karelian (Finnic)	60746	16290
Saami	1769	296
Udmurt (Permic)	551761	342963
Komi-Permyak (Permic)	94404	56817
Komi-Zyrian (Permic)	228025	135819
Mari	547044	386384
Mordvin	743602	439334
Mansi (Ugric)	12238	1773
Khanty (Ugric)	30733	11241
Nenets (Samoyedic)	44542	32640
Enets (Samoyedic)	227	102
Nganasan (Samoyedic)	858	563

Selkup (Samoyedic)	3642	1334

Source: http://www.gks.ru/free_doc/new_site/perepis2010/croc/Documents/Vol4/pub-04-22.pdf, http://www.gks.ru/free_doc/new_site/perepis2010/croc/Documents/Vol4/pub-04-08.pdf, accessed on 15 May 2016

25.1.2. General typological characteristics

Uralic languages show substantial typological diversity even in core grammatical features (see Laakso 2011 for an overview). This diversity is tied to geographic areas and accordingly is interpreted to be a result of massive contact influences (Germanic in the West, Turkic in the South, Palaeosiberian in the East, and recently also Russian).

Uralic languages are mostly agglutinating, but Finnic, Saami, and some Samoyedic languages show more complex morphophonology (including stem and suffix alternation, and fusion). Vowel harmony is present in many languages (e.g. Hungarian and Finnish), but lost in others (e.g. Estonian). Affixes are mostly suffixes, but some languages (most notably Hungarian, see Kiefer 2010) also have ‘prefixes’ or ‘preverbs’. Case systems are usually quite developed (fifteen cases in Finnish, fourteen in Estonian, sixteen to twenty-seven by different accounts in Hungarian); however, some Northern Khanty varieties have only three cases. Mordvin and Samoyedic languages allow conjugation of predicative nouns (e.g. Nenets *χāsawa-dam-ś* human.being-1SG-PAST ‘I was a human being’). In addition to the singular (unmarked) and plural, dual number is preserved in Ob-Ugric and Samoyedic, and partly in Saami. Negation is usually expressed by a construction ‘negation verb + connegative form of the lexical verb’.

The dominant constituent order is AVO/SV in Finnic, Saami, Mordvin, and Komi and AOV/SV in Mari, Udmurt, Ugric, and Samoyedic languages. Modifiers are always preposed to the head noun in the eastern Uralic languages; in the West (Finnic, Saami, and Hungarian) some types of postposed modifiers are also possible. Clause combining employs bifinite structures with conjunctions in the West and non-finite strategies in the East.

25.2. Types of evidentiality expression in Uralic languages

Evidentiality in Uralic languages has been grammaticalized to varying degrees and in different forms, but two types of items are prominent: a) sentential particles §25.2.1, and b) verbal morphology §25.2.3. In this overview we will focus on the second type.

Lexical expression of evidentiality through epistemic and evidential adverbs and parentheticals is present in most of the Uralic languages, especially in languages without grammaticalized evidentials (see example (6a)–(6c), from Hungarian).

Finally, many Uralic languages possess evidential strategies, i.e. evidential extensions of categories whose main function is non-evidential; e.g. for Finnic and Saami languages, with their Indo-European contact, the use of modal verbs with evidential reading is typical (see §25.2.2).

Not all evidential strategies are eventually grammaticalized into proper evidentials. It is a matter of general consensus that Estonian, Livonian, Mari, Komi, Udmurt (Kehayov and Siegl 2007), and also Khanty, Mansi, and the Samoyedic languages have grammatical evidentiality systems. In contrast, the Saami languages, most of the Finnic languages, Mordvin, and Hungarian have a number of evidential strategies, but no grammatical evidentials. (p. 530)

In general, the occurrence of grammatical evidentials within Uralic does not correlate with genetic subgrouping. Languages belonging to the same branch within the family may vary widely as to how evidentiality is coded. For instance, Estonian and Votic are very closely related, but Estonian has grammatical evidentiality and Votic lacks it.

25.2.1. Particles and other lexical expressions

Most if not all Uralic languages have particle-like elements that convey evidential meanings, among other functions; and as a rule these are not studied as much as evidentials of the verbal morphological type. Therefore, we will only briefly discuss them.

Cross-linguistically, typical sources of evidential particles are verbs of perception and verbs of speech (Aikhenvald 2004a; Boye 2010a; for Uralic verbs of speech, see Serdobolskaya and Toldova 2011). Finnish evidential particles include i.a. *näköjään* (direct sensory evidence and inference) and *kuulemma* (hearsay), from the perception verbs *näke-* ‘see’ and *kuule-* ‘hear’:

(1)

Finnish

Aino	on	**näköjään/kuulemma**	söpö
Aino	be:PRES.3SG	seemingly/hearsay	cute

They say/it seems that Aino is cute. (Kittilä 2015: 359)

Evidential particles of similar origin can be found in other Finnic languages and in the Saami languages (e.g. Fernandez-Vest 1996); cf. the Northern Saami particle *gusto* ‘apparently’ (cf. *kuostuđ* ‘to be seen’, Itkonen 1986: 440) expressing inference based on direct perception.

(2)

Northern Saami

Máhtege	lea	**gusto**	oastán	ođđa	mohtorgielkká.
Matti:PART	be.3SG	EVID.PART	buy:PAST.PARTIC	new:GEN	motor_sledge:GEN

Matti has apparently bought a new motor sledge. (Fernandez-Vest 1996: 179)

However, evidential particles are also compatible with grammaticalized evidentiality systems, especially if they do not replicate their functions. Consider the examples in (3) from Komi-Zyrian (a language with an evidentiality system; see §25.3.2.2) with the quotative particle *pö*. As can be seen from (3b), where the deictic orientation of the source utterance (1SG) is preserved, this particle is restricted to quotations (see Aikhenvald 2008; and Toldova and Serdobolskaya 2014 for discussion of such semi-direct speech markers).

(3)

Komi-Zyrian

a.

Marko	viśtal-is,	myj	jen	vol-öma	**pö.**
Marko	say-PASTI.3SG	CONJ	God	be-PASTII.3SG	QUOT

Marko said that God was around. (Klumpp 2016: 553)

b.

Anna	šu-öma,	myj	lokt-a	**pö.**
Anna	say-PASTII.3SG	CONJ	come-FUT.1SG	QUOT

Anna has said that she will come (lit. that I will come). (Klumpp 2016: 570)

(p. 531)

25.2.2. Evidential strategies

The main sources of evidential extensions in Uralic are expressions of modality, parenthetical clauses with cognition and speech verbs, and past tense forms.

Frequent markers of modality with evidential extension are modal verbs; in Finnic languages they typically occur in *irrealis* form, cf. (4) with deontic and evidential ('reported') readings of the verb *pitä-* 'must' (Hakulinen et al. 2005: §1497); cf. also (6b) in Hungarian.

(4)
Finnish

Täällä	**pitä-isi**	olla	tiskikone.
here	must-COND.3SG	be:INFIN	dishwasher

a. One would need a dishwasher here.
b. Reportedly, there is a dishwasher here. (Hakulinen et al. 2005: §1497)

An example of a past tense form extended to express a report is (5) from Estonian. In this language the pluperfect is sometimes used to mark hearsay, in which case it loses its complex time reference. If the narrator had observed the situations depicted in (5) himself, he would have used the simple past (imperfect); this means that the contrast between the pluperfect and the simple past here is not temporal, but evidential (Kehayov 2008: 130).

(5)
Estonian

Kui	Mari	eile	läbi	metsa	koju	**oli**
when	Mari	yesterday	through	forest:GEN	home	be:PAST.3SG
läinud,	**oli**	ta	suure	põdrapulliga	vastamisi	
go:PAST.PARTIC	be:PAST.3SG	s/he	large.GEN	bull_elk:COMIT	face_to_face	
sattunud.						
come:PAST.PARTIC						

When Mari (reportedly) went home through the woods yesterday, she (reportedly) came face to face with a large elk bull. (EKG II: 36–7)

Parenthetical constructions are usually clauses with cognitive verbs, or verbs of perception or speech, which are not supported by complementizers in the content clause ('I think that A' > 'A, I think'), e.g. in Hungarian *úgy tudom* 'as far as I know', *úgy tűnik* 'it seems' and similar expressions. As Hungarian has no grammaticalized evidentials, evidential meanings such as inference can be expressed by epistemic adverbials; e.g. *valószínűleg* 'probably' or *állítólag* 'supposedly' (6a), modal expressions (6b), or parentheticals (6c):

(6)
Hungarian

a.

Valószínűleg	otthon	van,	mert	ég	a	villany.
probably	at_home	be:PRES.3SG	because	shine:PRES.3SG	DEF	electricity

He is probably be at home, because the light is on.

b. Otthon **kell** len-**ni**-**e** (mert ég a villany.)
at_home must be-INFIN-POSS3SG
He must be at home, because the light is on.

c. Otthon van, **úgy** **tűnik**, (mert ég a villany.)
at_home be:PRES.3SG so seem: PRES.3SG
He seems to be at home (because the light is on).

(p. 532)

25.2.3. Grammatical evidentials

Grammatical evidentiality systems are of main interest for the present chapter and we will discuss them in detail in §25.3. The main distinction is between languages with one, exclusively 'reported' term (type A3 after Aikhenvald 2004a), languages with one non-firsthand term (type A2), and languages which distinguish between 'reported' and other terms (types B and C).

Various sorts of verbal morphology have been conventionalized for the expression of these evidential terms. In many Uralic languages, participles used as finite predicates in main clauses express non-firsthand evidentiality, i.e. reported and/or inferential meanings with mirative extensions. It can be only the past participle (e.g. in (15) from Livonian) encoding such meanings, or both past and non-past participles building temporal opposition within the evidential system (e.g. in Ob-Ugric); Jalava (2015: 31) states that ten out of sixteen modal and evidential finite suffixes in Nenets were originally participles in finite use, single or in combination with derivational elements. Person-marking on such evidentials varies: either the predicative (verbal) personal marking or possessive (nominal) personal marking; in some languages, e.g. Mansi or Nenets, both can occur with different forms. Three major grammaticalization paths of participles can be observed. The first path is by reanalysis of perfect tense forms and their gradual conventionalization from evidential strategy to dedicated evidentials ('verbalization' in Jalava 2015). According to the second path, participial forms get a place in the finite paradigm as evidentials through desubordination (called 'insubordination' by Evans 2007), mostly as complement clauses with an omitted main verb of cognition or perception (Ikola 1953: 48–58; Kask 1984: 273; Campbell 1991; Skribnik 1998; Jalava 2015). The third path concerns a reanalysis of a participial attributive clause with a head noun of abstract semantics. The latter gets the status of a particle (e.g. Surgut Khanty, see §25.3.3.2) or becomes a suffix after cliticization (e.g. Northern Samoyedic 'auditive', see §25.3.4).

Although the participial type of evidentiality coding is the dominant one for Uralic, several languages exhibit grammatical evidentials with non-participial origin.

25.3. Evidentiality systems in individual branches and contact areas

25.3.1. Finnic

Of seven Finnic languages only Estonian and Livonian have regular grammatical evidentials. Estonian dialects manifest various verb forms to express reportativity, most of them based on desubordinated forms; cf. (7), containing what is historically a partitive case form of the (p. 533) present participle[2], and accordingly, referring to the present tense, (8) with the past participle (and past time reference), see Kehayov and Siegl (2007), (9) with the *da*-infinitive, (10) with the *ma*-infinitive (also called 'supine' by some Estonian linguists), marking e.g. clauses of purpose (Ikola 1953: 29–30; Kask 1984: 272–3); (11) with a deverbal noun (agentive nominalization), and (12) with the inflectional suffix *na*- which most likely goes back to the potential mood (Metslang and Pajusalu 2002). In Standard Estonian only the first three (7)–(9) are represented. All these morphological devices encode one specific evidential value: 'reported', i.e. the Estonian evidentiality system belongs to the A3 type after Aikhenvald (2004a).

(7)
Estonian

Ta **ole-vat** linnas.
s/he be-EVID town:INE
Reportedly, she is in town. (< PRES.PARTIC:PARTIT)

(8)
Ta **ol-nud** linnas.
she be-EVID town:INE
Reportedly, she was in town. (< PAST.PARTIC)

(9)
Ta **olla** linnas.
she be.EVID town.INE
Reportedly, she is in town. (< *da*-INFIN)

(10)
Ta **ela-ma** hästi.
she live-EVID well
Reportedly, she is living well. (Central Estonia; Erelt 2002b: 94) (< *ma*-INFIN)

(11)

Vennad	**ole-ja**	mõlemad	joonu.
brother.PL	be-EVID	both	drink:PAST.PARTIC

Reportedly, both brothers have been drinking. (Southwestern Estonia; Kask 1984: 273) (< AGNMLZ)

(12)

Sis	na	**ol-na**	julge, …
then	they	be-EVID	bold

Then they are said to be bold, … (Southeastern Estonia; Metslang and Pajusalu 2002: 100)

All these forms contrast with the finite indicative present and past, not specified with respect to the source of information, cf. (13), though the simple past tense in contrast with the Reported can imply firsthand information.

(13) Estonian

Ta	**on/**	**oli**	linnas.
she	be:PRES.3SG	be:PAST.3SG	town:INE

She is/was in town.

(p. 534)

The evidentiality system of Livonian is semantically identical to that of Estonian: it encodes the distinction between ‘reported’ and ‘unmarked’, and distinguishes present and past tense (Kehayov, Metslang, and Pajusalu 2012). The marked value ‘reported’ is encoded in the present tense by a morphological device which is marginally present in Estonian as well: the agentive nominalization in *–(j)I* (14). The grammaticalization of the *nomen agentis* into an evidential is an areal feature of the Estonian dialects of the southwestern corner of mainland Estonia, Salaca Livonian (which had already become extinct in the nineteenth century), and Courland Livonian, whose last native speaker passed away recently. In other words, this may be an instance of areally induced grammaticalization; see also Aikhenvald (Chapter 7 of this volume) about Latvian influence on Livonian. The corresponding form of the ‘reported’ in the past tense is the copula-less past participle (15), as in (8) from Estonian.

(14)
Livonian

…ku	ta	**sō-ji**	tijā	makkõks	kilmõ
if	he	get-EVID(< AGNMLZ)	empty:GEN	stomach:INST	cold:PARTIT
vietā	jūodõ,	ta	**ē-ji**	īd	reitkõks
water:PARTIT	drink:INFIN	he	go-EVID(< AGNMLZ)	one:GEN	time:INST
ūlõks					
mad:INST					

… reportedly, if he gets to drink water on an empty stomach, he goes mad at once. (Kehayov, Metslang, and Pajusalu 2012: 46; glosses and translation modified)

(15)
Livonian

un	nei	nemat	**salõla-tõt**	un	**jellõ-nd**
and	so	they	marry-EVID(< PAST.PASS.PARTIC)	and	live-EVID(< PAST.ACT.PARTIC)

And, as the story goes, they were married and lived together. (Kehayov, Metslang, and Pajusalu 2012: 45; glosses and translation modified)

In both languages the reported term tends to convey doubt and lack of full epistemic support (reliability), especially in the case of the first person subject. First person occurrences however do not lead to mirative effects, because the Finnic evidentials are exclusively reportative and do not mark inference—a notion linked to mirativity (DeLancey 2001).

Despite the specialization on reported evidentiality, Estonian evidentials are not conventionalized in TV and radio broadcasts. At the same time, the main form of the predicate in popular and traditional narratives in both Estonian and Livonian is the past participial evidential (Kehayov, Metslang, and Pajusalu 2012), but not the present reported form.

Finally, in both Estonian and Livonian third person Imperatives (Estonian *-gu*/*-ku*) have been extended to all other persons in indirect commands, issued from a non-participant in the speech situation. The new paradigm has been has called ‘Jussive’ (e.g. Erelt 2002a on

Estonian). Compare, for example, the regular 2SG Imperative in (16) with the 2SG Jussive expressing a command coming from a non-participant in (17).

(16) Estonian

Tee	talle	teene.
do.IMP.2SG	s/he:ALL	favour

Do him/her a favour!

(p. 535)

(17)

Sa	**teh-ku**	talle	teene.
you	do-JUS	s/he:ALL	favour

(*X* said that) you should do him/her a favour.

This has prompted a distinction between two ‘modes of reporting’ in Estonian grammaticography: the ‘reported indicative’ (represented in (7)–(12)) and the ‘reported imperative’ (the ‘Jussive’ in (17)) (Rätsep 1971). In other words, the Estonian and Livonian (see Kehayov, Metslang, and Pajusalu 2012) evidential systems distinguish different values of the illocutionary force of the original utterance: reports of declaratives versus reports of directives. Accordingly, Estonian and Livonian have two subsystems of marking evidentiality: one for declarative clauses and one for imperative clauses. Both subsystems are binary, with ‘reported’ as the marked term.

Finnic grammatical evidentials: a) do not occur in interrogative clauses, b) are not compatible with morphological mood and modality (such as the Conditional or Imperative), c) are regularly negated but semantically are always outside the scope of negation (i.e. they express 'evidence for negated *p*' rather than 'negation of the evidence for *p*'), d) are compatible with all persons, and e) occur in dependent clauses containing conjunctions (Kehayov 2004 for Finnic; and Kehayov, Metslang, and Pajusalu 2002 for Livonian); e.g. in (18) the Estonian reported evidential occurs in a complement clause of the verb 'write', and in (19) in a relative clause.

(18)
Estonian

Nende	kohta	kirjutas	kroonik	Henrik,	et	nad	**ole-vat**
they:GEN	about	write:PAST.3SG	annalist	Henrik,	that	they	be-EVID
kannatanud	suurt	eestlaste	ja	liivlaste			
suffer:PAST.PARTIC	great:PARTIT	Estonian:PL.GEN	and	Livonian:PL.GEN			
ülekohut							
injustice:PARTIT							

The annalist Henrik wrote about them that they have suffered under a great injustice from Estonians and Livonians.[3]

3

(19)

Venelased	ja	teisedki	naersid	eestlaste	üle,	**kes**
Russian:PL	and	other:ALSO	laugh:PAST.3PL	Estonian:PL.GEN	over	who
taht-vat	täita	vene	korraldusi	saksa	täpsusega.	
want-EVID	fulfill.INFIN	Russian	order:PL.PARTIT	German	precision:COMIT	

The Russian and the others were laughing at Estonians, who have been said to want to fulfil the Russian orders with German precision.[4]

4

As has been previously mentioned, it is generally assumed that the reported term of the Estonian evidentiality system arose via omission of the matrix clause and desubordination of its non-finite complement clause (cf. Ikola 1953: 48–58; Kask 1984: 273; Campbell 1991). In examples (18) and (19) the reported evidential, despite its participial origin, occurs after (p. 536) subordinating conjunctions that are exclusively compatible with finite clauses. This provides further evidence that the finitization of the former non-finite verb form has been completed and its distribution has been extended from complements of mental predicates to other types of dependent clauses.

Estonian and Livonian encode reported evidentiality with structures similar to those found in the evidentiality systems of Baltic languages.[5] Therefore, the rise of grammatical evidentiality systems in Southern Finnic has often been explained in terms of areal convergence among the languages on the east coast of the Baltic Sea (Ikola 1953: 48; Klaas 1997; Metslang, Muižniece, and Pajusalu 1999; Kehayov, Lindström, and Niit 2011).

25.3.2. Volga-Kama area

As an area of linguistic contact between Uralic and Turkic languages, and since the sixteenth century also Russian, this region is known as the Volga-Kama *sprachbund* (Wintschalek 1993 and the references therein). Evidentials are grammaticalized in all Turkic languages, as well as in the Mari and Permic branches of Uralic (also see Johanson, Chapter 24 of this volume).

25.3.2.1. Mari languages

The evidentiality system of Mari has developed as the result of reanalysis of the tense system. Both contemporary literary Mari languages, Meadow Mari and Hill Mari, have six past tenses: synthetic Past I and Past II, encoding 'witnessed' (firsthand) and 'non-witnessed' information respectively (20) and (21), and four periphrastic past tenses as combinations of the present tense or Past II forms of the lexical verb with the Past I or Past II forms of the auxiliary verb 'be' (see Table 25.2).

(20)

(Yelu offers some food to her friend Zoya. Zoya eats the delicious thing and says:)
Jelu, tə̑j-ə̑n eger č̆-et mə̑-lan-em peš **kelšə̑-š.**
NAME you-GEN flatbread-POSS2SG I-DAT-POSS1SG very appeal-PASTI.3SG
(Witnessed:) Yelu, I liked your flatbread (lit. it was appealing to me) (Yakimova, Krylova, and Zorina 1990: 104; Pomozi 2014: 87)

(21)

(A description of the traditional eating habits of Maris.)
Marij-vlak šošə̑m mo-gaj šür-ə̑m **šolt-en-ə̑t?**
Mari-PL in_spring what-kind soup-ACC cook-PASTII-3PL
(Unwitnessed:) What kind of soup did Maris cook in the spring? (Yakimova, Krylova, and Zorina 1990: 129; Pomozi 2014: 87)

Historically, the Past II forms are built from the old *n*-participle (Lavrent'ev 1972: 258; Fedotov 1972) that functions in the modern language as the *n*-converb (see e.g. Bartens 1979: 143–50 for a description of its functions) and the reduced present tense form of the (p. 537) verb *ul-* 'be'. In dialects the periphrastic origin of the second past is still recognizable in some forms; cf. 1PL*purə̑n ulə̑na* 'we have bitten', 2PL*purə̑n ulə̑ða* (Alhoniemi 1993: 106; Lavrent'ev 1972: 257, 260–1).

Table 25.2. Temporal/evidential system in the Meadow Mari indicative (terms after Alhoniemi 1993: 104–7; Serebrennikov 1960: 171–8)

Terms, forms	Function and meaning	Example
Present tense -Ø	Non-past, evidentially neutral	*tol-eš* 's/he comes/is coming/will come'

Past I (palatalization) + *e/-o/-ö/-š*	Witnessed past	*toľ-o* ‘s/he came’
Past II *-ə̑n/-en*	Non-witnessed past, mirative extension	*tol-ə̑n* ‘s/he came, apparently’
Periphrastic imperfect I V-PRES + AUX.PAST I	Witnessed past continuous	*tol-eš ə̑ľe* ‘s/he was coming’
Periphrastic imperfect II, V-PRES + AUX.PAST II	Non-witnessed past continuous, mirative extension	*tol-eš ulmaš* ‘s/he was coming, apparently’
Periphrastic perfect I V-PAST II + AUX.PAST I	Witnessed pluperfect	*tol-ə̑n ə̑ľe* ‘s/he had come’
Periphrastic perfect II V-PAST II + AUX.PAST II	Non-witnessed pluperfect, mirative extension	*tol-ə̑n ulmaš* ‘s/he had come, apparently’

The Past II arose in Mari as a resultative perfect (e.g. Lavrent’ev 1972: 259), which at some point acquired inferential and reportative meanings (‘unwitnessed’ according to Serebrennikov 1960: 167). Non-firsthand evidence is now the prevailing meaning of Mari Past II forms, though their use in firsthand contexts can still be observed (see Serebrennikov 1960: 160–1). Mirative extension is also present; e.g. (22) denotes that the addressee exceeded the speaker’s expectations.

(22)
Mari

Kata-t-ə̑m	tošk-en=at	pə̑tar-en-at!
footwear-POSS2SG-ACC	step-CONVB=CLIT	finish-PASTII-2SG

You’ve already worn out your footwear! (CML[6])

6

In addition, Mari Past II is compatible with activities and states with long duration (imperfective aspect: continuous or habitual) and resultativity (Serebrennikov 1960; Lavrent’ev 1972: 259). Past I, on the other hand, usually has perfective aspectual meaning and is compatible with achievements and accomplishments (Serebrennikov 1960:

158–9). Accordingly, the evidential distinction in Mari interrelates with aspectual distinctions. (p. 538)

(23)
Mari

(On the white top of the hill I noticed a reddish-yellow fox)
Rəvəž koľa-m **kuć-a** **ulmaš.**
Fox mouse-ACC catch-PRES.3SG be:PASTII
Apparently, the fox was hunting mice. (Serebrennikov 1960: 161)

(24)

Peš sajən **əštəl-əda** **ulmaš!**
very well do-PRES.2PL be:PASTII
You did excellently! (Serebrennikov 1960: 178)

In analytical past tenses the firsthand/non-firsthand distinction is also present; e.g. in (23), the periphrastic imperfect II conveys an inference based on physical evidence, in (24) with a mirative extension:

Mari evidentials can occur in interrogative clauses. (21) exemplifies a content question; it refers to the information source of the 'answerer' (the 'questioner' expects non-firsthand knowledge). Example (25) demonstrates both non-witnessed and witnessed past; the former conveys also mirativity. Finally, in (26) the Past II occurs in a polar question; here it refers to some non-firsthand evidence the 'questioner' has that the addressee has been shooting.

(25)
Mari

Mo-lan **ör-ən-at?** Košt-m-et-əm
what-DAT be_surprised-PASTII-2SG walk.PARTIC.PASS-POSS2SG-ACC
mondə-š-əć **mo?** Ške sakə-ktə-š-əč.
forget.PASTI.2SG INTER REFL hang_up.CAUS.PASTI.2SG
Why are you surprised? Have you forgotten our relations (lit. my going)? You impregnated (me) yourself. (CML)

(26)

Təj **lüjəlt-ən-at?**
you shoot-PASTII-2SG
Did you shoot? (Serebrennikov 1960: 168)

As far as compatibility with morphological moods and modalities is concerned, Mari evidentials are not compatible with the Imperative, but the Desiderative has two periphrastic forms, 'imperfect I' and 'imperfect II'; the latter conveys non-witnessed volition or attempt:

(27)

Hill Mari

Koľa	məń-əm	**už-ne-žə**	**ə̑l-ə̑n**, . . .
NAME	1SG-ACC	see-DESID-3SG	be-PASTII.3SG

Allegedly, Kolya tried to see me (but could not). (Alhoniemi 1993: 121)

The non-witnessed past tenses are regularly negated, but, as in Finnic, the negation is within the scope of evidentiality (the content rather than the speaker's inference is negated in (28)): (p. 539)

(28)

Tudo	tə̑-ške	**tol-ə̑n**	**o-g-ə̑l.**
s/he	here-ILL	come-PASTII	NEG-PRES.3SG-be

He has not come here. (Saarinen 2015: 338)

All non-witnessed forms demonstrate the 'first person effect', describing non-controlled events, often with a mirative extension (although the periphrastic forms are rare in such use):

(29)

ondal-alt-ə̑n-am	**ulmaš**
cheat-PASS-PASTII-1SG	be:PASTII

(On the next day after the wedding it became clear:)
I was cheated, as it turned out. (CML)

As clause combining in Mari is based on non-finite forms, Mari evidentials do not occur in dependent clauses. The non-witnessed term is observed in combination with the verb *man-* 'say', which does not function as a complement-taking predicate in such contexts; it is rather a parenthetical 'they say' (probably undergoing grammaticalization to a reportative marker):

(30)

Tudo	tə̑-gaj-lan	peš	kuan-a,	**man-ə̑t**
s/he	this-like-DAT	very	be_happy-3SG	say.PRES-3PL

S/he will be very happy about something like this, they say. (CML)

Finally, the evidential forms of Past II occur conventionally in Mari journalese. This is an exceptional development, as the Finnic and Permic languages have not conventionalized their evidentials in literary registers (Serebrennikov 1960: 168).

It could be concluded that the 'firsthand versus non-firsthand' contrast is fused into the past tense system of Mari. However, there are indications that this category is getting lost in the language of the younger generation (Kuznetsova 2002). In colloquial speech, the use of the 'firsthand' Past I is shrinking, but the 'non-firsthand' Past II is expanding its use to witnessed events, so that in that opposition Past I is the marked member and Past II the unmarked one (Jeremy Bradley, personal communication).

The coding of non-firsthand evidentiality in Mari with these particular structures has been explained as grammatical replication from Turkic languages, especially Chuvash (e.g. Bereczki 1984; Koizumi 1996; see also Bartens 1979: 143–50 on Chuvash influence on the use of the *n*-converb in Mari).

25.3.2.2. Permic

The Permic branch of Finno-Ugric consists of Komi-Zyrian and Komi-Permyak (henceforth these two varieties will be subsumed under 'Komi'), and Udmurt. The evidentiality systems of Permic languages are built into the tense system and are otherwise similar to the Mari evidentiality system described in §25.3.2.1. Just like Mari, Udmurt and Komi distinguish two simple (synthetic) past tenses: the so-called 'Past I', morphologically a finite form, and the 'Past II', which is based on the past participle in *-m(a)*, which functions as a verbal noun (Leinonen and Vilkuna 2000; Siegl 2004: 25–9), followed by the nominal possessive suffixes. (p. 540)

Table 25.3. Temporal/evidential systems in Komi and Udmurt (terms after Serberennikov 1960: 52–85, 115–35; Leinonen 2000: 433–4)

Label, form	Function	Example
Present tense	Non-past, evidentially neutral	Komi *munö* 's/he goes/is going'
		Udmurt *mynè* 's/he goes/is going'
Past I	Witnessed past	Komi *munìs* 's/he went/was going'
		Udmurt *mynîz* 's/he went/was going'
Past II	Mostly non-witnessed past, mirative extension	Komi *munöma* 's/he has gone/went, apparently'

		Udmurt *mynèm* ‘s/he has gone/ went, apparently’
Past continuous I V-PRES + AUX.PAST I	Witnessed past continuous	Komi *munö völi* ‘s/he was going’
		Udmurt *mynè val* ‘s/he was going’
Past continuous II V-PRES + AUX.PAST II	Non-witnessed past continuous, mirative extension	Komi *munö völöm* ‘s/he was going, apparently’ (rare)
		Udmurt *mynè vylèm* ‘s/he was going, apparently’ (rare)
Pluperfect I V-PAST II + AUX.PAST I	Witnessed pluperfect	Komi *munöma völi* ‘s/he had gone’
		Udmurt *mynèm val* ‘s/he had gone’
Pluperfect II V-PAST II + AUX.PAST II	Non-witnessed pluperfect*	Komi *munöma völöm* ‘s/he had gone, apparently’ (very rare)
		Udmurt *mynèm vylèm* ‘s/he had gone, apparently’ (rare)

(*) The information about the functions of this form is scarce; we have not come across unequivocal mirative uses in the literature.

Table 25.3 demonstrates Komi and Udmurt tense and evidentiality distinctions.[7]

In addition, Komi and Udmurt can combine the Past II form of the auxiliary (Komi *volöm*, Udmurt *vylèm*) with the future form of the lexical verb. Such forms seem to be extremely rare in Komi, as they are not mentioned by Siegl (2004); Leinonen (2000: 434) presents only one such form: *völöm ćukörtćasny* ‘it turned out that they would gather’. In Udmurt, such forms seem to be more regular; functionally they merge non-witnessed evidentiality with frequentative lexical aspect: e.g. *mynoz vylèm* ‘allegedly/apparently s/he would go (repeatedly)’ (Serebrennikov 1960: 126). (p. 541)

The qualification ‘mostly non-witnessed past’ for Past II in the table suggests that the Permic second past has both non-evidential and evidential usage: either it functions as a resultative past (31), or it marks non-firsthand evidentiality which receives, depending on the context, reportative (32), inferential (33), or mirative reading (34). Similar examples can be found in Udmurt where Past II has the same semantic distribution as its Komi cognate (see e.g. Serebrennikov 1960: 118–20; Leinonen and Vilkuna 2000; Winkler 2001: 50–1; Siegl 2004: 131–8, 140–1).

(31)

Komi

Tol’a,	te	talun	stolövöjad	ötnad	vetly …	Me
NAME	you	today	dining.room:ILL:2SG	alone	go:IMP.2SG	I

s’ojöma-juöma

eat:PASTII.1SG-drink:PASTII.1SG

Tolya, go the dining room alone today. I have eaten and drunk. (Leinonen and Vilkuna 2000: 503) (resultative)

(32)

Šuony	don’âsys	pö	bara	**sodömny**
say:PRES.3PL	price:NOM.PL	PART	again	rise:PASTII:3PL

They say the prices have allegedly risen again. (Tsypanov and Leinonen 2009: 31) (report)

(33)

ńe	važön	**kuᵛöma**	yššö	šonyt
not	long.INST	die:PASTII.3SG	still	warm

[The man takes the fox in his hand and says:] He must have died recently, (the body) is still warm. (Kehayov and Siegl 2007: 89) (inference)

(34)

no-pö	tayke-pö	vijas,	te-pö	polyš
so-PART	this_when-PART	kill:FUT.3SG	you-PART	coward:POSS3SG

völömyd

be:PASTII:2SG

This (bear) almost killed me, and you turned out to be a coward! (Kehayov and Siegl 2007: 89) (mirative)

The main functional difference between Komi and Udmurt second past tenses lies in the domain of discourse organization. In Udmurt, the second past is the default form in traditional narratives (folk tales, etc.), a function almost absent from Komi, where the second past is used for ‘framing’ narratives (Siegl 2004: 98, 99–100, 108–9, 129–30). Komi traditional narratives may start with a few sentences in the second past, but then the perspective changes and the narration continues in either the first past or the present tense.

In general, the analytic second past tenses manifest stronger association with non-firsthand evidentiality than with the synthetic second past (cf. Leinonen 2000 about Komi; and

Siegl 2004: 138–9 about Udmurt). These analytic forms consist of the content verb, inflected for tense and person, and auxiliaries—Komi *völöm*; Udmurt *vylèm*, which historically consist of the Past II 3SG form of the verb 'be', and which synchronically are often analysed as evidential particles (e.g. Leinonen 2000; Klumpp 2016). (p. 542)

Permic evidentials show distribution similar to that of their Mari counterparts. They are observed in polar questions (referring to the information source of the 'questioner', see (35) from Komi), but not in proper information-seeking questions. The use of the second past in questions conveys an assumption based on the current state of affairs or a surprise, given this (Leinonen and Vilkuna 2000: 489; Tsypanov and Leinonen 2009: 26, 32). In general, the Komi and Udmurt evidential past tenses seem to be extremely rare in sentences orthographically marked in text as questions (Siegl 2004: 161).

(35)
Komi-Zyrian

Te	**vos'tlömid**	öšin'šö?
you	open:PASTII.2SG	window:ACC

[It is cold in the room. The window is closed.] Did you open the window [and close it again]? (perhaps, in my absence) (Leinonen and Vilkuna 2000: 498)

The Permic Past II cannot be combined with grammatical moods and modalities, i.e. with the Imperative and Conditional (Siegl 2004: 17). Instead, it is sometimes analysed as a 'mood' of its own (e.g. Winkler 2001 on Udmurt), which is in complementary distribution with the other moods. The second past and its periphrastic counterparts can be negated (e.g. Siegl 2004: 126, 128), but in this case, as in Finnic and Mari, evidentiality cannot be within the scope of negation.

The Permic Past II forms display restrictions in relation to the first person. Unlike literary Udmurt, literary Komi lacks forms for the first person singular and plural (however, they are present in the majority of Komi dialects; Leinonen 2000; Kehayov and Siegl 2007). The first person effects are, as expected, lack of consciousness, non-volitionality and mirativity (Siegl 2004: 119–21; Leinonen 2000); see (36) where the first two meanings are in the foreground and (37) with a mirative reading:

Komi-Zyrian

(36)

Me	**marajtema**	pal'tote.
I	smudge:PASTII:1SG	coat:POSS2SG.ACC

I have smudged your coat (without noticing). (Leinonen 2000: 430)

(37)

Me	tšyg	**völöma.**
I	hungry	be:PASTII:1SG

(At dinner:) It turns out that I have been hungry. (Leinonen 2000: 431)

Finally, the evidential second pasts are attested in finite complement, relative, and adverbial clauses (for examples see Siegl 2004: 111, 125, 161; and Klumpp 2016).

Similarly to Mari, the emergence of indirect evidentiality restricted to past tenses in Komi and Udmurt is believed to be due to their contact with Turkic languages, namely Chuvash (and its predecessor, Bulgar), Tatar, and Bashkir (see Johanson, Chapter 24 of this volume). The possible paths of contact-induced change are: one-directional pattern replication from Turkic, multiple convergence within the Volga-Kama Sprachbund, or mutual reinforcement of existing patterns (cf. Bereczki 1992; Bartens 2000: 213–15; and Leinonen 2000). (p. 543)

25.3.3. Ob-Ugric languages

All Ob-Ugric varieties except East Khanty have evidentials that were grammaticalized from past and present participles used as finite predicates. They have been described as a separate mood—'absentive', 'narrative', in the Russian tradition 'non-witnessed' (*neochevidnoe naklonenie*), more recently also 'evidential'. A strong mirative extension is characteristic here; in Northern Mansi this became the dominant meaning.

25.3.3.1. Northern Mansi

In Northern Mansi, the *realis* system includes indicative and evidentials/miratives: there is an opposition between two neutral finite tense forms and non-finite forms used as predicates of finite clauses (see Table 25.4); the latter show differentiated personal marking.

All three Mansi forms traditionally described as participles are also used finitely as evidentials/miratives: the present participle in *-n* (38), the past participle in *-m* (39), and the past passive participle in *-ima* (40).

(38)
Northern Mansi

sʲa:nʲ-e	wo:rut	o:jka	**o:sʲ-ne-te**
mother-POSS.SG<3SG	forest_monster	man	have-MIR.PRES-POSS3SG

His mother is married to a forest monster! (The main protagonist sees him entering the house)

(39)

sort	χuri-l	taw	ti	**χuliγlaχt-am**
pike	form-INST	s/he	PART	swim-MIR.PAST[3SG]

He swam away in the guise of a pike.

(40)

Ta	ma:χum-n	a:sʲ-anəl	ta	**al-ima**
that	people-DAT	father-POSS.SG<3PL	PART	kill-MIR.PASS.PAST[3SG]

But it was by those people that their father was killed. (a side remark, information unknown to the protagonists of the story, unexpected information for the audience)

Table 25.4. Verbal *realis* system in Mansi

Tense	Indicative (finite)	Evidentials-Miratives (participle-based)
Present	*-(e)γ-, -i*	*-n*-POSS (< present participle) immediate visual perception + mirative
Past	*-(ə)s*	*-m*-PERS vs. *-m*-POSS (< past participle) *-ima*-PERS (passive < past passive participle) non-firsthand information + mirative

(p. 544)

Their dominant meaning in the modern literary language (based on the Middle Sosva variety of Northern Mansi) is mirative; as confirmed by informants, evidential meanings have become secondary (immediate perception or access to information for *-n*; inference, assumption or hearsay for *-m* and *-ima*). The majority of traditional narratives are told in the indicative and typical introductory formulas are existential/presentational clauses. Furthermore, these forms are used in rhetorical questions (41); cf. 'miratives in interrogatives have a force of a rhetorical question; evidentials do not' (Aikhenvald 2012b: 441).

(41)
Northern Mansi

Naŋ tit o:l-ne-n?
you here live-MIR.PRES-POSS2SG
You live here?! (speaker's surprise on seeing the dwelling)[8]

8

These forms are distributed in narratives in accordance with the plot development, expressing 'an unexpected realization on the part of a character as told by the omniscient narrator' or 'information that the narrator marks as surprising for the audience' (Aikhenvald 2012b), i.e. with the possibility of shifting the point of view from the protagonist (38) to the audience (39, 40).

Still, in some varieties (first of all Ivdel Mansi[9]) these forms can be used in traditional narratives as evidentials, demonstrating mirative reading only sporadically (see Sipőcz 2014). We assume that this represents a previous state of the system of the type A1 (firsthand versus non-firsthand); the mirativization in 'Siberian' varieties should be interpreted as a rather recent areal development.

A further interesting feature of Mansi evidentials is their differentiated person marking:

- the nominal possessive paradigm as subject agreement in connection with *-n*;
- two paradigms in connection with *-m* (subject and subject-object agreement);

– one of the finite personal paradigms (only subject agreement) in connection with *-ima*.

This differentiation is due to grammaticalization paths of individual forms and information structuring of clauses with their participation (the latter topic will not be discussed here). It seems that one part of the Northern Mansi system appeared through desubordination of participial complements in *-n* and *-m* with retention of nominal possessive markers (38), and another part through conventionalizing of evidential and mirative extension by a former resultative marker (*-ima*) with retention of the predicative personal marking. The original complement constructions are also used; compare predicate forms in (38) and (42):

(42)

a:kwe:kw	ta	**ji-ne:-te**	sujt-i
old_woman	PART	come-PARTIC.PRES-POSS3SG	be_heard-PRES[3SG]

Now you can hear (lit. it is to be heard) that the old woman is coming back.

(p. 545)

Mansi evidentials-miratives cannot be combined with other moods (Imperative, Conditional) or with negation (no examples in the corpus). With respect to dependent clauses, Mansi clause combining employs non-finite forms; ‘participles’ are used in it as action nouns (see 42), but not as evidentials.

In addition to evidential-mirative forms, modern Mansi has the mirative particle *nasatʲi*; in text collections of the late nineteenth and early twentieth centuries there are few examples of its use, still written as a parenthetical clause *nas a:tʲi* (simple NEG) ‘it is not so simple’ > ‘but not’. It is more frequent in texts of the first half of the twentieth century; in combination with mirative forms it has a meaning similar to the Russian mirative marker *okazyvaetsya* ‘as it turns/turned out’. Today older speakers almost obligatorily use it in combination with miratives and younger speakers also use it with indicative forms. This indicates that the original Mansi marking of mirativity is in the process of being replaced by structures similar to those in the dominant Russian, as a consequence of language attrition.

25.3.3.2. Khanty

Northern Khanty dialects have evidential systems similar to the Mansi system: the present participle in *-ti*, the past participle in *-m* as well as the converb in *-man* (in finite use, in past passive contexts) all have experienced mirative extensions (see Kaksin 2015 for Kazym Khanty). Nikolaeva (1999a,b for Obdorsk Khanty) does not mention the third form.[10]

(43)

Kazym Khanty

Łiw	ăłmŏnti	wɛra	śi	**păł-t-eł**
they	as_if	really	PART	fear-EVID.PRES-POSS3PL

They seem to be very afraid. (Kaksin 2015: 136)

(44)

Lŭw	kŏrt-ał-n	atełt	**χăś-m-ał**
s/he	camp-POSS3SG-LOC	alone	stay-EVID.PAST-POSS3SG

He stayed alone at the (reindeer) camp, as it turned out. (Kaksin 2015: 136)

(45)

Wana	juχat-s-ŭw:	owł,	mătte,	tuman-an	**pun-man**
close	come-PAST-1PL	door	PART.MIR	lock-LOC	close-EVID.PAST.PASS[3SG]

We came closer: it turned out that the door was locked. (Kaksin 2015: 137)

Kaksin (2015: 135–6) also lists several conventionalized constructions with participial relative or complement clauses where the head noun or main verb are in the process of being grammaticalized as evidential particles: *nił-i* (PRES.3SG) ‘it is to be seen’, *peł-i* ‘it seems’, *χurasup* ‘it seems, it looks like’ from *χuras* ‘look, image’ etc.

In East Khanty (Surgut), the coding of evidentiality differs greatly between colloquial speech and folklore. According to Csepregi (2014: 208–9), grammaticalized participle-based (p. 546) evidentials have disappeared in modern colloquial language, but are preserved in the formalized language of folklore, especially in songs.

(46)

t’ăqa	jəɣ-iw-nə	tasəŋ-kə	**wärəntə-m-iw**
PART	father-1PL-LOC	rich-TRANSL	do-PARTIC.PAST-1PL

(The seemingly useless inherited items turned out to be valuable.) Well, our father has made us rich (Koshkareva 2004: 147; Csepregi 2014: 207)

Nevertheless, a new structure coding non-firsthand information exists in Surgut Khanty, using a grammaticalized evidential particle formed on the basis of a participial relative clause with present and past participles modifying the head noun *tåɣi* ‘place’ (‘this is a place where …’ > inference):

(47)

t’u	imi	quntintə	**kił-m-ał**	**tåɣi**
That	old_woman	long_ago	get_up-PARTIC.PAST-3SG	PART.EVID (< PLACE)

(It seems) the old woman got up a long time ago. (Csepregi 2014: 207)

This can also be seen as reinforcement of the participle-based system of the type A2 with particles.

25.3.4. Samoyedic languages

This branch of Uralic is characterized by the most complex systems of evidentials and epistemic modalities interacting with each other. The evidential systems range from type B3 to C3 and beyond, characterized by components ‘direct non-visual sensory’ and different ‘inferentials’. Etymologically many evidential forms go back to ‘the predicative conjugation of verbal nouns’ (Janhunen 1998: 471) and the ‘auditive’ (sensory evidential) goes back to the noun **mon* ‘sound’ (Collinder 1957: 442).

25.3.4.1. Selkup

The evidential systems of Selkup dialects vary considerably: they occupy a central place in the verbal system of northern dialects but are peripheral in the southern ones (Urmanchieva 2014: 66).

In Northern Selkup the *realis* (Martynova 1991: 4) is represented by an indicative and non-firsthand evidential, also labelled ‘narrative’ (*povestvovatel’noe naklonenie*, Prokof’ev 1935), ‘inferential’ (Helimski 1998: 566), and ‘latentive’ (Kuznetsova, Helimskiĭ, and Grushkina 1980; Helimski 1998). Additionally, ‘auditive’ is described as a separate ‘mood’ that has almost disappeared in the modern language.

There are slight differences among various authors in the assignment of forms to the categories, but the data can be summarized as follows:

– primary non-firsthand evidentials in *-nt-* (with allomorphs; ‘inferential’ in Helimski 1998) and *-mp-* (‘inferentive’ in Urmanchieva 2014, not mentioned in Helimski 1998), originally past and present participles in finite use; (p. 547)

– complex form of ‘narrative past’ *-mp-* plus *-nt-* > *-mmynt-* (with allomorphs);

– complex future form *-ty-* (indicative future tense) plus *-nt-* > *-tynt-* (with allomorphs);

– auditive in *-kyn(ä)* for direct sensory perception (mostly hearing, but also smell and touch; practically absent in modern texts).

For the two complex forms there is no analysis yet, only demonstration of allomorphy without clausal or broader context (Kuznetsova, Helimskiĭ, and Grushkina 1980: 243); in Urmanchieva (2015: 66) *-mmynt-* is characterized as reportative in folklore narratives.

The form in *-nt-* encodes endophoric (48), reportative (49), inferential-assumptive, and mirative meanings. Sensory evidence is also treated as indirect (see (50)); here *-nt-* becomes synonymous with the auditive in *-kynä* (60).

Selkup

(48)

…mat	uta-p	**cüšaily-nty.**
I	arm-POSS1SG	ache-INDIR.3SG

My arms are aching. (Urmanchieva 2014: 72)

(49)

Apa-my	momp-a	**qūty-nty.**
father-1SG	say-AOR.3SG	be_ill-INDIR.3SG

My father, they say, is ill. (Kuznetsova, Helimskiĭ, and Grushkina 1980: 241; Urmanchieva 2014: 72)

(50)

Ūtynyk	üŋkylty-mp-a-ty:	picy-t	sümy	**ünny-nty.**
towards_evening	hear-DUR-AOR-OBJ<3SG	axe-GEN	sound	be_heard-INDIR.3SG

Towards evening she hears: the sound of an axe is to be heard. (Urmanchieva 2014: 73, 2015: 56)

Compare the ‘auditive’ in *-kynä*:

(51)

Selkup

Ukkyr	contō-qyt	pi-t	conty-l’	kotā̆-qyt	aj	nı̯ľcyk
one	time-LOC	night-GEN	time-ADJ	middle-LOC	again	so

üntyn’-ny-ty:	aj	kos	qaj	na	**tü-kynä.**
hear-PRS-OBJ<3SG	again	INDEF	what	PART	come-AUD.3SG

Suddenly at midnight (she) hears again: somebody has come again. (Urmanchieva 2014: 73, 2015: 56)

According to Urmanchieva (2014, 2015: 54–6, 70), the ‘latentive’ also encodes visual evidence (52) if the speaker was not personally participating in the event; as a consequence, an indicative form appears to encode personal participation of the speaker. All cited examples can be also interpreted as having a mirative reading, ‘new information’ (cf. mirative values in Aikhenvald 2012b: 473), but Urmanchieva argues against a mirative interpretation because ‘latentive’ builds long chains in the narrative (cf. §25.3.4.3), which she considers atypical for miratives (2015: 55). The examples she analyses specifically as ‘the mirative use of latentive’ are those of ‘sudden discovery’ and ‘surprise’. This implies that

her claim concerning meanings to do with personal participation is based on a narrow approach to mirativity. (p. 548)

(52)
Selkup

Mɔ̄t	šēr-ny,	mannymp-a-ty:	n̓en̓n̓ā̄qyt	stol	totty-nty,
tent	come_in-AOR.3SG	look-AOR-OBJ<3SG	ahead	table	stand-LAT.3SG
šitty	tarälka	apsy-l’	**totty-nty.**		
two	plate	food-ADJ	stand-INDIR.3SG		

He came into the tent and saw: a table is standing; two plates of food are standing (Urmanchieva 2014: 73).

The form in *-nt-* can be used in questions:

(53)

Paŋa-p	kuccä	**qatti-nty?**
knife-POSS1SG	where	get-INDIR.3SG

Where is my knife? (Kuznetsova, Helimskiĭ, and Grushkina 1980: 241)

The form in *-mp-* is described as inferential (54) and mirative (55) with no reportative function except the standard opening in folklore texts. According to Urmanchieva (2015: 66) the original reportative function of *-mp-* went over to the broader form *-nt-*.

(54)

Mannymp-a-ty:	ira	**kərty-mpa**	captät.
see-AOR-OBJ<3SG	old_man	nomadize-INFER.3SG	long_ago

(He) looks (at it): the old man has moved long ago (Urmanchieva 2014: 79)

(55)

Nȳny	ponä	cap	tant-a –	«Onä-k	mɔ̄n-my,	moqynä
after	outside	just	go_out-AOR.3SG	own-POSS1SG	tent-POSS1SG	home
šı̯-p	**tattympa!»**					
I-ACC	bring-INFER.3SG					

After that he went out (of the closed sledge): It’s my own tent, (he) brought me home! (Urmanchieva 2014: 80)

Thus Northern Selkup has (or formerly had) a three-term (or a five-term, depending on the analysis of complex forms) system, employing firsthand sensory and non-firsthand evidentials with different sets of evidential meanings (non-visual sensory ‘auditive’, inferential, reported, i.e. the type B3 or probably C3). In contrast to this, the indicative can be either neutral or appear in firsthand evidence contexts.

Note that the desubordination in Northern Selkup is not yet fully accomplished: the majority of examples in grammars and usages in texts still have a perception or speech verb

to the left (see 49–52, 54), so it is not quite clear whether all these occurrences are evidentials—or non-finite complement clauses.

For the Southern dialects participial forms as finite predicates are analysed as temporal (present II and past perfect, Kuznetsova 1995: 133–41, 141–51), and are also used as an evidential strategy with non-firsthand and mirative meaning. Nadezhda Kuznetsova also stresses desubordination as the source of such forms.

25.3.4.2. Nenets and Enets

In both their varieties (Tundra and Forest) these languages have the most complex system due to interaction of several epistemic modalities and different evidentials, and descriptions (p. 549) that have been presented are highly controversial (for Tundra Nenets see e.g. Tereshchenko 1973; Labanauskas 1981; Salminen 1997; Lyublinskaya and Malchukov 2007; Nikolaeva 2014; Burkova 2010, forthcoming).

Burkova (2010, forthcoming) describes three epistemic 'moods' in Tundra Nenets: the probabilitive in *-ki*, the approximative in *-răxa* 'it looks like P' (both with a relatively low degree of certainty and an indication of the information source is needed), and the superprobabilitive in *-wanŋkăbʲa* (a high degree of certainty without reference to the source of information; but labelled 'Dubitative' in Nikolaeva 2014: 98). Further she lists five evidential suffixes: *-moʔ* with allomorphs ('auditive': firsthand sensory, endophoric, hearsay present, personal marking with possessive suffixes, see (56)), *-mi* (etymologically perfective participle; inference, hearsay past, mirativity; see (57)), *-na/-ta* (imperfective participle; assumption), *-pt͡su* (prospective on the basis of general knowledge; 'Potential' in Nikolaeva 2014: 92; see (58)) and *-mănta* (future participle; prospective, i.e. inference or assumption for the future, on the basis of visual evidence). The following examples are from Burkova (forthcoming).

Tundra Nenets

(56)

	pʲi-xĭnʲa	**jibʲe-mon-da**
	outside-LOC	get_warm-AUD-POSS3SG
	One can feel that it has got warmer outside.	

(57)

pidu$ʔ_2$	nʲertʲurkăna	**xæ-wi-$ʔ_1$**
they	not_long_ago	leave-INFER-3PL
They left not long ago (The teapot is still warm).		

(58)

sawa-wna	xa-b$ʔ_1$-na$ʔ_1$	**ta-pt͡su-do$ʔ_2$**
good-PROLAT	ask-COND-POSS3PL	give-PROSP-SG<3PL
If we ask them in a friendly way, they will probably give us [a woman]		

Finally, Burkova (forthcoming) shows possible combinations of epistemic modalities and evidentials and their meaning (see Table 25.5).

(59)

Tundra Nenets

tʲuku	jalʲa	xajer?	ŋadʲi-**mănda-răxa**
this	day	sun	appear-PROSP-APRX.3SG

It looks like it's going to be sunny today.

(60)

pewdʲa-xăna	**joxo-da-ki-ʔ$_1$**
dark-LOC	get_lost-ASSUM-PROB-3PL

(They are still absent.) Probably, they got lost in the dark.

Nikolaeva (2014: 101–4) presents such combinations with the approximative as its tenses based on imperfective, perfective, and future participles; Lyublinskaya and Malchukov (2007: 447–8) do the same for the probabilitive.

Forest Nenets has a similar set of five evidential markers, but no probabilitive; their combinations with the approximative are similar to those in Tundra Nenets (Burkova, forthcoming). (p. 550)

Table 25.5. Combinations of epistemic moods and evidentials in Tundra Nenets (adapted from Burkova 2010, to appear)

Combination	Evidential values	Resulting meaning	Temporal reference
-*mi*-PROB	inference	'On the basis of current evidence I can assume that probably P'	past
-*na*-PROB	assumption	'On the basis of my general knowledge I can assume that probably P'	no tense constraints
-*pt͡sa*-PROB	assumptive prospective	'On the basis of my knowledge I can predict that P'	future
-*na*-APRX	assumption	'On the basis of my knowledge it seems to me that P'	past, present
-*mănta*-APRX	inferential prospective	'It looks like P is going to take place'	future

APRX-*mi*	mirativity	‘It looks like P, and it surprises me’	near past, present
APRX-*moʔ*$_2$	first-hand sensory	‘I hear/feel what seems like P’	present

According to Siegl (2013), Forest Enets has the auditive in *-munu* (with allomorphs) and a quotative marker *mańu* based on the verb ‘say’; in addition, the perfect in *-bi/-pi* and several modalities can have evidential extensions (2013: 264, 300). Urmanchieva argues that *-bi/-pi* is not a perfect, but a non-firsthand evidential ‘inferentive’ with inferential, reportative, mirative meanings (2016: 123). She also shows that Forest Enets has developed a unique system of combination of inferential and different modal meanings: not only through a synthetic combination of inferential and approximative (‘speculative’ in Siegl 2013: 288) suffixes, similar to Nenets, but also through a set of analytic constructions with the past participle plus an auxiliary ‘be’ in different modal forms (Urmanchieva 2016: 133).

For Tundra Enets, Künnap (2002) descibes an auditive in *-mono* (with allomorphs), the ‘narrative’ in *-bi/-pi*, and several ‘probabilitives’ that express ‘an inferred action’ (Künnap 2002: 146) and are differentiated by temporal reference. He also states that Enets evidentials are not used in either commands or interrogative clauses.

25.3.4.3. Nganasan

The complex inflexional system of Nganasan verbs includes indicative, imperative, prohibitive, cohortative and optative (as less categorical commands), interrogative, *irrealis*, abessive (‘not yet’), and three evidential terms—inferential, ‘auditive’, and ‘renarrative’ (Gusev 2007: 415). This is summarized in Table 25.6. (p. 551)

Table 25.6. Evidential system in Nganasan (after Helimski 1994; Gusev 2007)

Terms	**Forms**	**Functions**
Inferential	*-hatu-* (with allomorphs)	inference, mirative extension, ‘new knowledge’
Auditive	*-munəʔ*, *-munuj-*	first-hand sensory evidential
Renarrative	*-haŋhu-*	quotative, reportative
Future renarrative	*-ntə-haŋhu-*	reported imperative; prospective/necessitive

Interrogative renarrative	*-ha-*	reported question

In contrast to evidentials, the indicative is described as representing information witnessed or assured, or else information for which the source is not relevant to the speaker (tales and mythological narratives are told in the indicative, Gusev 2007: 418). Other authors characterize the indicative as evidentially neutral, but state that used in contexts of retelling, it denotes 'especially trustful' information, e.g. a mother's words (Kuznetsova and Usenkova 2004: 34).

The auditive with the markers *-munəʔ* and *-munuj-* (with allomorphs), common to all Northern Samoyedic languages, marks information as auditive (61), other sensory, and endophoric, and also both visual and auditive when auditive is more important.

(61)
Nganasan

əuʔ,	kuniťə-küə-nị̆	maaŋuna,	ŋonəə	hunsəə	ďeli-rəki
oh	somewhere-AdvLoc	what	one.more	other	noise-COMPAR

sojbu-munu-tʼu
sound-aud-3sg
(One woman says:) Oh, what other noise is to be heard? (Gusev 2007: 420)

Very seldom it is used in reported contexts; according to Usenkova (2015: 200–1), this means that the speaker is not completely confident concerning his or her information. It is not used in questions (Kuznetsova and Usenkova 2004: 36).

The inferential in *-hatu-* (with allomorphs) marks inference (62), but is also used as mirative; it can build long chains of 'new knowledge' clauses in narratives.

(62)
Nganasan

Tʼeliʔmidʼi-ʔə-ʔ	– baarbə-δuŋ	huntə-δun	**i-hᵘaδu**
slow_down-PERV-3PL	master-POSS3PL	authority-POSS3PL	be-INFER

(Slow down! he cried.) They slowed down—evidently, their master is an authority for them. (Gusev 2007: 425)

The inferential is not used in commands; it can be used in questions intended to clarify inferred information (Gusev 2007: 428).

The 'renarrative' in *-haŋhu-* (with allomorphs) functions as a quotative and a reportative (63); it also demonstrates the first person effect. In songs and life stories of real people it (p. 552) signals that the content is not a legend, but real historical events (Gusev 2007: 430–1). It is also used in shamans' predictions (= information from spirits).

Nganasan

(63)

Betim-kü-mi,	bet^{i}aδ^{i}aŋgu-ŋ	**i-kə-bambu-ŋ**
dance-IMP-1DU	dancer-2SG	be-ITER-REP-2SG

Let's dance, you are a dancer, they say (across seven lands they talk about you).
(Gusev 2007: 429)

The content of the 'renarrative' can be questioned, but not the information source. Kuznetsova and Usenkova (2004: 33) add that the addressee of the question is the person who provided this information or, in the speaker's opinion, is acquainted with it. The renarrative also has an analytic variant consisting of the verb in the indicative accompanied by a renarrative 3SG from the auxiliary *ij-* 'be' (*ibahu*).

There are two more forms that Gusev (2007) puts into the category 'renarrative' (reported): 'renarrative imperative' and 'renarrative interrogative'. The former is a combination with the future marker, i.e. *-ntə-haŋhu-*, and its main function is retelling of a third person command (64) (cf. Estonian jussive, (17)). It also has a prospective/necessitive reading.

(64)

Nganasan

D'intə-güa-t'ə	**ńi-ntə-b^{i}ambi-ŋ**	koi-ʔ
bow-PART-ACC.PL2SG	NEG-FUT-RENARR-2SG	leave-CN

(The master said, you must work for me.) Don't forget your bow and arrows.
(Gusev 2007: 437)

The interrogative renarrative in *-ha* (analytic variant with the auxiliary 'be' PAST + *i-h^{u}a*) is used for retelling of somebody's question to the addressee (65), or if the speaker assumes that the hearer's information is secondhand.

(65)

Nganasan

Ɲəmsu-ruʔ	**təj-h^{u}aʔ**
meat-2PL	there_is-RENARR.INTER

(I was sent to ask:) Do you have meat?

According to Gusev (2007), the Nganasan system has no separate 'assumed' term; all evidentials are incompatible with *irrealis* and abessive ('not yet'). Although Kuznetsova and Usenkova (2004: 31) understand the 'renarrative' to have a connotation of unreliable information, according to Gusev (2007) it carries no epistemic nuances.

Tereshchenko (1979: 220) stresses that Nganasan ‘renarrative’ (in her terminology, ‘non-witnessed form’) is not derived from a past participle, as it is in Nenets and some other Finno-Ugric languages.

Altogether, Nganasan presents an interesting example of a B3 system.

(p. 553) 25.4. Conclusions

As this overview shows, evidential systems are very different in different branches of the Uralic family, but have similarities in both values and coding with their geographical neighbours. The systems are of the type A3 in Finnic, A2 in Mari and Permic, A1 and A2 in Ob-Ugric (with strong mirativization), and of B3, C3 and higher types in Samoyedic. Thus grammatical evidentiality cannot be considered an inherited feature of Uralic languages. Its emergence appears to be due to a complex interplay of areal diffusion and independent innovations.

Because all systems have evidentially neutral terms, evidentials are used when the speaker needs to mark the source of information. Still, it is often mentioned in the literature that indicatives in this opposition tend to become a direct perception reading.

The information about grammaticalization sources shows that while in the languages of the Volga-Kama area grammatical evidentiality is exclusively based on past tenses, in Finnic we have various sources, and ‘anteriority’ is not the relevant one. Ob-Ugric and Samoyedic evidentiality systems have multiple sources, including reanalysis of resultatives and similar forms, desubordination (ellipsis of matrix clauses like ‘it can be seen/heard’ with conventionalization of the content clause as inferential), and reanalysis of abstract head nouns of relative clauses as evidential particles following a participial predicate. The latter feature is ‘Siberian’ and seems to be related to the nominalization strategy used for expressing different modal meanings and emphatic assertion in many languages of this area (see Skribnik 2005; Chapter 26 of this volume). Desubordination is also prolific in this area, creating mostly mirative effects (in Siberian Turkic languages even with the retention of the accusative suffix of the former non-finite complement clause, see Skribnik 2005); this can be the explanation of the strong ‘mirativization’ of Ob-Ugric evidentials (which is not as strong in Ivdel Mansi variety, an isolated group on the European side of the Urals, in closer contact with Permic).

Uralic evidentials are not used in commands (though there are special forms for retelling commands of the third person to the addressee in Estonian and Nganasan); and they are rare in negative clauses (the content is negated, not the source of information).

Questions (mostly polar) are also rare; again, the content is questioned, not the source, and the source can refer to both the speaker and the hearer.

Finnic evidentials are used in dependent clauses; for all other languages this is not a relevant parameter, as outside of Finnic non-finite clause combining is prevalent, and evidentials are themselves mostly of non-finite origin and the results of desubordination. Finally,

evidentials exclude other modalities everywhere except in Samoyedic, where they can be combined with epistemic markers.

Notes:

([1]) We are greatly indebted to Johanna Laakso, Marianne Bakró-Nagy, Jeremy Bradley, Olga Kazakevič, Svetlana Burkova, Alan Vogel, and, of course, to Alexandra Aikhenvald, for their invaluable help in preparing this chapter.

([2]) Modern-day speakers are unaware of the participial origins of this form.

([3]) http://www.esm.ee/ekspositsioon/virtuaalne-sojaajalugu/muinasaeg; accessed 8 June 2016.

([4]) http://ylokool.com/artiklid/ettevotlusalane-ope-ja-ettevotja-haridus-70-ndate-ja-80-ndate-ajal/ accessed 8 June 2016.

([5]) See Kehayov (2008) for an estimation of the structural and functional similarity of Estonian, Latvian, and Lithuanian evidentiality systems.

([6]) Examples from the Mari corpus: corpus.mari-language.com

([7]) The examples in the table are romanized according to the ISO 9 (1995) system.

([8]) All examples are from the Ob-Ugric corpus (http://www.babel.gwi.uni-muenchen.de); transliterations utilize IPA.

([9]) The variety spoken by an isolated group of Mansi on the river Ivdel on the western slopes of the Ural Mountains with a well-preserved traditional culture; the number of speakers ranges from sixty-four to 194 according to different sources.

([10]) The polyfunctionality of Ob-Ugric non-finites has led to a number of analytical issues; see Nikolaeva (1999a) for a problematic discussion of evidentials in Obdorsk Khanty.

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Evidentiality in Mongolic

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Abstract and Keywords

Middle Mongol, first attested in the thirteenth century, exhibits three evidential markers that were restricted to the past tense: evidentially neutral -bA, direct -lUGA, and indirect -JUGU. Its modern successors show different systems which mostly pattern areally. The two most complex systems developed in Kalmyk (west) and Khalkha (central), where evidentiality spread to other tenses and is also expressed through semantically more specific analytic constructions. In several Southern and Central Mongolic varieties of Amdo (southwest), binary systems evolved under Amdo Tibetan influence; these distinguish between participatory and non-participatory evidence. Buryat, Khorchin, and Dagur (northeast) as well as Southern Mongolic varieties of Gansu (south) lack paradigmatic evidentiality, losing or reinterpreting the inherited evidential suffixes. Some evidential strategies evolved that cut across the Mongolic area, including structurally identical prospectives (Khalkha, Buryat, Khorchin) or the extension of ‘say’ to denote hearsay (Central and Southern Mongolic).

Keywords: Mongolic languages, Middle Mongolian, Khalkha, Buryat, Kalmyk, evidential systems, evidential strategies, language contact, egophoricity

26.1. Introduction

26.1.1. General remarks

Evidential meanings have been mentioned in grammars of Mongolic languages at least since Bobrovnikov (1849: 135, 154–6), who described inferential and mirative meanings of several simple and complex verbal forms in his grammar of Kalmyk. Systematic investigations started with Binnick (1979) and Cinggeltei (1981). Yet, in spite of a number of recent studies, the precise properties and evolution of most Mongolic evidential systems remain insufficiently understood. For this reason, the focus of this chapter will be on synchronic descriptions, with only occasional notes on diachronic developments. The discus-

sions are based on existing literature and language materials as well as on our own work.[1]

§26.1 provides a brief overview of the typological features of Mongolic languages. In §26.2 we look at the evidential systems of Middle Mongolian and Pre-Proto-Mongolic. The three Central Mongolic languages Khalkha, Buryat, and Kalmyk are discussed in §§26.3–5, showing the position of evidentials within the verbal system and the values they express. §26.6 is a brief overview of known facts of evidential systems in other languages of the family, and §26.7 sums up the results. (p. 555)

26.1.2. Mongolic languages

26.1.2.1. Classification

Mongolic languages together with Turkic and Tungusic are considered either different branches of the same Altaic family or members of an Altaic *Sprachbund* (for overviews, see Georg et al. 1999; Schönig 2003; Vovin 2009). The classification of Mongolic languages remains a matter of controversy, too; we summarized our understanding of the state-of-the-art in Figure 26.1.

We will concentrate on the following languages:

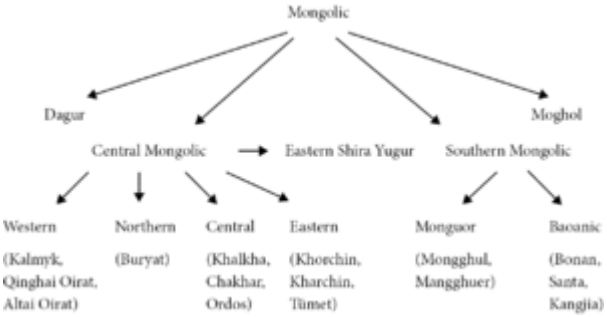
Middle Mongolian is the language of the Mongol Empire of the thirteenth and fourteenth centuries, unifying the tribal idioms previously spoken in the area of contemporary central and eastern Mongolia. It is considered very close to Proto-Mongolic (Janhunen 2003a: 1–3) and is the oldest preserved Mongolic language.

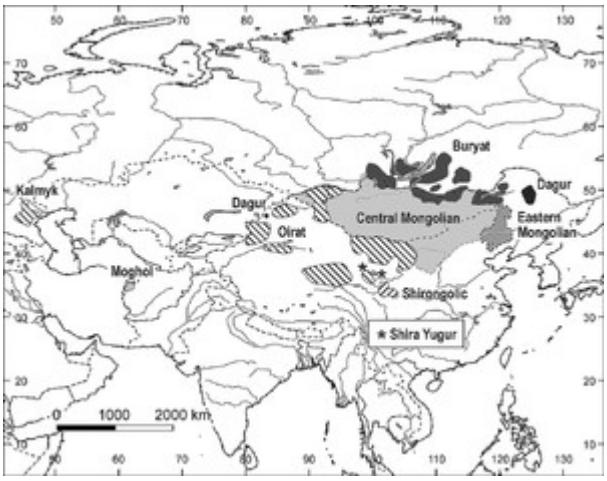
Khalkha (or Mongolian proper) is the official language of the Mongolian Republic with an estimated 2.7 million speakers (2010 census). In China, 12,000 people in central Inner Mongolia speak Shilingol dialects (Svantesson et al. 2005: 143), and small Khalkha communities are found in western Inner Mongolia (Alshaa) and Gansu.

Buryat is presently spoken by ca. 360,000 people out of an ethnic population of ca. 460,000 (2010 census). The Buryats are divided among three administrative units of the Russian Federation: the Buryat Republic (capital Ulaan-Ude), the Aga National District in the Chita Region, and the Ust'-Orda National District in Irkutsk Province. An additional 100,000 Buryats live in northeastern Mongolia and in China (Hulunbuir).

Kalmyk is spoken mainly in the Kalmykia Republic (Russian Federation, lower Volga region). A group of Oirats moved there in the early seventeenth century and has not been in contact with other Mongols since. The official number of native speakers of Kalmyk is ca. 180,000 (2010 census), but a large proportion of Kalmyks lost their native language due to a thirteen-year-long deportation to Siberia (1943–56). (p. 556)

Figure 26.1. Mongolic family (after Janhunen 2006 ; Luvsanvandan 1959 ; Rákos 2012 , Nugteren 2011)





Map 26.1. Mongolic languages

In addition to these four languages, we will give an overview of evidentials in Mongolic languages spoken in **Manchuria** (Khorchin, Dagur), the **Amdo** region (Southern Mongolic, Shira Yugur, Qinghai Oirat), and **Afghanistan** (Moghol, last attested in the early 1970s).

26.1.2.2. Typological characteristics of Central Mongolic

Central Mongolic languages are agglutinative, exclusively suffixing languages with vowel harmony, postpositions, and AOV/SV basic constituent order. Nouns can be marked for number (neutral or plural), case (most commonly with six to nine suffixes and unmarked

nominative) and possession (personal or reflexive). Productive verbal suffixes include voice as well as converbal, participial, and finite suffixes.

These languages exhibit around ten non-indicative mood forms, including second-, first- and third-person imperatives, adhortatives, and preventives. In the indicative, no more than four simple (synthetic) suffixes express temporal, aspectual, and evidential notions. Additionally, from one (Khorchin) to eight (Buryat) aspecto-temporal participles are used as finite predicates, but with considerable differences: e.g. the finite use of the future participle in *-x/-xA* is absent in Khorchin, rare in Khalkha, common in Kalmyk, and the basis of two future tenses in Buryat. In Buryat and Kalmyk, finite predicates are marked for person.

Clause combining is based on extensive systems of non-finite forms: i.e. up to twenty converbs, and up to ten participles in combination with case suffixes or postpositions.

(p. 557) 26.1.2.3. Structure of finite verbal predicates

Finite verbal predicates can be simplex and complex. A simple predicate consists of the verb stem and one finite or participial suffix marking tense, aspect and/or evidentiality. The inventory of such suffixes, which we will call ‘finalizing’, is language-specific. Complex predicates contain one or more analytic constructions with aspectual, but also temporal, directional, modal, or evidential meanings: the lexical verb in a non-finite form combines with auxiliaries (verbs or modal adjectives), which in turn are marked for tense, aspect and/or evidentiality.

Complex verbal predicates can be subdivided into several classes according to main verb form and type of auxiliary. The most important auxiliaries are the copula *bai-* ‘be’, inceptive *bol-* ‘become’, and quotative *ge-/gi-* ‘say’. The extent to which particular construction types contribute to evidential systems varies: For instance, ‘become’ in combination with the future participle, *–x(A) bol-*, basically expresses a ‘phasal change leading to a future event’, but functions as scheduled future (Khalkha), modal necessitive (Buryat) or evidential prospective (Kalmyk). Among modal adjectives (nouns derived with propriative/privative suffixes *–tAi/–güi*), independent constructions with evidential extensions developed in all three languages. The quotative verb *ge-/gi-* ‘say’, in addition to functioning as a more general complementizer, has grammaticalized into a marker of reportativity, sometimes including general knowledge. Via constructions expressing intention, it also gave rise to evidential prospectives. The most productive construction type, which is based on *bai-* ‘be’, can allow for up to four (Khalkha and Buryat) independent aspecto-evidential analytic constructions within one predicate and take four different particles, which allows for expressing combinations of different TAME values very elaborately.

In the following overview of evidential systems in several Mongolic languages we will present the inventories of ‘finalizing’ suffixes (both finite and non-finite) that are regularly used in simple predicates of independent clauses, the functions of evidential suffixes among these, and analytic constructions that express evidentiality. We will address special features of evidentials in interrogative and negated clauses briefly, if they are known

to any significant extent. There are no evidentiality distinctions in imperatives and other moods; other modality expressions will be discussed if involved in evidential strategies.

26.2. Evidential systems of Middle Mongolian and Pre-Proto-Mongolian

The past tense evidential system of Middle Mongolian, which is built upon three suffixes, is set out in Table 26.1.

Evidentiality is overtly expressed by the Direct Past *-lUGA ~ -lUA* (for directly perceived information) and the Indirect Past *-JUGU ~ -JUU* (for inference and hearsay), while the more frequent Factual Past suffix *-bA* lacks an overt evidential value, but perhaps implies factual reliability (cf. Street 2009; Brosig 2014a: 28, 2014c: 17–20). This most closely resembles an A1 system (Aikhenvald 2004a), but importantly differs in the existence of a neutral category, whereby evidential markers only appear in those contexts where the information source appears to be important. (p. 558)

Table 26.1. The past tense evidential system of Middle Mongolian

	factual	**problematic**	
		direct	**indirect**
past perfective/neutral	*-bA*	*-lUGA*	*-JUGU*
past imperfective/resultative	CONVB/PARTIC + AUX-*lUGA*		CONVB/PARTIC + AUX-*JUGU*

(1)

Nidöni	burqan ci	ügüle-rün	ba	taŋud	irgen	baraun	qar
last.year	NAME 2SG	say-CONVB.PREP	2PL.EXC	TRIBE	people	right	hand
cin-u	bol-su	kee-**lüe**					
2SG-GEN	become-HORT	say- PAST.DIR.EVID					

Last year you, Burqan, said: 'We, the Tangut people, shall be your right wing' (SH §265).

(2)

oŋgiŋ	ciŋsaŋ	megüjin_seültü-yi	ala-**juu**-y	kee-n
NAME	TITLE	NAME-ACC	kill-PAST.INDIR-PL	say-CONVB.IPFV
mede-ed		maši	bayas-cu	ciŋgis_qahan-a
learn+know-CONVB.PERV		very	be.happy-CONVB.RES	TITLE-DAT
jaud_quri	nere	ög=**be**		
TITLE	name	give-PAST		

Ongging Chingsang was very glad when he learned that they killed Megüjin Seültü and gave Chinggis Qaan the title Jaud Quri (SH §134).

The speech event that Genghis Khan recalls in (1), already mentioned in §249 of the Secret history of the Mongols, probably took place during a personal audience of Burqan with Genghis (cf. §267). Ongging in (2) as the chancellor of the Jurchen certainly relied on field reports about the killing of Megüjin Seültü. The author of (2), in turn, most likely relied on hearsay when narrating the bestowing (*ög-be*) of a title in Genghis' early career, but chose not to emphasize this.

In analytic constructions like converb-based progressives and continuative-resultatives, or participle-based past perfects, resultatives and futures (Brosig 2014a), as well as with nominal predicates, the evidential suffix attaches to the copular auxiliaries *bü-* or *a-*. In such contexts, only a distinction between (*bü*)-*lUGA* and (*a*)-*JUGU* is found. Evidentially neutral uses of *bü-lüge* as a nominal copula and, more rarely, as a verbal auxiliary (see Street 2009: 138–44) indicate that *-lUGA* was the less marked choice in this binary opposition.

In information questions, the use of *-lUGA* requires an answer 'based on the hearer's first-hand knowledge' (Street 2009: 135–7), while actual questions with *-JUGU* are absent in the sources. In rhetorical questions, the evidence lies with the speaker (as implied by Street 2009: 135–41) or is probabilistic in nature (Street 2009: 145–7). Evidentially neutral questions contain *-bA*. Preverbal negation particles did not interfere with the evidential system.

The quotative verb *keme-* (Street 2013) already exhibits the functions of a complementizer with verbs of manner of speaking (such as *uŋš-* 'cry', *asagu-* 'ask') and mental activity (such as *sedki-* 'think', *mede-* 'recognize + know') and is also used for indirect quotations. Its systematic use in hearsay contexts is not yet attested.

(p. 559) The difference between the present tense copula forms *a-mui* and *bu-yu* was most likely aspectual (Brosig 2014a: 10–20) rather than evidential (e.g. Nasanurtu 1989). Finite uses of a number of suffixes that would play an important role in Central Mongolic such as the perfect *-GsAn*, the resultative *-GA* and the Late Western Middle Mongolian (MM) present progressive *-nAm* are only marginally attested in MM. The role and function of the present tense copula form *bu-i* (which would develop into a participatory marker in the Qinghai sprachbund [cf. Janhunen 2012a]) has yet to be investigated.

The evidential system of Proto-Mongolic (a language used no earlier than the mid-twelfth century) must basically have been identical to that of MM, but internal reconstruction and comparison to Khitan, a sister to Proto-Mongolic (Janhunen 2012b), allow us to reconstruct Pre-Proto-Mongolic forms. The Indirect past suffix in its masculine form *-JUGU* probably goes back to a reconstructed construction **-jU a-QU* consisting of the resultative converbal suffix *JU*, the copular auxiliary *a* and the participial suffix *-QU*. MM *-QU* denotes future, but it could have had a general non-past meaning at an earlier stage (cf. Dahl 1995 for a discussion of this kind of development). This construction would thus have expressed a resultative present meaning, which is a common source for inferentials (Aikhenvald 2004a: 112–16, 2015b). The feminine form of the Indirect past, *-JiGAi*, might be linked to the plural of the resultative participle *-GA*. Direct past suffix *-lUGA ~ -lUGAi* (plural) *~ -liGi* (feminine (cf. Rybatzki 2003b: 75) can be compared to Khitan *lun*, a past suffix (Kane 2009: 146) of otherwise unknown meaning and morphological status. This suggests that it can be segmented into a morphosemantically unclear suffix *-*lU* and MM *-GA*. The segmental transparency of these two forms suggests that evidentiality in Pre-Proto-Mongolic emerged fairly recently, possibly in the eleventh century in contact with Old Turkic (for which Al-Kāšğarī 1072–4 [translated as Dankoff 1982: 412] reported a similar, but binary evidentiality distinction).

26.3. The evidential system of Khalkha

In Khalkha, the expression of evidentiality is closely linked to the expression of when evidence was acquired or interpreted (see Table 26.2). In the past and present tense, a distinction between events that the speaker immediately became aware of and those that already belong to her established knowledge is central. Thus, for present tense temporary states, events that the speaker (usually directly) perceives at the time of speech are marked by *bai-na*, while ongoing events that are already established in the speaker's mind are marked by *bai-(g)aa*. In the past tense, events that the speaker just noticed are further subdivided into direct perception (*-lAA*) and inference (*-Ž(ee)*), contrasting with already mentally established events (*-sAn*). It depends on genre whether hearsay notions are also expressed by *-Ž(ee)* or through separate devices such as sentence-final particles and the verb 'say'. Assumptive reasoning for all temporal levels is expressed through a specialized immediate present construction, whereas prospectives (which can be understood as tensed future evidentials) are treated akin to other aspectual forms (in the sense of Klein 1994: 114–17) in that the state at which the evidence is perceived can receive any kind of present or past tense evidential marking.

Evidentiality is neutralized under negation in perfective aspect, while negated temporary states can receive evidential marking. In interrogative clauses, both the old past tense form *-v* and the old resultative *-AA* still play an active role in the past tense system, but an analysis of (p. 560) how this affects the evidential system as a whole has yet to be conducted. Past tense evidential suffixes in questions take the addressee's perspective (Brosig forthcoming: §8).

Table 26.2. Grammaticalized evidentiality system of Khalkha

interpretation/acquisition time		**earlier than the time of speech**		**time of speech**		
evidence type		**n.a.**	**hearsay**	**direct**	**indirect/inference**	**assumptive**
event time	past	*-sAn (-v)*	PARTIC + *suragtai/gene*	*-lAA*	*-Žee* PARTIC +*až*	PARTIC + *yum* + *bai-na*
	present	NOUN/CONVB/ PARTIC + *bai-(g)aa*		NOUN/CONVB/PARTIC + *bai-na*		
	future	*-x ge-ž bai-san /bai-(g)aa*		*-x ge-ž bai-na/bai-laa/bai-žee*		

26.3.1. Past reference

The basic past tense is realised through three suffixes. The Established Past *-sAn* is used to refer to past events that have been consolidated and reified (cf. Dahl 2013) within the memory of the speaker. The way they have originally been accessed has become irrelevant (Kalchofner 2003; Brosig forthcoming). It contrasts with *-lAA* for directly perceived events (including speaker-internal perceptions such as pain or thoughts) and *-Ž(ee)* for inferred events (Brosig forthcoming) and deferred realizations (Jingan 2010: 87). In both cases, immediately accessible (direct or indirect) sensory evidence (Brosig forthcoming), or in the case of *-lAA* at least very clear recollection, is required (Svantesson 1991: 193):[2]

A: Bi ug-aas-aa xot-iin xün.
1SG root-ABL-REFL town-GEN person

B: xot-iin?
town-GEN

(3) A: Tiin, hot-(o)d tör-**sön**.
so town-DAT be.born-PAST.EST

A: I'm a city dweller.
B: City dweller?
A: Yes, I was born in the city. (Brosig forthcoming)

(p. 561)

(4)
Badraa-g-aa ald-**laa** šüü. Badraa gar-aad
NAME-ACC-REFL lose-PAST.DIR.EDIV PART.DIS NAME exit-CONVB
yav-can=uu?
go-COMPL.PARTIC.PAST=INTER
We have lost our Badraa! Did Badraa go out? (Brosig forthcoming)

(5)
a. Boroo or-**žee**.
rain come-PAST.INDIR
[Seeing that the ground is wet] It has rained. (Svantesson 1991: 193)

b. Boroo or-oo=güi. / or-son=güi.
rain come-PARTIC.RES=NEG / come-PARTIC.PAST=NEG
It didn't rain.

In (3), *-sAn* signals that the speaker treats the place of his birth as a well-established, unproblematic fact, irrespective of the source. He could use *-Ž(ee)* if evaluating archival documents right now, while *-lAA* would be infelicitous here. In (4), the speaker mentions what he just discovered, which renders *-sAn* infelicitous, while the direct visual evidence rules out *-Ž(ee)*. In (5a), *-Ž(ee)* is obligatory, since an inference is drawn synchronously. (5b) illustrates how perfective *-sAn*, *-lAA*, and *-Ž(ee)* are negated: *-AA=güi* is unmarked, while *-sAn=güi* confines the event to the past (it wouldn't help if it rains now) and often implicates counter-expectedness (Brosig 2015b: 88). Neither pattern conveys a source of information.

In formal or narrative written language, the old past tense suffix *-v* (< MM *bA*) is regularly used instead of *-sAn* (cf. Binnick 2012).[3] In formal writing or journalism, as in (6), *-Ž(ee)* covers both inference and hearsay (cf. Svantesson 1991; Song 1997; Binnick 2012) without necessarily implying immediate perception:[4]

(6)

Alga bol-son 16 nas-tai oxin-iig ol-**žee**.[5]
absent become-PARTIC.PAST 16 year-PROPR girl-ACC find-PAST.INDIR
They found the 16-year-old girl that was missing.

5

Speakers have multiple alternatives for expressing hearsay meanings, as listed in (7). In (7a) and (7b), a quotative construction with the verb *ge-* 'say' is employed. Established past *ge-sen* 'said' in (7a) evokes a concrete past speech event which is quoted, while the potential form *ge-ne* in (7b) allows for a hearsay reading. In (7c), the word *surag* 'secondhand information' is used as a modal adjective. In (7d), the indirect sentence-final particle *až* (< MM *a-juɣu*) is used. (7a–c) are neutral or informal and do not assert the truth of the proposition, while (7d) is newspaper style and does assert that the proposition is true. (p. 562)

(7)

a. ol-son ge-sen
find-PAST.EST say-PAST.EST
[SPEAKER] said that [she] was found.

b. ol-son ge-ne
find-PAST.EST say-POT
1. [It is] said that [she] was found.
2. [SPEAKER] says that [she] was found.

c. ol-son surag-tai
find-PAST.EST hearsay-PROPR

26.3.2. Present reference

In the present tense, the presence or absence of evidential marking depends on aspect. For generic or habitual events (marked by the participle *-dAg*), evidential marking is rare, and it does not apply to potential events (marked by the finite suffix *-nA* on regular verbs) at all. Conversely, simple temporary states (such as progressives in *-žii- ~ -ž bai-* and perfect resultant states in *-sAn bai-*) have to be marked for evidentiality: either *-nA* for immediate (and usually direct) perception of the event or its resultant state, or *-AA* for 'what has been perceived earlier … or is held as general knowledge' (Brosig 2015a: 66):

(8)

Xorin	tavdugaar	suvag	tyelyeviz	Tanai-d	xono-yo
twenty	fifth	channel	TV	2PL.GEN-DAT	stay.night-HORT
nevtrüüleg	exel-**žii-n.**				
program	begin-PROG-PRES.IMMED				

Here on TV 25, the TV program Tanaid honii is beginning. (Brosig 2015a: 54)

(9)

Tyelyeviz	gedeg	yöröösöö	či	öör=öö	med-**ži**-(g)aa	šd.
TV	PC.TOP	generally	you	self=REFL	know-PROG-PRES.EST	PART.DIS
reklam	surtčilgaag-aar.					
advertising	propaganda-INST					

[A: But where do you get your money from? J:]

As for TV, you know the TV business yourself. From advertising. (Brosig 2015a: 70)

In (8), the speaker uses the immediate present in *-nA* to announce that his show is starting. In (9), the established present in *-AA* can indicate that the speaker assesses his addressee's knowledge on the basis of what he already knows, while *-nA* would suggest that he has just learned about it e.g. by reading the addressee's facial expression. However, *-AA* might also indicate an already 'enhanced degree of personal knowledge' (Sun, Chapter 2 of this volume) about an event that the speaker has noticed for the first time while still on the scene and observing. (p. 563)

When present states are negated, stative verbs do not require evidential marking (10a), while for dynamic verbs the negated participle is within the scope of an auxiliary which receives evidential marking (10b) (see Brosig 2015b: 85–9 for additional details).

(10)

a. Yaagaad bai-(g)aa-g med-(e)x=güi.
why be-PARTIC.RES-ACC know-PARTIC.FUT=NEG
We don't know why.

b. Ünen-iig ol-(o)x=güi bai-na.[6]
truth-ACC find-PARTIC.FUT=NEG AUX-PRES.DIR.EVID
We cannot find the truth.

6

26.3.3. Extensions of the basic system

As discussed in §26.3.1, indirect evidence (*až*) and hearsay (*suragtai, gene*) can be expressed through a number of separate devices. These forms are not restricted to past events, but can refer to past, present, or future events through participles in *-sAn, -AA* (or *-dAg* or any nominal) and *-x*, respectively. A similar range of events is covered by the assumptive construction (see Mönh-Amgalan 1996: 42–3 for details) which involves a participle plus *yum bai-na* as in (11). The participle is used to form attributive clauses to the noun *yum* 'thing', which in turn is (in the absence of sentence-final particles of epistemic possibility) consistently marked as directly perceived through *bai-nA*.

(11)

Tanai kompani maš sain barilga bar'-ž
your(PL) company very good construction construct-CONVB
bai-(g)aa **yum** **bai-na**.[7]
AUX-PARTIC.PRES PART.MOD AUX-PRES.IMMED
[I told C. 'Take a look at the quality of our construction work' and showed it to him. C. then said:] 'Your company is apparently doing construction work very well. [I will help you. Let me find out what possibilities there are.' and stayed in contact.]

7

A special role among aspect constructions is assumed by the prospective, which is formed by the constructions *-x ge-ž bai-* and, marginally, *-xAAr bai-* and *-x bai-*. It resembles progressive and perfect constructions in that what is perceived is a present (or past) state which can apparently be marked with all evidential suffixes applicable to these domains:

(12)

Gemtl-iin	šine	darga	ažl-aa	av-(a)x	ge-ž
injury-GEN	new	leader	work-REFL	take-PARTIC.FUT	say-CONVB

bai-na.[8]

AUX-PRES.IMMED

[Headline of a short news article:] The new head of [the Centre for] Trauma [Medicine] is about to assume his duties.

8

(p. 564)

The role of sentence-final particles in expressing evidentiality is rather limited, for even though this morpheme class consists of fossilized auxiliaries, most of its members have specialized in epistemic or illocutionary meanings. For instance, while *až* as in (13) retained its evidential meaning, the particle *bilee* (< MM *bü-lüge*) was reinterpreted in terms of recollection (see Brosig 2012) and, after further grammaticalization into *lee* (which indicates that a speaker perceives a situation as familiar), started to combine with immediate *-nA*.

(13)

Lavrov-iin	medegd-sn-eer, …		ge-deg-t	Oros	naid-(a)ž
NAME-GEN	state-PARTIC.PAST-INST		COMP-PARTIC.HAB-DAT	Russia	hope-CONVB
bai-(g)aa	až.	'…'	ge-dg-iig	Lavrov oncol-žee.[9]	
AUX-PRES.EST	PART.INDIR		COMP-PARTIC.HAB-ACC	NAME emphasize-PAST.INDIR	

According to Lavrov, Russia is hoping that … Lavrov emphasized that '…'

9

26.4. The evidential system of Kalmyk

The Kalmyk evidential system is the most heterogeneous and diversified among the Mongolic languages, possessing seven terms (Direct, unspecialized Indirect, Inferred, Assumed, Prospective, Reported, and Common Knowledge) expressed by structurally (p. 565) different markers. As there are also evidentially neutral finalizing suffixes, the marking of evidentiality is optional, being used by speakers when needed.

Table 26.3. Kalmyk finalizing suffixes (terms after Bläsing 2003: 244)

affix	< MM	function	example	negation
-nA	< *-nAm*	present-future (non-past)	*ir-nä* ‘(he) comes’	*ir-x biš* (> *ir-x-š*)
-v	< *-bA*	terminative (past)	*ir-v* ‘(he) came’	*ir-sn uga*
-lA	< *-lUGA*	confirmative (direct evidential past)	*ir-lä* ‘(he) came’	*ir-sn uga bilä*
-ž	<*-JUGU*	resultative (indirect evidential past)	*ir-ž* ‘(he) came’	*ir-ž uga*
-sn	< *-GsAn*	perfective participle (assertive past)	*ir-sn* ‘(he) came’	*ir-sn uga*
-x	< *-QU*	future participle (future)	*ir-x* ‘(he) will come’	*ir-x uga* (> *ir-š-go*)
-dg		habitual participle (habitual)	*ir-dg* ‘(he) usually comes’	*ir-dg uga* (> *ir-d-go*)
-A	<*-GA*	imperfective participle (ongoing event started in the recent past)	*ir-ä* ‘(he) is still on his way’	*ir-äd uga*

Indicative finalizing suffixes include eight elements (see Table 26.3), two of which bear overt evidential meanings. These form the core of the evidential system, the opposition between direct and unspecialized indirect evidence at the past tense level. The system is further enriched by idiomatic analytic constructions that add highly specialized evidential meanings (see Table 26.4).

Table 26.4. A multi-term evidential system in Kalmyk

evidential meaning	**TAM/realization**	**epistemic/mirative overtones**	**marker**
Direct	Past		*-lA* (neg. *-sn uga bilä*)
	Past Habitual		*-dg bilä*
	Past Continuative (rare)		*-A bilä*
Indirect	Past	mirative	*-ž* (neg. *ž uga*)
	Pluperfect	mirative	*-sn bää-ž*
	Past Habitual	mirative	*-dg bää-ž*
Inferred	Present (current evidence)	uncertainty	*-dg bäädltä*
		certainty/mirative	*-dg bol-ža-na*
	Past (current evidence)	uncertainty	*-sn bäädltä*
		certainty/mirative	*-sn bol-ža-na* I
	Pluperfect (previous evidence)	certainty/mirative	*-sn bol-ža-na* II
	Future (current evidence)	uncertainty	*-x bäädltä*
Assumed	Present		*-dg bol-x*
	Past	certainty	*-sn bol-x*

Prospective	Future-in-the-past (previous evidence)		*-x bol-v* I
	Near future (current evidence)	certainty	*-x bol-(ža-)na*
	Remote future (expected evidence)		*-x bol-x*
Reported	Past		*-ž ginä*
	Past based on reliable information source		*-sn bilä*
	Future based on personal interviews		*-x bol-v* II
Common knowledge			*-dg ginä*

(p. 566) 26.4.1. Direct evidentiality

Forms of Direct evidentiality with *-lA* or *bilä* (< MM *bü-lüge*, used with *-lA* instead of the modern auxiliary *bää-*) and their negative counterpart *-sn uga bilä* are mostly used in declarative contexts, but also appear in questions where direct perception of the 'answerer' is expected (15):

(14)

xürm	özkldür	ekl-**lä**
wedding	yesterday	begin-WIT.EVID[3SG/PL][10]

The wedding began yesterday.[10]

(15)

mana	eež	xal'mg	zää-g	jahž	čan-**dg**
our	grandmother	Kalmyk	tea-ACC	how	cook-PARTIC.HAB

bilä?
be:WIT.EVID[3SG/PL]
(You surely remember) How did our grandmother usually cook Kalmyk tea?

26.4.2. Indirectivity

Unspecialized Indirectivity forms cover inference (16) or hearsay (17) as well as uncontrolled events (18) or dreams. Aspectually, a distinction is made between simple past in *-ž* (16), negated as in (17), habitual past in *-dg bääž* (19), and pluperfect indirectivity in *-sn bääž*. All forms have a mirative extension (cf. Pyurbeev 2010: 97), and the MM indirect past auxiliary *a-juɣu* was actually grammaticalized into a mirative particle *ž* for nominal predicates (20).

(16)

Čirä-d-än	zahan	pomade	zövär	zuzan-ar	türk-ž
face-DAT-REFL	white	powder	very	thick-INST spread-	PAST.INDIR[3SG/PL]

[Her face is unnaturally white;](She) will have spread white powder on her face very thickly.

(17)

vaxtjor	yum	üz-ž	uga
porter	thing	see-PAST.INDIR[3SG/PL]	NEG

The porter did not see anything/claimed not to have seen anything (from a police report about a theft).

(18)

	Gee-čk-ž-v …
	lose-COMPL-PAST.INDIR-1SG
	(To my surprise) I have lost it …

(19)

mini	eež	ik	lam-nr-in	xuvz-ig	altn	utz-ar
my	grandmother	big	monk-PL-GEN	clothes-ACC	golden	thread-INST
keerül-ž			uj-dg	bää-ž		
decorate-CONVB.IMPERV			sew-PARTIC.HAB	be-PAST.INDIR[3SG/PL]		

(I was told that) My grandmother used to decorate the clothes of important monks with embroideries made with a golden thread.

(20)

Kermn	gem-tä-ž-ij?
NAME	illness-PROPR-MIR-INTER
	Is Kermn ill? (new unexpected information)

(p. 567)

26.4.3. Inference

Inferred evidential constructions, which need to be based on current evidence, are differentiated according to an epistemic ‘degree of certainty’: if the speaker is certain of her conclusion, constructions with *bol(ža)na* (become-PROG-PRES) are used. Less certain conclusions are encoded with the modal adjective *bäädltä* (*bäädl* ‘look, appearance’ +

propriative in *-tA* or negative *uga*). Uncertain inferentials allow for past *-sn bäädltä* (21), present *-dg bäädltä* and future *-x bäädltä* reference (22). Certain inferentials with *bol(ža)na* are used for assessing evidence for present habitual events in *–dg* (23) or past events in *-sn* (also in case of deferred realization as in (24)), but has no future form.

(21)

en	xoir-in	negn-d-n’	möŋg	es giž	posylk	ir-**sn**
this	two-GEN	one-DAT-POSS.3	money	or	parcel	come-PARTIC.PAST
bäädltä						
PART[3SG/PL]						

(On watching two students cooking a big dinner) Probably one of these two has received money or a (food) parcel (from his parents).

(22)

Ör	zää-tl	gii-**x**	**bäädl**	**uga**
dawn	glimmer-CONVB.TERM	hold-PARTIC.FUT	PART[3SG/PL]	NEG

(It’s drizzling:) Probably it will stop by sunrise (lit. it doesn’t look like it will continue till sunrise).

(23)

ä	ugah-ar	tiigäd	bič-äd	dür-äd
sound	NEG-INST	so	write-CONVB.PERV	put_away-CONVB.PERV
jov-**dg**	**bol-ža-na**			
go-PARTIC.HAB	become-PROG-PRES[3SG/PL]			

(Look, Bata’s suitcase under his bed is full of his poems!) Without telling anyone, he writes (poems) and puts them away.

(24)

Ter-n’	digtä	Dzhek	avtomat-as	žiŋnül-**sn**
that-POSS.3	exactly	NAME	phone_booth-ABL	call-PARTIC.PER
bol-ža-na				
become-PROG-PRES[3SG/PL]				

(Before I opened the door for you, the phone rang, but the caller hung up without speaking. Now I think that) It must have been Dzhek calling from the telephone booth.

(p. 568)

26.4.4. Assumed evidential

If sensory or reported current evidence is interpreted on the basis of speaker's knowledge, this is marked by *-sn bolx* for past events (25) and by *-dg bolx* for present events.

(25)

oln	hazr-ar	or-**sn**	**bol-x-č**
many	place-INST	enter-PARTIC.PAST	become-PARTIC.FUT-2SG

You must have visited many places.

26.4.5. Prospective

There are three evidential prospective forms in Kalmyk which are used for predictions based on the current (*-x bol(ža)na*), previous (*-x bolv*) or expected (*-x bolx*) state of affairs. For instance, in (26) the speaker predicts an event that will take place in the near future as a logical consequence of the current state of affairs. Prospectives are frequently used in questions (27).

(26)

noolda-hi-n'	tadn	ke-x	**bol-ža-na-t**	bidn
fight-ACC-POSS.3	you	do-PARTIC.FUT	become-PROG-PRES-2PL	we
bol-xla,	zug	zal'vr-x	**bol-ža-na-vidn**	
become-CONVB.COND	only	pray-PARTIC.FUT	become-PROG-PRES-1pl	

You (young people) will have to continue the fight. As for us, we (being old now), will only have to pray.

(27)

Oda	dočn	duuna-d	jahž	ter	**ir-x-mn**
now	40	verst-DAT	how	she	come-PARTIC.FUT-AFF

bol-x-vi?

become-PAST-INTER[3SG/PL]

(The boy leaving for a boarding school thinks about his mother's future visits:) How will she now travel forty verst (= 42.7 km)? (Skribnik and Seesing 2012: 64)

26.4.6. Reported and common knowledge evidentials

Reported evidence can be expressed by *-ž ginä* (indirect *-ž* plus present tense form of *gi-* 'say') as in (28) and, in newspaper style, by the two constructions *-sn bilä* and *-x bolv* reanalysed as Reported (see Skribnik and Seesing 2014). The construction *-ž ginä* with the habitual participle in *-dg* (often combined with the assertive particle *mön/mn*) is grammaticalized as common knowledge (29) and occurs mainly in proverbs.

(28)

Batah-as	bičg	ir-ž	**ginä,**	ünn-ij?
NAME-ABL	letter	come-INDIR.EVID[3SG/PL]	REP	truth-INTER

(They say) A letter from Bata has come, is it true?

(p. 569)

(29)

äämtx-äg	asr-ž	tus	uga	bol-**d-mn**
coward-ACC	care-CONVB.IMPERV	use	NEG	become-PARTIC.HAB-AFF[3SG/PL]
ginä				
REP				

Taking care of a coward is useless (as everyone knows).

To sum up, Kalmyk has an optional seven-term evidential system covering Direct, Indirect, Inferred, Assumed, Prospective, Reported, and Common Knowledge evidentials organized on two structurally different levels. On the first level, the primary synthetic past forms *-lA* for direct perception and *-ž* for information obtained indirectly are in opposition. The second level is shaped by idiomatic analytic constructions of a different character with highly specialized evidential meanings. Evidential distinctions are richest for past reference, though general present and future are represented in complex constructions through the habitual participle in *-dg* and the future participle in *-x* in the non-finite position. A common marker in Reported *-ž ginä* and Common Knowledge *-dg ginä* constructions indicates that common knowledge is communicated in both constructions. Interrogative uses, which reflect the information source of the 'answerer', are attested for Direct, Indirective, Reported, and Prospective forms.

26.5. The expression of evidentiality in Buryat

In Buryat, evidentiality is grammaticalized for Reportativity and Common Knowledge, while otherwise evidential strategies are used.

Indicative finalizing suffixes include three finite (see Table 26.5) and eight participial suffixes, which combine with the particle *hen* for past tense meanings. A reflex of MM indirect *-JUGU* is absent in Buryat, and direct *-lAi* (< MM *-lUGA*) is reanalysed and marginalized. Particles grammaticalized with this suffix, like *gelei* 'even accepting that V, still' or

assertive *belei* (cf. direct *bilä* in Kalmyk) lack evidential meaning. It is the complex system of analytic aspectual and modal constructions that allows for evidential extensions (see Table 26.6).

Table 26.5. Buryat finite verbal suffixes

affix	**<MM**	**function**	**example**	**negation**
-nA	*<-nAm*	non-past	*una-na-b* ‘I’m falling/I fall/I will fall’	*una-na-güi-b*
-bA	*<-bA*	past	*una-ba-b* ‘I fell’	*una-ba-güi-b*
-lAi	*<-lUGAi*	preventive	*una-lai-š!* ‘Don’t you fall!’	

(p. 570)

Table 26.6. The expression of evidentiality in Buryat

construction	**meaning**	**extension**
Evidential strategies		
-han bai-	perfect/resultative	indirective; mirative
-AA bai-	continuative	inferred or assumed
-dag(güi) bai-gaa bai- *-sAn bai-gaa bai-*	habitual and past continuative (+ negation)	(re)interpretation of the previous evidence
PARTIC + modal adjective	epistemic and other modalities	indirective
-xA bai- *-xA bolo-*	circumstantial necessity, stative, and inchoative	assumption
-xAA/-xAyAA/-xAAr bai-	intention	inferential and assumptive prospective
-xa gežе bai-	intention	assumptive prospective
Evidentials		
V_{fin} *ge-lse-ne*	Reported	
V_{fin} *ge-deg/ge-lse-deg*	Common knowledge	

26.5.1. Evidential strategies: aspectual constructions

The evidential extensions are most common in the perfect/resultative and continuative constructions. The perfect/resultative in *-han bai-* (past participle plus auxiliary *bai–*) allows for indirect evidential and mirative extensions. Analysing (30), Cydypov (1972: 161) stresses sources other than direct perception: 'The speaker was at Baatar's office or his home and found out that he is absent.' In (30b), the first person effect allows for a hearsay reading with mirative extension:

(30)

a. Baatar	Moskva	ošo-**hon**	**bai-na**
NAME	NAME	go-PARTIC.PAST	AUX-PRES[3SG]

Baatar went to Moscow, as it turned out (Cydypov 1972: 161).

(30)

b. Bi-š	xürš-in-göö		üüde	**nyeerge-hen**
I-POSS2SG	neighbour-GEN-REFL		door	bang-PARTIC.PAST
bai-gaa-l-bi				
AUX-PAST-PART.FOC-1SG				

(I was so drunk yesterday, they say,) I was banging at the neighbour's door [Babasan Cyrenov, personal communication].

(p. 571)

The continuative construction *-AA bai-* denotes present states that started in the recent past and in its evidential reading conveys inferred or assumed information. In evidential interpretation only two finalizing suffixes are possible: either *-nA* (present), denoting the time of interpretation (31), or *-xA* (future), reinterpreted as atemporal uncertain inference (cf. the Khalkha modal particle *baix* 'probably') (Cydypov 1972: 194). Combined with perfect or habitual forms (*-dag(güi) bai-gaa bai-; -hAn bai-gaa bai-*), this construction is used for the (re)interpretation of past evidence (32):

(31)

Gal-da	düte	bai-ža	bolo-xo-güi	ašaan
fire-DAT	close	AUX-CONVB	become-PARTIC.FUT-NEG	load
bai-gaa		**bai-na**		
AUX-PARTIC.PRES		AUX-PRES[3SG/PL]		

It seems it was a load that shouldn't be placed close to fire (looking at the consequences of a fire that broke out after someone started smoking nearby) [BC].

(32)

Ene-l	ülegšen	xuluu-**dag**	**bai-gaa**	**bai-na**
this-PCL.FOC	bitch	steal-PC.HAB	AUX-PC.PRES	AUX-PRES[3SG/PL]

(After discovering a theft: Do you remember, a dainty girl with a pretty face was walking around here the whole day.) It must have been this bitch that has stolen it! [BC].

26.5.2. Evidential strategies: modality expressions

In some Buryat constructions that either feature modal adjectives or future participles, modal meanings overlap with inference and assumption. For instance, the modal adjective *xeber-tei* 'apparently, probably' (propriative from *xeber* 'similarity, appearance') expresses epistemic uncertainty with conclusions inferred from sensory evidence ('it looks like …'). With the future participle, an uncertain prospective meaning is prevalent (33). Through grammaticalization into a particle, *xebertei* has become compatible with finite forms such as *-bA* (34), reflecting a development 'participial attribute + head noun *xebertei*' to 'finite predicate + particle *xebertei*':

(33)

Xura	oro-**xo**	**xebertei**
rain	enter-PARTIC.FUT	LOOK_LIKE[3SG/PL]

It will probably rain/It looks like it will be raining [Čeremisov 1973: 639].

(34)

Hüül-ei	hüül-de	oilgo-**bo**	**xebertei**
end-GEN	end-DAT	understand-PAST	LOOK_LIKE[3SG/PL]

It seems he understood it at last [BC].

Expressions for different types of modality are based on the participle in *-xA* and its derivatives, and several of these allow for evidential readings. First, constructions with *-xA* plus the auxiliary forms *bai-* 'be' and *bolo-* 'become' express circumstantial necessity, but also allow for general assumptions about past (35) and future events, depending on the tense of the finalizing suffix. (p. 572)

(35)

Taanar,	nügel_edleeše-d,	nügel-öö	nyüd-öör-öö	xara-**xa**
you	sinner-PL	sin-REFL	eye-INS-REFL	see-PARTIC.FUT
bolo-bo	geeše-t			
AUX-PAST	PART-2PL			

You, sinners, must have come to see your sins with your own eyes [BC].

A combination of the auxiliary *bai-* with different variants of the purposive converb in *-xAA/-xAyAA/-xAAr* originally denotes intention. But it can also express expected developments and predictions based on observable facts or more general knowledge (36), functioning as inferential and assumptive prospective; in this function is not restricted to sentient subjects. The finalizing present tense *-nA* indicates an immediate reaction to sensory evidence simultaneous with the speech act (36), and the past tense *-bA* puts it in the past. The construction *-xa geže bai-* (-PARTIC.FUT SAY-CONVB AUX-) is almost synonymous because *xa geže* is already grammaticalized as an 'analytic converb' of purpose (Skribnik

1987: 43–5). It is particular, however, in that it can combine with future *-xA* to denote assumptions based on expected future events (37).

(36)

Ügloo_münöögüi	ursa_ger-šni	una-**xayaa**	**bai-na**
any_day	tent-POSS2SG	fall-CONVB.PURP	AUX-PRES[3SG/PL]

Any day now your tent can fall down [BC].

(37)

Amerik-in	noyo-d	atomna	bombo-yoo	dalai-ža,	aimšag-tai
Amerika-GEN	master-PL	atomic	bomb-REFL	brandish-CONVB	fear-ADJ
muuxai	dai	kosmos-to	exil-že,	altan	delxei-ye-mnai
bad	war	space-DAT	start-CONVB	gold	earth-ACC-POSS1PL
butal-**xa**		**ge-že**	**bai-xa**		
destroy-PARTIC.FUT		SAY-CONVB	AUX-FUT[3SG/PL]		

The American masters, brandishing the atomic bomb and starting a terrible space war, will be about to destroy our golden planet [BC].

26.5.3. Sentence-final particles

More than forty sentence-final particles in Buryat (often deriving from the MM auxiliary *a-* or from *ge-* 'say') express epistemic (and other) modalities, as well as assumption or inference. For instance, *geešeltei* combines inference/assumption with doubt:

(38)

Exe-šni-l	šamai-gaa	yexeer	erxelüül-žerx'-öö
mother-POSS2SG-PCL.FOC	you:ACC-REFL	very	pamper-INTENS-PAST
geešeltei			
PCL[3SG/PL]			

I guess it was your mother who pampered you very much [BC].

(p. 573)

26.5.4. SAY-constructions for reportativity and Common Knowledge

The quotative verb *ge-* takes direct and indirect speech report complements and is the most important means for expressing reported and quoted information. Its present tense sociative form (*ge-lse-ne*) was grammaticalized specifically for this reportative function (39). To express common knowledge, the habitual participle *ge-deg* either with or without sociative voice is used (40). It means that for Buryat the 'verbal plurality' is relevant in grammaticalization of these evidential notions: either many acts of communication or many participants.

(39)

Bol'nica-da	asar-aa-l	ge-lse-ne
hospital-LOC	bring-PAST-PART.FOC[3SG/PL]	SAY-SOC-PRES

(Nothing is known.) (He) was taken to the hospital, they say [BC].

(40)

Erdeni	ele-xe	bür'-ee	ünge	oro-xo
jewel	wear_out-PARTIC.FUT	POSTP-REFL	colour	enter-PC.FUT[3SG/PL]

ge-lse-deg
SAY-SOC-PARTIC.HAB

The more a jewel wears out, the brighter it gets, as they say [BC].

Summing up, while Buryat has a number of analytic forms that can express evidential notions, their meanings are interwoven with aspectuality and modality. Even though a few constructions such as *ge-lse-ne/ge-lse-deg* for Reported and Common Knowledge express evidentiality unambiguously, evidential strategies are prevalent.

26.6. Evidentiality in other Mongolic languages

In this section we discuss a number of other Mongolic languages that have been investigated in less detail. The discussion is structured geographically, as areal distribution turns out to be more relevant for the development of evidentiality in Mongolic than genetic factors.

26.6.1. Loss of evidentiality in Khorchin and Dagur in Manchuria

In Khorchin (Brosig 2014b), an Eastern Mongolian dialect spoken in Hinggan and Tongliao in southwestern Manchuria, evidentiality was lost probably under the influence of Mandarin-speaking settlers. Present tense reference is solely accomplished through potential *–nA*. The suffix *–dʒɛ* (< MM indirect past *–JUGU*) is used as an evidentially neutral past, while *–sən* (< MM perfect *–GSAn*) is used either as a perfect or as a standard-influenced past in official contexts. The suffix *-lA* (< MM direct past *-lUGA*) is used for events either seconds (p. 574) before or after the time of speech that have usually been perceived directly, but this source-of-evidence interpretation is not prominent in speak-

ers' minds. The Khorchin prospective *–ndʒɛ-* (<*–na gež bai-*) is likewise best understood as part of the tense-aspect system.

The Dagur language is mostly spoken in Hulunbuir and Heilongjiang, but there is also a small resettled population in Tacheng (Xinjiang). It uses only two tense suffixes, *-bəi* for future (on its own) and present tense (with other aspect markers) and *-sən* for past tense (Wang 1993: 101–9), and thus lacks grammaticalized evidentiality.

Both Khorchin (Brosig 2014b: 51–7) and Dagur (Ding 2013: 188) can optionally express hearsay meanings through evidential strategies involving the verb 'say'. Moreover, Xinjiang Dagur (Ding 2013: 190) can use two sentence-final postverbal particles of unclear origin to express inference (*kəː*) or hearsay (*mək*).

26.6.2. The development of Tibetan-style evidentiality in Southern Mongolic and other Mongolic varieties of the Amdo region

The Amdo region is a linguistically relatively diverse area. Next to Amdo Tibetan and the relative newcomer Mandarin as the areally dominant languages, there are the Turkic languages Western Shira Yugur and Salar and Sinitic languages such as Wutun. Additionally, all five Southern Mongolic languages as well as two Central Mongolic varieties, Eastern Shira Yugur and Qinghai Oirat (Deed Mongol), are spoken in this area.

Amdo Tibetan dialects (Haller 2000a; see also Sun 1993; and Chapter 2 of this volume) make a threefold distinction between participatory evidence, other forms of direct evidence, and indirect evidence.[11] The forms that indicate indirect evidence are very regular, so they are more recent (Slater forthcoming). In contrast, the Southern Mongolic languages Mangghuer, Mongghul, Kangjia, and Qinghai Bonan, which are spoken in Qinghai Province east of Lake Qinghai, only draw a binary distinction between participatory and non-participatory evidence. The typical characteristics of such a system are summarized by Slater (2003b: 194–209, our glossing) for Mangghuer. Typically, with the participatory evidential, the speaker describes her own experiences, and second or third persons are marked as non-participatory. In interrogatives, it is second persons that receive evidential marking.

(41)

a. bi ri-ba
1SG come-PERV.PARTI
I came.

b. qi/gan ri-jiang
2SG/3SG come-PERV.NPARTI
You/she came.

(42)

a. qi ri-b-u?
2SG come-PERV.PARTI-PARTI.INTER
Did you come?

b. bi/gan ri-ji-nu?
1SG/3SG come- PERV.NPARTI-NPARTI.INTER
Did I/she come?

(p. 575)

Non-participatory marking is commonly used with first persons to indicate lack of control, whether the predicate verb denotes a non-controllable event as in (43), or control is lacking for some other reason:

	bi	gan-ni	tani-lang.
(43)	1SG	3-ACC	recognize- IMPERV.NPARTI
	'I recognize him/her.'		

If the speaker closely associates herself with an event or intends to vouch for it, participatory marking can be used with second and third person declarative subjects as in (44). As shown by (45) from Mongghul (Cinggeltei 1989: 69–71), even subjective reasoning versus explicit recourse to visual evidence can motivate the use of subjective forms.

(44)

taiting-du	huguer	liang-ge	ri-ba
there-DAT	cow	two-CL	come-PERV.PARTI

Two bulls are coming over there (you go eat them.) [In a fairytale, the speaker is trying to trick a monster into not eating him and going for the 'bulls' instead which he knows are actually tigers. Sitting on a tree, he can see the tigers, while the monster on the ground cannot.]

(45)

a.	qi	lox-j-i		b. qi	lox-j-a
	2SG	be.hungry-PERV.PARTI		2SG	be.hungry-PERV.PARTI
	(I think) you are hungry.			You look hungry.	

Patterns can be syntactically or lexically conditioned: In Qinghai Bonan (Fried 2010: 191–3), only the non-participatory form of the copula can be used as a verbal auxiliary, and only the participatory form of a verb can be used following a concessive or conditional subordinate clause or before a finite marker of epistemic uncertainty. In Mongghul (Åkerman 2012: 23–7), a distinction is made between non-control events on the one hand which receive non-participatory marking like in Mangghuer, and non-control lexical verbs on the other hand which, if they combine with first person subjects, require a form of the imperfective suffix that is unmarked for evidentiality (either *-ni* [nə] or *-nu*).

The interaction of evidentiality with aspectual-temporal values differs somewhat between these four Southern Mongolic languages. The declarative systems of three of these languages are given in Table 26.7 (Slater forthcoming using Slater 2003b; Åkerman 2012; Fried 2010).

The future, (non-future) imperfective and (past) perfective forms as well as all types of copulas mark an obligatory contrast between participatory and non-participatory forms in all three languages. In Mongghul, participatory forms distinguish between perfective *-wa* and resultative-stative *-jii*, while the non-participatory form covers the entire aspectual

range between resultative-statives and perfectives (extrapolating from Åkerman 2012: 20–3). Qinghai Bonan -*na*, used with stative verbs and for transitory states, and -*m*, used for negated and future (and thus *irreal*) situations, are evidentially neutral (judging from Fried's 2010 examples), while Mongghul -*m* is restricted to non-participatory contexts (Åkerman 2012: 29–31). In questions, Monguor (Åkerman 2012: 13; Slater 2003b: 117) uses addressee-centred evidentiality marking throughout, while Qinghai Bonan only does so in polar copula questions (Fried 2010: 258–60). **(p. 576)**

Table 26.7. Evidentials in declaratives in Mangghuer, Mongghul, and Qinghai Bonan

		Mangghuer		**Mongghul**		**Qinghai Bonan**	
		PARTI	NPARTI	PARTI	NPARTI	PARTI	NPARTI
declarative	PFV	*-ba*	*-jiang*	*-wa/-jii*	*-jia*	*-to*	*-jə*
	IPFV	*-la bi*	*-lang*	*-nii*	*-na*	*-ji*	*-jo*
	STATIVE					*-na*	
	FUT	*-ni*	*-kun(i)ang*	*-gunii*	*-guna*	*-gi*	*-gəwa*
	HAB/ STATIVE				*-m*	*-m*	
copula	POSITIVE	*bi*	*bang*	*ii*	*wa*	*bi*	*ba*
	as AUX or V					*wi*	*wa/o*
	NEG.EQU	*puzhi*	*puzhang*	*puxi*	*puxia*	*çi*	*çəwa/ço*
	NEG.ATTR	*gui*	*guang*	*gui*	*gua*	*ki(wə)*	*kina*

The historical genesis of these systems deserves a more detailed treatment than possible here. The basic contrast is between participatory *-i* and non-participatory *-a* (Qinghai Bonan *o* < *wa*), except that Monguor preserved the form of the MM factual *-bA* intact, while reinterpreting it as participatory (cf. Slater forthcoming). The imperfective forms might go back to the MM converbal suffixes *-n* (imperfective) and *-ju* (resultative > imperfective) in combination with the MM auxiliaries *bui* > **bii* > *i* and *a-* (Cinggeltei 1981, 1989) or the sixteenth century auxiliaries *bui* and *bai-*. The alternative approach, to identify Monguor and Qinghai Bonan non-participatory perfective forms with MM *-JUGU,* seems less promising.

The situation in these languages contrasts markedly with the situation in Gansu Bonan (Keith Slater p.c.) and Santa, both of which have populations that converted to Islam and left the Tibetan plateau and moved eastwards into today's Gansu Province, thus minimizing contact both with Amdo Tibetan herders and with Amdo Tibetan as a language of liturgy. Santa uses the three finite suffixes *-wo* for perfective, *-nə* for imperfective and *-ji-wo* for progressive contexts (Field 1997: 202–7), while evidential marking except through hearsay verbs is not attested (Bāo 2013).

The Central Mongolic varieties of Amdo are spoken to the north (Eastern Shira Yugur) and west (Qinghai Oirat) of Lake Qinghai. Eastern Shira Yugur is notable for featuring a relatively complex TAME system that makes extensive use of auxiliaries, as listed in Table 26.8.[12] It is probable that a distinction between *-wA* (< MM *-bA*) and *-j wai* (**-ju* *(p. 577)* *bayi-nam*) as participatory versus non-participatory can be established (as cautiously suggested by Nugteren 2003: 280) and that this distinction also obtains for *-GU* versus *-G' wai*. Other aspectual forms of this variety always require an auxiliary, for which there seems to be a distinction between the two forms *be* < MM *bui* and *bai* < sixteenth century Mongolian **bayi-nam*.[13] If this analysis is correct, the only evidentially neutral form would be the stative/generic marker *-nai*. Secondhand information can facultatively be marked by the stative form of 'say', *gə-ni:* (Bāo 2013).

Table 26.8. TAME system of Eastern Shira Yugur

	primary forms		**secondary past**
past	*-wA*	*-j wai*	
future	*-GU*	*-G' wai*	
habitual/generic		*-dAg bai*	
progressive		*-jla wai*	*-jla suu*-PAST
continuative		*-AA wai*	*-AA suu*-PAST

perfect		*-sAn bai*	
stative	*-nai*		

Qinghai Oirat speakers, similar to MM or Kalmyk, employ three finite suffixes (*-lAA*, *-dtʃAA*, *-wAA*) for past tense, but they developed a distinction between two kinds of progressives coded by *-dʒiː* (< MM *-ju bui*) and *-dʒæːn* (sixteenth century *-ju bayi-na*) (cf. Oyunceceg 2009: 150–65) which is reminiscent of the participatory/non-participatory systems found in the area. The precise evidential values of the suffixes require further investigation.

26.6.3. Moghol in Afghanistan

Moghol in Afghanistan is a language isolated from the rest of Mongolic since the Middle Mongolian period. It was attested until the early 1970s, but is now probably extinct. In Moghol, overall six indicative 'finalizing' suffixes are used. The distinction between the two non-past suffixes *-na* and *-m* is unclear, though *-m* is restricted to first/third person in any but the oldest materials (Böke 1996: 187–8) and seems to be more common in habitual-generic contexts (Johanson 1974: 468–9). As *-gsan* is a stative perfect (Johanson 1974: 470–1), this leaves *-ba*, *-ja,* and *-la* as regular past tense suffixes. *-ba* is used as the main narrative device irrespective (p. 578) of person, *-la* is too rare to be assessed, and *-ja* (see examples in Böke 1996: 198–9) seems to denote inference or lack of control. On the basis of available descriptions, the system of Moghol might resemble MM.

26.7. Summing up

In Middle Mongolian, evidentiality is restricted to the past tense and organized in a past tense system with three markers: evidentially neutral *-bA*, direct *-lUGA,* and indirect *-JUGU*. The changes that this pattern underwent in its development into modern languages can mostly be explained areally.

Buryat, Khorchin, and Dagur—the languages spoken in the north and east of the Mongolosphere—form part of Greater Manchuria (see Map 26.1). Each of these languages is characterized to varying extent by ongoing or recent contact with Tungusic, Russian, and Mandarin Chinese—languages which lack extensive evidential systems. All three restructured their past tense systems to privilege one past tense suffix (*-bA* in Buryat, *-JUGU* in Khorchin, and MM perfect *-GsAn* in Dagur), while the other morphemes were reinterpreted (Buryat *-lAi* and Khorchin *-w* as preventive, Dagur *-bəi* as general future/non-past) or lost (*-JUGU* in Buryat and Dagur).

In several Southern and Central Mongolic varieties of Amdo, binary systems evolved under Amdo Tibetan influence that distinguish between participatory and non-participatory evidence. Most morphs which express evidentiality in Monguor, Qinghai Bonan, and Eastern Shira Yugur can be traced back to MM *-bA* and two different copular auxiliaries. MM

-lUGA and indirect *-JUGU* were either lost or never present. The system first spread to declaratives (see Slater forthcoming) and only later included interrogatives. But Amdo Tibetan influence varied. While the Kangjia-speaking Muslims within Amdo apparently developed a participatory/non-participatory distinction, the Santa and Gansu Bonan Muslims living at the border of Amdo did not.

Amdo Tibetan influence might also have played an important role for Khalkha, as Amdo was the centre of Central Mongolian monastery culture and Amdo Tibetan served as the language of religion for monks (up to two-fifths of the male population in pre-socialist times). Khalkha retained a tripartite past tense evidential system, but replaced *-bA* with the former perfect *-sAn*. The latter only referred to established knowledge, so that the evaluation of evidence with *-lUGA* and *-JUGU* was confined to the time of speech, which in turn led to the demise of the hearsay meaning of *-JUGU*. The distinction between previously established and immediately realized events was extended to present states (now marked by the MM resultative *-GA* and present progressive *-nAm*, respectively).

The speakers of all the languages already discussed inhabit a contiguous area, which helps to explain common developments such as the creation of structurally identical prospectives (Khalkha, Buryat, Khorchin) or the extension of ‘say’ to denote hearsay (Central and Southern Mongolic).

Kalmyk, whose speakers departed from Greater Mongolia in the seventeenth century, preserved the basic tripartite past tense system of MM, but supplemented it with a very elaborate system of analytic evidentiality markers that makes ample use of separate coding of event and evaluation time. Most unique features of this system are related to (p. 579) constructions grammaticalized from ‘become’, which otherwise is only found in a single Buryat evidential strategy.

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Notes:

([1]) Our materials include written literary texts, press, the internet, and recently launched online corpora: Buryat corpus (BC): http://web-corpora.net/BuryatCorpus/search/?interface_language-en; Kalmyk National Corpus (KNC): http://web-corpora.net/KalmykCorpus/search/?interface_language-en.

([2]) Past tense suffixes can also be used for referring to the future, in which case they express epistemic meanings which mirror their evidential values (e.g. *-Ž(ee)* inferred past > epistemically certain future, see Brosig forthcoming).

([3]) In spoken language, *-v*, as well as a semelfactive use of *-dAg*, also function as mirative (Brosig 2015a: 93–6, 101–4, forthcoming).

([4]) In previous research, Khalkha past tense suffixes have often been analysed in terms of temporal distance or aspect (see Brosig 2015, forthcoming for detailed discussions).

([5]) http://chuhal.mn/r/50923, 2015-10-12, heading of a news article. Retrieved 7 November 2015.

([6]) B. Ariuntuyaa (November 2011, Niigmiin tol'): D. Caxilgaan: Minii xüügiin ard alban tušaal gor'dson xümüüs bii. http://news.gogo.mn/r/78744, retrieved 28 June 2016.

([7]) http://www.iaac.mn/content/306. Cinggeltei District Court, Sentence 105, 30 March 2010.

([8]) http://www.news.mn/content/173622.shtml. L. Haliu, 20 March 2014. Retrieved 15 January 2015.

([9]) http://world.news.mn/print/content/187819.shtml, Š. Myagmar: *Syergyei Lavrov yuu yariv?* Retrieved 18 January 2016.

([10]) All examples in this section are from Skribnik and Seesing (2014) if not indicated otherwise.

([11]) The term *participatory*, which we will use throughout this chapter, denotes the same evidential category as the one DeLancey (Chapter 27 of this volume) calls *egophoric*. In Mongolian studies (including Åkerman 2012; Bāo 2013; Cinggeltei 1981; Fried 2010; Slater 2003b, forthcoming), the category is labelled *subjective perspective*, contrasting with an *objective perspective* in binary systems.

([12]) This table represents our interpretation of Nugteren's (2003: 278–81) data. In contrast, Bāo (2013) gives examples that contain evidentially neutral progressives in *-jla-ni* and also mentions a form *juu-cig-**j*** '[it] bit [me]' that must be a reflex of MM *-JUGU*.

([13]) Such a distinction is contemplated, but rejected by Bāo (2013: 210–12). We think, however, that there is a clear correlation between *we* and first person declaratives and second person interrogatives and between *wai* and second person declaratives and third person forms in general in Jagunasutu's (1981) data, and that the counterexamples that disturbed Bāo might be made sense of, if presented in a wider discourse context.

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Abstract and Keywords

This chapter describes the evidential and related catetgories of Tibetic languages, concentrating on the Lhasa variety. Tibetic languages show an unusual evidential system based on a three-way grammatical distinction among Factual or assumed knowledge, Egophoric or personal knowledge, and Evidential or contingent facts. Evidentiality per se, specifically the distinction between directly and indirectly acquired knowledge, is distinguished only for propositions of the third type. Some Tibetic languages such as Lhasa and Standard Tibetan further subdivide the Egophoric category and distinguish volitional and non-volitional Egophoric forms. All of these categories are matters of presentation, not objective fact; that is, a particular grammatical construction is chosen not in automatic response to an objective situation, but in order to convey a proposition to the addressee in a particular perspective.

Keywords: Tibetan, evidentiality, egophoricity, volitionality, inferential

27.1. Introduction

THE unusual and unusually prominent grammatical expression of epistemic status and information source in Tibetic languages, especially Lhasa Tibetan,[1] has played a prominent role in the study of evidentiality since that category was brought to the attention of the general linguistic public in the early 1980s. Work by many scholars over the past two decades has produced a substantial body of more deeply informed research on Lhasa and other Tibetic languages, only a small part of which I will be able to refer to here (see also DeLancey 2017). In this chapter I will mostly discuss Lhasa data, but concentrate on the ways that this system is typical of the pan-Tibetic phenomenon. The system will be presented inductively, in terms of grammatical categories in Tibetic languages, rather than

deductively, in terms derived from theoretical claims or typological generalizations about a cross-linguistic category of evidentiality.

The first known Tibetic language is Old Tibetan, the language of the Tibetan Empire, recorded in manuscripts from the seventh century CE. In scholarly as well as general use, 'Tibetan' is often applied to all descendants of this language, as well as to the written standard which developed from it. Since the modern descendants of Old Tibetan (OT) are as fully divergent as, say, the Romance languages, it is preferable to distinguish them in our terminology; following Tournadre (2014), I will refer to the family as Tibetic, and to the individual languages as, e.g. Amdo rather than 'Amdo Tibetan'. 'Tibetan' is appropriate in reference to varieties shared across the Tibetan cultural sphere, i.e. Classical Tibetan, Written Tibetan, Standard Tibetan.

Evidentiality is not a feature of Classical Tibetan grammar. All the modern languages have some grammaticalized evidential constructions, and almost all (with the exception of Balti, see Bielmeier 2000) have a complicated system in which typical evidential categories, such as inferential, interact with the very unusual system of grammaticalized (p. 581) knowledge category which will be discussed below. But forms in these systems are often not cognate, and combined with the lack of evidence for evidentiality in older stages of the written language, this tells us that the modern systems represent a recent development, so that its prevalence across the family represents horizontal spread rather than common inheritance.

27.2. Evidentiality in Lhasa Tibetan

Evidential phenomena in Lhasa (Central Tibetic) had already been noted in the literature before the concept and the associated term became a topic of wide interest in the 1980s (Goldstein and Nornang 1970; Goldstein 1973; Jin 1979). From the mid 1990s (Tournadre 1996) we have had more and better primary descriptions, including a growing body of work on other Tibetic languages.

27.2.1. Previous work

The notoriety of Tibetic in evidentiality studies is due to an unusual grammatical interaction with person. In almost all Tibetic languages there is a set of forms which typically occur only with first-person statements and second-person questions; following current usage I will call these Egophoric verb forms (glossed EGO). In the following exchange, from a folktale, we see the Egophoric Imperfective verb ending *-gi.yod* used in a second-person question in (1a), and a first-person statement in (1b):[2]

(1)

a.	rang	nam.rgyun	lto.byad	ga.re	za-gi.yod=zer
	you	ordinarily	food	what	eat-IMPERV.EGO=QUOT
	'What food do you usually eat?' [he] said				

b.	tsa	zas	chu	‘thung	byas-kyi.yod
	grass	ate	water	drink	do-IMPERV.EGO
	Eat grass, drink water is what I do. (*Rabbit Eats the Baby*)				

In quotative complements these forms signal coreference of the subjects of the complement and main clause, and this was the basis for Hale’s (1980) terms CONJUNCT and DISJUNCT for a similar phenomenon in Newar. In earlier work (DeLancey 1985, 1992) I adopted these labels, but, as this terminology grossly oversimplifies the fundamental nature of the Tibetic phenomenon (and is not apt even for Newar, see Hargreaves to appear), it was not universally popular with Tibetanists. Most scholars now use Tournadre’s (1996) term EGOPHORIC for the first-person-associated category which I had called ‘conjunct’. (For a more detailed history of the concept see Hargreaves 2005; Tournadre 2008). (p. 582)

27.2.2. The structure of information in Tibetic

The verbal systems of modern Tibetic languages grammatically mark a distinction among three kinds of knowledge. The characteristic which has made Tibetic languages so celebrated in the world of evidential studies is a set of forms which mark a statement as representing certain kinds of personal knowledge. Following widespread current practice we may call these forms Egophoric, and the category which they express, personal knowledge. (I will use capitalized labels for specific grammatical constructions, and a distinct set of labels, uncapitalized, for the functional categories which they express). Tibetic languages are often described in terms of a two-way distinction between Egophoric and other forms, but the latter can be further subdivided. A set of what I will call Factual forms express a category of assumed knowledge, i.e. assertions which are presented as not requiring any kind of evidential support. Finally, in perfective aspect, assertions which are presented as requiring evidential support are marked for Evidential status, i.e. as based on direct observation of the asserted fact or on inference from secondary evidence.

This distinction has not been much discussed outside the Tibetic literature, and there is no standard or consensus terminology for it. Hein (2001: 35) speaks of ‘focus on speaker’s involvement’, ‘focus on speaker’s unspecified knowledge’, and ‘focus on speaker’s perception’; Zeisler (2004) of ‘personal self-evident’, ‘generic’, and ‘immediate perception’, DeLancey (2012) of personal, generic, and immediate forms, Hill (2013) of Personal, Factual, and Testimonial categories, Tournadre and LaPolla (2014) of Egophoric, Factual, and Sensory. The different labels emphasize different aspects of the same overall idea, distinguishing information which the speaker is the only possible source for, information which the speaker feels no need to provide any source for, and information which the speaker takes responsibility as the source for. Here I want to carefully distinguish between grammatical forms and the cognitive categories which they express. I will refer to the latter as personal, assumed, and contingent knowledge, and to the forms which express them in Tibetic languages as Egophoric, Factual, and Evidential (Direct versus Inferential).

The distinction is encoded in the copular system, and many of the verbal endings which encode it are based on copulas and derive their evidential force from them. Consider the Lhasa examples:

	nga-’i	nang	bod-la	yod
(2)	1sg-GEN	home	Tibet-LOC	exist.PERSONAL
	My home is in Tibet.			
	bod-la	g.yag	yog.red	
(3)	Tibet-LOC	yak	exist.FACTUAL	
	There are yaks in Tibet.			
	bod-la	moṭa	mang.po	‘dug
(4)	Tibet-LOC	auto	many	exist.DIRECT
	There are lots of cars in Tibet.			

Examples like (2), with the Egophoric Existential copula *yod*, are often described as expressing personal knowledge, but are perhaps better thought of as self-representation. (p. 583) This statement, for example, does not necessarily describe any objectively verifiable fact, such as the existence of an ancestral homestead somewhere in Tibet; it simply expresses the speaker’s personal view of her place in the world. In (3), the use of the Factual form *yog-red* (sometimes written as *yod-pa red*) suggests that this statement is based on general knowledge, rather than personal experience or direct perception. The speaker feels no need to justify the claim, and asks the addressee to simply take it as given. As we will see in §27.4.1, statements in this form do not necessarily represent generic knowledge, but this is the appropriate form for statements which do. In (3), the Direct Evidential *‘dug* indicates that the statement is based purely on direct perception. It might be said, for example, by a Tibetan who has lived abroad for many years, and returns for a visit to discover that nowadays one sees many cars, which were much less common in the old days. A speaker who had read or heard this information from others prior to visiting the country could instead use *yog-red*, indicating that this is a generally known fact, but such a speaker could also use *‘dug* as a way of expressing an acute awareness of how much things have changed. In either case the choice of *‘dug* indicates that the statement expresses an impression based on immediate perception, rather than on any other basis.

27.2.3. The Lhasa verbal system

The written language includes a small paradigm of opaque verb inflections which distinguish four stems, traditionally labelled Present, Past, Future, and Imperative. In Classical Tibetan these constitute finite verb forms. The Classical system does not express evidential or egophoric categories. In the modern languages the verb usually requires further marking through innovative paradigms of suffixes and auxiliaries in order to function as

finite, and this is where evidential categories are marked. Some Tibetic languages have finite forms which are simple nominalizations, but in all the largest part of the verb paradigm consists of endings of two kinds: erstwhile serial verbs and nominalized clause + copula constructions (DeLancey 2011).

Lhasa verb inflections are of these two kinds. The core set of endings, which encode the Egophoric and Factual categories, originated and are written as a nominalizing suffix *-pa/-ba* or *-gi/-gyi/-kyi*, followed by an equational (*yin, red*) or existential (*yod, ‘dug*) copula. The Evidential forms were originally serialized verbs, *song* ‘went’ and *bzhag* ‘put [someplace]’ (DeLancey 1991). See Table 27.1:

Table 27.1. Verb endings in Lhasa Tibetan

	Egophoric	**Factual**	**Evidential**	
			Direct	**Inferential**
Perfective	*-pa.yin*	*-pa.red*	*-song*	*-zhag*
Perfect	*-yod*	*-yog.red*	*-’dug*	
Imperfective	*-gi.yod*	*-gi.yog.red*	*-gi.’dug ~ -gis*	
Future	*-gi.yin*	*-gi.red*		

(p. 584) We will not discuss the Future forms further as they are not relevant to questions of evidentiality. Two other Egophoric forms, *-byung* and *-myong*, will be discussed in §27.3.3.

27.3. Egophoric forms

Most of the substantial body of work on Tibetic evidentiality has concentrated on the typologically unusual Egophoric category. In previous work I have treated this category as part of the evidential system (DeLancey 1985, 1990), with a special relationship with mirativity (DeLancey 1997, 2001). Some Tibetic specialists have expressed discomfort with this (e.g. Zeisler 2004; Tournadre 2008; Hill 2012), and with reason. The Tibetic Egophoric category is not part of the evidential system; it is an independent, and more fundamental, category which affects evidential meanings that come under its shadow. Rather than an evidential category, Egophoric is a category to which evidentiality is not applicable.

27.3.1. Self and Other

The most striking characteristic of Tibetic evidential systems is a fundamental distinction between a set of forms which report information to which the speaker has privileged access (in the sense of Hargreaves to appear), and those which report information which the speaker finds in the world outside—Denwood's (1999) 'self' versus 'other-centered' (see also Sun 1993; Hein 2001, *inter alia*). In earlier work I and a few others have referred to the distinction with the labels conjunct versus disjunct. This opposition is fundamental to the verbal system of most Tibetic languages:

> In Tibetan, the category of person constitutes an important factor which determines much of the verbal morpho-syntax. The relevant oppositions, however, are not the well-known trichotomy of first person (speaker), second person (interlocutor) and third person (other referents), but rather a referentially fluid dichotomous distinction between self-person and other person. In rather vague terms, self-person sentences are marked as utterances produced by oneself.
>
> (Sun 1993: 955–6)

As many scholars have noted, the fundamental distinction between these categories is that direct statements are subject to verification, and thus must be specified for evidentiality, while personal statements do not allow evidential marking:

> A simple test allows us to distinguish the two categories: the evidential morphemes are in general not compatible with first person. In effect, a speaker *cannot observe himself* (except in particular situations: mirrors, photographs, dreams, mental illness, daze, etc.) while the use of the direct form poses no problem with first person …
>
> (Tournadre 1996: 201, my translation, emphasis original)

This way of characterizing the distinction requires some care in defining the personal category, as some kinds of things which one can say about oneself are treated grammatically as Evidential rather than Egophoric, as we will see in §27.3.2 and §27.3.5. (p. 585)

27.3.2. Egophoric and Evidential

The basic pattern of interaction between the Egophoric and Evidential categories can be neatly illustrated with examples from Amdo (Eastern Tibetic; Sun 1993: 955–9, glosses modified for consistency), where we find three different evidential forms in complementary distribution based on person. The particle =*nə* marks the event as volitional on the part of the subject, =*tʰœ* indicates a report based on direct perception, and =*zəg* one based on inference. With a volitional predicate such as *xabda ndʑo* 'go deer-hunting', an affirmative statement with first person actor can only take the first of these:

(5)

a. ŋæ xabda sʰoŋ=nə
I deer.chase went=EGOPHORIC
I went deer-hunting.

b. *ŋæ xabda sʰoŋ=tʰæ

c. *ŋæ xabda sʰoŋ=zəg

In contrast, with a third-person actor, volitional =*nə* is impossible, while the direct and indirect evidentials are fine:

(6)

a. dordʑe xabda sʰoŋ=tʰæ
Rdo.rje deer.chase(DAT) went=DIRECT
Dorje went deer-hunting. [direct evidence]

b. dordʑe xabda sʰoŋ=zəg
Rdo.rje deer.chase(DAT) went=INFERENTIAL
'idem.' [indirect evidence]

c. *dordʑe xabda sʰoŋ=nə
Rdo.rje deer.chase(DAT) went=EGOPHORIC

The impossibility of the volitional form with a non-first-person actor can be interpreted in evidential terms: assuming fundamentally evidential senses for all forms in the paradigm,

=nə can be interpreted as indicating direct evidence of volition, which one can only have with respect to oneself (DeLancey 1986, 1990; Hargreaves 2005, to appear). Here we are concerned with the converse problem, the impossibility of direct or indirect evidential specification with a first-person volitional actor. Non-volitional predicates with first-person actors behave as with non-first person, that is, they disallow the *=nə* which indicates volitionality, and accept evidential marking:

(7)

ŋə	ndaŋ	^{h}n̥ədɕed	ji=zəg
I.ERG	last.night	sleep.talk	do=INFERENTIAL

I talked in my sleep last night.

(8)

ŋə	ma-sæm	s^{h}æ=ni	der	tɕag=taŋ=t^{h}æ
I.ERG	NEG-think	place=LOC	dish	break=AUX=DIRECT

I broke the dish by accident.

(p. 586)

Examples like these are easily interpreted in terms of evidence: I can only know about something that I did in my sleep by indirect report, while in the ordinary circumstance I would be aware of accidentally breaking something at the moment it happened, and thus have direct evidence for it.

27.3.3. Subdividing the Personal category: Further egophoric forms

Lhasa has elaborated the Egophoric category more than some other Tibetic languages, subdividing it according to the nature of the experience being reported. Like Amdo *=nə* in the preceding section, the Lhasa Egophoric forms listed in Table 27.1 are used only to report volitional actions. In some languages, including some other Tibetic languages, non-volitional actions with a first-person actor require Evidential forms, and this occurs in Lhasa as well, as we will see in §27.5. But Lhasa also has two forms marking particular types of first-person statement where volition is irrelevant or not involved. Both occur with all persons as independent verbs or auxiliaries, but as verb suffixes occur only with a first-person argument (see DeLancey 1991).

The first of these, *-byung*, occurs freely as a main verb meaning approximately ‘happen, come to pass’:

(9)

de'dra	byas=nas	sdad.bzod	mi-bde.ba	gtan.gtan	byung-yog.red
thus	did=NF	peace	NEG-peaceful	really	happen-PERFECT.FACTUAL

[They] having done that, [he] came to have no peace.

As a verb suffix, *-byung* occurs only with a first person argument functioning as some kind of Goal (i.e. a Patient, Theme, Recipient, or spatial Goal). We can see the contrast between Egophoric Goal and non-Egophoric Evidential constructions in (10a–d):

(10)

a.	kho.tsho-s	nga.cag	spun.kya	drug	btang-byung	yin.na'i
	they-ERG	we	kin	six	send-EGO.GOAL	but
b.	am.khag-la	seng.ge	gzhan.dag	chen.po	cig	thug=nas
	way-LOC	lion	other	big	a	meet=NF
c.	nga-'i	spun.kya	gzhan.dag	lnga	bsad-song	
	I-GEN	kin	other	five	killed-PERV.DIRECT	
d.	nga	gcig.po	bsad-ma-byung			
	I	alone	kill-NEG-EGO.GOAL			

They [the Animals' Committee] sent six of us kin, but meeting another big lion on the way, [it] killed the other five of my relatives, only me [it] didn't kill. (*Rabbit Fools Lion*)

The (fictitious) killing of the narrator's companions is presented in (10c) with the direct evidence form *-song*, telling us that the source for this information is his witnessing the event. The Animals' Committee's sending of the narrator and his (fictitious) kin, and the (fictitious) (p. 587) lion's sparing of the narrator, however, are marked with *-byung*, presenting these not as a observation, but as personal experience.

The other Egophoric form is Experiential *-myong*, which expresses the state of having had the experience described by the rest of the clause. This is rare in the spoken language as an independent verb, but occurs freely as an inflected auxiliary:

(11)

khye.rang	rgya.gar-la	phebs	myong-zhag
you	India-LOC	go(HON)	experience-PERV.INFERENTIAL

You have been to India, I see.

(12)

kho	bod-la	'gro	myong-ba.red
he	Tibet-LOC	go	experience-PERV.CONTINGENT

He has been to Tibet.

Like *-byung*, it occurs as a verb suffix, rather than an inflected auxiliary, only with a first person experiencer argument:

(13)

nga	rgya.gar-la	las.ka	byed-myong
I	India-LOC	work	do-EXPERIENCE

I used to work in India.

(14)

rang-gi	thog-la=ya,	nga-s	mgo	‘khyer	yongs-pa	thengs.ma
self-GEN	lifetime-LOC=CONTR	I-ERG	head	take	came-NMZ	occasion
gnyis	mthong-myong					
two	see-EXPERIENCE					

In my own lifetime I have on two occasions seen a head taken. (*Head*)

27.4. Assumed and contingent knowledge

Some treatments of Tibetic languages describe a simple binary distinction between Egophoric forms and everything else. But the ‘other’ category is better understood as bifurcated into what I am calling the Evidential category, expressing contingent knowledge which requires evidential specification, and the Factual category, expressing propositions which are to be taken as assumed without justification. I will outline the use of each category in this section; we will see how the two categories are related in narrative in §27.6.

27.4.1. Assumed assertion and the Factual paradigm

The formal category which I will gloss as FACTUAL (following Hill 2013; and Tournadre and LaPolla 2014), has attracted less attention then the Egophoric and Evidential forms, and is less well-understood. Goldstein and Nornang (1970) call these forms ‘Narrative’; Zeisler (2004) labels them ‘Generic’. Both narrative style and expression of generic knowledge (p. 588) are prominent functions of the form, but neither is in fact a basic meaning, which is simply the absence of any specification of source of knowledge. The Factual verb endings are the only forms in the system which neither assert nor imply anything about the source of information.

For this reason attempts to define this category tend to be rather vague:

> The unmodalized declarative construction is found mainly in generic statements, proverbial sayings, and stories, but is ill-suited for informative reports.
>
> (Sun 1993: 951)

The category is difficult to describe explicitly precisely because it has no evidential value whatever. As Sun and others note, this is the grammatical form used to express generic knowledge:

> The general fact copula is for those very generally known facts about the world, such as sugar being sweet. It is not frequently used in daily interaction.
>
> (Gawne 2014: 78)

But this is also the form used in narrative, whether fictional, historical or autobiographical. Essentially assumed knowledge is just that, information which the addressee is asked to take for granted, without worrying about source or justification:

> The morphemes of this category are mainly used with non-speaker agents and patients … to express the speaker's knowledge of the verbal action without specifying how this knowledge is/was gained.
>
> (Hein 2001: 43)

Emphasizing the use of this form to express 'generally known facts' is thus misleading. It is used in that function, because, by definition, one can always assume that one's interlocutor shares one's attitude toward such facts, and so their evidential status is not in question. And this is the only function that can be easily described. But sometimes in conversation, and generally in narrative, claims which do not have this status may be assumed for the immediate purposes of the discourse, and the basic function of the Factual verb forms is to mark an assertion as having this status.

In searching for a positive evidential meaning for this set of forms, it is tempting to set aside as an oddity the fact that these are the forms used in narrative, including much autobiographical narrative. But this establishes the true function of the Factual category: it simply disregards the question of evidence. In narrative, including both personal and witnessed, and both true and fictional, most of the story is told in the Factual form. Consider examples (15) and (16), from an autobiographical narrative (which we will see more of in §27.6). The two sentences both refer to the same individual, the main character in this episode, and illustrate the Perfective (15) and Perfect (16) Factual forms:

(15)

de-'i	rjes-la=ya	thengs.ma	gsum.pa	de	drug.cu=re.gnyis		
that-GEN	after-LOC=CONTR	occasion	third	that	sixty=two		
lo-la	yin.na, re.gsum	lo-la	yin.na	de'dra	gcig-laya	kho	tshur
year-LOC	maybe three	year-LOC	maybe	thus	a-LOC	he	back
log	yongs-pa.red						
return	came-PERV.FACTUAL						

After that, the third time was in '62 or 3 maybe, he came back again. (*Head*)

(p. 589)

(16)

rnam.lha	gtan.gtan	sdad.bzod	mi-bde-pa	byung-yog.red
Namla	really	peace	NEG-peaceful-NOMZ	get-PERFECT.FACTUAL

Things had gotten really difficult for Namla. (*Head*)

These events are related as part of a story in which the narrator herself is a player, and so could in principle be expressed with Direct or Inferential Evidential forms. But they are

not major events in the story, and the narrator had no direct connection with them, so their evidential status does not need to be specified.

27.4.2. Contingent assertion and the Evidential paradigm

I will use the term ‘contingent’ to refer to the domain of knowledge for which Tibetic languages mark the cross-linguistically typical evidential distinction between events directly perceived by the speaker and those inferred from indirect evidence. This is information that the speaker does not ask the addressee to take for granted; rather, it is information that the speaker presents as requiring some additional specification as to source in order for the addressee to accept it. Statements which are neither assumed nor asserted on the basis of the speaker’s personal authority must be marked as Direct or Indirect. Although some languages elaborate the system, e.g. the non-visual direct evidential *rak* in Ladakhi (Bielemeier 2000) or the ‘acquired knowledge’ category of Dzongkha, (van Driem 1992: 169), the fundamental distinction in all languages is between direct evidence and inference.

In Lhasa and other Central varieties the Direct Evidential forms are perfective *-song*, perfect *-’dug*, and imperfective *-gi.’dug*. The Inferential, indicated by *-zhag*, is marked only on completed events, since it entails that the speaker knows of the event through perceiving its aftermath. The difference is illustrated in examples (17) and (18), adapted from Denwood 1999: 159–61 (see also DeLancey 1985).

(17)

de.ring	char.pa	btang-’dug
today	rain	fall-PERFECT.DIRECT

It has been raining today.

(18)

de.ring	char.pa	btang-zhag
today	rain	fall-PERFECT.INFERENTIAL

It has been raining today.

Example (17), with *-’dug*, entails that the speaker has seen the rain directly. In (18), with the inferential *-zhag*, the speaker has not actually seen the rain, but infers it from secondary evidence, e.g. fresh puddles on the ground.

As further illustration compare (19) (previously presented as 10c) and (20):

(19)

nga-’i	spun.kya	gzhan.dag	lnga	bsad-song
I-GEN	kin	other	five	killed-PERV.DIRECT

[He] killed the other five of my kin. (*Rabbit Fools Lion*)

In (19) the speaker is relating an event to which he was a witness. In his story (which is in fact a lie), a lion set upon him and his five brother rabbits and killed all but him. In (20), from (p. 590) another folktale, the protagonist (*rkun.ma-gi gźu.gu* 'Thieving Tail') wants to drive off a band of thieves who are dividing up their loot, which he wants to take for himself. He calls out an alarm, and the thieves, thinking that the shout is coming from a police patrol, react:

(20)

kho.tsho-'i	sems-la=ya,	'da	rgyal.po-s	rkun.ma-gi	gźu.gu=ya
they-GEN	mind-LOC=CONTR	now	king-ERG	thief-GEN	tail=CONTR
rjes.'ded	btang-zhag'	bsam-rjes	…	bros	phyin-pa.red
pursuer	send-INFERENTIAL	think-NF		fled	went-PERV.FACTUAL

They, thinking 'Now the king has sent pursuers after the thieves,' … fled. (*The Hungry Dried-up Goat Tail*)

The thieves express their conclusion with the inferential *-zhag* because they did not have direct experience of the king dispatching pursuers, but came to this conclusion only by inference from hearing someone shouting. (If the thieves said, 'Pursuers are after us!', this could be said with the Direct Evidential. But even if I directly perceive that I am being pursued, that is not direct evidence that someone else sent pursuers after me; that can only be an inference from the fact that they are after me).

Because the Direct forms assert that the speaker directly perceived the event, they generally occur only in contexts where that direct perception is the speaker's only warrant for the statement. Normally this will only be true of relatively recently acquired knowledge:

> The use of this what may be termed the immediate evidential indicates that the speaker's basis for his assertion comes *solely* from perceptible evidence directly present in the immediate speech-act situation. What is crucial here is that the speaker implicitly denies having any information regarding the situation prior to the current perceptual experience; in other words, this knowledge is entirely novel for the speaker.
>
> (Sun 1993: 996–7)

In my earlier work I therefore treated these forms mirative, but this is misleading, as their basic meaning is unquestionably fundamentally evidential, not mirative (DeLancey 2012; Hill 2012).

27.5. Evidential and Egophoric

There is an obvious relationship between the cognitive category of personal knowledge and the grammatical category of first person, but the distinction between Egophoric and other verb endings is clearly not verb agreement or argument indexation. There are a few

situations where statements about non-first persons can be in Egophoric form, and numerous types of statement which one can make about oneself which are not marked as Egophoric.

27.5.1. Personal ≠ Egophoric

Statements about others, or about material objects, can sometimes represent personal knowledge. For example, statements about the speaker's close family members may use Egophoric forms: (p. 591)

	nga-'i	ama	bod-la	yod
(21)	1sg-GEN	mother	Tibet-LOC	exist.PERSONAL
	My mother is in Tibet.			

(21) would be a normal way for a Tibetan visiting abroad to speak about his family, or, evocatively, for a Tibetan expatriate to talk about his family and homeland. On the other hand, if I am not Tibetan, and my mother is an inveterate tourist, such that I cannot keep track of her wanderings, and I just found out her whereabouts this morning when she phoned me from Chamdo, I would more appropriately use an Evidential form.

Conversely, information about oneself that is not part of one's self-presentation can be presented as contingent information, using Evidential forms. If I am in the habit of carrying money with me, or if I made sure that I had some when I left the house, then when it comes time to pay for refreshments I would typically say:

	nga-r	dngul	tog.tsam	yod
(22)	I-DAT	money	some	exist.PERSONAL
	I have some money.			

But if I don't think I am carrying any money, and reach into my pocket and find some there, I could indicate the unexpectedness of the fact by using the Direct Evidential form:

	nga-r	dngul	tog.tsam	'dug
(23)	I-DAT	money	some	exist.DIRECT
	[I see] I have some money.			

27.5.2. Evidentiality and volition

One of the most intriguing phenomena connected with Egophoric forms is their strong association with volitionality. The Egophoric forms in Table 27.1 always entail that the

clause describes a volitional act on the part of the speaker. An intrinsically non-volitional verb such as *rjed* ‘forget’ requires Evidential marking:

	kho-’i	ming	brjed-zhag
(24)	he-GEN	name	forgot-INFERENTIAL
	I’ve forgotten his name. (*Head*)		

Even imagining that there is some specific moment at which a fact disappears from one’s memory, one is never conscious of that moment, and can only infer it from the present fact that one has searched one’s memory and failed to find the fact one was looking for. The same is systematically true for verbs of involuntary perception:

	nga	mthong-gis
(25)	I	see-IMPERV.DIRECT
	I see [it].	

(p. 592)

It has been argued (DeLancey 1986, 1990; Garrett 2001) that this is evidence that the Egophoric forms are evidentials, expressing direct experience of the act of volition which leads to an action. Events such as seeing and forgetting have no such antecedent act of volition, and therefore cannot be described with Egophoric forms.

27.5.3. Endopathic states

Since they are inherently non-volitional, endopathic states such as ‘hungry’ and ‘sick’ likewise do not typically take volitional Egophoric markings. With a first person argument they may take either the Egophoric Goal form *-byung*, or else Evidential marking:

	nga	na-byung
(26)	I	sick-EGO.GOAL
	I got sick.	
	nga	na-’dug
(27)	I	sick-PERFECT.DIRECT
	I’ve gotten sick.	

Interestingly, such verbs may appear in the Imperfective Egophoric form to indicate a chronic state:

	nga	na-gi.yod
(28)	I	sick-IMPERV.EGO
	I'm chronically sick.	

It is not clear why this verb form, which is otherwise strongly associated with volitionality, occurs in this function. It may be that we need to reconsider the volitional component of these Egophoric forms as just one manifestation of a more basic sense of self-presentation—a current state or feeling is not part of who I am, while a chronic condition is.

27.6. The system in use

Let us look at some examples from an autobiographical narrative. The speaker is telling a story of an atrocity which she witnessed during one of the drives to bring the nomads of Tibet into the commune system in the early 1960s. Most of the narrative is in the Factual form, expressing assumed knowledge, as is typical in narrative. At a few points the narrator shifts to Egophoric or contingent forms, and here we can see the system in use.

The story concerns a nomad who fled and rejoined the commune several times, finally resulting in Red Guards chasing him out into the countryside, beheading him, and bringing the head back as a trophy. Early in the story, after one return to the commune, he is summoned to speak with commune officials. The narrator has to translate, because the nomad (p. 593) speaks only Amdo. Everything recounted up until now has been presented as assumed knowledge, as in examples (15) and (16), although much of the story was also personally witnessed and experienced by the narrator. But only the nomad protagonist, the two officials, and the narrator are present at this event. Thus events in this episode are either contingent, and thus specified for Evidential value:

(29)

gnyis-kyis	kho-r=yang	skad.cha	bshad-song
two-ERG	he-DAT=CONTR	speech	spoke-PERV.DIRECT
[Those] two [officials] spoke to him.			

Or personal, and thus marked as Egophoric:

(30)

de-'i	skabs-la=ya,	nga-s	skad.gyur	byas-pa.yin
that-GEN	time-LOC=CONTR	I-ERG	translation	did-PERV.EGO
That time I translated [for them].				

At the conclusion of this episode, the narrative reverts to Factual forms. Example (31) is the end of the discussion between the nomad and the officials, and thus is still contingent, marked for Direct evidentiality:

(31)

kho-s	mtsho.dmar	nang-la	sdad-kyi.yin=ze	zer-song
he-ERG	Red Lake	in-LOC	stay-IMPERV.EGO=QUOT	say-PERV.DIRECT

. . . he said 'I will stay in Red Lake.

The next sentence, wrapping up the episode, returns us to the main narrative track, and hence uses the Factual form:

(32)

kho	mtsho.dmar-gyi	shang nang-la	bsdad-pa.red
he	Red Lake-GEN	village in-LOC	stayed-PERV.FACTUAL

He stayed in Red Lake village.

Although some authors suggest that the difference between examples like these is that (32) does not report direct evidence, this is not exactly correct. The narrator did directly observe most of the events in the story, including the nomad's return, and the fact that he then took up residence in Red Lake. (If she did not actually witness the moment when he entered Red Lake village, she could have used the Inferential form). The choice of verb form is a matter of presentation, not a report of the objective circumstances under which the speaker came to know the information. By the shift from Factual to Direct the narrator presents the episode in which the officials interrogate the nomad as one in which she was directly involved. The rest of the story is presented as a sequence of events in which she was not directly involved, even though, like other people living in the commune at the time, she did witness them directly or indirectly. Although the speaker does have direct knowledge of the nomad's taking up residence in Red Lake, she is presenting it as simply one more event in the narrative, and therefore the source of her knowledge is irrelevant.

It is important to understand that these categories are not objectively recoverable. The alternation in examples (31) and (32) reflects the speakers' desire to present certain events (p. 594) in the narrative as part of her autobiography, as opposed to others which are presented as generally available information. There is no way that one could consistently predict choice of verb form from some 'objective' characterization of the situation.

Contrast this with the narrator's comment after the climactic point when the Red Guards return, brandishing the recalcitrant nomad's severed head as a warning to others:

(33)

de	nga-s	nga-ra-'i	mi.tshe	'di-'i	thog-la=ya	mgo
that	I-ERG	I-REFL-GEN	lifetime	this-GEN	in-LOC=CONTR	head
mthong-ba	dang.po	yin				
see-NOMZ	first	be.EGO				

That was the first time I ever in my life saw a (severed) head.

This is presented neither as assumed nor contingent, but as personal, to emphasize that the sentence is about her personal experience. It is worth noting that examples like this demonstrate that the association of the Egophoric forms with first person is not a syntactic rule, but a matter of presentation. Here the first person narrator is a syntactic argument only of the nominalized clause 'I in my lifetime seeing a head', not of the matrix clause, and thus has no syntactic relation to the main verb *yin*. The syntactic arguments of *yin* are *de*, referring to the preceding story, and the nominalized clause 'I seeing a head' modified by *dang.po* 'first'. We find the personal form here not because of any syntactic trigger, but to emphasize that the speaker is presenting this as part of her personal story, not as assumed knowledge. A few lines later, marking the end of this entire episode and the transition to the next, the narrator says:

(34)

mgo	mthong-ba	dang.po	de	red
head	see-NOMZ	first	that	be.FACTUAL

That was the first [occasion of] seeing a [severed] head.

This sentence refers to and says the same thing as (33) a few lines earlier, but it has a different narrative function, and thus is marked as assumed rather than personal knowledge.

Notes:

([1]) The terms 'Standard' and 'Lhasa' Tibetan are sometimes used interchangeably, but they are not exactly the same thing. The early publications on the topic (Goldstein and Nornang 1970; Jin 1979; Chang and Chang 1984; DeLancey 1985, 1986) were based on work with educated speakers from Lhasa, and those works and the data in this paper represent the Lhasa dialect, not 'Standard Tibetan'.

([2]) Examples are presented in standard Tibetan orthography, transliterated according to the Wylie system. Hyphens represent relevant morpheme breaks. Periods represent morpheme breaks in compounds, and in the composite verb endings described in §27.2.3.

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Abstract and Keywords

The Bodic group of Tibeto-Burman languages infamously code a wide range of epistemological categories, including evidentiality (source of knowledge) and perhaps more contentiously mirativity (expectations of knowledge), and egophoricity (access to knowledge). This chapter investigates these interrelated related epistemological categories in a range of Bodic languages, including but not limited to Darma (Himalayish; Uttarkhand, India), Manange (Tamangic; Nepal), Magar and Kham (Magaric; Nepal), Newaric (Nepal), various Tibetic languages, and Kurtöp (East Bodish; Bhutan). Mirativity appears to be widely found throughout the region, followed by egophoricity and evidentiality. In terms of evidentiality itself, Bodic languages commonly encode oral source of knowledge and less commonly encode indirect source of knowledge. Despite the close cognitive relationship between evidentiality, mirativity, and egophoricity, Bodic languages demonstrate that these categories are distinct.

Keywords: Bodic, Evidentiality, Mirativity, Egophoricity, source of knowledge, indirect source

28.1. Introduction

WITHIN the vast Tibeto-Burman family, nearly one hundred Bodic languages span across the Himalayas from northern Pakistan in the west (e.g. Balti Tibetan) to as far Arunachal Pradesh, India (e.g. Dakpa) and Sichuan, Yunnan, and Gansu, China (e.g. various Tibetan languages) in the east. The languages vary considerably in terms of typological profile, (e.g. see Hyslop 2014a), but we can make some generalizations about the evidential systems in the languages. In actual fact, when addressing ‘evidentiality’ in Bodic languages, specialists of Tibeto-Burman languages tend to include phenomena which are not strictly encoding grammaticalized source of knowledge; expression of knowledge and access to knowledge are notoriously difficult to tease apart from source of knowledge and are thus included in analyses of Bodic evidentiality. As we will see below, the grammaticalization of

expectations of knowledge (mirativity) and access to knowledge (egophoricity) are prevalent categories throughout the Bodic languages, existing side by side with evidentiality.

This chapter overviews evidentiality and the related categories of mirativity and egophoricity in Bodic languages, concluding with arguments to reinforce the distinction between the three. In §28.2 we introduce the Bodic languages and the sources used for the analyses presented in this chapter. §28.3 reviews the theoretical literature relevant to this chapter and §28.4 examines how evidentiality and related categories are coded in Bodic languages. §28.5 offers a summary and conclusion.

28.2. Bodic languages

Bodic languages have been studied in the western academic world since at least the early 1800s, beginning perhaps when von Klaproth (1823) observed that Chinese, Tibetan, and Burmese are related. Simon (1929) and Nishida (1957) were among some of the earlier (p. 596) scholars to discuss the relationship between languages of this family, though Shafer (1966) and Benedict (1972) are most often cited. Shafer (1966) offers an overview of the Tibeto-Burman (he refers to the family as Sino-Tibetan) family as comprising nearly 400 languages spread across six divisions: Sinitic (e.g. Mandarin Chinese), Daic (e.g. Thai), Bodic (e.g. Tibetan), Burmic (e.g. Burmese), Baric (e.g. Garo), and Karenic (e.g. Karen) [1]. Benedict (1972), unlike Shafer (1966), proposes an internal taxonomy amongst the divisions of Sino-Tibetan and also removes Daic altogether. Benedict's (1972) classification of Tibeto-Burman proposes seven primary divisions: Tibetan-Kanauri (Bodish-Himalayish), Bahing-Vayu (Kiranti), Abor-Miri-Dafla (Mirish), Kachin, Burmese-Lolo, Bodo-Garo, and Kuki-Naga. Other notable models of Tibeto-Burman which include a Bodic branch are van Driem (2004), Thurgood (2017), and Noonan (2011). This chapter follows the proposal for Bodic laid out in Hyslop (2014a); that is, we treat Bodic as a collection of Tibeto-Burman languages that are typologically and/or lexically similar but are not yet established as a subgroup united by shared innovations. Following Hyslop (2014a), we identify nine 'Bodic' language groups, summarized in Table 28.1.

Table 28.1. Bodic languages

	W Himalayish	Tamang-ic	Tibetic languages	Magaric	Newaric	Kiranti	Lhokpu	East Bodish	Tshangla
Approximate # languages	12	7	25	4	6	32	1	7	1

The West Himalayish languages are spoken in Himachal Pradesh and Uttarkhand, in northwest India. Many of the languages still remain unstudied, though Willis (forthcoming) offers the most thorough study of a West Himalayish language to date, with her descriptive grammar of Darma. Another well-known West Himalayish language is Old Zhangzhung, a language of upper Tibet known today only through textual documents (e.g. Haarh 1968; Van Driem 2001b; Matisoff 2001; Nishi and Nagano 2001; Takeuchi, Nagano, and Ueda 2001; see also Martin 2010).

Tamang-Gurung-Thakali-Manange (Tamangic) languages are primarily spoken in north central Nepal and are generally assumed to be genetically closer to the Tibetan dialects than most other Bodic languages. The Tamangic languages are fairly well-studied, with a few descriptive grammars (Hildebrandt 2004; Georg 1996; Poudel 2006).

The Tibetic languages are the most famous of the Bodic languages and are also the most extensively studied. DeLancey (Chapter 27 of this volume) presents an overview of evidentiality in those languages and so here we present just a summary. The best-described Tibetan language is probably Lhasa, with Kitamura (1977); Hoshi M. (1988); and Denwood (1999) representing some quality grammatical studies, and DeLancey (2003) as a good overview. Good descriptions have also been published for Balti (Read 1934; Bielmeier 1985), Mustang (Kretschmar 1995), Drokpa (Kretschmar 1986), Dingri (Hermann 1989), Brag-g.yab (Schwieger 1989), Nangchenpa (Causemann 1989), Shigatse (Haller 2000b), Themchen (Haller 2004), Sherpa (Kelly 2004), Kyirong-Kagate (Huber 2005), Yolmo (Gawne 2016), (p. 597) Dzongkha (van Driem 1998), and Spiti (Kato 2001). Still, many Tibetic languages remain completely undescribed, such as Lakha, Dur, and Merak-Sakteng in Bhutan and others elsewhere in neighbouring regions; as such we still do not yet have an exhaustive picture of evidentiality in Tibetic languages.

The Magaric group consists of Kham, Magar, Chepang, and Bhujeli, all spoken in Nepal. Little is known about Chepang and Bhujeli but a variety of Kham (Watters 2002) and a variety of Magar (Grunow-Hårsta 2008) are well-described.

The Newaric family of languages is spoken in and around the Kathmandu valley in Nepal. Following van Driem (2004), we assume Newaric to comprise Barām, Thangmi, and Newar, the latter of which has a long literary history, dating back to AD 1114 (Hargreaves 2003: 371). Some references for Classical Newar are Jørgenson (1941); and Malla (1982). There are several modern, distinct Newar dialects and languages, Dolakhā being the most divergent with an estimated 700 years of divergence (Genetti 2003: 355). Other than Dolakhā (e.g. Genetti 2007), Kathmandu Newar is probably the best-studied Newar language (e.g. Malla 1985; Joshi 1992; Hale and Shrestha 2006; Kiryu 2009, *inter alia*).

Ebert (2003) identifies thirty-two Kiranti languages. Some notable grammars of Kiranti languages include van Driem (1987) for Limbu; van Driem (1993) for Dumi; Lahaussois (2002) for Thulung Rai; Rutgers (1998) for Yamphu; Michailovsky (1988) for Hayu; Ebert (1997a) for Camling; Ebert (1997b) for Athpare; Opgenort (2004) for Wambule; and Opgenort (2005) for Jero. Shorter descriptions for Kiranti languages also exist (Bickel

2003 for Belhare; Lahaussois 2009 for Koyi Rai; Toba 1984 for Khaling; Rai 1985 for Bantawa).

Lhokpu, a language of Southwestern Bhutan, is the least-studied of all Bodic languages with no linguistic study of the language published to date. Van Driem (2001b: 800–11) presents an ethnolinguistic outline of the language and history of Lhokpu and a grammar of Lhokpu is currently underway (Gerber et al. forthcoming).

Hyslop (2013) proposes an internal phylogeny of the East Bodish subfamily, comprising seven languages spoken primarily in central and eastern Bhutan but also neighbouring areas of Tibet and Arunachal Pradesh in India. The most thoroughly studied East Bodish language is Kurtöp (e.g. Hyslop 2016), which has also been well-studied in terms of evidentiality and related categories (Hyslop 2014b, 2014c, forthcoming). van Driem (2015) is a sketch grammar of Bumthap, and Bosch (2016) presents some analysis of Upper Mangdep grammar, including various aspects of the epistemic system.

Tshangla is a thriving language with over 100,000 speakers and several distinct dialects. The center of gravity for the language is eastern Bhutan, but it is also spoken in Tibet and Arunachal Pradesh, India, where it is known as Central Monpa. The most comprehensive study of the language is Andvik (2010), though Grollmann (2014) offers an impressive sketch of a divergent Tshangla dialect.

The approximate location of these languages or language groups is illustrated in Map 28.1. Note that this map is slightly misleading in two ways. First, Tibetan languages are spoken as far west as northern Pakistan, as far east as Sichuan and Yunnan in China, and as far south as Northern Nepal, India, and Bhutan. The location of ‘Tibetan’ on the map below thus represents an approximate midpoint between the various extremes. Second, Magaric, Tamangic, Newar, and Kiranti actually have an overlapping distribution in Nepal and are fairly dispersed speech communities. The location of the languages below (p. 598) is an approximate mid-point between the different extremes of each speech communities’ locations.

Map 28.1. Approximate location of Bodic languages

28.3. The constructs of ‘evidentiality’, ‘mirativity’, and ‘egophoricity’

Bodic languages are known for coding evidentiality but perhaps more notorious is their complicated and nuanced system of mirativity and/or egophoricity. Often, a combination of these contrasts is made in the same grammatical system and it is difficult to tease evidentiality out from a larger system concerned more broadly with epistemological contrasts. As such, it will be useful to review the literature surrounding these theoretical constructs and define how the terms are being used in this chapter.

Aikhenvald (2004a: 14) describes ‘evidentiality’ as the grammaticalized encoding of information source. It is important to keep in mind the difference between a true evidential and an evidential strategy; the latter is used for forms with a primary function that is not evidential but which can be employed to code source of knowledge. Mirativity, a related category, has been noted as early as Aronson (1967) and Friedman (1977, 1986) but DeLancey (1997) is credited with the establishment of mirativity as a cross-linguistic, typological category. (p. 599) While evidentiality is linguistic coding of *source* of information, mirativity is quite different, coding that the information is *not expected*. Dickinson (2000) speculates that mirativity may be a universal conceptual category and a recent issue of *Linguistic Typology* was devoted to the topic (see Hill 2012; DeLancey 2012; Aikhenvald 2012b, *inter alia*).

Mirativity can be exemplified simply by comparing two Kurtöp sentences in (1) and (2)[2].

Kurtöp mirativity

(1)
khwe khikta
khwe khik-ta
water be.cold-IMPERV.MIR
The water is cold (I have just discovered)

(2)
khwe khiktaki
khwe khik-taki
water be.cold-IMPERV
The water is cold (I already know this; this is not new)

In example (1) the speaker has just learned the water is cold, most likely because they touched the water and suddenly discovered it was cold, but also possibly because someone had told them it was cold or through any other source of knowledge. The crucial piece of context here is that the speaker acquired the knowledge at the point of speaking or immediately prior to it; the fact that the water was cold was unexpected or unanticipated information. In (2), on the other hand, the speaker has already learned the water is cold and is conveying the knowledge; it is no longer new or unexpected information. Again, how the speaker gained their knowledge is not relevant. To give one example of possible contexts for these two, we can say that (1) could be uttered at the water tap and shortly thereafter as the speaker conveys the knowledge. But as the knowledge is ingrained via the events that led the speaker to utter (1), example (2) would be used instead.

Hill (2012) recently contends that all DeLancey's examples of mirativity are actually better understood as instantiations of direct knowledge (i.e. evidentiality) and DeLancey (Chapter 27 of this volume) does no longer seem to use the term to describe the phenomena (p. 600) in Tibetic languages. Nonetheless, we believe that the term is still a valid conceptual category, coded in several Bodic languages and as such is reviewed here.

Tournadre (2008), moving away from the older terms of 'conjunct/disjunct' (see §28.4) advocates use of the term 'egophoric' to characterize 'personal knowledge or intention' of the speaker as being core to the selection of egophoric forms (formerly 'conjunct'). It should be noted that while some have equated 'conjunct/disjunct' with 'egophoric', under the assumption that the two systems are fundamentally the same but analysed differently, others are not happy equating them (see e.g. Tournadre and LaPolla 2014). As pointed out by Post (2013), the focus on personal knowledge or intention captures contrasts described for several other Tibeto-Burman languages, including 'self-person' and 'other-person' in Amdo Tibetan (Sun 1993), 'personal knowledge' in Dzongkha (van Driem 1998), 'personal experience' in Kyirong Tibetan, and Lhasa Tibetan *yin* and *yod*, which DeLancey

(1990: 297) describes as being ‘integrated with the speaker’s personal understanding of the world’.

A new analysis for Dzongkha describes a mirative contrast amongst the copulas and egophoricity in progressive aspect (Hyslop and Tshering 2017).[3] To be more specific, Hyslop and Tshering (2017) identify at least the four affirmative copulas shown in Tables 28.2 and 28.3, marking speculation, inference and mirativity, along with a form which is semantically/pragmatically unmarked. However, only a two-way contrast (egophoric and alterphoric) is made in progressive aspect (Table 28.4).

On the surface, mirativity, and egophoricity may seem similar. In terms of sheer distributions in discourse, miratives tend to be used for third person and are less common with second and first. Non-egophorics also tend to be used for third person and are less likely to be used with second and first. These distributional tendencies that occur in discourse, and will be evident in a balanced textual corpus, arise naturally out of the semantic and pragmatic factors that condition the use of miratives and egophorics in the first place. In fact, both ‘mirative’ and ‘conjunct/disjunct’ (=egophoric) have been used to analyse the (p. 601) same data. For example, DeLancey (1992) explains how Tibetan *‘dug* is an instantiation of mirativity while in Tournadre and LaPolla (2014) Tibetan *yod*, seen as the non-mirative/egophoric (depending on the analysis) counterpart to *‘dug* is glossed as egophoric (see also DeLancey’s Chapter 27 in this volume). The formal similarities between mirativity and egophoricity have also been noticed in previous publications (e.g. DeLancey 1992, 1997; Hyslop forthcoming). Curnow (2000) also summarizes the formal similarities between mirativity and egophoricity (using the terms ‘conjunct/disjunct’ for ‘egophoric’/‘non-egophoric’), pointing out that miratives are very rare with first person, more common with second, and most common with third person.

Table 28.2. Dzongkha affirmative existential copulas (Hyslop and Tshering 2017: 356)

Form	Function	Diachronic source
yö	Non-mirative	WT *yod*
dû	Mirative	WT *‘dug*
yön-ime	Inference	WT *yod.ni.mas* (*-ni.mas* on true verbs encodes inferential future tense)
yöp ong	Speculative	WT *yod.pa.ong*

Table 28.3. Dzongkha affirmative equative copulas (Hyslop and Tshering 2017: 359)

Form	Function	Diachronic source

'ing	Non-Mirative	WT *yin*
'immä	Mirative	WT *yin.pas*
ongnime	Inference	WT *ong.ni.mas*
'ing mong	Speculative	WT *yin.pa.ong*

Table 28.4. Dzongkha progressive aspect suffixes

Form	**Function**	**Diachronic source**
-do	Egophoric	unknown
-dä	Alterphoric	*-do*+ WT *bas*

An example of the egophoric is in (3), which Tournadre and LaPolla (2014: 245) say would be uttered when the speaker is asking the hearer about 'his intentional or deliberate activity'.

Tibetan egophoric markers (Tournadre and LaPolla 2014: 245):

(3)

khyed.rang-(gis) ga.re byed-kyi'dug.yod
khyed.rang-(gis) ga.re byed-kyi'dug.yod
2SG-(ERG) what do-IMPERV+EGO
What are you doing?

The term 'egophoric' is yet to gain acceptance as a valid typological category and it is not clear what unites the different 'egophorics' in different languages. For example, Tournadre (2008: 295) defines the Tibetan egophoric to mark 'personal knowledge or intention on the part of the actual speaker' and that there is a contrast between broad and narrow scope (297). Hyslop (2014c: 204) notes that the Kurtöp egophoric, on the other hand, is used for contexts in which the speaker 'has exclusive access to knowledge' and goes on to show that use of the (p. 602) egophoric often entails an expectation that the interlocutor does not share the knowledge. Tournadre and LaPolla (2014) argue that we should broaden our understanding of evidentiality to also capture the notion of *access* to knowledge, and in doing so we could subsume the Tibetan egophoric as an instantiation of evidentiality, more broadly[4]. For the purposes of this chapter, we keep egophoricity as a phenomenon separate from evidentiality, which we define as referring to *access* to knowledge.

With the understanding that evidentiality encodes source of knowledge, mirativity encodes expectation of knowledge, and egophoricity encodes access to knowledge, we can now turn to how these phenomena are coded in Bodic languages more broadly. Of course, although we group phenomena from different languages into one category, it is important to keep in mind that, ultimately, what is glossed as one category in one language will be unique and not perfectly equatable to what is glossed as the same category in another language.

28.4. The expression of knowledge in Bodic

28.4.1. Evidentiality

Evidentiality in its strictest sense as source of knowledge is reported in several Bodic languages, but it is usually not very well understood and may be interacting with other contrasts. The West Himalayish language Darma (Willis 2007) contrasts direct/visual, general knowledge/indirect, inferred, and reported sources; however, it is not entirely clear whether these are true grammaticalized evidentials or better described as evidential strategies.

Manange (Hildebrandt 2004: §4.4.1) is analysed to also have several evidentials: *1mi, ko, nʌ, ro* (the author sometimes also glosses *a* as an evidential; other times it is 'maybe')[5] but again, it is not clear what the precise function of each of these morphemes is, or if, in fact, evidentiality is their primary function. For example, *1mi* is defined as a 'non-first past evidential' (Hildebrandt 2004: 93), which perhaps is more likely to be indicative of mirativity or egophoricity. Distributionally, *nʌ* can (but need not) follow *1mi* and occurs in examples in which the speaker has circumstantial evidence or in first person, future, uncertain contexts (Hildebrandt 2004: 93–4). The particle *ro* marks reported speech and *ko* is described as indicating that something is 'checked and confirmed' or indicates an event that can be 'pointed to'.

Rgyalthang Tibetan (Hongladarom 2007) makes a relatively clearer four-way contrast in evidentiality, yet we also see interactions of these with a mirative marker and additional egophoric contrast. The four evidential contrasts of visual, non-visual, reported speech, and quotative are made primarily with sentence-final auxiliaries and copulas in the grammatical (p. 603) domain of the copular predication and perfective aspect. The examples below illustrate visual evidentials in Rgyalthang Tibetan.

Rgyalthang Tibetan visual evidential in equational copular context (Hongladarom 2007: 23):

	tshə̤-ji	pā	rĭŋdē	nā
(4)	dog-GEN	hair	long	EQUA:OTHER;VIS
	The dog's hair is long (I saw it).			

Rgyalthang Tibetan visual evidential (*ndo re*) in existential copular context (Hongladarom 2007: 27):

(5)

khūə-la	ŋəi	jŷ	ɕĭ	ndô	ma-rê
3S-DAT	money	EXIST:INAN	child	EXIST:ANIM	NEG-EQUA:OTHER

He has neither money nor children.

Rgyalthang Tibetan visual evidential in perfective context (Hongladarom 2007: 27):

	khȳə	zŷ	tɕi	sè-tɕi	thi
(6)	3S.ERG	snake	DET.ABS	kill-PER	AUX:VIS

He killed a snake (I know because I saw it).

As we can see, visual source of knowledge is marked with the copula *nə̄* for existential contexts while in equational contexts the combination of the animate existential and equational copula are used. It is worth pointing out that while one morpheme (*nə̄*) carries the functional task of encoding both existential predication and visual evidentiality, in equational predication a periphrastic construction is actually used. In perfective aspect there is one morpheme whose sole function is to encode evidentiality, but this morpheme cannot be used in other aspects; Rgyalthang Tibetan does not encode evidentiality in imperfective aspect. To further complicate things, the mirative existential copula and egophoric copula is in paradigmatic contrast with the copula presented here, amongst others.

The East Bodish language Kurtöp has two clear evidentials: *-mu*, which marks indirect source of knowledge in perfective aspect, and *=ri*, which marks reported source of knowledge (Hyslop 2014b). The former is one of five perfective aspect suffixes (contrasting with a mirative, presumptive, egophoric, and unmarked) while the latter is a phrase-final clitic. Magar (Grunow-Hårsta 2007) also encodes inferred and oral source of knowledge through evidentials.

The most straightforward examples of Bodic evidentiality are all found in reported speech markers. Kham (Watters 2002), Dzongkha (Hyslop and Tshering 2017), Newar (Genetti p.c.), Kurtöp (Hyslop 2014b), Magar (Grunow-Hårsta 2007), amongst others, have straightforward reported speech markers, illustrated below:

Magar reported evidential (Grunow-Hårsta 2007: 156):

hose tarafi ta

(7)

hose	tarafi	ta
DIST.DEM	arrive	REP

He has arrived (they say).

(p. 604)

(8)

Dzongkha reported evidential (Hyslop and Tshering 2017:326):

Jamyang tsêm tsedolo

Jamyang	tsêm	tse-do=lo
Jamyang	play	play-PROG.EGO=REP

Jamyang is playing (I know because someone told me).

Kham reported evidential (Watters 2002: 297):

ba-zya di tsêm tsedolo

(9)

ba-zya	di
go-CONT	RSP

He's going (or so it's said).

28.4.2. Mirativity

Mirativity, or the grammatical encoding of expectation of knowledge, is found in the Bodic region but seems to be most prominent in Bhutanese languages. For example, in the East Bodish language Kurtöp (Hyslop 2017), mirativity is encoded in the copulas (affirmative and negative forms of both existential and equative), perfective aspect, and imperfective aspect. In perfective aspect the mirative perfective *-na* is one of five possible forms that encode epistemological contrasts. In imperfective aspect only a two-way contrast is made: mirative clauses are contrasted with non-mirative clauses. In the affirmative existential and equational copulas, a four-way contrast is made between presumption, doubt, mirativity, and non-mirativity. This differs somewhat when compared to the contrast made in the negative existential and equational copulas, where mirativity contrasts with pre-

sumption, indirect evidence, and non-mirativity. Table 28.5 shows the Kurtöp mirative forms and the grammatical context in which they occur.

Mirativity is also widely reported in the Bhutanese language Tshangla, where Andvik (2010: §10.3) states that it is encoded via a two-way contrast in the existential and equative copulas and then marked in copular clauses and perfective and imperfective verbal phrases. In Dzongkha, another Bhutanese language that is well-described, mirativity is found to only occur in the copulas (Hyslop and Tshering 2017).

In Kham, there is a mirative construction, formally composed of the nominalized third person form of the verb 'to be'. Consider (10) and (11).

Table 28.5. Kurtöp mirative morphemes

Form	Grammatical Domain
-na	Perfective aspect
-ta	Imperfective aspect
nâ	Affirmative existential
mutna	Negative existential
wenta	Affirmative equational
minta	Negative equational

(p. 605) Kham mirative (Watters 2002: 289):

ba-duh-ke-rə
(10) go-PRIOR-PERV-3P
They already went/left.

(11)

ya-ba-duh-wo o-le-o		
ya-ba-duh-wo	o-le-o	
3P-go-PRIOR-PERV.NOMZ	3S-be-NOMZ	(MIR)
They already left!		

Example (10) can be considered the unmarked example while Watters (2002: 289) says the following about (11): 'the speaker, travelling with friends and planning on joining an-

other party, arrives at the other party's house, and seeing a padlock on the door, turns to his friend and says *yabaduhwo oleo*' (italics mine). Watters points out that the form *oleo* is not restricted to the contexts in which the speaker gained their knowledge through inference; it can also be used when the speaker has gained knowledge from another person. Magar (Grunowh-Hårsta 2008) also has a mirative construction, with obvious similar formal structure. Yakkha, a Kiranti language of Nepal, has a mirative marker which it has borrowed from Nepali (Schackow 2015).

Mirativity is not widely reported outside of these cases. There has been considerable debate surrounding the issue of mirativity in Tibetan and there appears to be a recent trend to avoid using the term in the Tibeto-Burman literature. Hill (2012), for example, argues that all instances of mirativity in Tibetan are in fact better characterized as being of indirect source of knowledge. For more details regarding the nature of the contrast(s) found in Tibetic languages, readers are referred to DeLancey (Chapter 27 of this volume) and the recent book on evidentiality in Tibetic languages (Gawne and Hill 2017).

28.4.3. Egophoricity

A related phenomenon which seems to be unique to Bodic languages, is that of egophoricity, formerly known as conjunct/disjunct marking. Hale (1980) famously illustrates the phenomenon in Newar, shown below. In the classic system, verbs have two different conjugations depending on person. For example, in (12)–(14) we see that a first person actor is encoded differently (conjunct) than a second or third person actor (disjunct). The past conjunct suffix *-ā* is used with first person while the past disjunct suffix *-a* is used with second and third person. The data in (15) show that second person questions, like first person statements, also use the conjunct form.

Newar (Hale 1980: 95)[6]:

	ji	ana	wan-ā
(12)	1s	there	go-PAST.CNJ
	I went there. (conjunct)		

(p. 606)

	cha	ana	wan-a
(13)	2s	there	go-PAST.DIS
	You went there. (disjunct)		
	wa	ana	wan-a
(14)	3s	there	go-PAST.DIS
	He/She/It went there. (disjunct)		

	cha	ana	wan-ā	lā
(15)	2s	there	go-PAST.CNJ	Q
	Did you go there? (conjunct)			

In quoted speech with third person actors, subject control is indicated with conjunct forms while different subjects will be indicated with disjunct-marking in the embedded clause. Take (16) and (17), for example. In (16) the subordinate verb *wan* 'go', receives the past conjunct suffix *-ā* and the two subjects are co-referential. In (17), on the other hand, the subordinate verb *wan* 'go', takes the past disjunct suffix *-a* and the two subjects are different.

Newar (Hale 1980: 95):

(16)

wã-ã	wa	ana	wan-ā	dhakāā	dhāl-a
3s-ERG	3s	there	go-PAST.CNJ	COMP	say-PAST.DIS
He/She/It$_i$ said that he/she/it$_i$ went there.					

(17)

wã-ã	wa	ana	wan-a	dhakāā	dhāl-a
3s-ERG	3s	there	go-PAST.DIS	COMP	say-PAST.DIS
He/She/It$_i$ said that he/she/it$_i$ went there.					

Several studies of conjunct/disjunct followed Hale (1980), with DeLancey (1992) being a noteworthy reference discussing the phenomenon in several Bodic languages. While the canonical description of conjunct/disjunct systems is as described here, Hale (1980), amongst others, noted these tendencies were not exceptionless. That is, in natural data, speakers were found to use conjunct terms in stereotypical disjunct contexts and vice versa in order to convey various pragmatic functions. For example, a Newar first person clause could be marked as disjunct if the event was unintentional (Hale 1980: 96). This observation has eventually led to the abandonment of the terms 'conjunct' and 'disjunct' for this phenomenon and the field has by and large embraced the term 'egophoric' in its wake. See also the chapters in Gawne and Hill (2017); and Norcliffe et al. (forthcoming) for further discussion.

Egophoricity is most famous in Newar and the Tibetic languages but is also reported in Kurtöp (Hyslop 2014b, 2014c, forthcoming). The Kurtöp egophoric is used for personal knowledge if the speaker does not expect the hearer to already have the knowledge. Thus, it is most common in reporting on first person arguments, but can be extended to other persons if the speaker has privileged access to the knowledge, especially knowledge that is not shared with the interlocutor. Second person referents can condition the use of the egophoric (p. 607) in rare contexts when the speaker has access to knowledge

about the interlocutor but not known to the interlocutor, for example when a doctor talks to a patient about the patient's condition. Third person referents in storytelling often present a context which favours use of the egophoric. It appears that control may also be one aspect of egophoricity in Kurtöp, as the egophoric could not be used to narrate one's dreams. The Kurtöp egophoric also entails expectation on behalf of the speaker that the interlocutor does not share this knowledge.

28.5. Summary and conclusion

Evidentiality and the related categories of egophoricity and mirativity are integral aspects of most Bodic languages, often inextricably linked to aspect or a paradigm of copulas. In particular, we saw that reported speech was always marked with a sentence-final particle or enclitic while other types of evidentiality, mirativity, and egophoricity tended to be encoded through copulas or aspect markers. We also saw that while these epistemological contrasts could be marked in imperfective aspect, they were found more often in perfective aspect or in the copulas. There has been no mention of evidentiality in future tense.

The study of the grammar of knowledge in Bodic languages is still emerging as most Bodic languages remain un- or under-described. The complex semantics make the nuanced differences that separate evidentiality from egophoricity and mirativity extremely difficult to discern, and most descriptions of Bodic languages do not articulate these distinctions. However, that is not to say we cannot find evidence in the Bodic languages that evidentiality can be teased apart from mirativity and egophoricity. In conclusion, we present a minimal triplet from the East Bodish language Kurtöp, showing the difference between evidentiality, mirativity, and egophoricity in perfective aspect:

Kurtöp evidentiality, mirativity, egophoricity:

(18)

khit	gimu
khit	ge-mu
3.ABS	go-PERV:INFER

He left (I know this through indirect evidence).

(19)

khit	gena
khit	ge-na
3.ABS	go-PERV:MIR

He left (I did not expect this).

(20)

khit geshang
khit ge-shang
3.ABS go-PERV:EGO
He left (I have privileged access to this and expect the interlocutor does not).

The data in (18) could be uttered in contexts in which the speaker has indirect evidence for their knowledge. For example, they noticed that someone's coat was no longer hanging on the wall at a party and so inferred that the person had left. Another context might be that (p. 608) the referent was wearing a strong cologne or perhaps had not bathed in a long time. The smell associated with his presence was suddenly notably absent and so the speaker could say (18), inferring the referent had left. Example (19), on the other hand, is completely different in its nature. In this case, the speaker is highlighting the fact that the information was not expected while the source of the knowledge is irrelevant. Possible contexts for (19) could be that the speaker expected the referent to be in the house but upon reaching the house learned the referent had left (either through their own observation or being told by someone else). Or (19) could also be said when the speaker learns for the first time that a referent has left for another country, most likely in this case by being told by someone else. Finally, example (20) is used when the speaker wants to assert their privileged access to the knowledge which, by default, entails that the interlocutor does not share the knowledge. The source of the speaker's knowledge is not relevant here—it could be that the speaker has direct (i.e. saw the person leave) or indirect (i.e. inferred the person has left because that person always leaves at a certain time) evidence. Some possible contexts for this example are the speaker reporting to someone else about the speaker's partner or child. Or this example could be used in the case when the speaker was at an important event and spent enough time or proximity to a referent to be able to report on their behalf.

The examples immediately above should make it clear that evidentiality, mirativity, and egophoricity are distinct categories. At the same time, we can see that in practice they can be difficult to disentangle from each other. Miratives are often used with indirect evidence while egophorics are usually used with direct evidence and this overlap, amongst others, makes the analysis complicated and demanding. Nonetheless, we have been able to make some observations regarding how the three are encoded in Bodic languages.

In terms of evidentiality, reported speech markers are relatively common amongst Bodic languages and when they occur they are always as sentence final particles or enclitics. There are a few clear instances of evidentiality beyond reported speech markers, namely Kurtöp (East Bodish) and Magar (Magaric), which clearly mark indirect source of knowledge in addition to reported speech. There are more complex systems reported in the literature but in those cases it appears that either the authors include evidential strategies or conflate evidentiality with mirativity or egophoricity. More commonly, the linguist has not been able to understand what the precise conditioning factors are for each form. In-

deed, it is difficult (if not impossible) to find Bodic language which clearly marks only evidentiality, mirativity, or egophoricity.

Mirativity in Bodic has been made most famous in Tibetan but is found also in Kurtöp (East Bodish), Tshangla, Kham (Magaric), and Magar, amongst other languages. There is recent debate surrounding the existence of mirativity as a viable theoretical construct (see e.g. Hill 2012) and no doubt what some have analysed as mirativity may be better analysed as evidentiality or egophoricity (but see some of the discussion in Hyslop and Tshering 2017).

Egophoricity, formerly known as conjunct/disjunct, is also widely reported in Tibetic languages but found also in East Bodish. Some of the descriptions of evidentiality in other Bodic languages may turn out to be better captured by the notion of egophoricity (e.g. the 'non-first past evidential' in Manange). In fact, Tournadre and LaPolla (2014) recently advocate that we expand the notion of evidentiality to include *access* to knowledge, not simply *source* of knowledge, based primarily on data in Tibetan. Regardless of how linguists end up defining evidentiality versus mirativity, egophoricity, or other related epistemic contrasts, it (p. 609) is clear in Bodic languages that it is very important for speakers to keep track of knowledge, in terms of source, in terms of access, and in terms of expectations.

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Notes:

([1]) Shafer (1966: vii) also mentions Miao (e.g. Hmong) as possibly being distantly related.

([2]) Note that the mirative here is actually the formally unmarked member of the paradigm while the formally marked members of the paradigm are the least marked, semantically. That is, the mirative imperfective and copula are *-ta* and *nâ*, respectively, while the non-miratives are *-taki* and *nawala*, respectively. There are likely diachronic reasons for this. We suspect the mirative imperfective is a recent grammaticalization from the auxiliary *tak* 'become' and the mirative copula has grammaticalized from an existential verb *nak* 'to be at'. In the case of the former, it is easy to see how 'become' would be closely associated with new knowledge. In the case of the latter, the direct link between 'to be at' and new knowledge is less clear. Nonetheless, it is a recent grammaticalization as, in Kurtöp's closest languages, a different form is used for mirative existential contexts (if, indeed, further research shows the apparently cognate forms to be identical in use). It is also worth

pointing out that the non-mirative imperfective *-taki* is often reduced to simply *-tak*. Alexandra Aikhenvald has also drawn to my attention the possible similarity between the grammaticalization pathway proposed here and that argued for in Radetzky (2002), in which locative markers grammaticalized into topic markers.

([3]) Most Bhutanese languages remain un- or under-studied but the current state-of-the-art research shows mirativity in at least Dzongkha (Hyslop and Tshering 2017), Tshangla (Andvik 2010), Upper Mangdep (Bosch 2016) and Lhokpu (Gerber et al. forthcoming) and we suspect it is overtly coded in other languages as well. In fact, it is likely that mirativity and egophoricity are overtly coded in most or perhaps all Bhutanese languages, suggesting contact has played an important role in the development of these systems (see also Bosch 2016).

([4]) A forthcoming volume on egophoricity (Norcliffe et al. forthcoming) should help advance our understanding of this phenomenon.

([5]) Hildebrandt (2004) glosses each of these, except *ro* (which is clearly a reported speech particle) as 'EVID'. In an email dated 24 July 2016 she elaborates that she has not yet been able to tease apart the semantic and pragmatic nuances beyond the description here so cannot offer any more specific glosses. In addition to these, she adds *momu*, which is an evidential (or marker of related category) limited to copula structures.

([6]) I am grateful to Carol Genetti for offering updated glosses and translations of the Newar data.

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Evidentiality and the Expression of Knowledge: An African Perspective

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Abstract and Keywords

Evidentials in African languages range from systems that distinguish between firsthand and non-firsthand information to repertoires of evidential markers that express source of information, control over knowledge, reliability of inferred information, etc. Besides more 'typical' evidentials, there are also examples where evidential meanings are expressed via spatial deictic markers, discourse markers, and pronominal elements. This contribution provides an overview of evidentiality in a number of African languages and a case study of the pragmatics of these expressions. The chapter's main argument is that evidential meanings can emerge ad hoc in specific sociolinguistic settings, where a number of factors translate into a need for clarity and unambiguity in phatic communication. To avoid misinterpretations, speakers make use of evidential markers, thereby reacting to social pressure. They also make reference to notions of agency, voice, and control over knowledge. This chapter focuses on individual languages of Nigeria (Jukun, Maaka) and South Sudan (Luwo).

Keywords: interjections, language ideology, pragmatics, African Frontier, logophoricity, evidential meaning, agency

29.1. Introduction

EVIDENTIALITY in the languages of Africa has a recent, albeit vibrant, history of research, with a focus on the Sudanic belt, as well as individual studies on languages of southern Africa. This regional bias does not imply that evidentiality should be seen as a rare phenomenon in African languages, but perhaps rather that evidentiality, as well as mirativity, have not been major fields of interest for many linguists specializing in African languages over the years. Much of the earlier Africanist grammar writing was intended to produce insights into structure that would help to get a better idea of language change

and the cohesiveness of linguistic units. Looking at grammar as a social phenomenon, and at semantics and pragmatics as key domains for understanding how sociolinguistic context and linguistic structure inform each other, tended to be seen, in turn, as slightly out of place in grammar writing. As a result, even recent typological overview work, such as in the *World Atlas of Language Structures* (http://wals.info), maintains that African languages largely lack otherwise widespread means of encoding the source of information: 'It appears that expressing evidentiality as a verbal affix or clitic is the most common strategy. With the exception of Africa it occurs on every continent' (De Haan 2013b: §1).

It seems as if the contrary is true and that precisely this strategy is also present in a number of African languages. The Western Nilotic language Shilluk (Nilo-Saharan, South Sudan), for example, distinguishes three forms of evidentiality, which are marked by means of verbal clitics and syntactic strategies (Miller and Gilley 2007):

(1)

A. Speaker has direct knowledge concerning the proposition; marked by PAST verbal prefix *á-*:

dhyàng'	á-kwal`	yi	cʊl	SHILLUK
cow	PAST-steal	ERG	<NAME>	

Col stole the cow.

(p. 611)

(2)

B. Speaker witnessed the action, but does not wish to make any accusation/comment; the agent (transitive subject) is omitted:

dhyàng'	á-kwal`	SHILLUK
cow	PAST-steal	

Someone (I know who it was) stole the cow.

(3)

C. Speaker was not eyewitness to the event, but has some evidence; verbal affixes ʊ́-. . .-*O*:

dhyàng'	ʊ́-kwalɔ̀	yi	cʊl	SHILLUK
cow	PERV-steal	ERG	<NAME>	

Col stole the cow (I'm sure he did).

(4)

D. Speaker was not an eyewitness, but knows the event took place; agent omitted:

dhyàng'	á-kwal`	SHILLUK
cow	PERV-steal	

Someone stole the cow (I'm sure it happened).

(5)

E. Speaker refers to an accusation; particle *í*:

í	dhyàng'	ʊ́-kwalɔ̀	yi	cʊl	SHILLUK
hear	cow	PERV-steal	ERG	<NAME>	

It is reported that Col stole the cow.

(6)

F. Speaker refers to hearsay; subject/agent omitted:

í	dhyàng'	ú-kwalɔ̀	SHILLUK
hear	cow	PERV-steal	

It is reported that someone stole the cow.

The closely related language Luwo lacks the many choices Shilluk offers (Storch 2014: 161 f.). Instead, Luwo distinguishes between the eyewitness and non-eyewitness forms in the perfective aspect marked on the verb, as follows:

(7)

à-cʌ́mɔ̀	LUWO
PERV-eat:APASS	

S/he ate/has eaten. (speaker as a witness who is sure that the action was completed)

(8)

à-náà-cʌ́mɔ̀	LUWO
PERV-N.EVID-eat:APASS	

S/he ate/has eaten. (speaker has not witnessed that the action was completed)

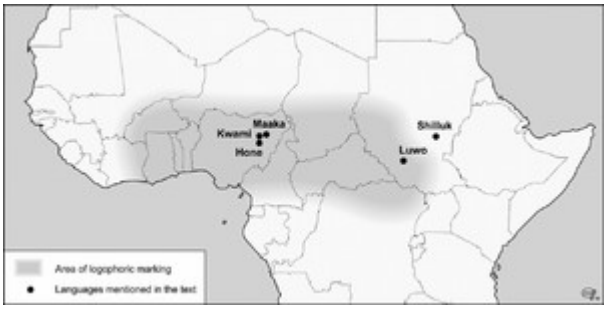
Example (7) exhibits the perfective prefix without any evidential marker, while example (8) shows the aspect marker, plus a morpheme *náà*.

The connection between the perfective, eyewitness evidence, and truth is interesting, as it implies that only a perfective event permits the speaker to make a statement about probability and truth. In the imperfective aspect, completion as a parameter is not relevant, and hence no evaluation of the event's probability and truth can be given. The conceptualization of the perfective aspect as a grammatical category with strong evidential overtones is (p. 612) obviously a salient property of the entire aspectual system, as it correlates with the use of a separate marker for the non-evidential perfective (cf. Aikhenvald 2004a: 263 f. on evidentiality as a possible extension of aspect).

Evidentials in languages such as Shilluk have been considered mainly in the relevant overview work, where most of the available studies on evidential marking in African languages are presented (especially Aikhenvald 2004a and 2014). Recent additions to the descriptive literature not covered there include König's (2013) study on evidentiality, mirativity, and counterexpectation in !Xun, a language of Namibia, Dimmendaal's (2014) work on Tima (spoken in Sudan), and the contributions highlighted in the present chapter. Besides this pre-existing and easily accessible work, which largely focuses on grammatical structure and construction types, very little is known, in principle, about African evidentials, especially in terms of pragmatics and semantics (which have been of considerable interest to linguists working on evidentiality in various other parts of the world; however, see Botne forthcoming for an updated survey of evidentiality in African languages).

The social context of knowledge as well as the sociolinguistic aspects and semantics of evidentiality have received much less attention, and when turning our focus to them it becomes clear that there is a variety of other possibilities in African languages to express

notions such as the source of information, to make a proposition more precise or to even indicate control over knowledge. This chapter is intended to highlight precisely these facets of evidential marking and epistemic language. It focuses on selected languages spoken in Africa's 'fragmentation belt' (Dalby 1971), one of the continent's linguistically most diverse regions (Map 29.1). Two rather specific phenomena are at the centre of the discussion, namely testimonial reliability in narrative speech, and precision in discourse, reflecting key aspects of evidential marking in terms of its semantics, indexicality, and sociolinguistic setting. Data presented in the examples largely stems, unless indicated otherwise, from the present author's fieldwork over a time span of twenty years.



Map 29.1. Logophoric pronouns in Africa

(p. 613) 29.2. Testimonial reliability in narrative speech styles

In African languages of the Sudanic Belt, the presence of logophoric markers is among the features that transcend boundaries between the language families (that is, Niger-Congo, Nilo-Saharan, and Afroasiatic languages). What makes these languages so interesting to a study of evidentiality across these genetic units is the fact that they not only share a similar etymology, having developed from referential demonstratives (Dimmendaal 2001: 140 f.), but that they also share epistemic connotations. The pragmatic behaviour of logophoric markers in these languages suggests that referential disambiguation is but one of their functions, while the coding of epistemic reliability and the source of information are other, perhaps more salient ones. What is of considerable interest here as well is the fact that the ubiquity of logophoricity across the entire area hints at complex historical sociolinguistic processes which have taken place there. This, together with other typological features, has been identified as evidence for a much larger linguistic area (Westermann 1927; Güldemann 2008). In other words, epistemic reliability appears to be a pragmatic feature of equal import in a large number of languages spread across a vast area. This might not be surprising, as I will argue further, given the observations made with regard to historical ways of making and remaking community in precisely this area, as well as to polyglossic practices and ideologies about multilingualism.

Such considerations have not, however, played any role in most of the existing studies of this linguistic area and its individual languages. In most of the descriptions of the languages concerned, logophoric marking is presented simply as a means of referential disambiguating within discourse units (see e.g. Frajzyngier 1985; Hagège 1974; von Roncador 1992 for overviews). Typically triggered by complement-taking verbs such as 'say' in quoted speech, 'hear' and other perception verbs, as well as verbs of cognition, logophoric markers, which tend to be specialized pronominal forms, are used to indicate reference, as in the following examples from Goemai (Hellwig 2011: 449 f.):

(9)

là=gùrùm	yìn	jì	zèm	à	bì	GOEMAI
DIM:SG:GEN=person	say	SG:MASC:LOG:SU	like	FOC	thing	
wààp						
borrow/lend						

The poor person$_1$ said he$_1$ wants a loan.

(10)

sái	ní	tál	ǹ-ḓuòe	là=gùrùm	yìn	GOEMAI
then	3SG:SU	ask	LOC-voice:GEN	DIM:SG:GEN=person	say	
gwà	wúl	à	dé	bí	mmòe?	
SG:MASC:LOG:SU	arrive	FOC	DIR	thing	what	

Then he$_1$ asked the poor person$_2$ saying, he$_2$ arrived for what?

Although the phenomenon is most certainly more complex than this, both semantically and pragmatically, as Dimmendaal (2001) was able to show in a ground-breaking study, there are (p. 614) only limited corpora and data to substantiate this claim. But wherever the available material permits us to turn the gaze to 'discourse units larger than the sentence, usually the paragraph or episode' (Dimmendaal 2001: 135), a different perspective is obtained: logophoricity in Niger-Congo and Nilo-Saharan languages, in combination with reported speech-marking, saliently tends to express general notions of reliability of what is reported, as well as precisely indicating the source of information, in the sense that the narrated information can be attributed either to the speaker or to a third person. Dimmendaal (2001: 139 f.), in line with Heath (1999), on Koyra Chiini/Songhay, observes that discourse-driven logophoric marking serves foremost as a means of attributing ownership of knowledge to another speaker: 'These phenomena strongly suggest that disambiguation is but one reason, evidential hedging and expression of the fact that the narrated material is attributed to another speaker being additional important motivations behind the use of logophoric marking in discourse.'

29.2.1. Referential marking and epistemic validation

In the following examples from Hone, a Jukun (Benue-Congo) language spoken in northeast Nigeria (author's own field data), a brief case study of typical features of logophoricity described in the preceding section is provided. In this language, logophoric marking is not only licensed by the reported speech-indicating verb *-ń* 'say' (similar to many of the languages referred to in Dimmendaal's analysis), illustrated in examples (11) and (12),

but also by the subjunctive (examples 13, 14) and the causal clause linker *jír* 'for that matter, because' (examples 15, 16), whereby different semantic groups of verbs may be involved (e.g. not only verbs of saying and thinking), such as the verbs of motion below:

(11)

ku-ń	ku-fɔ̀m	bɛr	ní	dìr-ùm	HONE
3SG:SU-say	3SG:SU:LOG-leave	place	DEM	body-1SG:POSS	
má	n-tí-fɔ̀m	rí			
too	1SG:SU-FUT-leave	FOC			

S/he$_1$ said she$_1$ left the place, as I will leave as well.

(12)

ku-ń	àŋwí-yáá	kàrààtú	yí-bè	HONE
3SG:SU-say	3SG:EMPH-give	reading	give-3PL:OBJ	

S/he$_1$ said that s/he$_2$ should teach them.

(13)

ku-ɓìy	kú-nyáŋ-kə̀	HONE
3SG:SU-come	3SG:SUBJ:LOG-see-3SG:OBJ:INAN	

S/he$_1$ came so that s/he$_1$ could see it.

(14)

ku-ɓìy	ŋwá-nyáŋ-kə̀	HONE
3SG:SU-come	3SG:SU-see-3SG:OBJ:INAN	

S/he$_1$ came so that s/he$_2$ could see it.

(15)

ku-shíí	gìní	jír	ku-ŕ-fúk	ámárù	HONE
3SG:SU-sit	ground	reason	3SG:LOG-IMPERV-hear	hunger	

S/he$_1$ sat down because s/he$_1$ was hungry.

(p. 615)

(16)

ku-shíí	gìní	jír	ŋwá	tí-fúk	ámárù	HONE
3SG:SU-sit	ground	reason	3SG:SU	IMPERV-hear	hunger	

S/he$_1$ sat down because s/he$_2$ was hungry.

That precisely such constructions as causal clauses and subjunctive verb forms, as well as reported speech verbs, trigger logophoric marking is not surprising. This indeed throws some light on the fact that logophoric marking has strong connotations of epistemic validation. In examples (13) and (14), actions are referred to that are supposed to have taken place *elsewhere*, or have resulted in the participants being *somewhere else*. Speakers indicate that they have some knowledge about who performed a particular action for what purpose and with which mindset by using the relevant pronominal marker. Motion verbs, like reported speech markers, have the semiotic potential to move the narrative away from the place where the narration takes place: reported speech is speech that takes place, or has taken place, where we are not—or have not—been present, while motion

events indicate that there is another place involved, a space at which one has to point, or where one has been before. A speaker here not only 'presents his point of view concerning the mental state of others, e.g. in reporting the mental activities of a third person not participating in the speech event' (Dimmendaal 2001: 156), but also his or her reason for doing so, as the reported event has taken place away from the speaker and hearer. Epistemic validation here is obviously triggered by an entire combination of meanings: spatial setting and altrilocality, intentionality, and causation in relation to a third person who is neither speaker nor hearer of the speech event in question.

While the constructions in which logophoricity as an epistemic validation device is used to express notions of knowledge about the origin of information—and can therefore be regarded as an evidentiality strategy—the marker itself does not show such features. While it is common in other languages of the area to express logophoricity by means of 'shortened forms of referential demonstratives' (Dimmendaal 2001: 140), this is different in Hone: in contrast to examples (9) and (10) from Goemai presented in §29.2, Hone exhibits considerable iconicity in its marking of referentiality. Co-reference in the logophoric construction in (11) is indicated by the use of similar pronominal markers (*ku-*), while disjunctive reference is indicated by the use of a specialized form, namely *àŋwí-*, whose non-emphatic base is *ŋwá-*. While the pronominal marker *ku-* is cognate to third person markers in many other Benue-Congo and Niger-Congo languages (Dimmendaal and Storch 2015), which frequently occur as logophoric markers in these classificatory units (Dimmendaal 2001: 150), the marker in (12) is likely to derive from a fairly different source, namely **-ŋgwa* 'external/foreign possession' (Meinhof 1948: 91), reconstructed for the Bantu branch of Benue-Congo. While this root retains its meaning as a possessive marker in various Bantu languages, it expresses switch-reference concepts elsewhere (e.g. in Jukun); both senses conserve, however, an underlying meaning of 'non-present/foreign third person'. As a marker with evidential meanings, it conveys non-firsthand knowledge about an event or an action.

It is important to stress that referential disambiguation, like the indication of control over possession in the Bantu form, is available exclusively for third person markers here, while there is no such option for first- or second-person markers. This is of considerable significance for an understanding of epistemic connotations of logophoric marking in these languages, as it more or less directly relates to conventions of narrative discourse (see (p. 616) Aikhenvald 2014: 35 f. for an explanation of genre-specific evidentiality). Storytelling and other narrative practices in Hone exhibit a strong tendency towards presenting information using a third-person perspective. Hence, telling an audience a story is usually done by framing the speaker as absent and putting the players into the centre of discourse: instead of 'I said that … ', 's/he said …' would be the appropriate way of communicating voice and stance.

Such conventionalized ways of presenting narrated material might result in the development of different epistemic validation markers in the third person, but probably not in the first and second person. However, this deictically restricted repertoire does the job: it offers a choice between three strategies for presenting the speaker's attitude and view con-

cerning information in narrative texts. The speaker consequently may act as a 'reflector', as in example (17), who presents firsthand information, claiming direct involvement and an emic perspective. In example (18), in contrast, the speaker is a narrator who presents information that originates from a third person and offers an etic perspective. In (19), the role of the speaker differs again, as there he or she acts as a performer, using direct speech and offering a means to identify the speaker with the source of information. In the examples, none of these different roles of the speaker implies that there is a boundary between the Self, or the subject, and the outer world. Firsthand information can also relate to an event that has happened long ago in the past, or far away, but has been witnessed by the speaker under supernatural circumstances, for example in connection with witchcraft, as in example (17). Performed direct speech, in contrast, can be presented within the narrative as a song, where the voice and musical components indicate that the speaker merely mimics experience and participation, as in example (19):

(17)

ku-zuu	nəm	súláak	nəm	ku-yak-tər	HONE
3SG:SU-come.out	like.this	IDEO:sneak.away	like.this	3SG:SU:LOG-go-push	
hwɪáwù	ní	ku-tərtərtər	mə-tən-zə		
skin	REF	3SG:SU:LOG-push:REP	CONS-take.away.SGVE-COMPL		
bú	nó-aa	nəm			
for	husband-3SG:POSS	like.this			

She came out like this, sneaking away like this she went push that skin, she pushes and pushes and completely pushes for her husband, like this.

(18)

ku-wéí	núú	ŋáán	kí	ní	mə-ń	ŋwá-yak	HONE
3SG:SU-see	mouth	excrement	ghost	REF	CONS-say	3SG-go	
áku-hwóa	pyîr	à	páŋ				
3SG:SU:LOG-take	fire	PREP	there				

He_1 saw that ghost's$_2$ anus and said that he_2 went in order to take the fire there.

(19)

àlgáità	ní	ku-ń:	líilìlíi	sábarwa	HONE
oboe	REF	3SG:SU-say	lilili	girls	

That oboe, it said: lilili, girls …

Taking Aikhenvald's (2014: 44 f.) terminological demarcations of evidentiality, where evidentials are carefully differentiated from other means of epistemic coding, into account, it makes sense to analyse forms of evidential marking such as this by considering their pragmatics and semiotics. Here, evidentials do have extensions that allow for the linguistic (p. 617) creativity of the speaker: evidential marking might have, in some contexts, connotations of certainty, doubt, and the speaker's attitude to information and knowledge. In order to properly analyse these constructions and their meanings, it should therefore be considered that whatever a speaker wishes to highlight in an utterance, his or her epistemic validation of an event is directed at an audience to be evaluated. There is an utterly dialogic component in such instances of evidential marking where, in a very

prominent form, the speaker not only communicates how he or she has learned something, but also how he or she expects others to evaluate what has been said.

29.2.2. Sociolinguistic contexts of evidential marking

There are many motivations for the emergence of such evidential strategies, among them, most notably, the complex language contact scenarios in which these languages have developed (Aikhenvald 2002, 2004a, and Chapter 7 of this volume; Dimmendaal 2001, among others). The sociolinguistic history of the African settings where evidential marking is a common feature in a variety of unrelated languages suggests that there are particular contact settings that are likely to enhance the emergence of evidential marking, namely those in which sacred kingship plays a role. Hone is an example of a language present in such a setting; it was spoken[1] by people sharing heteroglossic practices, albeit not so much as an unmarked part of a communicative repertoire, but as a language ideologically linked to first-comer identity concepts and spiritual agency.

The villages of Pindiga, Kashere, and Gwana, where Hone used to be spoken, are located in a remote area that was once part of the sacred kingdom of Kororofa, a pre-colonial polity which was controlled by Jukun-speaking groups before it vanished in the nineteenth century (Meek 1931; Rusch forthcoming; Harnischfeger forthcoming). These villages were distant outposts of the kingdom, located far away from its political and spiritual centre. However, as is characteristic for other settlements that belonged to sacred kingdoms in this part of the world, these villages at the frontier were organized politically as a replica of the centre. They were ruled by sacred kings, who were surrounded by an entourage of priests and counsellors, and who largely performed the same holy spectacle as the king did in the metropole. Johannes Harnischfeger (2014a) analyses these structures as immediately resulting from competitions for power and land, and as strategies to achieve stable communalities. He emphasizes that the sacred king in these communities was not a personification of the gods; he stood above them, as his power and agency reached beyond that of the gods. The sacred king’s remarkable power resulted from his ability to oust rivals and competitors prior to and after his installation as king. A king’s election potentially went along with social fission, as he had to construct alliances against less sympathetic clans and powerful competitors, who would either remain oppositional or would leave the community. The spreading of stories about the new king’s victories and political successes might have been a power-consolidating mechanism in the creation of new frontiers.

(p. 618) Harnischfeger also argues that the king’s sacredness did not result or emanate out of his persona or charisma, and was not based on dynastic birth. The Jukun dynasty of the Kororofa Empire, Harnischfeger writes, did not reach far back into history and was only the last and rather weak dynasty of a kingdom that had been founded sometime in the eleventh century (also see Rusch forthcoming).

These sociopolitical disruptions and the institutionalization of the borders and frontiers that went along with them resulted in the creation of an entire area that is characterized

by highly multivocal discourses and extreme sociolinguistic complexity. This seems to be a process that has taken place over a considerable span of time, and which has led to a situation in which it is considered normal practice for most people to control a variety of linguistic resources, while the construction of communality is elusive, mixed, and fluid. Igor Kopytoff, in his introduction to *African Frontier* (1987), argues that the mixed character of elusive communities is the result of specific and recurrent sociopolitical strategies such as these in many other parts of Africa as well. Political conflicts and crisis, he emphasizes, continuously produced new settlements, as one of the preferred strategies in conflict resolution was migration: not only had the sacred king the power to ban inefficient deities, he was also expected to oust defeated competitors if they posed a threat to the sacred political order. The language associated with these concepts of power and continuity was ideologically constructed as spiritually and politically agentive, as having the potential to change reality (in contexts of spirit possession, witchcraft, and so on), and therefore as a way of speaking that needed to be treated with special care and that was associated with notions of secrecy and sacredness.

The marginal, newly founded settlements that the speakers of such a language established largely gained power and safety through the inclusion of other people, speaking other languages. Because of shared experiences and the potential for disruption, both first-comers and subsequent settlers were able to agree in each group within the newly formed community to keep a close link to their respective ancestors and spiritual worlds. Gods and spirits came with their people, and were taken along if one had to leave and migrate elsewhere. With the gods and ancestral spirits came specific tales about each group’s origins, sacred registers, and rituals.

In terms of strategies of communication, the fragile balance in such communities was not only maintained through complex heteroglossic practices but also by the creation of linguistic means that sustained unequivocal ways of expression: when talking about reported events as well as other people’s points of view on such events, actions, or their own interiorities, a speaker is required to render his or her narrative as transparent and reliable as possible. Language could affect reality, and consequently false testimonies and unsubstantiated claims about others could potentially result in social rifts and political disruption (see Grehan 2004 for an extensive discussion). Language therefore was and is treated with care, even though there was (and continues to be) plenty of it, in terms of codes present in people’s repertoires and other sociolinguistic contexts available to them to turn to (see Lüpke 2015b, and forthcoming; and Good 2013 for examples of a multilingual culture in Frontier contexts in Senegal and Cameroon).

29.2.3. Interiority and epistemic stance

Against this background, it may not be surprising that epistemic marking in these languages mainly concerns mental states, rather than indicating modalities of sensory perception (also see Dimmendaal 2001; Heath 1999). Such a perspective on evidentiality sheds some light on the (p. 619) possibility that there are views on language and its speakers that differ in various aspects from those that tend to dominate academic, commonly

held concepts of language. While the latter emphasize that speech is motivated by the intention of the individual speaker to be understood by the hearer (perhaps most notably stated by Grice 1957), other language ideologies, such as among Jukun-speaking groups, focus on more complex interpersonal settings. Metalinguistic discourse in communities founded by Jukun groups is about both invisible and visible agents taking part in communication events: besides the visible interlocutors, there is the possible presence and interference of ancestral spirits, masks, and witchcraft (directed by other, potentially not present persons) in a communicative event, framing speech as decidedly intertextual. Language, therefore, is not automatically owned and controlled by those who speak it, and agency is a complex concept that involves ideas about mediumship, patienthood, and subjectivity alike. It has a higher status as a first-comer's code, is related to the sacredness of kingship, and links past and present, current settlements, and places of origin. Such a way of framing language does not allow for a prominent demarcation, it seems, between 'ordinary' ways of speaking and ritual codes; both are semiotically complex and express various meanings at the same time.

Hence, using this strategy to avoid conflicts arising from claiming undue authority over knowledge and information, as authorship is not associated with the self or the self's respondent, but with a potentially absent participant, Hone (and other Jukun) speakers need to make clear, in narrated discourse, how the represented third person is licensed to claim particular issues and facts, and whether they deem the latter reliable information or not. In principle, speakers need to be precise about their information source, in the sense of Aikhenvald (2014: 37): 'Being precise in one's information source goes together with cultural conventions which appear to be particularly strong in languages with evidentials. […] In many linguistic communities with evidentiality, being as specific as possible about what one has to say is obligatory. Those who do not obey the cultural conventions of evidential usage are not to be trusted.' It is therefore not so much a matter of making clear how knowledge was obtained in terms of sensual modality (having heard, seen, etc.) and source (firsthand versus inferred, and so on), as in the more 'typical' evidentiality-marking languages (e.g. Aikhenvald 2004a: 3 ff, 2004b, 2014, and Chapter 7 of this volume), but also in terms of interiority—the emotions, feelings, and inner states of the speaker. The Frontier strategies on the fringes of the sacred kingdoms resulted not only in heteroglossic practices in present-day societies as a social and political necessity, and as a tool for survival, but also in certain cultural conventions. These also concern the construction of the body as an 'open' and interpersonal entity, into which spiritual powers and spirits could move under particular circumstances (see e.g. Ahyi 1997; Colleyn 1999 for further explanations). In other words, there is no real separation between the inner and the outer world, between reality and dream, or between the visible and quantifiable and the inwardly felt.

In Hone, together with a number of other Jukun languages, such cultural conceptualizations translate into evidential meanings in miratives, which are not necessarily a feature of mirativity (Hengeveld and Olbertz 2012; Aikhenvald 2004a, 2012b). In Hone, a set of morphologically complex mirativity pronouns are used to express counter-expectation, in the sense of referring to an unprepared mind and the agent's surprise about the accom-

plishment of an action. Unlike in many languages studied in recent overview work on mirativity (De Lancey 1997; Hengeveld and Olbertz 2012), the mirative and evidential markers are not identical in Hone: mirative pronouns in this language consist of the copula *b ə̀* 'with' and a pronominal element that expresses person. These pronouns literally translate as (p. 620) 'A-S with P-S', in the sense of 'I with me', and express the AGENT-subject as performing an action despite being considered incapable of doing so. The pronouns encode mirativity in the sense that they indicate that an action takes place even though it is considered highly improbable that it will happen (because of the agent's presumed disability; see Storch 2009 for a more detailed analysis):

(21)

ku-làk	bɔ́à	HONE
3SG:SU-fly	3SG:MIR	

S/he flew off [unexpectedly, even though s/he considered her/himself as being incapable of doing so].

(22)

n-tì-nyi-é	kyèr-u	n-kyèr	bə́mìì	HONE
1SG:SU-NEG:PERV-know-NEG	cook-NOMZ	1SG:SU-cook	1SG:MIR	

I didn't know yet how to cook, but cooked nevertheless.

(23)

ɔ̀-kàn	búɔ̀	HONE
2SG:SU-finish	2SG:MIR	

You really finished [in spite your doubts or incapability].

In all of these examples, it is not the speaker or narrator who is portrayed as being surprised, but the transitive subject: in (21)–(23), the mirative pronouns are all concordant with the subject-agent markers. Surprise on the part of the speaker, or an indication that new information is presented, would be expressed by means of interjections and ideophones, for example. The constructions presented here, in contrast, not only indicate that an action has been performed against the agent's expectations, but also that the speaker *knows* something about the agent's unprepared mind. Very much like in the logophoric constructions discussed above, mirative pronouns are evidential hedging strategies that help to express a speaker's knowledge about the mental activities of persons who are not necessarily participating in the speech event. The reported action is framed as a complex event, which can only be fully understood if sufficient information on the agent's interior state is provided. The speaker indicates that he or she has access to such information, relating to the agent's emotional perspective on the situation described.

Interestingly, mirative pronouns exclusively refer to animate, typically human agents. Inanimate referents do not have enough agency to violate any external conceptualization of capability and ability in terms of performing an action. Hence, a form such as **kə-kàn búkə̀* 'it really finished (despite its length, etc.)' is ungrammatical and semantically problematic. Moreover, mirativity in Hone correlates with intensity, and actions are often expressed which have been performed fully, intensively, and with more energy than other-

wise necessary—a situation that is reminiscent of the close etymological and semantic connection between resultative forms, evidentials, and miratives discussed by Hengeveld and Olbertz (2012: 498 f.). Here, as in Hengeveld and Olbertz's study, the mirative can also express persistive or stative meanings (rather than surprise), as in the following example:

(24)

n-shán	bə́mìì	HONE
1SG:SU-cry	1SG:MIR	

I cried and cried [even though someone comforted me].

(p. 621) Here, epistemic overtones are largely missing as other aspects of the event or action are highlighted, such as intensity and duration. What is so interesting about the evidential meanings in mirative constructions is that they reveal that speakers are able to make marked choices in communicating different forms of epistemic stance without, however, necessarily drawing boundaries between mental and sensually perceived knowledge. This furthermore reveals that evidential marking can focus, in different social and cultural contexts, on different ways of knowing. Highlighting mental activities and emotional investment in actions and events thereby makes a lot of sense if evidential marking is seen as a strategy that enhances social cohesion and conflict resolution strategies. Emotions (as mental activities) are social and cultural practices, and not simply individual psychological states (Abu-Lughod and Lutz 1990; Barbalet 2001). Sara Ahmed (2014: 10) argues that 'emotions are not "in" either the individual or the social, but produce the very surfaces and boundaries that allow the individual and the social to be delineated as if they are objects.' To provide, for example in narrative speech, information on how such socially meaningful boundary production can be known and asserted is an important part of being explicit and precise—especially, one might want to add, when engaging with a heteroglossic and socioculturally diverse audience. However, it makes a distinction between evidentiality and epistemic modality, as suggested by De Haan (1999), difficult to relate to the social and cultural meanings that evidential marking has; drawing a line between constructions that express an assertion of the type of evidence relating to a particular piece of information (De Haan's characterization of evidentiality) and those that code evaluation of the speaker's commitment to what is said (De Haan's definition of epistemic modality) is rather problematic, when taking the strong focus on interpersonality and the sociality of interiority in alternative, emically informed conceptualizations of language into account.

29.3. Precision in discourse

While Hone and other Jukun languages (such as Wapha and Jibe) highlight in their evidential marking strategies the agency of others and interior phenomena in their relevance for sociality, other languages spoken in the area exhibit more diverse evidentiality strategies. One of these is Maaka, a West Chadic language that is found at the northern fringes of the Jukun-speaking region of northeastern Nigeria (Harnischfeger 2014b).

Maaka exhibits a complex system of expressing the source of information that involves not only the noun phrase but the entire clause (Storch and Coly 2014). In addition to these devices, Maaka speakers also express knowledge, source of information, and its reliability by means of ideophones and discourse markers. These devices and evidential constructions are frequently used, and in both narrative speech styles and other types of discourse such as dialogic communication, serve to make language as precise and explicit as possible. Even though this phenomenon remains understudied, the insights from Maaka suggest that it might be more widespread than presently assumed: some of the Maaka evidential markers can be identified as loans from neighbouring languages, where evidentials have not been in the focus of linguistic research but might well play a role.

The majority of the languages surrounding Maaka are languages spoken by small-scale societies, and this particular sociolinguistic context is rather relevant for an understanding (p. 622) of the frequency of evidential marking: Maaka speakers affirm that they have an interest in making their statements as explicit as possible in certain sociocultural contexts, thereby using Maaka both as a local code of daily communication and as an utterly 'diplomatic' code in a small but highly multilingual and highly fluid community (Harnischfeger et al. 2014). In his study of comparable small-scale societies and their languages, Evans (2010: 12 ff.) describes how these communities' attitudes towards languages differ from those of larger and more coherent communities. Small-scale communities are predominantly multilingual and, often using concepts of esoterogeny (Ross 1996), exhibit a high degree of metalinguistic awareness about differences between languages and linguistic correctness. These societies are often open to culturally and socially different people; this is also evident in terms of their preferring exogamy over other marriage patterns. Members of small-scale societies also tend to use metalinguistic terminology, Evans suggests, because they are interested in sharing knowledge and linguistically innovative forms with others.

Most, if not all of these features apply to Maaka speakers. This is of particular interest with regard to language attitudes, as metalinguistic discourse and ideas about correctness often have two related, albeit different functions: to negotiate linguistic in-group practice and to ascribe identity. As Maaka co-exists with very dominant or prestigious languages such as Naija ('Nigerian Pidgin English'), Hausa, and Kanuri as part of its speakers' repertoires, there are a number of significant linguistic strategies that have to do with the role of Maaka as being both a single language among several others being used by a small community on a daily basis, and being a first-comer's code that belongs to the founders of the villages.

Speakers ideologically rationalize the prominence of evidential-marking strategies in their language by referring precisely to this sociolinguistic context: they claim that they have to make the reliability of their knowledge and its context explicit. Ambiguity and therefore the possibility of being misunderstood by the addressee needs to be avoided, and speakers share metalinguistic discourse on how their various communicative re-

sources serve to indicate in a very exact, precise way the source of information, the reliability of the proposition, and the speaker's attitude towards the context of the proposition.

29.3.1. Discourse markers and ideophones

Like any other language, Maaka has a number of epistemic discourse markers that help to specify the semantics of perception in terms of indicating reliability, hearsay, and so forth. As a rhetorical strategy, the use of such epistemic marking strategies is a salient means of making speech precise and unequivocal, but also has strong stylistic connotations, as speakers tend to use discourse markers from various codes that form part of their communicative repertoires to achieve clarity and precision. Some of these markers have rather strong evidential overtones, particularly when they occur in discourse environments where their meaning becomes more specific in reference to asserting the type of information provided in the utterance. Probably the most frequently used discourse marker that fulfils this task is *dàcí*. It expresses assertive focus in clauses where simple events are described, as in the following example:

(25)

ʔàmààlé	mbàl-sú	dàcí	Maaka
DEM:PRES	alcohol-3PL:POSS	DM	

Here is their alcoholic drink, alright.

(p. 623)

In utterances where complex events are described that consist of various single actions, *dàcí* acquires a perfective aspect meaning and indicates that the information presented is based on firsthand observation: the speaker frames the different events in a chain of single although interdependent events as true, as having really happened, and as having potentially been eyewitnessed, as in the following examples.

(26)

gáy-nì	dàcí	ʔà	dáàndè	ndéyà			Maaka
house-3SG:MASC:POSS	DM	then	children	arrive:IMPERV			
sù-rììnà-n-nì				fátí	bínò	dàcí	ʔáá
3SG:MASC-enter:INTR:VN-LINK-3SG:MASC:POSS				side	house	DM	COND
dáàndá	râkkò	ʔà	ndéy-ní-yà			dàcí	
children:DEF	enter:PERV	then	arrive-3SG:MASC:OBJ-IMPERV			DM	

His house now: the children arrive as he has finally entered the house from the side: if the children enter, they ultimately reach him.

(27)

ʔà	kè-mòòktó		ʔàlték	témtù	ʔà	MAAKA
then	2SG:MASC-take:PL:PERV		cornstalk	indian.hemp	then	
kè-záy	gè-kó	dàcí	kè-bárkùtà		kè-bárkùtà	
2SG:MASC-put	LOC-on	DM	2SG:MASC-rub:PL:IMPERV		2SG:MASC- rub:PL:IMPERV	
ʔàlóólóóà	ngéɓɓútò	dàcí	kè-zènà	ʔénndè	kwàm	dàcí
cotton	catch:PERV	DM	2SG:MASC-put.on:IMPERV	exrement	cow	DM

Then you take a cornstalk and the Indian hemp you put on it—visibly; you rub a lot, rub a lot and the cotton catches [a spark]—visibly; you certainly put cow dung on it.

Evidential extensions of perfective constructions are fairly common and therefore not unexpected in examples such as (26), where *dàcí* helps to organise information structure by presenting the single events not only as precisely ordered and differentiated but also as completed and witnessed. The convergence of meanings of the completion and separateness of events is also obvious in (27), where—in a prescriptive text—notions of visibility are also implied. Such uses of the discourse marker guarantee that explanations and narratives on complex topics remain transparent and unequivocal, and they provide an orientation with regard to the introduction of new information and the repetition of previously introduced conversational topics (see Schiffrin 2001 for a more general discussion).

Another means of sharing experienced knowledge is through the use of ideophones, as discussed in Dimmendaal (2014: 256 f.); and Dingemanse (2011) for two African languages, Tima (Katla-Rashad group, Sudan) and Siwu (Kwa, Ghana). In Maaka, a large number of ideophones is attested; most of them, however, are used in heightened speech styles such as narrative and poetic genres rather than in everyday discourse practice. They express sensory qualities of events and actions and help to recreate specific experiences of the same, such as *tíndùkùɗùk* 'too dark [to see]', *bámm* '[laid] completely down' and *káŋ* '[tied] very fast'. Those ideophones that occur more frequently and across genres in turn tend to specify knowledge and information. For example, used as an adverbial after verbs of perception and cognition, the ideophone *dám* '[know] precisely' indicates that the speaker refers to firsthand information: (p. 624)

(28)

káà	ʔà	tà-sól	dám	ʔái	láká	MAAKA
but	then	3SG:FEM-hear:IMPERV	IDEO	thing	other	

But then she precisely hears another thing.

As Dingemanse (2011) has recently demonstrated, ideophones represent expressive and performative language *par excellence*. When ideophones are used in epistemic and evidential contexts, this has an interesting consequence: Dimmendaal (2014: 257) suggests that joint perception is an important evidential connotation of constructions with ideophones. In example (28), exactly this is achieved by imaginatively recreating an experience of directly witnessing, by hearing, a certain event or action. Not only is the speaker

framed as possessing firsthand knowledge in constructions with ideophones, but also the hearer.

29.3.2. Evidential markers

Besides offering various discursive means of making the type and source of given information explicit, Maaka exhibits a rich inventory of evidential markers and evidential strategies, which very often express control over and possession of one's knowledge, rather than indicating the source of information. Maaka's evidentials therefore derive from demonstratives, particles, prepositions, and conjunctions, which all have largely turned into bound markers indicating information source. In the text corpus, there are a few markers that appear more frequently than others, namely the bound morphemes *-mú*, *-dìyà, -ntí, -râ,* and *-kà*, as well as *kònò, yàayé,* and *kóŋ*. Others, such as the verbal evidential markers *kìn* and *nòn*, which express controlled mythical and shared knowledge respectively, are used less often.

Control over knowledge and the possession of information are crucial notions in Maaka. These grammatical devices not only indicate the reliability of information given, but also frame knowledge as a property that is controlled by the speaker, rather than being available to other speech participants at any time. Storch and Coly (2014) show that in Maaka, knowledge is a very complex semantic and pragmatic domain which can be conceptualized as the result of direct observation and affectedness (vision, joint perception, intuition), belief and conviction, possession and ownership of epistemic resources, control over information, or shared insight and common experience.

More conventional meanings of evidential markers in Maaka include two visual evidentials, indicating firsthand/eyewitnessed information and joint vision. The morpheme *-mú* marks topicalized participants in indicative clauses. In such constructions, it expresses certainty on the part of the speaker: the speaker is sure that the marked participant has taken part in the event, because s/he has seen him or her on the relevant occasion, as in the following example:

(29)

tóò	dáàndà-mú	ndéyà	gáy-nì	MAAKA
TOP	children:DEF-VIS	arrive:IMPERV	house-3SG:MASC:POSS	

Well, these children arrived at his house [eyewitnessed].

Reliable information that is evaluated by both speaker and addressee as truth is expressed by means of the suffix *-dìyà*, which is likely to be based on a borrowing (p. 625) from Kanuri. This marker indicates that both speaker and hearer see the participant in question:

(30)

músá-dìyà	sù-dèló	bùródì	MAAKA
<NAME>-JOINT:VIS	1SG-need	bread	

Musa, whom we can both see, needs bread.

(31)

bót-dìyà	nàmá	gòm-nà-wó	ìyéy	Maaka
place-JOINT.VIS	DEM	be.good-1SG:O-PERV	INTERJ	

This place which we both see is good for me, yes!

Maaka also has a variety of markers that indicate doubt in truth, vagueness of information, and lack of reliability, without explicitly focusing on the sensory modality of perception. The suffix *-kà* expresses that a speaker has some intuition about an event, but is not informed about any details. In other words, the speaker provides information on a proposition marked as highly probable, and at the same time states that no firsthand information is available (example from Storch and Coly 2014: 197):

(32)

ʔáa	ɓà	làmbà-kà	mìnè-móy	tàríyá-á-ɓá	Maaka
COND	CONJ	cloud-ASSUM	1PL-see	moon-DEF-NEG	

When there are those very clouds [I know *they* will be there], we cannot see the moon.

Doubt in truth is expressed by *kònò.* This marker helps to make explicit that the speaker is referring to hearsay or rumour and may provide dubious information (example from Storch and Coly 2014: 198):

(33)

ʔálí	nà	kònò	sù-wókkó	músá	kò	máytà	Maaka
<NAME>	QUOT	REP	3SG:MASC-see:PERV	<NAME>	do	vomit:VN	

There is a rumour that Ali said he saw Musa vomiting.

A feeling of uncertainty is expressed by *yàayé*. This attitude marker indicates that a speaker has doubts about the entire proposition, which may be framed in the context as being a proposition that other people still consider believable. The speaker here assumes the role of a person who may know more than others:

(34)

sù-móy-ní	gè	dúm-njó	yàayé	Maaka
3SG:MASC-see:IMPERV-3SG:MASC:OBJ	LOC	tamarind-tree	DUB	

He sees him on the tamarind, but this is doubtful [and he might be mistaken].

Control over knowledge as a source of power, or as an asset the speaker wants to bring into play, is either indicated by *-ntí*, which marks certainty on the part of the speaker, or by *-râ*, which expresses that the speaker controls information not available to others. Both markers highlight the speaker's role as an indispensable source of information and serve as attitude markers in narrative texts, indicating that more exciting facts might be revealed soon (examples from Storch and Coly 2014: 200): (p. 626)

(35)

ʔà	tá	nà	tày	nàmá	ʔíŋŋcé	lée	mày	ɓà	Maaka
then	3SG:FEM	QUOT	food	DET:DEM	today	even	chief	CONJ	
páadàa	wáŋcè-n-nì				tíinà-ntì-râ				
cabinet	DEM:PL-LINK-3SG:MASC:POSS				eat:TR-ASSERT-EVID.NPOT				

Then she said that as for this food today, even the chief and his advisors will definitely *not* eat (it).

(36)

sì-gìɬɬà	rìinà-râ	Maaka
3sg:masc-be.able:imperv	enter:intr:vn-evid.npot	

He will never ever be able to enter.

The complementizer *kóŋ*, in turn, encodes strictly egophoric meanings, as it indicates that only the speaker and no other participant possesses any recent information on the proposition in question, and that only the speaker is able to clarify the current situation (example from Storch and Coly 2014: 201):

(37)

mày-yá	pór-ná-t-tò		nà	kóŋ		Maaka
chief-def	say-1sg:su-link-3sg:fem:obj		quot	evid.mod		
zùtí-nì	dàmmbìkínà	ɓà	ʔínà	bòktì	kóŋ	
heart-3sg:masc:poss	spoil:partic	conj	1sg:obj	because	evid.mod	
nì-bòo-búrì						
1sg-hab-lie:intr						

The chief told me that he was very angry with me [no longer the case] because I used to lie [no longer the case].

Such examples suggest that speakers of Maaka not only use a large variety of linguistic means to make themselves explicit, but also employ various devices that help them to provide precise information on the type of knowledge on which a proposition is based, and to indicate their attitude towards the notion of truth or doubt in truth in a very fine-grained way. Given the areal context of Maaka and the ways in which sociality is constructed and community is maintained in the Frontier societies that are associated with this very context, such a diversified repertoire of means to make oneself clear and one's claims explicit appears to be a very productive way of achieving social cohesion. These small-scale societies, it seems, require communicative precision in a way that enhances the development of complicated evidential systems. The evidential overtones of particular discourse markers and of ideophones in specific constructions might suggest that such systems behave in fairly dynamic ways, in terms of being based on a variety of grammatical domains and construction strategies.

29.4. Concluding remarks

Systems of evidentials in two typologically and genetically diverse languages, albeit belonging to one linguistic area, share a number of semantic and pragmatic features that seem to differ from those found in other languages. Evidential marking here assigns importance not merely to information about the action or event expressed by the verb, but to everything (p. 627) else as well. Information on how a given object can be known and perceived, on how a third person's mindset could be presented by a narrator, how participants are real and visible or supernatural and invisible are all relevant. Events, participants, and speakers (and the world itself, one might want to add) are presented discur-

sively as complex and never as simple constructs: there is a strong focus in both communicative practice and in metalinguistic discourse on intertextuality, which highlights the possibility of multiple voices in a text, multiple voices emanating out of the narrator, and multifaceted realities as the foundations of perception and cognition. Considering the cultural contexts of these languages, which are spoken in sociolinguistically extremely complex contexts, and whose speakers share historical experiences of ideas about the Self as potentially permeated by the Other and about sociality as fluid and disruptive, this is absolutely consistent with the social requirements that relate to Frontier settings and heteroglossic practices as political necessities. These holistic ways of constructing evidential meanings seem to be both the basis and the consequence of a need for testimonial reliability and discursive precision in these languages, thereby translating particular sociohistorical experiences.

The distribution of a type of logophoric marking with evidential meanings, from the continent's Western coastal areas to Kordofan in northeast Africa (von Roncador 1992; Güldemann 2008), together with the historical picture painted in Kopytoff's (1987) Frontier model, suggests that these historical experiences were shared by numerous communities over time and over a vast geographical area. One possible conclusion could be that logophoricity as an evidential hedging strategy (Dimmendaal 2001) is a type of evidential marking that is typical of African languages in a particular area. However, as Dimmendaal's (2014) study of the grammar of knowledge in Tima suggests, similar ways of marking evidentiality can be found in languages with presumably different sociolinguistic histories; moreover, not every language spoken in a Frontier context exhibits evidential marking. The cases attested so far are, as already mentioned, very few.

However, there are other evidential strategies that seem to be common, namely those that correlate spatial deixis, hearsay, and eyewitness. Evidential markers originating from deictic markers or locative morphemes being widely attested crosslinguistically (Aikhenvald 2004a: 275 ff.), and so this is in principle not very surprising. It has been suggested that all evidentials described for various Benue-Congo languages developed out of demonstratives (e.g. Blass 1989; Botne 1995; Dimmendaal 2001), focusing on notions such as the presence of a speaker at an event (or his/her distance from it) as an indication of whether the information is or is not firsthand. These analyses are based on the assumption that the underlying deictic markers underwent some kind of grammaticalization. More recent contributions on the complex deictic systems found in some Koman languages (Nilo-Saharan) of Sudan and Ethiopia, however, reveal that the grammar of space might be rather more multifunctional. In Uduk, a complex demonstrative pronominal system not only helps to indicate the precise location of an object or an event, but also provides epistemic validation (Killian 2015, and p.c. 2016). In Komo, a closely related language, directional suffixes on the verb indicate whether the hearer was close to a reported event or not, placing the focus on the epistemic validation of the addressee (Otero 2015).

As a final observation, the diversity of evidential marking suggested by these new studies on previously under-researched languages points at another aspect of evidential marking in African languages, namely its dynamics. Epistemic and epistemological connotations seem to emerge in fairly diverse structural domains, and speakers appear to use them in utterly creative ways. Nico Nassenstein, in a study of rural youth language practices in east and central Africa (p. 628) (Nassenstein forthcoming), describes how users of social media incorporate screen shots of maps into their text messages in order to present particular propositions as having been eyewitnessed. The creativity and dynamics that characterize these ways of indicating source of information and of being precise reach beyond language as structure, and tell us something about social and cultural practices.

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Notes:

([1]) Hone had largely fallen out of use by the turn of the century, due to social change and marginalization in a postcolonial state. Most of the remaining speakers were elderly in the 1990s; at the time of writing this chapter, only a very small number of speakers remains.

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Abstract and Keywords

While most languages spoken on the island of New Guinea lack grammatical evidentiality, attested evidentiality systems are diverse. These range from small systems with only one marked evidentiality category to systems in which five or more categories are marked. Minimal systems mark only reported, only non-firsthand, or only inferred evidentiality; maximal systems mark visual, non-visual sensory, inferred, reasoning, and factual/participatory or reported evidentiality. Most languages with well-developed grammatical evidentiality are found in a region of Papua New Guinea known as the Highlands Evidentiality Area. Several of these are noteworthy for marking timing of the perception event relative to the speech act.

Keywords: evidentiality, Papuan, languages, New Guinea, inferred, reported, tense, marking

30.1. Overview

THE island of New Guinea is still a frontier region for linguistic description. Complete descriptions are extant for only a fraction of the island's languages, with tantalizing but incomplete studies available for more. These hint at a kaleidoscope of evidentiality systems across the island, concentrated in a band of languages in the Highlands.

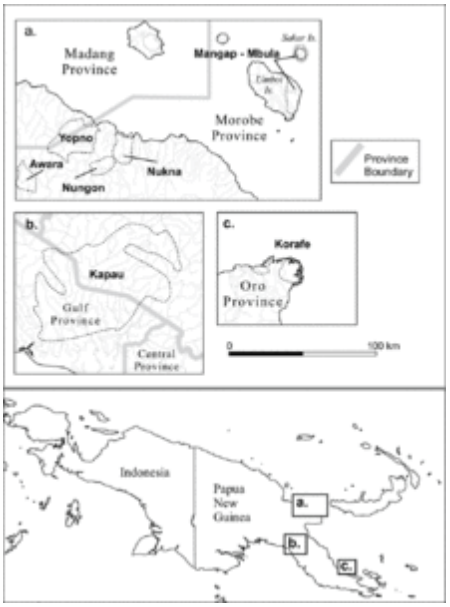
A minority of the languages of New Guinea, spoken primarily along its coasts and on its islets, are Austronesian; a majority are non-Austronesian, or 'Papuan'. Of the Austronesian languages of New Guinea, only one—Mangap-Mbula (Bugenhagen 1995)—has been described as having evidentiality markers. Most Papuan languages described to date do not have grammatical evidentiality. A single major band of languages with evidential systems runs from the Western Highlands, east of the centre of the island, through to middle-elevation sago swamps south of Mt. Bosavi. This has been called the New Guinea Highlands Evidentiality Area (San Roque and Loughnane 2012a, b) (Map 30.1). All lan-

guages in this area described to date, but a peripheral few, are said to have morphological marking of information source. Besides the languages of this area, evidentiality systems are attested in only a few Papuan languages of New Guinea (Maps 30.2, 30.3); none of the systems outside the Highlands Area come close to matching its maximal systems in complexity.

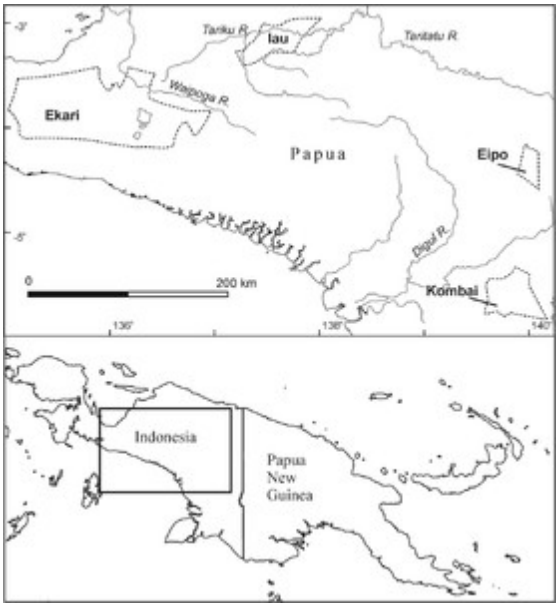
One of the lynchpins to the description of the Highlands Evidential Area is the widespread presence in even reduced-size systems of contrastive categories indicating 'inferred from presently visible results' and 'inferred from previously seen results'. As San Roque and Loughnane note (2012a: 154), these may be considered to denote different tense distinctions for the 'perception event' (the point at which the speaker obtained the information) within a single category of evidentiality.

Evidential systems are described here in increasing order of complexity. Systems are categorized according to number of evidential categories marked, not by number of separate (p. 631) (p. 630) (p. 632) evidential morphemes. Some descriptions are unclear as to the optionality of evidential marking, and any evidential implications of the absence of marking. It is possible to organize them into three streams, labelled according to the category which is present in every system in the stream, including the minimal system with only one category of evidentiality marked. Attested minimal systems are: only reported evidentiality, only non-visual, and only inferred. The systems are shown according to stream (reported, non-visual, and inferred) and number of categories (one to five) in Table 30.1.

Map 30.1. The Highlands evidentiality area in PNG



Map 30.2. Further languages with evidentials in PNG



Map 30.3. Languages with evidentials in Papua Province, Indonesia

(p. 633)

Table 30.1. New Guinea evidential systems grouped by evidentiality categories marked

stream	one-category systems	two-category systems	three-category systems	four-category systems	five-category systems
reported	reported Ekari (Wissel Lakes) Kamula (isolate) Kombai (Awyu) Oksapmin (Ok-Oksapmin) Samo (E. Strickland)				
non-visual	non-visual Awara, Nukna, Nungon (Finisterre)	non-visual visual Kewa (Engan) Bogaia (Duna-Bogaia) Odoodee (E. Strickland) Mangap-Mbula (Oceanic)	non-visual visual reported Edolo, Eibela, Kaluli (Bosavi) Iau (Lakes Plain)		
inferred	inferred	inferred non-visual	inferred non-visual reported	inferred non-visual reported	inferred non-visual reported

				reasoning	reasoning visual
	Pole (Engan)	Huli (Engan)	Ipili (Engan)	Enga (Engan)	Duna (Duna-Boga-ia) Fasu (W. Ku-tubuan)
			inferred non-visual visual Angal group (En-gan)		inferred non-visual visual reasoning participatory/fac-tual Foe (E. Kutubuan)

(p. 634) 30.2. Only reported evidentiality marked

Of the simplest evidential systems, some involve just the marking of secondhand information source or hearsay, with no morphological indications of other information sources. In some languages of New Guinea, quotative markers may also serve as hearsay evidentials. Here, the direction of development is clear. The Ok-Oksapmin language Oksapmin has a marker of reported evidentiality that is formally related to the verb 'say', though not to the quotative marker (Loughnane 2009: 421). In at least two languages on the southwestern fringe of the Highlands Evidentiality Area, Kamula (Routamaa 1994) and Samo (Shaw 1973), reported evidentiality is the only category marked—but in each language there is more than one morpheme associated with the category. In Kamula, an isolate spoken close to the Bosavi region of the Highlands evidentiality area, evidentiality is fused with past and future tense forms. In the East Strickland language Samo, in contrast, up to four distinct morphemes apparently mark nuances in reported evidentiality.

De Vries (1990: 294) describes for Kombai (Awyu) what may be a widespread phenomenon among languages of New Guinea: 'When the quotation-margin is deliberately left unspecified and the encoding situation of the utterance cannot be inferred from context, the quotation-marker becomes an evidential suffix' indicating hearsay, as in (1):

	ai	khwui	lefa-nene
(1)	pig	theft	do.3SG.NFUT-QUOT.PL [1]

He stole a pig (hearsay).[1] (De Vries 1990: 294 (8))

Note that here the quotation marker is in plural form, despite there being no reporter specified.

The Ok-Oksapmin language Oksapmin has a clitic =*ri* (Lawrence 1987) or =*li* Loughnane (2009: 404–8) that marks hearsay or secondhand information source. As is common in languages of New Guinea (Reesink 1993), this form is transparently related to the verb 'say', for which the root is *li-* (Loughnane 2009: 312). Loughnane writes that =*li* has a secondary function to mark inference or supposition, when combined with the free morpheme *se* 'inference' (2009: 406). This may be compared with evidential marking of deduction and reported evidentiality in Foe (§30.11.1). According to Loughnane, Oksapmin speakers also describe others' thoughts and attribute some feelings to them using the reported clitic =*li* (2009: 407).

Routamaa (1994: 26–7, 29–30) notes the existence of 'reported past' and 'reported future' inflections for the family level isolate Kamula. The reported past involves the suffix *-yo* affixed directly to the verb stem, and the reported future is marked with a reported suffix *-eyo* after the future tense suffix, *-lo*. According to Routamaa (1994: 29), the reported past form is used when information was obtained secondhand or through hearsay, or when information is presumed or reasoned to be the case by the speaker. If a Kamula verb has

two (p. 635) suppletive stem forms, the reported past suffix *-yo* follows a different form of the verb stem than does the far past tense suffix *-wa*.

Routamaa (1994: 26–7) describes the reported future suffix *-eyo* as contrasting paradigmatically with suffixes indicating epistemic certainty, uncertainty, and neutrality. She writes that *-eyo* 'is used mainly when someone is reporting second- or thirdhand information about a future event'. Included among future events are commanded actions, so the reported future form is used to report imperatives. As with the reported past, the reported future form may also involve presumption or reasoning as information source, rather than reports, as in (2):

(2)

ye	alotle	Samokopa	dla	ta-lo-eyo
3SG	later	Samokopa	LOC	go-FUT-REP.FUT

She'll go to Samokopa later (I presume). (Routamaa 1994: 27 (72))

In her essay on the East Strickland language Samo, Shaw (1973: 210–12) gives a verbal suffix *-lu* glossed as 'report', as well as the clitics *=ga* 'quoted', *=siyo* 'overheard', and *=dạlo* 'reported but not seen'. These clitics may occur with non-verbal elements, as well as with verbs. She also mentions a verbal suffix *-ya* 'reported imperative' used only with non-final verbs. Potentially all these morphemes could relate to reported evidentiality. The clitic *=siyo* is a possible exception, if Shaw's label 'overheard' means 'heard', for auditory and possibly general sensory evidentiality. This clitic formally resembles the evidential marker *=sio* 'seen' in the remotely related language Edolo (§30.7.3).

For Ekari, of the Wissel Lakes family, Doble (1987) describes various verbal suffixes as related to the newness of information for addressee and speaker. The form of the near past tense suffix used to relate events unknown to the addressee is also used 'to report hearsay' (Doble 1987: 90, 93).

30.3. Only non-firsthand evidentiality marked

Marginal systems found at the fringes of the Highlands area and in the northeast of New Guinea include only optional marking of non-visual sensory, or non-firsthand information source. In the Finisterre languages Nukna and Nungon, this marking is related to a verbal auxiliary construction with the verb 'do'. Auxiliary constructions using the verb 'do' have similar non-firsthand semantics in Oksapmin (Lawrence 1987: 56) and the Angan language Umbu-Ungu (Blowers and Blowers 1970: 47). The Finisterre language Awara is reported to have non-firsthand evidentiality marking with a post-root verbal suffix (Quigley 2014: 386–7).

The Finisterre language Nukna has been described as having a construction indicating either non-firsthand or non-visual sensory evidentiality (Taylor 2015: 157–60). The construction involves the lexical verb in dependent form followed by the verb 'do' in present

tense. Consonant-final lexical verb roots receive a special evidential suffix, *-táng* or *-náng*. Although Taylor (2015: 157) explains that this construction is appropriate either for (p. 636) non-visual evidentiality or non-firsthand evidentiality, all examples in Taylor (2015) show non-visual sensory evidentiality, as in (3):

(3)

káráp	hose-ng-tá-e-ráng.
tree	chop-DEP-do-PRES-2/3PL

(I hear that) they are chopping down the tree. (Taylor 2015: 159 (150))

While the Nukna evidentiality construction is restricted to present tense for final verbs, Taylor (2015: 157–60 (151), (152), (153)) shows that the construction may occur in medial clauses within clause chains, in which case the 'do' auxiliary occurs in medial form, unmarked for tense.

The related language Nungon also has a form related to a 'do' auxiliary that indicates non-firsthand evidentiality and also bears inherent imperfective aspect (Sarvasy 2017: 323–9). Nungon non-firsthand evidential marking involves a special evidential-present tense form of the verb 'do' and an optional lexical verb in medial form. Unlike in Nukna, Nungon medial verbs cannot be marked for non-firsthand evidentiality.

30.4. Only inferred evidentiality marked

Among evidential systems comprising only one marked category, the last configuration involves only inferred evidentiality, with inference based on visual results. Such a system is typologically unusual, and does not appear among attested minimal systems described in Aikhenvald (2004a: 25–42).

The Engan language Pole (Rule 1977: 80) has two verbal suffixes that clearly relate to information source: *-na* '(inferred from) visible evidence' and *-ya* '(inferred from) previous evidence'. These contrast paradigmatically with non-evidential suffixes *-nda* 'attention drawing' and *-nde* 'referential'. All four of these suffixes only occur in the present and past tenses. It is possible that the Pole evidential markers *-na* and *-ya* are related to *-na* 'seen' and *-ya* 'unseen' markers in the Engan language Kewa (§30.5.2). The Pole suffix *-nde* 'referential' could also be related to information source; Rule (1977: 80) explains that it is 'used with the near and far past tenses when referring to, or reminding the person spoken to of, an event which they both saw'.[2]

30.5. Visual and non-visual marked

The systems described here include morphological marking of visual and non-visual evidentiality. The semantics of the non-visual marker vary from simply 'unwitnessed', (p. 637) and not necessarily perceived by the speaker's other four senses (Kewa, Odood-

ee), to ‘sensory’, or perceived by the speaker through a sense other than sight (Bogaia, Mangap-Mbula).

30.5.1. Bogaia (Duna-Bogaia)

In contrast to its probable relative Duna (§30.11.3), which has a rich system of evidentials, Bogaia is described (San Roque and Loughnane 2012a: 127–9, citing Seeland 2007a,b) as marking only two evidential categories: visual =*ki* and non-visual sensory =*ai*. The visual evidential marker =*ki* can occur on verbs inflected for either present or past tense; when it occurs with a past tense verb, this is often interpretable ‘as indicating inference from observed evidence’ (San Roque and Loughnane 2012a: 127), as in (4):

(4)

ho	mabaro	wagan	mogona=ki
3SG	pig	hunt	go.PAST=VIS

He has gone to hunt pigs. (I saw him go.) or, I see evidence that he went. (San Roque and Loughnane 2012a: 128 (14b), citing Seeland 2007a: 9 and Dan Seeland, personal communication)

Unlike the visual marker =*ki*, the non-visual =*ai* occurs only on verbs inflected for present tense.

(5)

mabaro	moga-s=ai.
pig	go-PRES.ACT=NVIS

The pig is running away. (I hear it) (San Roque and Loughnane 2012a: 128 (15), citing Seeland 2007b: 8)

30.5.2. Kewa (Engan)

The primary analyst of the Engan language Kewa, Karl Franklin, has altered his terminology for Kewa evidential markers over the years. In sum, it seems that Kewa has a visual evidential verbal suffix -*na* and non-visual evidential verbal suffix -*ya*. (Compare -*na* ‘visible evidence’ and -*ya* ‘previous evidence’ in another Engan language, Pole (§30.4), and -*da* ‘visible evidence’ and -*ya* ‘previous evidence’ in the Engan language Huli (§30.6)).

Franklin (1964: 119–20) gives ‘aspects’ labelled ‘observed’, -*na*, and ‘unobserved’, -*ya*,[3] exemplified in (6) and (7):

(6)

púa-a-ná
go-3SG.PAST-VIS

He went (observed). (Franklin 1964: 120)

(p. 638)

(7)
pú-a-ya
go-3SG.PAST-NVIS
He has gone (unobserved). (Franklin 1964: 119)

The Kewa evidential *-ya* is found in one narrative in Franklin (1994) when the narrator describes visiting a faraway community with (8):

(8)

nimu-na	eta-re	epawe-para	kokonasa-para	buai	go	yae	repo
they-POSS	food-TOP	sago-and	coconuts-and	betelnut	that	things	three

ne-me-ya
eat-3SG:PERV-NVIS
Their food is said to be sago, coconuts, and betelnut, those three things. (Franklin 1994: 30 (58) of Appendix A)

Although the free translation here implies reported evidentiality, the context is not incompatible with simple non-visual or non-firsthand evidentiality. The evidentiality marker here may have to do with the speaker's inability to state authoritatively what people he encountered briefly regularly do.

30.5.3. Mangap-Mbula (Oceanic)

The northeast of the island is the locus for the only description of evidentiality in an Oceanic language of New Guinea. Mangap-Mbula is spoken on Umboi and Sakar Islands north of the Huon Peninsula, northeastern New Guinea (Bugenhagen 1989, 1995). For Mangap-Mbula, the 'proximate event' marker *=(g)i* is described as used with 'visible progressive events and inceptives' (1995: 132). The marker is described as identical to a marker *=i* that 'occurs at the end of relative clauses which encode propositions that are viewed as being: 1) presently true, or 2) in the process of becoming true' (1995: 133). The 'non-visible proximate event' marker *=(g)a* is described as marking either 'invisible or remote progressive action or recently completed action' (1995: 133). Finally, the 'certain non-proximate event' marker *=(g)o* is 'used to assert the occurrence of a past event which the speaker personally witnessed' (1995: 133). The proximate and non-visual proximate forms are also claimed to occur with temporal adverbs (1995: 144).

30.5.4. Odoodee (East Strickland)

For Odoodee, Hays and Hays (2002: 27–9) describe two evidential markers, *-so* for present tense non-visual evidentiality, and *=na* for past witnessed evidentiality. These can combine with other morphemes for additional semantics. If their analysis is correct, visu-

al information source is unmarked in the present tense but marked in past tense, while the reverse is true of non-visual information source. (p. 639)

Eyewitness evidence for present in-progress events is morphologically unmarked, while the 'non-visual' verbal suffix *-so* indicates that an in-progress event is not seen by the speaker at the time of the speech act (Hays and Hays 2002: 28).

Verbs indicating past events witnessed by the speaker are framed in simple past tense with the witnessed evidential enclitic *=na*, which can also occur on the final constituent in a verbless clause. This witnessed enclitic combines with a discourse-related enclitic *=go* (Hays and Hays 2002: 15) to mark that the information was reported to the speaker by an eyewitness not present at the time of the speech act (Hays and Hays 2002: 28, 50–1). The element *=go* most often marks information that is shouted over some distance to an addressee, as by the village crier. When combined with *=na*, however, *=go*-marked sentences are not shouted. An example is in (9):

(9)

Yale-ye	a	hee	mapoo	moso	dia	taka-l-ai=go=na
Yale-FOC	moon	other	on	house	new	build-INCOM-IRR=DIST=VIS

Yale will build a new house next month [a witness told me so]. (Hays and Hays 2002: 18 (38))

The combination *=go=na* may mark either a verb or the final element in a verbless clause.

30.6. Non-visual sensory and inferred marked

The Engan language Huli is described by San Roque and Loughnane as potentially 'a key player in transmission' of evidentiality in the Highlands Evidentiality Area (2012b: 417). Huli marked evidentiality categories are non-visual sensory and inferred. Non-visual sensory marking is fused with tense, while two inferred markers indicate different perception event times. Huli sensory evidence markers are *-arwa* 'present sensory' and *-aywa* 'past sensory' evidence (Lomas 1988: 124; his orthography uses <j> for the glide; this is written <y> here for comparison with other languages). The inferred category markers are *-da* 'visible evidence' and *-ya* 'previous evidence' (Lomas 1988: 158–9). The present non-visual sensory suffix is shown in (10):

(10)

garo	iba-rwa.
car	come-PRES.NVIS.3

A car's coming (I can hear but not see it). (Lomas 1988: 125)

Lomas (1988: 124) writes that the non-visual evidentials only co-occur with third person subjects. It thus seems likely that the initial *-ay* and *-ar* of the non-visual markers are related to the Huli past and present tense suffixes for third person: past *-ya* (1988: 123),

and present *-ra* (1988: 122). (Third person past tense *-ya* occurs closer to the verb root than the homophonous inferred evidential marker *-ya*, and the two can co-occur.) (p. 640)

Unlike the Huli non-visual evidentials, the inferred evidentials may co-occur with first person subjects. In at least one example, it seems that while the grammatical subject of the verb is first person, the perceiver of information referenced by the evidential may be second person:

(11)

biabe	bi-ru-ya-gwa,	ti	nde	biabe	bi-li-mu.
work	do-PAST.1SG-PREV.INFER-since	2PL	yes	work	do-FUT.2PL-FUTIMP

Since I worked, you also work! (Lomas 1988: 160)

Although Lomas does not explain the use of the evidential *-ya* here, it could be that the speaker is putting the onus of evidence on the addressee: 'you saw the results of my work, thus replicate them!'.

Lomas (1988: 160) analyses another verbal suffix, *-ba*, as indicating 'evidence internal to the speaker—i.e, his or her emotions, feelings, and thoughts'. This requires more investigation, however, since Lomas acknowledges that *-ba* most often follows desiderative verb forms expressing wishes or desires. Lomas further interprets a verbal suffix *-bada* as comprising this *-ba* and the inferred evidential *-da* (1988: 160–1).

30.7. Visual, non-visual, and reported, or direct, indirect, and reported marked

The medium-sized systems described here lack the inferred evidential marking but contain two categories plus reported evidentiality, and are found in languages on the southwestern fringes of the Highlands Evidentiality Area (the Bosavi languages Edolo, Eibela, and Kaluli), or far from it on the Indonesian side of the island (Iau). Semantics of the first two categories range from direct and indirect (Eibela) to visual and non-visual sensory (Edolo, Kaluli), to obvious and inferred (Iau).

30.7.1. Kaluli (Bosavi)

Kaluli has been described as marking visual, non-visual, and reported evidentiality. Within reported evidentiality, there may be a tense distinction for the reporting of the event (Grosh and Grosh 2004: 27–8). The visual evidential is frequently used with past tense (Rule 1964; Schieffelin 1996: 441).

Andrew Grosh (p.c.) writes that the visual evidential marker *-(o:)lo:b* has extended uses to describe events, states, and actions currently in progress that are 'obvious'. This can even cover 'acknowledging rational proof that something is a certain way'—such as saying

'Yes, you are obviously correct in your argument—you win'. This extended use to indicate epistemic certainty is illustrated in (12):

(12)

ene	inga-yo:	sow-a:lega,	e	ya:li-meib-o:lo:b
3SG.POSS	wife-TOP	die-COND	3SG	cry-3.FUT-VIS

If his wife dies, he will surely cry. (Grosh and Grosh 2004: 27 (77))

(p. 641)

Andrew Grosh (personal communication) suggested that the visual evidential is used here because the eventual crying is 'obvious' (epistemically certain) at the time of the speech act.

30.7.2. Iau (Lakes Plain)

Bateman (1986: 47) notes the existence of four 'post-verbal particles' she classes as evidentials in Iau (Lakes Plain): *da* 'reported speech/hearsay', *bede* 'inferential', $da^{7}by^{9}$ 'obvious truth', and $di^{7}dv^{3}$ 'emphatic obvious truth'. Elsewhere, Bateman notes that *da* 'reported speech/hearsay' can also function to indicate 'common knowledge' (Bateman 2015). Although the glosses for $da^{7}by^{9}$ and $di^{7}dv^{3}$ do not necessarily relate to information source, these could indeed turn out to be related to evidentiality—see Kaluli use of the visual evidential for information that is obvious, although not literally visible (§30.7.1). Bateman (1986) also mentions several other Iau particles related to expectations of the hearer's knowledge of information.

Of the possible evidential particles, *da* is also found in the examples in Bateman (1990) as apparently a quotative marker, following her glossing and translation of the sentence in (13):

(13)

ba^{7}	dy^{8}-da^{9}
come.PERV	IMP.AUTH.IRR-REP.FACT

I said come! (Bateman 1990: 5 (9))

30.7.3. Edolo (Bosavi)

For Edolo, Gossner (1994a: 54–5, 86) describes the evidential verbal suffixes *-sio* 'seen', *-sabeo~-wabeo~-habeo* 'heard', and *wabu* 'reported', the independent word status of which is not clear (1994a: 54, 131). In (14), the visual evidential *-sio* occurs on the verb 'cross'; the speaker observed the crossing while carried by the apparent grammatical subject of 'cross':

(14)

Haimago-ea	ne	ägu-la	ödä	Sobeao	aulo	amo	dëgë-sio.
Haimago-ERG	1SG	carry-SIMULT	water	Sobeao	bridge	that	cross-VIS

Haimago carrying me, he crossed that Sobeao River bridge. (Gossner 1994a: 112 (97))

The auditory (or possibly general non-visual sensory) evidential *-sabeo* occurs in allomorphic form *-wabeo* in the next example:

(15)

waibo	amo	wida-ea	sale-lo	galö-wabeo
black.palm	that	cassowary-ERG	fill.up-IRR	narrate-NVIS

Cassowaries eat that black palm, he said. (Gossner 1994a: 54 (24))

(p. 642)

Gossner describes the reported evidential *wabu* as 'used very commonly in traditional stories and in conversation when one person repeats what another has just said' (1994a: 86). One example of *wabu* outside a traditional story context is in (16):

(16)

Goeli	mösö-a	nudu-salea	wabu
Huli	house-all	fight-IMPERV.CONJ	REP

The Hulis are fighting (they say).

In one traditional story about how people became small-bodied (Gossner 1994a: 130–7), *wabu* occurs after nearly every final verb. In another, in which the origins of one clan are attributed to a woman impregnated by a snake, there are no instances of *wabu* (1994b: 26–30). A further search for all the evidential morphemes in the 222 lines of interlinearized personal narrative, procedural, and clan origin texts in Gossner (1994b) turned up only one instance of *-sio* (Gossner 1994b: 19 (178)) and none of the other two forms.

30.7.4. Eibela (Bosavi)

For the Bosavi language Eibela, Aiton (2015: 14–20, 2016: 268–79, p.c.) describes three markers of evidentiality: direct experience *-sa:*, indirect/inferred *-o:bo:*, and reported *-o:nɛ:.* All are optional; the absence of these markers means that an utterance is evidentiality-neutral. The Eibela evidentials may occur in questions (Aiton 2015: 14 (45), (47)).

They have differing patterns of co-occurrence with tense markers. The direct evidential does not co-occur with tense marking, and has not been attested in connection with future time. Indirect *-o:bo:* and reported *-o:nɛ:* do co-occur with tense marking. Both direct and indirect evidentials are attested for non-visual sensory information source; the choice may relate to epistemic certainty (Aiton 2015: 16). A fourth quotative marker may be part of the evidentiality system, but more data on this is needed (Aiton 2016: 277–8).

According to Aiton (2015: 16), the direct evidential *-sa:* prototypically indicates eyewitness information source, but sometimes occurs with non-visual sensory information source, as in (17).

(17)

sɛnɛ-kɛː=miː	aːmiː	nɛ	ɛːjaː-jaː	wɛlɛ-saː-bi
stay-ITER=ASSOC	DEM:ASSOC	1SG	father	call-3.DIR-DS

While I was still sitting, my father called. (Aiton 2015: 16 (58))

In this function, direct *-sa:* overlaps with indirect *-o:bo:*. Aiton writes that the speaker's degree of certainty regarding an inference based on sensory evidence may influence the choice of evidential, with less certainty leading to the use of the indirect rather than direct evidential.

Indirect *-o:bo:* may be used in describing assumptions about others' intentions, as in (19), which directly followed (18) in a narrative.

(18)

ɛdijoːbi-jaː	aːmiː	jahɛlɛ	doː-saː-bi
Idiobi-ABS	DEM:ASSOC	DIR:VEN	come.out-PER-3.DIR.EVID-DS

Idiobi came out (of the bush) there. (Aiton 2015: 19 (69a))

(p. 643)

(19)

nɛː	bɛbɛːniː	mi-jaː-boː
1SG	see:PURP	come-PAST-INFER

She came to see me. (Aiton 2015: 19 (69b))

Here, a speaker has just described seeing his wife arrive at his bush camp. While the physical arrival is marked with the direct evidential marker *-sa:*, the wife's reason for coming is marked as only an assumption through *-o:bo:*.

Reported *-oːnɛː* indicates hearsay, and sometimes indirect speech reports. It may also co-occur with the indirect evidential *-oːboː*, resulting in the fused suffix *-boːnɛː*. According to Aiton, this form indicates inference based on reported information, as in (20).

(20)

ɛːmɛː	diːmɛi-boː-nɛː
DEM:ERG	get-N.1:FUT-INFER-REP

That (man) will get (it), it is said. (Aiton 2015: 20 (74))

30.8. Non-visual sensory, inferred, and reported marked

For the Engan language Ipili, San Roque and Loughnane (2012a: 135) give the following markers: the verbal suffix *-lu(a)* for non-visual sensory evidentiality, and clitics *=ya* 'visible evidence', *=yala* 'previously visible evidence', and *=(e)pia* 'reported'. Ingemann (2011: 199) writes that 'in ordinary Ipili speech there is an affix *-pia* that is added to remote past inflections to indicate that the speaker does not know of the event from personal knowledge'. She contrasts this marker with formulaic use of two forms of the verb 'say' to indicate reported information source in the *tindi* sung poetry style. The reported marker used in everyday parlance is shown in (21):

(21)

Jone-to	Pita	pe-le-a=epia
John-ERG	Peter	kill-FP-3SG=REP

John killed Peter (someone told me). (San Roque and Loughnane 2012a: 135 (21a))

Ingemann (2011: 199) writes that the reported evidentiality marker *-pia* does not occur in *tindi* sung poetry. Rather, independent forms of the verb 'say' are used formulaically at the ends of many *tindi* lines to indicate reported evidentiality. These forms are *lea* 's/he said' and *lama epea* 's/he came to say', as exemplified in (22):

(22)

wamba	yale	pua	yandeana-sia	lama	epea
before	like	doing	plant.FP.3SG-LOC	to.say	come.FP.3SG

Where he planted as he had done before, it was said. (Ingemann 2011: 200 (22))

(p. 644) 30.9. Visual, non-visual sensory, and inferred marked

Evidential marking in the three Engan varieties of the so-called Angal group (San Roque and Loughnane 2012a: 137) is complex: evidentiality is fused with subject person/number indexation and past tense, but in at least two varieties additional evidential suffixes may follow these for further nuances of evidentiality. The evidentiality/subject/tense suffixes are described by two analysts as relating both to information source and to relative access to information by the speaker and addressee.

The Angal group comprises three varieties: Mendi (also referred to as Angal Henen, Angal, North Mendi, and East Angal), Nembi (also called Angal Enen, South Mendi, South Angal Heneng), and Wola (also called Angal Heneng, West Mendi, and West Angal Heneng). These are as yet unconfirmed to be dialects or separate languages (Reithofer 2011: 208, fn 2). An important difference from other Engan languages is that in the Angal group apparent evidential suffixes on verbs are fused with person and number marking.

For Nembi, Tipton (1982: 78–9) analyses the two sets of subject person/number suffixes for ‘customary’, present, near past, and distant past tenses as relating to the speaker and addressee’s participation in or eyewitness knowledge of an event: ‘Greater perception means that both speaker and hearer have participated in or witnessed the event, whereas lesser perception means that either speaker, hearer, or both neither participated in nor witnessed the event’.

In the examples in Tipton (1982), ancestral and other past-time stories with third-person subjects only use the ‘lesser perception’ suffix forms. In procedural descriptions and personal narratives, both sets of suffixes occur with first-person and with third-person subjects.

Madden (n.d.) on the Angal language Mendi gives suffixes that are formally similar to the Nembi ‘greater perception’ and ‘lesser perception’ suffixes. Madden (n.d.: 6) explains the Mendi equivalent to the Nembi ‘greater perception’ suffixes as indicating visual evidentiality. The Mendi equivalent to the Nembi ‘lesser perception’ suffixes are described as indicating either visual evidentiality where only one of the speaker or addressee witnessed an event, or non-visual evidentiality, where the event was witnessed by neither speaker nor addressee. Madden also gives additional ‘stative’ forms for the three third-person subject numbers that relate to auditory evidentiality.

Mendi past tense visual evidentials may further host one of three additional suffixes (Madden n.d.: 6): *-nda* ‘seen’: both addressee and speaker saw the action; *-e* ‘complete evidence’: both speaker and addressee ‘now see the evidence which indicates that the action was done before, though neither of them saw it at the time it was being done’; and *-sa* ‘part evidence’: either speaker or addressee now sees or otherwise deduces that the

action was done. Doubling of suffixes, with *-sa* ‘part evidence’ followed by *-nda* ‘seen’, also indicates inference from visible results, according to Madden.

Tipton (1982: 39) glosses a recurrent Nembi form *nda* as ‘this-in-reference’, translating it into English as an anaphoric demonstrative. If the Nembi demonstrative *nda* is related (p. 645) to the suffix *-nda* described for Mendi, this may be an instance of a visual evidential form originating in a deictic. For the Engan language Pole (§30.4), Rule (1977: 80) glosses a suffix *-nde* as ‘referential’; it is unclear whether the Angal *nda* forms are related to this.

For the third Angal language, Wola (Angal Heneng), anthropologist Sillitoe (2010: 18) only gives the paradigm for the verb ‘do’ in the past tenses. Some of Sillitoe’s forms appear to have *-nda, -e*, and/or *-sa* incorporated. He lists different forms, fused with tense and subject person/number, for: ‘both speaker and hearer witness’, ‘either speaker or hearer witnesses’, ‘hearer did not witness but heard of previously’, ‘speaker did not witness’, and, in only the third person, ‘neither speaker nor hearer witnesses’. Of these, the forms indicating ‘hearer did not witness but heard of previously’ could turn out to indicate reported evidentiality restricted to the addressee as primary perceiver.

30.10. Non-visual sensory, inferred, reasoning, and reported marked

For the Engan language Enga, Lang (1973: xlii–xliii) describes five evidential markers; three of these are also mentioned in Lang (1975: 36–7). These are: a verbal suffix *-lu* ‘non-visual sensory’, the stand-alone elements *lúmu* ‘deduced’ and *lámo* ‘inferred from visible results’, and two different verb-final suffixes *-pyáa* ‘hearsay, historical’ and *-lámi* ‘hearsay, myth’. Lang (1973: liii, note 12) suggests that *-lu* ‘sensory’, *lúmu* ‘deduced’, and *lámo* ‘inferred’ may derive from the verb *la-* ‘utter’; she does not mention *-lámi* ‘hearsay, myth’, although it appears that this form too could be included in the group. The Enga sensory evidential suffix is exemplified in (23).

(23)

kaití	toká	lá-lu-mu.
sky	shot	utter-NVIS-3SG.AUGMENT

(I sense) it is thundering. (Lang 1975: 36 (79); glosses readjusted to reflect 1973 description)

Lang (1973: xliii) describes the Enga suffix *-pyáa* ‘reported, historical’ as implying that an event took place ‘so far in the past that there can be no living witness’. This suffix may be cognate with Ipili reported evidential *=(e)pia*.

30.11. Maximally complex evidential systems

The languages with the most complex evidential systems come from three different language families: Duna-Bogaia, East Kutubuan, and West Kutubuan. Duna (Duna-Bogaia) is spoken at the northwest edge of the Highland Evidentiality Area, while Foe (East Kutubuan) and Fasu (West Kutubuan) are spoken along the southern edge. (p. 646)

30.11.1 Foe (East Kutubuan)

Rule (1977) describes Foe as having a highly complex system of evidential marking with the highest number of different evidential morphemes attested for any New Guinea language, partly due to fusion of evidentiality with tense, mood, negation, and deverbal nominalizers. Different evidential morphemes are used with: positive versus negative statements (1977: 84–5); questions versus statements (1977: 53); verb-final clauses (1977: 76–7) versus verbless clauses (1977: 52); and inflected verbs (1977: 76–7) versus nominalized or ‘gerundial’ verbs (1977: 97). Further, evidentiality marking on inflected verbs is fused with tense, yielding a possible twenty-four distinct forms for six evidentiality categories and four tenses (Rule actually gives only twenty, due to two instances of syncretism in present tense and the absence of future tense forms for two evidentiality categories).

Table 30.2. Evidential categories by word class and clause type in Foe

category	verbless clauses	final verbs	nominalized verbs
factual/(participatory)	*-’ae*	fused with tense; ‘The speaker is either participating actively and consciously in the action, or is making a statement of known fact without regard to the way the knowledge has been gained’. (Rule 1977: 71)	fused with tense; ‘Fact known to speaker, but unseen by person spoken to’ (Rule 1977: 97)
visual	—	fused with tense; ‘The speaker is describing an action he has seen, can see, or expects to see … and the main emphasis is that the speaker witnessed the event … also can be used of something the speaker is doing or has done if he has not been doing it deliberately or con-	fused with tense; ‘Seen by both speaker and person spoken to’ (Rule 1977: 97)

			sciously, and only became conscious of it subsequently’. (Rule 1977: 72)	
non-visual sensory		—	fused with tense; ‘The speaker is making a statement of something he can’t or hasn’t seen, but has only perceived with his senses of hearing feeling, smelling, and understanding’. (Rule 1977: 72)	fused with tense; ‘Detected by senses’ (Rule 1977: 97)
inferred	from currently visible results	*iba’ae* ‘on the grounds of the evidence before the speaker’ (Rule 1977: 52)	fused with tense; ‘The speaker has not seen the action going on, nor perceived it with his other senses, but he bases his statement on the visible evidence before him’. (Rule 1977: 72)	fused with tense; ‘Determined on grounds of present evidence’ (Rule 1977: 97)
	from previously seen results	*iyo’oge*	fused with tense;	fused with tense;

		‘on the grounds of evidence which was previously, but is now no longer visible’ (Rule 1977: 52)	‘The speaker is describing an event, the evidence of which he has seen, but which evidence is no longer present’. (Rule 1977: 72)	‘Determined on grounds of previous evidence’ (Rule 1977: 97)
reasoning from non-visual sensory evidence		*eada’ae* ‘based on a mental deduction made from hearing, feeling, tasting or smelling something’. (Rule 1977: 52)	fused with tense; ‘The speaker makes a deduction from something he has perceived with his senses’. (Rule 1977: 72)	—
‘possibility’		*-’amedee* ‘based on a mental judgement that the statement may or may not be true’. (Rule 1977: 52)	—	—

(p. 647) Beyond forms, the actual categories of evidentiality identified by Rule vary by word class and sentence mood. For final verbs, Rule (1977: 76–7) describes the following categories: participatory/factual, visual, non-visual sensory, reasoning based on non-visual sensory evidence, and inferred based on visible results (with two times for the sighting of the results distinguished). For verbless clauses, Rule (1977: 52) mentions no visual evidential, describes the factual category as lacking participatory semantics, and adds a category he calls ‘possibility evidence’. Finally, according to Rule (1977: 97), the Foe nominalizing suffixes distinguish the following five evidential categories: ‘fact known to speaker, but unseen by person spoken to’; ‘seen by both speaker and addressee’; ‘determined on grounds of present evidence’; ‘determined on grounds of previous evidence’; and ‘detected by senses’. These Foe evidential categories are listed by the type of constituent with which they occur (p. 648) in Table 30.2. Rule’s prose descriptions of the evidential categories are also given; these only diverge significantly in the ‘factual or participatory’ and ‘seen’ categories.

Table 30.3. Foe evidential markers for positive statements

	verbless clauses	**final verbs**			
		present	**near past**	**far past**	**future**
factual (participatory)	*-’ae*	*-bubege*	*-ge*	*-bi’ae*	*-’anebege* or *-’agerege*
visual	—	*-boba’ae*	*-bo’oge*	*-bo’owa’ae*	*-’anege*
non-visual sensory	—	*-bida’ae*	*-bidobo’oge*	*-bidobo’owa’ae*	—
inferred from currently visible results	*iba’ae*	*-boba’ae*	*-iba’ae*	*-biba’ae*	*-’aiba’ae* or *-’oiba’ae*
inferred from previously visible results	*iyo’oge*	*-bubege*	*-iyo’oge*	*-iyo’owa’ae*	*-’abege*
reasoning from non-visual sensory evidence	*eada’ae*	*-ada’ae*	*-adobo’oge*	*-adobowa’ae*	—
pure reasoning	*-’amedee*	—	—	—	—

In sum, evidential categories present in Foe are: factual/(participatory), visual, non-visual sensory, inferred (from either presently visible results or results that were previously witnessed), and reasoning (either based on non-visual sensory evidence or pure cogitation). It is typologically unusual for a language that apparently distinguishes so many categories of evidentiality to lack a reported evidentiality category (Aikhenvald 2004a: 52, 60). Indeed, anthropologist Weiner (1991: 75) writes of the Foe evidentials that Rule describes as marking reasoning based on non-visual sensory evidence that they most frequently mark secondhand information source: 'Most commonly … the speaker is referring to an event related to him by another person who actually witnessed or performed it'.

The forms of the Foe evidential suffixes used in positive statements with verbs and verbless clauses are in Table 30.3. Although Rule (1977: 74) shies from parsing these suffixes further, several formal similarities across categories may be noted here. There is no formal distinction in the present tense between eyewitness evidence and inference from visible results, nor between participatory or factual evidence and inference from previously visible results. Marking of reasoning based on non-visual sensory input is formally similar to marking of non-visual sensory evidence for all tenses: the forms differ only in an initial *-a* for reasoning versus an initial *-bi* for non-visual sensory evidence.

Finally, for both time periods of inferred evidentiality, there is syncretism between the verbless clause form and the near past final verb form. This is logical; if a verbless clause is inferred from resulting evidence, then the relationship denoted by the verbless clause may (p. 649) be removed to the near past, since it is only known that the relationship existed recently enough to leave resulting evidence, and no longer certain whether the relationship still exists in another place. These forms could have originated as tense-marked, independent verbs of perception or existence. This is supported by one inferred evidential's apparent occurrence as an auxiliary 'be' with a dependent lexical verb in an example from a witness statement in a village court session for accused adulterers:

Table 30.4. Final components of Foe evidential suffixes in positive and negative statements, and questions

evidential categories	**positive statement**	**negative statement**	**question**
near past factual, future visual	*-ge*	*-yiye*	*-ge*
present factual, future factual, present inferred (currently visible results), future inferred (currently visible results)	*-bege*	*-biye*	*-ge*
near past visual, near past non-visual sensory, near past inferred (previously visible re-	*-oge*	*-'oriye*	*-ge*

sults), near past reasoning (non-visual sensory input)			
present visual, present inferred (currently visible results), future inferred (currently visible results)	*-ba'ae*	*-yiye*	*-ige*
far past visual, far past inferred (previously visible results), far past reasoning (non-visual sensory input)	*-owa'ae*	*-'oriye*	*-riye*
present non-visual sensory, present reasoning (non-visual sensory input)	*-da'ae*	*-'diye*	*-dige*
far past factual	*-bi'ae*	*-biwae*	*-ye*

(24)

ba'a	bara=mo	ibu	sa	ubiare	iyo'oge
boy	that=ERG	water	there	go.DEP	be.PREV.INFER

It appeared that he was going to the river. (Weiner 1991: 77)

Question formation and negation involve different alterations to the evidential suffixes. For verbless clauses, the evidential morpheme changes completely. For final verbs, only the last one to three syllables of the evidential suffix change. The interrogative mood change occurs with both polar and content questions; polar questions are marked with an additional final *-be.* The evidentiality category used in the question conforms to the category of the anticipated response (Rule 1977: 86). Rule (1977) does not explain what forms occur in negative questions, if these exist. The formal relationship between positive statements, negative statements, and questions is summarized in Table 30.4, based on Rule (1977: 84, 86).

Systematic replacement of particular sequences within the Foe final verb suffixes (such as positive indicative *da'ae*) by other sequences (negative indicative *-'diye* and interrogative (p. 650) *-dige*) seems to entail that these sequences were at least historically parsable as separate morphemes. Table 30.4 shows a complex pattern of neutralization of contrasts in this original final morpheme under negation and interrogative mood. For instance, in questions the formal distinction between positive indicative *-ge, -bege*, and *-oge* is neutralized, while under negation that distinction is upheld, but the distinction between positive *-oge* and *-owa'ae* is neutralized.

With final verbs, it is apparently the factual/participatory form that is used in narratives with third person subjects. This is the case throughout the sample Foe text in Rule (1977: 114–16). As with other languages (see Kaluli, for instance, in §30.7.1), the Foe visual evi-

dential category may also be used with abstractions deemed obvious, such as the trueness of speech, in (25):

(25)

hagema'amo	namege	do-boba'ae.
2DU.POSS	speech	true-PRES.VIS

You (two) are speaking truly. (Rule 1977: 87)

As noted in Table 30.2, the Foe evidential suffixes used with nominalized verbs show fusion of evidentiality and tense. These suffixes are formally related to the positive indicative final verb suffixes. In (26), the nominalized verb is the apparent subject of an inflected verb, with each marked for a different information source:

(26)

Yesu	wa'a-bora	dani-boba'ae
Jesus	come-NOMZ.PRES.FACT	draw.close-PRES.VIS

The coming of Jesus [present factual] is drawing close [present seen, or inferred from visible evidence]. (Rule 1977: 97)

Here, a visual evidential is used to refer to the 'drawing close' of time—something which cannot be seen, but is thought to be obvious or epistemically certain, as in example (25) and in Kaluli example (12).

30.11.2. Fasu (West Kutubuan)

For Fasu, sole member of a West Kutubuan family, Loeweke and May (1966, 1980) hint at a complex evidential system. Fasu seems to have a marked visual evidential category only in the present tense, with auditory (or possibly non-visual sensory) and inferred evidentials, potentially up to three markers for reported evidentiality, and a marker of reasoning evidentiality. Analysis is further complicated by rampant homophony or polysemy.

Loeweke and May (1980: 71–4) mention the following evidentiality-related verbal suffixes: auditory *-rakae*, inferred *-rea*, reported (secondhand or hearsay) *-pakae*, and 'indirect reason' *-hoa*, as well as a curious circumfixal present-tense visual form, *a-__-re*. Two quotative markers can apparently also function as evidentials; these are: *-ripo*, used for direct speech reports or information 'that is self-evident' (1980: 74), and self-quotative *-hoapo*, used when 'the speaker is repeating something he told you or is self-evident' (1980: 74). It is unclear whether self-quotative *-hoapo* comprises 'indirect reason' suffix *-hoa* and indicative suffix *-po*. (p. 651)

Visual and factual evidentiality are unmarked except in the present tense, when the circumfixal visual evidential *a-__-re* is apparently used. This is exemplified in (27).

(27)
a-pe-re
VIS-come-VIS
I see it coming. ('Said when actually seeing the airplane on the horizon', after initially just hearing it.) (Loeweke and May 1980: 71)

Here, the semantics may be similar to the Kaluli visual evidential marker (§30.7.1), used to denote in-progress events that are visible at the time of the speech act. The Fasu verb 'do' is *a-* (Loeweke and May 1980: 93), and Loeweke and May interpret several clausal conjunctions as beginning with this verb root (1980: 51–2), such as *a-siane* 'but' and *a-yiane* 'immediately'. It could be speculated that *a-__-re* originated as a multi-verb construction combining 'do' with the lexical verb. This construction would then relate to far-flung evidential strategies using 'do' (see §30.3), although these generally have non-visual or non-firsthand semantics.

A 'suppositional' suffix *-pi* occurs in the same slot as auditory *-rakae*, reported *-pakae*, indicative *-po,* and interrogative *-re*, but its semantics are not fully clear from Loeweke and May's description (1980: 71). They write that *-pi* marks 'a statement about a thought' and give the example in (28); *-pi* could mark reasoning evidentiality or it could simply indicate epistemic doubt. San Roque and Loughnane (2012b: 414) point out that there is a homophonous *-pi* in Duna (§30.11.3) that marks utterances as opinion (San Roque 2008: 392–7).

(28)
pe-sa-pi
come-PAST-SUPPOS
I thought he came. ('But the implication is that I don't know if he came or not'.)
(Loeweke and May 1980: 71)

Loeweke and May (1980: 74) write that the indicative suffix *-po* may convey the speaker's participation in an event (past, present, or future); this is reminiscent of the Foe factual/participatory evidentiality category (§30.11.1). Textual examples show that the participatory reading is by no means requisite. Instead, *-po* seems to occur with similar distribution to markers of indicative mood in other languages of the region, such as Pole and Huli (Rule 1977), and the Angan language Kapau (Oates and Oates 1968).

Loeweke and May (1980: 66) describe a past tense suffix *-sa*, with variants *-sua* and *-sia* apparently depending on the preceding verb root vowel(s), homophonous with an adjective marker *-sa* (1980: 29–31). San Roque and Loughnane (2012a: 141–5) reanalyse the Fasu verbal suffix *-sa* as bearing participatory evidentiality. This is, however, not well-supported by Loeweke and May (1980), where examples like (29) show two conjoined final verbs with different subjects, both marked with *-sa*:

(29)

e	pe-sa-samo	ano	pari-sa-po
3SG	come-PAST-CONJ	1SG	remain-PAST-INDIC

He came so I stayed here. (Loeweke and May 1980: 67)

(p. 652)

In the similar example (30), *-sa* occurs with both second and third person subjects in a statement. This would be unusual for a morpheme that entails participation of the speaker.

(30)

pu-sua-aki=poko	mitikoro	pe-sa-po.
go-PAST-INDOBJ=BEN	doctor	come-PAST-INDIC

While you were gone the doctor came. (Loeweke and May 1966: 32 (6))

San Roque and Loughnane's reanalysis of the Fasu past-tense suffix *-sa* as bearing participatory evidentiality may have been spurred by the fact that Loeweke and May (1980: 74) also list additional past-tense forms *-rakasapo* 'seen or heard, near past' and *-rakasupo* 'seen or heard, far past', parsable into *-rakasa* and *-rakasu* plus the indicative *-po*. Textual examples of these are few, and ambiguous. In at least two examples including *-rakasa*, the suffix is glossed as 'near past' and the authors give no mention of evidentiality in their free translations or notes. One of these is in (31):

(31)

epo	some-hoafununine	some-rakasa-fa-po
3SG.FOC	talk-should.have	talk-NP-NEG-INDIC

He should have said it, but didn't. (Loeweke and May 1980: 67, glosses original)

Finally, Loeweke and May (1980: 54–6) also describe suffixes used with dependent (medial) verbs that may relate to the speaker and addressee's access to knowledge; see §30.12.

Table 30.5. Evidential markers in Duna (adapted from San Roque and Loughnane 2012a: 125, and San Roque 2008: 307, 332)

category		form	description	impersonal form
visual	stative, previous	*-rua*	stative event was seen	*-nua*
	perfective, previous	*-tia*	non-stative event was seen	
non-visual sensory	current	*-yarua*	event is currently sensed (heard, smelled, tasted, felt)	*-yanua*
	previous	*-yaritia, -yatia*	event was previously sensed	
inferred	current	*-rei*	past event inferred from (currently visible) evidence	
	previous	*-rarua*	previously inferred from (then-visible) evi-dence	*-ranua*
reasoning	current	*-noi*	realized (with surprise) to be the case based on some current evidence; a hypothesis	

reasoning or reported	previous	*-norua*	event known about from a thirdhand report, or inaccessible original source	*-nonua ~ -nanua*

(p. 653) 30.11.3. Duna (Duna-Bogaia)

Duna expands on the current/previous distinction found in the inferred evidentiality category in other 'inferred' stream languages (Table 30.1), with current/previous distinctions identified for the visual and non-visual sensory categories as well as the inferred category. San Roque (2008: 325–31) also discusses the possibility that even the reported evidential may sometimes function as a 'previous reasoning' marker, so that the reasoning category could also be considered to distinguish current and previous time frames for the perception event. Unique among New Guinea languages described to date, Duna allows for the possibility to mark that the perceiver of information is general or unspecified. This is indicated by replacing the /r/ in the final *-rua* of some evidential markers with /n/.

The evidential markers identified for Duna in San Roque and Loughnane (2012a: 125) are given in Table 30.5. While they are written as suffixes following San Roque (2008), their status as verbal suffixes or clitics is complicated: The evidentials contrast paradigmatically with other verbal tense, aspect, and mood suffixes, but some also occur in verbless clauses, 'in referential NPs, and in combination with TAM inflections' (San Roque and Loughnane 2012a: 125), so San Roque and Loughnane (2012a: 125) class them as non-inflectional clitics.

San Roque (2008: 404–8) speculates that the Duna evidentials have heterogenous origins, with some originating in auxiliary constructions involving the lexical verb in perfective form. The recurrent form *-rua* could have come from the verb *ruwa* 'say', or could be related to the Huli present non-visual sensory suffix *-(a)rwa* (§30.6).

The Duna current non-visual sensory evidentials can refer to the present discourse context as the information source, apparently with the addressee(s) as evidential origo. In this function, the impersonal *-yanua* is more frequent than the personal *-yarua* (San Roque 2008: 169). An example in which the evidential occurs with a demonstrative is in (32). Here, the speaker is describing a place his addressees have not visited and are only now learning about through his in-progress description:

(32)

rindi	ho-yanua,	rindi	rakare	rindi	kone
land	here-CURR.NVIS.IMPERS	land	cold	land	INTENS

This place [currently heard about], the place was a very cold place. (San Roque 2008: 169 (267))

Similarly, the impersonal reasoning evidential may function in storytelling to invite the addressee to discover surprising information along with the main character or narrator, as in (33):

(33)

e,	ho-na	sokoleti-na	noae	ngu-nanua=nia
EXCLM	here-SPEC	chocolate-SPEC	eat.DS.PURP	give-REASON.IMPERS=ASSERT

Ah, this was chocolate they gave me to eat. (San Roque 2008: 334 (816))

Although San Roque (2008: 331–2) analyses the impersonal evidentials as indicating non-specified evidential origo, she acknowledges that this is not straightforwardly reflected in her Duna data. For instance, the impersonal sensory evidential ‘can be used in the description of bodily sensations for which, logically, the speaker is the only actual perceiver’. San (p. 654) Roque writes that it is unclear what conditions use of the impersonal or personal evidentials in such contexts (2008: 334). The impersonal evidentials often correlate with non-specificity of the information rather than the perceiver (San Roque 2008: 170–1, 332–3). They may also function to add support for the speaker’s assertion in a dispute (San Roque 2008: 333).

30.12. Phenomena related to evidentiality

Many more New Guinea languages have systems that are tangentially related to evidentiality. Conjunct/disjunct and similar systems in Oksapmin, Fasu, Eipo (Mek; Heeschen 1978: 26–7), and Ekari show correlations between information source or access to information and the category of person. In the Chimbu-Wahgi language group Kaugel (Blowers and Blowers 1970; Head 1976, 1993, 2010; Stefaniw 1987), the ‘present awareness’ form has been described as relating to visibility (Stefaniw 1987: 9). Other languages such as Yopno (Finisterre; Reed 2000: 28) and Kapau (Angan; Oates and Oates 1968: 71–3) mark epistemic certainty or ‘obviousness’, which may turn out to relate to visual or other evidentiality, as in languages like Kaluli (§30.7.1). For the Binanderean language Korafe, spoken far southwest of the other languages in this chapter, Farr (1999: 38–42) analyses verbal suffixes *-a* and *-o* as relating to the speaker’s willingness to vouch for the factuality of a statement. These are cognate with suffixes that mark speech act type in other Binanderean languages (Smallhorn 2011: 105–6).

Many Papuan languages index grammatical subject person and number on final verbs (Foley 1986). Of those languages that do not index both grammatical subject person and number, some display conjunct/disjunct-type systems (Hale 1980) of person indication on the verb. Typically, conjunct forms are associated with the first person in statements, except where the first-person actor lacks control or cognizance of the action, and with the second person in questions. Disjunct forms are typically used everywhere else.

In some languages, the conjunct/disjunct marking system is clearly distinct from the evidentiality system. Gossner writes that Edolo imperfective suffix *-sa* generally occurs with first person, and the contrasting suffix *-sebe* with third person (1994a: 48). (Gossner does not mention second person.) These are distinct from Edolo evidentiality marking (§30.7.3), and indeed the visual evidential *-sio* can co-occur with imperfective *-sa* (Gossner 1994a: 54). San Roque and Loughnane (2012a: 157, fn 24) write that in Duna, Kaluli, Huli, and Pole there are some morphemes unrelated to evidentiality with conjunct/disjunct-type distribution.

Loughnane (2009) and San Roque and Loughnane (2012a,b) analyse the conjunct/disjunct distribution of past-tense subject desinences in Oksapmin to indicate a contrast of participatory (conjunct) versus visual/sensory (disjunct) evidentiality. These desinences, re-

ferred to as set A (conjunct) and set B (disjunct) by Lawrence (1987), largely show typical conjunct/disjunct correlation with grammatical subject person. One exception is that 'factual' statements with third-person subjects, at least some narratives with third-person subjects, and general knowledge are framed with set A suffixes, not set B (Lawrence 1987; Loughnane 2009: 248, 255, 260). Loughnane analyses the use of conjunct forms with third (p. 655) person actors in narratives as 'a narrative device through which listeners can identify more with the main character, and the story seems more vivid and real because it is being told as though the main character told it to the current speaker' (2009: 407).[4]

San Roque and Loughnane (2012a) group Oksapmin with Foe and Fasu as marking a participatory evidentiality category. Indeed, participatory/factual evidentials in Foe may have conjunct/disjunct-type person implicature in statements, with the added characteristic, as in Oksapmin, that third-person narratives can also be framed with this marking (Rule 1977: 114–16). Rule writes that what he terms participatory/factual evidential marking in final verbs has such strong correlation with first-person subjects that at first he interpreted it as person marking (1977: 71).

In Fasu, two sets of medial verb suffixes may relate to speaker's or addressee's participation in events. Loeweke and May write that 'direct participation' suffixes either mark that information is directly related to the speaker or addressee, or 'indicate those things which are in the main stream of a story or conversation' (1980: 55). The contrasting 'reference' set are used with background information or information that does not directly relate to speaker or addressee (1980: 56–7). These suffixes may overlap in function with typical switch-reference markers in other New Guinea languages (Roberts 1997); Loeweke and May write that if a speaker produces the clause chain translatable as: 'I went and sat down and talked and cooked a fire and hung up a saucepan of water and the water boiled and I took it', 'the water boiled' would be marked with a suffix of the 'reference' set (1980: 57). This is also the clause that would be marked for switch-reference in a language with switch-reference marking.

The Edolo imperfective suffixes (as in Gossner 1994b: 19 (177)), Fasu medial verb suffixes, and Oksapmin past tense subject desinences (Lawrence 1987) may all signal or support a shift in 'viewpoint' in narratives. These languages all lack other switch-reference marking on medial verbs. It may be that these morphemes are functionally similar to switch-reference markers in other New Guinea languages (Roberts 1997) in that they can serve as signposts within sequences of clauses, although 'viewpoint' may relate to reference, topicality, or association with speaker or addressee.[5]

(p. 656) 30.13. Conclusion

The diverse evidentiality systems of New Guinea range from small systems with only one marked category to systems in which five or more categories are marked. Minimal systems mark only reported, only non-firsthand, or only inferred evidentiality; maximal systems mark visual, non-visual sensory, inferred, reasoning, and factual/participatory or re-

ported evidentiality. Within these categories, a number of languages in the Highlands Evidentiality Area mark further distinctions in timing of the perception event relative to the speech act.

The roots of the Highlands Evidentiality Area are murky. It is thought that evidentiality spread from the influential Engan languages to their neighbours, although this has not yet been proven and the mechanisms of areal diffusion are poorly known (San Roque and Loughnane 2012b). Formally similar evidentials may indicate different categories of evidentiality across languages, as with the Edolo visual *-sio* versus Samo auditory *-siyo*, and Kewa visual *-na* and non-visual *-ya* versus Pole current inferred *-na* and previous inferred *-ya* (San Roque and Loughnane 2012b).

The languages of the area except those of the large Engan family lack indexation of subject person and number on final verbs, which is unusual for Papuan languages associated with the Trans New Guinea grouping (San Roque and Loughnane 2012b: 391). San Roque and Loughnane (2012a, 2012b: 392) suggest that with these languages, it is evidential marking that helps to carry 'the functional load of person marking'. The typological profile of these languages, then, could have been conducive to acquisition of evidentials.

Analyses of evidentiality systems in the languages of New Guinea are nearly as diverse as the systems themselves. This chapter sought to consolidate extant descriptions, in the hope that the next few decades of linguistic description will provide answers to outstanding questions while these complex languages are still spoken.

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Notes:

([1]) Throughout this chapter, interlinearizations are supplied by the author where the original source lacked them. Where glosses were non-standard, they have been adjusted for maximal clarity and comparison with other languages.

([2]) San Roque and Loughnane (2012a: 137–8) point out that Rule (1977: 80) also describes the Pole past tense 'stative voice' as being used in two contexts, one of which is the speaker's unconscious or uncontrolled participation in the action described.

([3]) These suffixes are later glossed as *-na* 'reported seen' and *-ya* 'reported unseen' in Franklin (1971: 50).

([4]) It is unclear whether the two sets of Oksapmin subject desinences have primarily evidential or primarily referential semantics. Loughnane (2009: 339, 340, 342, 389) shows that in some contexts they cannot be interpreted as relating to information source. For instance, analysis of the disjunct suffixes as visual/sensory evidentials fails to explain their function in past tense jussives, where a third person was directed to act (2009: 340).

([5]) The Edolo and Oksapmin suffixes that relate to 'viewpoint' occur on final verbs, not medial verbs, unlike switch-reference markers in many New Guinea languages (Roberts 1997). But in Eibela (§30.7.4), the suffix *-bi* indicates switch-reference when used with medial verbs, and possibly a shift in 'viewpoint' when used with final verbs, as in (17) and (18) of this chapter. Eibela *-bi* occurs on final verbs in narrative 'when a new or unexpected subject is introduced into the discourse, so it signifies that the subject is different from the discourse that preceded it, or differs from the main/topical protagonist of the discourse' (Grant Aiton, p.c.).

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Abstract and Keywords

This chapter investigates evidentiality in Formosan languages. Five Formosan languages—Bunun, Paiwan, Kanakanavu, Saaroa, and Tsou—are discussed. Evidentiality in these languages is a grammatical category in its own right, and not a subcategory of epistemic or some other modality, or of tense-aspect. The system of grammatical evidentials in Formosan languages has a limited number of choices. Formosan languages with grammatical evidentials divide into types depending on how many information sources are assigned a distinct grammatical marking. Except for Tsou with the richest system of grammatical evidentials, other Formosan languages are relatively poor in evidentiality. In Formosan languages with grammatical evidentials, Tsou is the only language that requires information source to be obligatorily marked in grammar. Other Formosan languages optionally use evidentials in order to ensure efficient communication. This chapter is the first typological study of grammatical evidentiality in Formosan languages.

Keywords: evidentiality, Formosan languages, Bunun, Paiwan, Kanakanavu, Saaroa, Tsou

31.1. Formosan languages

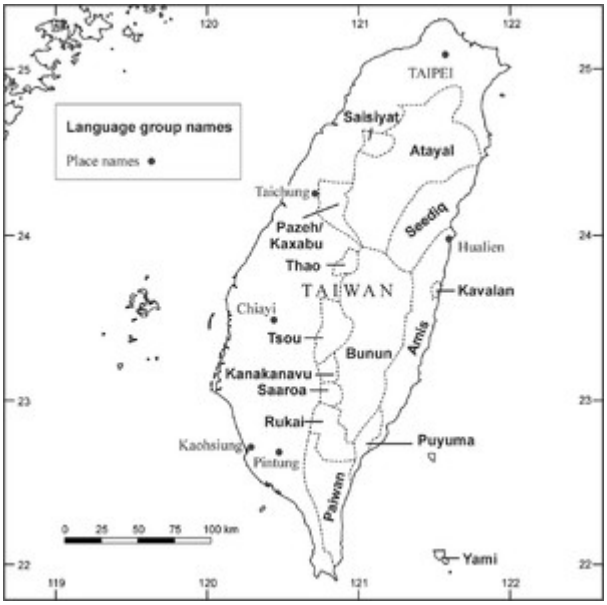
FIVE Formosan languages—Bunun, Paiwan, Kanakanavu, Saaroa, and Tsou—are discussed in this chapter, in that these are the languages for which evidential systems have been well-described. Evidentiality in these languages is a grammatical category in its own right, and not a subcategory of epistemic or some other modality, or of tense-aspect.

Taiwan’s aborigines are Austronesian peoples, with genetic links to other Austronesian ethnic groups. The overall population of aborigines is approximately two percent of Taiwan’s total population. At present there are sixteen ethnic groups, including Amis,

Atayal, Bunun, Kanakanavu, Kavalan, Paiwan, Puyuma, Rukai, Saaroa, Saisiyat, Sakizaya[1], Seediq, Thao, Truku[2], Tsou, and Yami.

The languages spoken by the aborigines of Taiwan are collectively referred to as the Formosan languages, within the Austronesian language family. There are fourteen Formosan languages: Atayal, Saisiyat, Pazeh[3], Thao, Bunun, Tsou, Saaroa, Kanakanavu, Rukai, Paiwan, Puyuma, Amis, Kavalan, and Seediq (see Map 31.1). A fifteenth indigenous language is Yami, spoken on Orchid Island, Taitung County; Yami is included in the literature on Formosan linguistics, although it is genetically closer to the Philippine languages (Batanic subgroup).

Some grammatical characteristics of Formosan languages are as follows. The languages are not tonal. Underived roots carrying the basic meaning of words usually have more than two syllables. Grammatical morphemes are usually a single syllable, e.g. construction (p. 658) markers. A vowel with primary stress is characterized by higher pitch and greater intensity. Formosan languages exhibit rich morphology, and are synthetic and agglutinating. Usually a word contains a largish number of morphemes (roots, affixes, and clitics) but at the same time morpheme boundaries are clear. Prefixation is the most productive morphological process, whereas other types of affixation are less productive. Reduplication is widely deployed. Verb and noun are the two major word classes, with rich morphology marking. Adjectival and adverbial elements usually behave as verbs. Constituent order is VAO or VOA, if transitive, and VS, if intransitive. The pronominal system consists of bound pronouns and independent pronouns. There are four main verbal clause patterns: (i) Pattern 1: monovalent intransitive clauses, (ii) Pattern 2: bivalent intransitive clauses, (iii) Pattern 3: bivalent transitive clauses, and (iv) Pattern 4: applicative clauses. (i) and (ii) take Actor voice (AV); (iii) takes patient voice (PV); (iv) takes locative voice (LV), instrumental voice (IV), or beneficiary voice (BV). The manifestation of voice in an independent clause depends on the definiteness of arguments; these features play a role in determining what the subject is (Pan 2012).



Map 31.1. Formosan languages

(p. 659)

31.2. Organization of the evidential system

In Formosan languages, a sentence may contain an indication of how the information was acquired by the speaker. In Formosan languages with evidentials, these are never the only means of expressing information source. Verbs, adjectives, adverbials, and speech reports may offer additional detail, to do with attitude towards knowledge—the sum of what is known and the information this is based on. Our main concern within this chapter is an investigation of expression of knowledge through evidentials as a major grammatical means to express information source.

The system of grammatical evidentials in Formosan languages has a limited number of choices. Formosan languages with grammatical evidentials divide into types depending on how many information sources are assigned a distinct grammatical marking. Except for Tsou with the richest system of grammatical evidentials, other Formosan languages are relatively poor in evidentiality. Bunun exhibits the smallest evidential system, a system with just one, reported, evidential covering information acquired through someone else's narration. Tsou displays the largest evidential system, consisting of visual, non-visual, experiential, non-experiential, and reported evidentials.

Boas (1911b), in his grammatical description of Kwakiutl, was one of the first Western scholars to mention the idea of obligatory marking information source in grammar. In languages with obligatory evidentiality, a closed set of information sources has to be marked in every clause; otherwise, the clause is ungrammatical, and a possible misunderstanding may occur. In Formosan languages with grammatical evidentials, Tsou is the only lan-

guage that requires information source to be obligatorily marked in grammar. Other Formosan languages optionally use evidentials in order to ensure efficient communication.

31.3. Bunun

Bunun is spoken in Nantou County, Hualian County, Taitung County, and Kaohsiung City, Taiwan. Bunun is an endangered Formosan language, with all fluent speakers over the age of sixty. Bunun is subdivided into five dialects: Isbukun, Takbunuaz, Takivatan, Takibaka, and Takituduh. Isbukun, the dominant dialect, is mainly spoken in southern Taiwan. Takbunuaz and Takivatan are mainly spoken in central Taiwan. Takibaka and Takituduh are northern dialects. A sixth dialect, Takipulan, became extinct in the 1970s.

There is a reported evidential =*dau* in Isbukun Bunun. The reported evidential =*dau* is a clitic, in that it usually attaches to the first clausal constituent. Isbukun Bunun does not distinguish between secondhand and thirdhand information sources. The reported evidential indicates that the information is obtained from someone else, as in (1) (Li 2013: 2).

(1)

a.	ma-ludah=**dau**	saia	takna	ivut.[4]		*Bunun*
	AV-hit=REP	NOM.3SG	yesterday	snake		
	It is said that he/she hit a snake/snakes yesterday.					
b.	saia=**dau**	abas	hai	mastaan	manauað.	*Bunun*
	3SG.DIST.NOM=REP	before	TOP	most	beautiful	
	It is said that he/she was the most beautiful person before.					

1

(p. 660)

In Isbukun Bunun, the reported evidential implies the speaker is uncertain about the event. If the speaker is sure about the event, the reported evidential cannot be used, as in (2) (Li 2013: 2).

(2)

luvus	nastuan=i,	aupa	laupaŋ	h<in>udan-an.	*Bunun*
wet	ground=Q	because	a.while.ago	<PERV>rain-LV	
The ground was wet, because it was raining a while ago.					

Evidentials can only rarely fall within the scope of negation (Aikhenvald 2003a: 16). The reported evidential in Isbukun Bunun is in line with this observation; that is, while the truth value of the proposition is negated, the information source is not, as in (3) and (4) (Li 2013: 9).

(3)

ni=in=**dau**	saia	muhna	ku-saintin.	*Bunun*
NEG=PERV=REP	3SG.DIST.NOM	again	go-3SG.PROX.OBL	

It is said that he has not been here again.

(4)

na=ni=**dau**	saia	ku-saintin	kutun.	*Bunun*
FUT=NEG=REP	3SG.DIST.NOM	go-3SG.PROX.OBL	tomorrow	

It is said that s/he will not come here tomorrow.

When the reported evidential is used in interrogative clauses, it acquires additional overtones. As shown in the examples below, while the speaker is directing a question to the hearer, its origin is not within the speech act situation; that is, the question's author is a third party, and the question is repeated by the speaker, as in (5) (Li 2013: 3).

(5)

a. na=ku-isa=as=**dau**? *Bunun*
FUT=go-where=NOM.2SG=REP
Where are you going?

b. h<in>udan-an=**dau** kamu takna saintin? *Bunun*
<PerV>rain-LV=REP NOM.2PL yesterday 3SG.PROX.OBL
Did it rain in your place yesterday?

31.4. Paiwan

Paiwan is spoken in Taitung County and Pingtung County, Taiwan. Paiwan is an endangered Formosan language, with all fluent speakers over the age of sixty. Paiwan is (p. 661) traditionally classified based on its distribution: Eastern Paiwan, Central Paiwan, Southern Paiwan, and Northern Paiwan.

Paiwan exhibits a small evidential system, consisting of an inferential evidential and a non-inferential evidential.

31.4.1. Inferential evidential *kaumaya*

The inferential evidential *kaumaya* is used to mark inferences made on the basis of visual evidence as in (6) (Chang 2012: 118–19), of the general knowledge as in (7) (Chang 2012: 119), or of reasoning as in (8) (Chang 2012: 119). The inferential evidential is a particle,

rather than a verb, in that unlike verbs, it cannot be inflected for voice or take aspectual markers.

(6)

inika	pa-cu-cun	tjiamadju,	a	marekaka	*Paiwan*
NEG	see.AV-REDUP-see.AV	3PL.OBL	LINK	brothers	

a	zua	tiamdju	a	marekaka	pai,	
NOM	that	3PL.NOM	LINK	brothers	PAI	
vaik	**kaumaya**	a	kivangavang.			
go.AV	INFER	LINK	play.AV			

(The caretaker) did not see the brothers. They perhaps had gone out to look for fun.

(7)

pai	sa	cevel-in	**kaumaya**	niamadju.	*Paiwan*
PAI	then	bury-GV	INFER	3PL.GEN	

And then they perhaps buried (him).

(8)

lakua	macula=anga	**kaumaya**,	a	zua	kaka	*Paiwan*
but	hungry.AV=COM	INFER	NOM	that	brother	
ʔaung	sakamaya.					
cry<AV>cry	simply					

However, that brother perhaps got hungry. He simply cried.

31.4.2. Non-inferential evidential *aya*

In Paiwan, the non-inferential evidential *aya* covers information obtained visually and non-visually. In (9) (Chang 2012: 120), it marks visual information.

(9)

vaik	a	paucn.	na=maca=anga	**aya**	tua	*Paiwan*
go.AV	LINK	see.AV	PERV=die.AV=COM	NON.INFER	OBL	
zua	uʔalay.					
that	male					

They went to have a look. That man had died.

(p. 662)

When referring to non-visual information, the non-inferential evidential *aya* covers quotative information acquired from a specified person and from an unspecified source, as in (10)–(12) (Chang 2006: 357, 2012: 120, 121).

(10)

'keLem-u	ti	kalalu!'	**aya**-in	ni	zepul	ti	*Paiwan*
hit-IMP	NOM	Kalalu	NON.INFER-GV	GEN	Zepul	NOM	
cemedas	a	pasemaLaw.					
Cemedas	LINK	tell.AV					
'Hit Kalalu!' Zepul told Cemeda.							

(11)

'uzi	ki	limecav=anga	a	za	zalum'	**aya**	*Paiwan*
well	will	clear=COM	NOM	that	water	NON.INFER	
timadju.							
3SG.NOM							
'Well, will the water be clear?' he said.							

(12)

nu	kisuLid,	macay	a	zua cekel	**aya.**	*Paiwan*
when	sleep.together.AV	die.AV	NOM	that spouse	NON.INFER	
When the couple slept together, the husband died, (it was said).						

31.5. Kanakanavu

Kanakanavu is spoken in Namaxía District, Kaohsiung City, Taiwan. There are around 500 members of Kanakanavu community. Kanakanavu is a moribund Formosan language, with fewer than ten fluent speakers.

Kanakanavu exhibits a small evidential system, consisting of a reported evidential and an assumptive evidential. Besides evidentiality, Kanakanavu has a mirative marker which is distinct from evidentials.

31.5.1. The reported evidential =*kani*

The reported evidential =*kani* encodes information obtained through someone else's narration. Kanakanavu does not distinguish between secondhand and thirdhand information sources. The reported evidential =*kani* is conceptualized as a genre marker and a token of narratives. It is usually pronounced =*kan* in daily speech, and encliticizes to the right of the first clausal element, as in (13) (Tsuchida 2003: 63).

(13)

'aisi=**kani**	ukulatumulu	sua	nungunungu.	*Kanakanavu*
be=REP	full	NOM	creek	
The creeks were full of water.				

(p. 663)

The reported evidential may occur more than once in the same clause. When there are two reported evidentials in the same clause, the reported evidential attaching to the first clausal element indicates that the information is acquired from someone else, and the one occurring in the modifying phrase develops an additional emphatic connotation, that is, contrastive focus—a fine-built man (rather than anyone else), as in (14) (Tsuchida 2003: 44).

(14)

'aisi=**kani**	t<in>upuru	'inia	sua	caau	*Kanakanavu*
be=REP	sit	there	NOM	man	
[ni-maru-manenge=**kani**]$_{VP}$.					
became-big-good=REP					
A **fine-built** man was sitting there.					

The reported evidential itself cannot fall within the scope of negation. To negate the information source, one has to adopt an evidentiality strategy through lexical means, e.g. verbs of auditory perception 'hear', as in (15) and (16) (Pan 2015: 350, 351).

(15)

kuu=**kani**	si-'icupu	nanaku	i:sa.	*Kanakanavu*
NEG=REP	sleep-dream	woman	that	
It is said that that woman didn't sleep.				

(16)

kuu=ku	t<um>a-**timana**	'e:si	l<um>a-liu'u	*Kanakanavu*
NEG=1SG.NOM	<AV>REDUP-hear	PROG	<AV>REDUP-fish.by.scoopnet	
sua	nanaku	i:si.		
NOM	woman	this		
I didn't hear that this woman was netting fish.				

In Kanakanavu, the reported evidential =*kani* is used in telling a dream, signalling that what one experienced in a dream is unconsciously acquired information, outside the real world, as in (17) (Pan 2015: 357).

(17)

s<in>i-'ucupu=ku	miura	*Kanakanavu*
<PERV>sleep-dream=1SG.NOM	yesterday	
ni-musutupuku=ku=**kani**.		
PERV-fall=1SG.NOM=REP		
Yesterday, I dreamed that I fell.		

Evidentials cannot be used in imperative clauses in an overwhelming majority of languages (Aikhenvald 2004a: 250). In Kanakanavu, the reported evidential can be used in commands marking an order on behalf of someone else, as in (18) (Tsuchida 2003: 112).

(18)

'muciria=**kani**!'	kisaene=kani	kiai	sua	cina-ini.	*Kanakanavu*
stand=REP	say=REP	he	NOM	mother-his	
'Stand up!' he said to his mother.					

(p. 664)

31.5.2. Assumptive evidential ='*ai*

The assumptive evidential **='***ai* encodes information acquired by reasoning or common sense through observing evidence of an event or a state without directly experiencing it, or through observing direct evidence of an event or a state. In Kanakanavu, the assumptive evidential may acquire connotations of doubt or speculation, as in (19) (Tsuchida 2003: 62).

(19)

makaasua	mi'aranase=cu='**ai**	sua	caau.	*Kanakanavu*
like.that	trouble=already=ASSUM	NOM	people	
Thus people were in trouble.				

In Kanakanavu, different evidentials can co-occur in the same clause. For example, the assumptive evidential ='*ai* can co-occur with the reported evidential =*kani*, as in (20) (Tsuchida 2003: 68).

(20)

pasa-tanam='**ai=kani**	'inia	na	si'ip-ini.	*Kanakanavu*
put-try=ASSUM=REP	it	on	arm-her	
She tried to wear it on her arm (it is said).				

31.5.3. Mirative =*ava*

DeLancey (1997, 2001) defines mirativity as conveying information which is new or unexpected to the speaker, with overtones of surprise. Aikhenvald (2012b) states that evidentiality and mirativity are two distinct grammatical categories. Mirative is not an evidential, but is perhaps semantically related to it inasmuch as a mirative reflects a reaction to knowledge and the expectation of knowledge. In Kanakanavu, =*ava* is a grammatical marker of unprepared mind, including unexpected and also surprising information, as in (21) (Tsuchida 2003: 48).

(21)

pariviiviini=**ava**	sua	tamu-ini.	*Kanakanavu*
follow=MIR	NOM	grandfather-their	

Their grandfather came indeed after other people.

The mirative marker can co-occur with the reported evidential =*kani* and assumptive evidential ='*ai*, as in (22–3) (Tsuchida 2003: 68, 32).

(22)

'uuna=**ava**=**kani**=pa	sua	nipariviiviini.	*Kanakanavu*
exist=MIR=REP=still	NOM	came.late	

There was still the one who came late.

(23)

'nguai=**ava**='**ai**,'	misa=kani	pacepecepenge.	*Kanakanavu*
that=MIR=ASSUM	say=REP	think	

'That may be he,' she thought.

(p. 665)

31.6. Saaroa

Saaroa is spoken in Taoyuan District and Namasia District, Kaohsiung City, Taiwan. There are around 400 members of Saaroa community. Saaroa is a moribund Formosan language, with fewer than ten fluent speakers.

Saaroa exhibits a small evidential system, consisting of a reported evidential and an assumptive evidential. In addition to evidentiality, Saaroa, like Kanakanavu, has a mirative marker which is distinct from evidentials.

31.6.1. Reported evidential =*ami*

In Saaroa, the reported evidential =*ami* is conceptualized as a genre marker and a token of narratives. It is widely employed when the speaker tells a folk tale or a traditional story. Saaroa does not distinguish between secondhand and thirdhand information sources. The function of the reported evidential =*ami* is to signal where information comes from.

Adopting the reported evidential can be regarded as a requirement for successful communication, and a way of shunning possible misunderstandings.

The reported evidential usually encliticizes to the right of the first constituent in a clause or sentence, as in (24) (Pan 2015: 345, 346).

(24)

a.	rianu=**ami**	alumulhu	ka	ma-maini=isa	akuisa		*Saaroa*
	all=REP	wild.boar	KA	REDUP-small=3.GEN	when		
	lh<um>ivuru	isana	ka	ta-turua=isa			
	stab<AV>	3.INDEP.PR	KA	REDUP-cousin=3.GEN			
	It is said that when her children turned out all to be wild boars, her cousin stabbed them.						
b.	maaci=**ami**	utulu=cu	vulalhu	ia,	um-a-urapi=cu.		*Saaroa*
	when=REP	three=COS	moon/month	TOP	AV-IRR-sow.seed=COS		
	It is said that when (it is) March, (we) sow seeds.						

However, the reported evidential does not always encliticize to the right of the first constituent in a clause or sentence. When it encliticizes to a constituent other than the first constituent in a clause or sentence, its function is to focus on the constituent, thereby adding pragmatic overtones, as in (25) (Pan 2014: 95).

(25)

ku	tararianu	kana	cucu	lika'a	kaaiu	m-a-aru	*Saaroa*
NEG	hear	that	person	outside	far.there	AV-STAT-exist	
luuvi=ta			vuvulungaa=**ami**				
kiwi.fruit=1PL.INCL.GEN			mountain=REP				
It is said that those outsiders didn't hear that we have kiwi fruit on the mountain.							

(p. 666)

In Saaroa, the reported evidential usually has the whole clause or sentence within its scope. In a negative construction, the reported evidential itself, nevertheless, cannot fall within the scope of negation; that is, the negator negates the whole proposition, but it does not negate the information source. Employing an evidentiality strategy through lexical means, e.g. verbs of auditory perception 'hear', is a way to negate the information source, as in (26) and (27) (Pan 2015: 345, 2014: 96).

(26)

uka'a=cu=**ami**	ka	kana	turukuuka	m-aa	isana.	*Saaroa*
NEG=COS=REP	CORE	PF	chicken	AV-be:LOC/TEMP	there	
It is said that there are no chickens over there.						

(27)

ku	lhi-**timalha**=ku	na	alhaama kiariari	n	kana	*Saaroa*
NEG	EXP-hear(PV)=1SG.GEN	OBL	ancestor past	LINK	PF	
m-uritalhiva~~u~~	n	al~~u~~mu~~l~~hu~~				
AV-have.a.love.affair	OBL	wild.boar				

I didn't hear that ancestors had a love affair with a wild boar.

There are extended uses of the reported evidential. For example, dreams are cast in the reported evidential *=ami*. Besides, the reported evidential is used to talk about something one heard on the phone or radio, as in (28) and (29) (Pan 2015: 357).

(28)

pausasalili=aku	m-ilakupu=aku=**ami**.	*Saaroa*
dream=1SG.NOM	AV-fall=1SG.NOM=REP	

I dreamed that I fell.

(29)

lhi-makari=aku	'arivungua	m-ilakupu=**ami**	kana'ana.	*Saaroa*
EXP-talk=1SG.NOM	telephone	AV-fall=REP	3.INDEP.PR	

When I talked on the phone, (I heard on the phone) he fell.

In Saaroa, in addition to declarative clauses, the reported evidential can occur in other clause types. When used in interrogative clauses, the speaker is speaking on behalf of someone else to direct the question to the addressee (second person), as in (30) (Pan 2015: 355).

(30)

um-a-usalh~~u~~=i=**ami**	maataata?	*Saaroa*
AV-IRR-rain=Q=REP	tomorrow	

(He or she wants to know) will it rain tomorrow?

When used in imperative clauses, the reported evidential acts as a secondhand imperative, indicating that the speaker does something on someone else's order, as in (31) (Pan 2015: 356). (p. 667)

(31)

a.

t<um>a-timalha=kia=**ami**!	*Saaroa*
<AV>REDUP-listen=PR=REP	

Please listen (on someone else's order)!

b.

kuu=kia=**ami**	alusap~~u~~!	*Saaroa*
NEG.IMP=PR=REP	sleep	

Please do not sleep (on someone else's order)!

In Saaroa, the verb of 'saying' is the source for the reported evidential =*ami*, as in (32) (Pan 2014: 100).

(32)

amilh-a	pakiaturua,	[ku-a-tumulhu=kia	lhat~~u~~ng~~u~~
say-PV	teacher	eat-IRR-a.lot=PR	vegetable
paa-m-a-vacang~~u~~	tilha'alh~~u~~]!		
CAUS-AV-STAT-good	body		

Saaroa

Teachers said, please eat more vegetables (because it) makes the body healthy!

31.6.2. Assumptive evidential =*'ai*

The assumptive evidential =*'ai* indicates that the speaker's assertion is based on a logical inference as to the action or process that led to the evidence or resultant state observed. In Saaroa, the assumptive evidential may acquire connotations of doubt or speculation, as in (33) (Pan 2014: 103).

(33)

maacu	a	m-a-ca-calhia=mana			
concerning	LINK	AV-STAT-REDUP-be.able.to=IMPERV			
m-asi-lha'a-lha'alua	ia,	umara-maalhi=cu='**ai**	ka	m-a-calhia	
AV-speak-REDUP-Saaroa	TOP	human-ten=COS=ASSUM	LINK	AV-STAT-be.able.to	
m-asi-lha'a-lha'alua	n	kani'i	kaa-r~~u~~lh~~u~~c~~u~~=na		
AV-speak-REDUP-Saaroa	OBL	this	person.of-place.name=DEF		

Saaroa

Concerning (those who are) still able to speak Saaroa, (to the speaker's inference) ten people of R~~u~~lh~~u~~c~~u~~ are able to speak Saaroa.

31.6.3. Mirative =*iau*

Mirative is not an evidential, but it is a category related to information source, mirroring a reaction to knowledge and the expectation of knowledge. In Saaroa, the range of mirative meanings, e.g. sudden discovery, surprise, or unprepared mind, typically refers to the speaker, rather than the audience (or addressee) or the main character, as in (34) (Pan 2014: 104). (p. 668)

(34)

m-a-aru=mana=**iau**	ka	saa-sar~~uu~~-ana	
AV-STAT-exist=IMPERV=MIR	CORE	REDUP-soil/dirt-LOC.NOMZ	
m-aa-'ulutii			
AV-be:LOC/TEMP-a.magic.object.that.provokes.an.earthquake			

Saaroa

To the speaker's surprise, a magic object provoking an earthquake still exists in the Earth.

Table 31.1. Non-propositional evidentials through case markers in Tsou

	Nominative case	Oblique case	Genitive case
Visual	*'e* (near), *si* (intermediate), *ta* (remote)	*ta*	*ta*
Non-visual	*co*	*nca*	—
Experiential	*'o*	*to*	*to*
Non-experiential	*na*	*no*	*no*

31.7. Tsou

Tsou is spoken in Alishan Township, Chiayi County, and Xinyi Township, Nantou County, Taiwan. There are around 6000 members of Tsou community. Tsou is a critically endangered Formosan language, with all fluent speakers over the age of sixty. There are four dialects of Tsou: Tfuya, Tapangu, Luhtu, and extinct Iimucu.

Tsou exhibits the largest evidential system among all Formosan languages, consisting of visual evidentials, non-visual evidentials, experiential evidentials, non-experiential evidentials, and a reported evidential. Except for the reported evidential, other evidentials in Tsou are expressed by case markers. Tsou case markers are discussed from different perspectives in the literature, including Huang (2010); H. Y. Chang (2001, 2011); M. Y. Chang (1998); Szakos (1994); Tung et al. (1964); Yang (2000b); and Zeitoun (1992, 1993, 2000, 2005). In this chapter, Tsou case markers are analysed as evidential markers, since they encode the information source of the speaker. Case markers in Tsou encode both grammatical relations and information sources. Non-propositional evidential markers are typological rare and rather striking.[5] Tsou is the only Formosan language with non-propositional evidential markers and grammatically obligatory evidential markers. These non-propositional evidential markers are expressed by case.

As shown in Table 31.1, there are four non-propositional evidential markers in Tsou. Visual and non-visual evidentials mark the information from visual and non-visual perception, irrespective of whether the speaker has experienced the (non-propositional) (p. 669) argument in his life. Experiential and non-experiential evidentials principally mark the information that the speaker has or has not experienced in his life, despite the fact that the (non-propositional) argument is not visible at the moment of speaking.

31.7.1 Non-propositional evidentials

31.7.1.1 Visual evidentials

Visual evidentials in Tsou refer to the information acquired from the speaker's visual perception, expressed by nominative case markers *'e, si,* and *ta*, oblique case marker *ta*, and genitive case marker *ta*. The difference between the three nominative case markers lies in proximity (i.e. proximal, intermediate, and distal) to the speaker.

(35)

a.	mo	fhʉngoya	**'e**	sofʉ.	*Tsou*
	REAL.AV	red	NOM.VIS	roof	
	This roof (proximate to the speaker) is red.				
b.	mo	fhʉngoya	**si**	sofʉ.	*Tsou*
	REAL.AV	red	NOM.VIS	roof	
	That roof (intermediate to the speaker) is red.				
c.	mo	fhʉngoya	**ta**	sofʉ.	*Tsou*
	REAL.AV	red	NOM.VIS	roof	
	That roof (distal to the speaker) is red.				

(36)

mi=cu	aiei'i	**ta**	pangkaa	si	naveu-su.	*Tsou*
REAL.AV=ASP	stick	OBL.VIS	table	NOM.VIS	rice-your	
Your rice sticks are on the table.						

(37)

mo	esmi	'e	amo	**ta**	voyu.	*Tsou*
REAL.AV	come	NOM.VIS	father	GEN.VIS	male.name	
Voyu's father came.						

31.7.1.2. Non-visual evidentials

Non-visual evidentials in Tsou indicate the information acquired from the speaker's non-visual perception, expressed by nominative case marker *co*, and oblique case marker *nca*. Non-visually obtained information covers hearing, smelling, and feeling.

(38)

a.	cuma	**co**	i-he	papas-a?	*Tsou*
	what	NOM.NVIS	REAL.AV-3PL	saw-PV	
	(To the speaker's hearing,) what are they sawing?				
b.	na'no	nat'e	**co**	beʉbcʉ-su.	*Tsou*
	very	smelly	NOM.NVIS	fart-your	
	(To the speaker's smelling,) your fart is smelly.				
c.	mi=cu	ake'i	ao'pou	**co**	to'tohʉngʉ-'u.	*Tsou*
	REAL.AV=ASP	a.little	relieve	NOM.NVIS	mind-my	
	(To the speaker's feeling,) I kind of feel relieved.				

(p. 670)

(39)

ma	ngiau	co	mo	emooskopʉ	**nca**	sofʉ.	*Tsou*
EMPH	cat	NOM.NVIS	REAL.AV	walk.on.the.house	OBL.NVIS	roof	
A cat is walking on the roof.							

31.7.1.3. Experiential evidentials

Experiential evidentials in Tsou indicate the information obtained from the speaker's personal experience, but invisible at the moment of speaking. Experiential evidentials are expressed by nominative case marker *'o*, oblique case marker *to*, and genitive case marker *to*.

(40)

mi=cu	acʉhʉ	tacʉmʉ	**'o**	bnʉvhʉ.	*Tsou*
REAL.AV=ASP	all	ripe	NOM.EXP	plum	
Plums are all ripe.					

(41)

la-ta	couno	pe-iachi	**to**	emi.	*Tsou*
ASP-3SG	frequently	drink-alone	OBL.EXP	wine	
(S)he frequently drinks wine alone.					

(42)

os-'o	payo'-a	**'o**	oko	**to**	sayungu.	*Tsou*
REAL.NAV-1SG	lose-PV	NOM.EXP	child	GEN.EXP	female.name	
I lost Sayungu's child.						

31.7.1.4. Non-experiential evidentials

Non-experiential evidentials in Tsou refer to the information that the speaker has never experienced in his life. Experiential evidentials are expressed by nominative case marker *na*, oblique case marker *no*, and genitive case marker *no*.

(43)

o'a	os-'o	talu-a	**na**	ongko-su.	*Tsou*
NEG	REAL.NAV-1SG	hear/remember-PV	NOM.NEXP	name-your	

I do not hear/remember your name.

(p. 671)

(44)

la-ta	smoyo	**no**	fkoi.	*Tsou*
ASP-3SG	fear	OBL.NEXP	snake	

He fears (any kind of) snakes.

(45)

peisu	**no**	sia	suu?	*Tsou*
money	GEN.NEXP	who	2.SG	

Whose money?

31.7.2. Reported evidential *nana*

Tsou does not distinguish between secondhand and thirdhand information sources. The reported evidential, conceptualized as a genre marker and a token of narratives, is expressed by *nana* in Tsou. Every verbal clause in Tsou begins with an auxiliary, indicating voice and reality status of the clause. The reported evidential usually appears between preverbal auxiliary and verb, as in (46) (Tung et al. 1964: 260).

(46)

a.

moso	**nana**	eohu	na	eaazuonu.	*Tsou*
REAL.AV	REP	hunt	NOM.NEXP	Eaazuonu.people	

The Eaazuonu people went hunting.

b.

moso	**nana**	o'te	teelu	ho	moso	mitungucu.	*Tsou*
REAL.AV	REP	NEG	on.time	when	REAL.AV	sacrifice	

(They) were not on time when (people at home) sacrificed.

In Tsou, the reported evidential indicates the source of information, when it occurs once in a clause. The multiple occurrences of the reported evidential acquire additional semantic connotations. The reported evidential occurring between auxiliary and verb indicates that the information is acquired from someone else, and the one that has the NP within its scope enhances the speaker's objectivity and unwillingness to vouch for the information, as in (47) (Yang 2000a: 83). In (47), the non-experiential evidential is used, even though the speaker has the experience of eating fish in real life. Dreams are conceptual-

ized as unreal events in a non-factual world. The non-experiential evidential is preferred in dream-telling, in that in the dream, the speaker did not really experience the event.

(47)

sua	ho	mi-ʾo	**nana**	bonu	no	**nana**	eosku-mu.	*Tsou*
dream	that	REAL.AV-1SG	REP	eat	OBL.NEXP	REP	fish-your	

I dreamed that I ate your fish.

In Tsou, the reported evidential itself is not within the scope of negation. To negate the information source, one has to adopt an evidentiality strategy through lexical means, e.g. verbs of auditory perception 'hear', as in (48) and (49) (Tung et al. 1964: 260; Pan 2015: 351). (p. 672)

(48)

oʾa	i-he	**nana**	aht-a	teolu-i.	*Tsou*
NEG	REAL.NAV-3PL	REP	ever-PV	see-LV	

It is said that they did not ever see.

(49)

o'a	os-'o	tac'uh-i	ho i-he	yainca	mo	*Tsou*
NEG	REAL.NAV-1SG	hear-LV	that REAL.NAV-3PL	say	REAL.AV	
tmaʾcongo	'o	pasuya.				
sick	NOM.EXP	male.name				

I didn't hear that they said Pasuya is sick.

In Tsou, dreams are cast in the reported evidential *nana*, indicating that what one was involved in a dream is unconsciously acquired information, which does not exist in the real world, as in (50) (Pan 2015: 357).

(50)

mi-ʾo	yacei	ho	mi-ʾo	**nana**	mah-mahafo.	*Tsou*
REAL.AV-1SG	dream	that	REAL.AV-1SG	REP	REDUP-bring	

I dreamed that I was pregnant.

In Tsou, the reported evidential in questions implies that the speaker is questioning some information that s/he has been given, as in (51) (Yang 2000a: 79).

(51)

te	**nana**	mcoi	'o	í-he	tiuna?	*Tsou*
FUT	REP	die	NOM.EXP	REAL.NAV-3PL	beat	

Will the person who was beaten die?

When used in interrogative clauses, the reported evidential develops an additional overtone of politeness, as in (52) (Pan 2015: 356).

(52)

te-'o	**nana**	peel-a	an-a	'e	huv'o	eni?	*Tsou*
IRR-1SG	REP	able-PV	eat-PV	NOM.VIS	tangerine	this	

May I eat this tangerine?

In Tsou, the reported evidential and the non-visual evidential are two distinct evidentials. In addition to covering information sources of smelling and feeling, the indirect evidential decodes the information heard by the speaker themself, whereas the reported evidential encodes the information acquired by the speaker from someone else.

31.8. Conclusions

This chapter introduces evidentiality in a selection of Formosan languages. The system of grammatical evidentials is a small and restricted grammatical category, with limited choices available. Having a closed and limited grammatical evidential system in Formosan languages does not stop speakers from upholding communicative efficiency. The function (p. 673) of evidentials is to signal where the information comes from. Evidentials may acquire additional overtones, when they occur more than once in the same clause, and when they appear in different clause types. The extended overtones include emphasis, contrastive focus, politeness, retelling, and so on.

Table 31.2. Evidentiality in a selection of Formosan languages

	Bunun	***Paiwan***	***Kanakanavu***	***Saaroa***	***Tsou***
Inferential		kaumaya			
Non-inferential		aya			
Assumptive			='ai	='ai	
Visual					'e, si, ta
Non-visual					co, nca
Experiential					'o, to
Non-experiential					na, no
Reported	=dau		=kani	=ami	nana
Mirative			=ava	=iau	

In Formosan languages, it is Tsou that displays the largest evidential system. Except for the reported evidential, other evidentials—visual evidentials, non-visual evidentials, experiential evidentials, and non-experiential evidentials—are expressed by case markers. These typologically rather striking non-propositional evidential markers occur obligatorily.

Table 31.2 summarizes the forms and the meanings described for evidentials in a selection of Formosan languages.

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Notes:

([1]) Sakizaya was recognizsed as an ethnic group (from Amis) by the Taiwan government in January 2007. However, most linguists consider Sakizaya as a dialect of Amis.

([2]) Taiwan government has officially recognized Truku as an ethnic group (from Atayal) since 15 January 2004. In terms of language *per se*, Truku is part of the Seediq language.

([3]) The last well-known speaker of Pazeh passed away in 2010. Whether there are other speakers or language rememberers of Pazeh is not clear. It is likely that Kahabu, one of the dialects of Pazeh, might have language rememberers.

([4]) For consistency and ease of comparison, examples cited from other linguists in this chapter are reorganized or reanalysed.

([5]) For discussion on non-propositional evidentiality, refer to Jacques (Chapter 3, this volume).

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Abstract and Keywords

This chapter presents the results of research on the reportative in over two dozen Austronesian languages spoken in different parts of the Philippines. It shows a sampling of forms that the reportative takes and discusses its grammar, semantics, pragmatics, discourse functions, and derivations. The last of these is found only in a few languages that allow the process. It also touches on a distinct reportative of the newscasting register. The latter part of the chapter tackles how social changes have hastened diffusion of reportative forms in areas beyond the homeland of their original users. The chapter ends with a summary of the findings.

Keywords: reportative, evidentiality, hearsay particle, second position-clitic, Austronesian languages, Philippine-type Austronesian languages

PHILIPPINE-TYPE Austronesian languages spoken in the Philippines each have a linguistic unit that is dedicated to marking information from a source other than the speaker or the addressee. This linguistic unit is an evidential marker that is not required syntactically. Henceforth it is referred to as reportative or 'REP'[1]. §32.2 presents a range of forms of the reportative from a selection of languages spoken in the Philippines. Its grammatical behaviour, particularly as a second-position clitic, is described in §32.3. Its semantic and pragmatic effects and certain non-evidential uses are examined in §32.4. A number of derivations are addressed in §32.5, and some other observations are noted in §32.6. But first, for a typological background of the languages, we turn to §32.1.

32.1. Typological background

Data on which this study is based come from a selection of Philippine-type Austronesian languages spoken in the Philippines. These are verb-initial languages that typically follow the constituent order VAO/VS. However, when the O argument is encoded by a personal

pronoun or any other proform that behaves as a second-position clitic, and A is encoded by a full noun phrase (NP), O precedes A. Furthermore, in some of these languages, when A and O are both encoded by personal pronouns, in certain combinations of persons and numbers they either assume a single fused form or one of the pronouns is dropped. When a secondary verb occurs in the clause, it takes the clause-initial position, preceding the primary verb; there are other modifiers of the verb such as adverbs, adjectives, and negators (p. 675) that likewise take this position. Negators in this position are secondary verbs in some of the languages, but not in others.

The unmarked constituent order in verbless clauses is verbless clause complement (VCC) first followed by the verbless clause subject (VCS). However, discourse considerations trigger fronting and left-dislocation of the encoding of arguments in both verbless and verbal clauses. Clause-level modifiers may take the final, medial, or initial positions in both clause types.

In addition to the proforms mentioned above, in each of the languages there are other monosyllabic and disyllabic words that behave primarily as second-position clitics.[2] When these clitics co-occur they observe certain sequential ordering. Phonologically, the reportative evidential marker being discussed here belongs to this group of words.

32.2. Forms of the reportative

Map 32.1 presents forms of the reportative in twenty-two selected languages. These are plotted on a map of the Philippines islands to show the relative positions of the known homelands of the speakers of the languages. The forms and all language data in this chapter are presented in phonemic writing based on available literature on the phonology of the languages and language varieties and the author’s own analysis. To represent the palatal approximant /j/ y is used.

32.3. Grammatical behaviour

32.3.1. Syntactically optional

A reportative is syntactically optional. Consider the Ilonggo construction in (1). It provides an appropriate context for a reportative to occur in the complement clause. But the reportative can be deleted, as in (2), where the complement clause and the entire construction remain grammatical without it.

(1)

…siliŋ	ni	Nanay	niya,	[buluŋ	**kunu**	ʔaŋ	Ilonggo
say	ERG	mother	3SG.GEN	medicine	REP	ABS	

tubigʔulan]$_{\text{COMP CL}}$ …
water.rain
…her mother said that rainwater is medicine, she (her mother) said …[3]
3

(2)

…siliŋ	ni	Nanay	niya,	[buluŋ	ʔaŋ	tubigʔulan]$_{\text{COMP CL}}$ …	Ilonggo
say	ERG	mother	3SG.GEN	medicine	ABS	water.rain	

…her mother said that rainwater is medicine …

(p. 676)

Map 32.1. The reportative evidential in twenty-two languages of the Philippines

(p. 677)

32.3.2. Second-position clitic

32.3.2.1. Position in different clause types

A reportative primarily behaves as a second-position clitic that has the clause as its scope. It does not normally occur in the initial position of a clause. A couple of constructions where reportative forms are known to occur clause-initially are highly marked; one of these does not convey an evidential meaning. This is further discussed in §32.4.4.

The majority of the time, the reportative follows the first word from the left edge of the main clause. It typically follows the verb (3), the secondary verb (4), or the negator (5) in a verbal clause.

(3)

Lumiku?	**gaʔa**	sa	ʔəmaʔ	ko	Dulangan Manobo
come.home	REP	CORE	father	2SG.GEN	
simag.					
tomorrow					

Your father is coming home tomorrow, someone said.

(4)

ʔiŋ=ka	**kanu**	ʔalan	diay	sampay.	Ilocano
go=2SG	REP	get	that	laundry	

Go get that laundry (she (Mother) said.)

(5)

ʔawan	**kan**	siya	makaʔaŋas	ti	maʔayos.	Paranan
NEG	REP	3SG.ABS	breathe	LK	good	

He cannot breathe well, he said.

The reportative also follows an adjective (6) or a noun (1) in a verbless clause, and follows the question word in an interrogative clause (7).

(6)

Lay-layad	**ʔano**=h	madʔan …	Balangao
very-happy	REP=ABS	old.woman	

The old woman was very happy …, it is said.

(7)

ʔanu	**kunu**	ʔaŋ	kinahaŋlan	niya?	Ilonggo
what	REP	ABS	need	3SG.GEN	

What did she say she needed?

It is also found to occur following the first word of a long fronted NP in Tagalog (8), the introductory word of a narrative in Calamian Tagbanwa (9), and the sentence initial discourse connector in Balangao (10); (10) is the twenty-sixth sentence of the story with thirty-nine sentences. (p. 678)

(8)

Lahat	**daw**	na	gumawa	sa	tahana(n)=ŋ	ay	Tagalog
all	REP	LK	worked	LOC	house=LK	INVS	
katatapos	namin						
just.finished	PL.EXCL.GEN						
kukunin	niya=ŋ	maŋa	trabahador.				
will.get	3SG.ERG=LK	PL	worker[4]				

All those who worked in our latest construction project he will hire as workers, he said.

(9)

Duun	**ʔunu**	maŋa	duma=n(i)ta	tu	Calamian Tagbanwa
EXIST	REP	PL	relative=1PL.INCL.GEN	there	
Malawig …					
PLN					

There were relatives of ours in Malawig, they say, …

(10)

ʔaŋkay	**ʔano**	gawan	di	labi …	Balangao
COH	REP	middle	LK	night	

And so then, it is said, in the middle of the night, …

This is not a rigid rule as the reportative is also attested to occur elsewhere after the initial position as long as the resulting construction is intelligible, as in (11) where it occurs following the entire fronted NP, and in (12) where it is in the clause-final position. Compare (7) and (12). But something more is communicated if the reportative is right-dislocated, separated from the main clause by a pause, and stressed. See §32.4.4.

(11)

…[ʔaŋ	ʔiyaŋ	paʔa]$_S$	**kunu**	[napaʔakan]$_V$…	Cebuano
ABS	3SG.GEN	thigh	REP	was.bitten	

Her thigh was bitten, she said.[5]

5

(12)

ʔanu	ʔaŋ	kinahaŋlan	niya	**kunu**?	Ilonggo
what	ABS	need	3SG.GEN	REP	

What did she say she needed?[6]

6

The reportative also occurs in subordinate clauses. We discuss here relative clauses, complement clauses, and adverbial clauses that occur after the main clause. When the (p. 679) subordinator is monosyllabic, the reportative typically takes second-position in the subordinated clause, as in the second occurrence of *kun* of the Kagayanen example (13). But when the subordinator is disyllabic, the reportative occurs in second-position of the subordinate clause, following a disyllabic subordinator. This is consistently observed in Agutaynen texts, from which (14) is taken. However, in Cebuano texts this is observed to be variable where the reportative may take second-position in subordinate as well as subordinated clauses; both (ADVZ-REP-V) and (ADVZ-V-REP) are attested.

(13)

Pambal	ʔa	ta	maŋa	manakem	[[na]	[dili	Kagayanen
say	1SG.ABS	ERG	PL	elder	COMP	NEG	
ʔa	**kun**	magguwa	[[tak]$_{ADVZ}$	[dilikadu	**kun**		
SG.ABS	REP	go.out	because	dangerous	REP		
ta	kasalen	na	sigi	panaw]]$_{ADV\,CL}$]]$_{COMP\,CL}$			
OBL	to.be.wed	LK	continue	go			

The older people told me that I should not go out because it is dangerous for those who will be wedded to keep going (somewhere).

(14)

Maŋa	matapus	da	taŋ	pagtugda,	pamagpuruŋitan	Agutaynen
if	finish	already	DEF	rice.planting	smear.dirt.on.each.other	
[[ʔagud]$_{ADVZ}$	ʔ**unu**	kumuran]$_{ADV\,CL}$.				
so.that	REP	will.rain				

When the people are all finished planting the rice, they smear each other with dirt so that it will rain, they say.

Example (13) also shows that the reportative can occur more than once in a multiclausal construction, but just one reportative to a clause.

32.3.2.2. Position in a clitic cluster

32.3.2.2.a. General comments

When a reportative co-occurs with other second-position clitics in the same clause, it abides by a sequential order of clitics that applies in the language. For example, the reportative *kunu* in Cebuano in (15) comes after *pud*, which in turn comes after *man*, which comes after *ra* in this cluster. These positions are fixed.

(15)

…ʔiguʔigu ʔ	ra=man=pud=**kunu**	ʔilaŋ	suwildu.	Cebuano
enough	just=DN=also=REP	3PL.GEN	salary	

…their salary is just enough, he said.

But while *kunu* 'REP' in (16) follows *unta* 'DESID', the reverse order is also possible.[7]

(p. 680)

(16)

…dili	unta	**kunu**	mawala	ang	iyang	tatay…	Cebuano
NEG	DESID	REP	be.gone	ABS	3SG.GEN	father	

…his father would not have died, she said …[8]

8

So, while some order of occurrence of the reportative is fixed in relation to some clitics, it is variable in others. §32.3.2.2.b describes the order of occurrence of the reportative in relation to clitic personal pronouns that function as arguments in the languages.

32.3.2.2.b. Reportative and personal pronoun arguments

Most of the examples thus far show the reportative preceding arguments encoded by full NPs. When the argument is encoded by a personal pronoun, the position of the reportative depends on phonological and other language-specific factors or preferences. The phonological factors are syllable weight and structural pressure. A language-specific factor that has been identified is a need for disambiguation in the language. To illustrate, descriptions of the unmarked positions of the reportative in relation to non-fronted argument personal pronouns S, A, and O in a number of these languages are given below.

In Kinamayo, *kunuʔ* 'REP' follows monosyllabic personal pronouns but precedes disyllabic ones. The same pattern is attested for Butuanon (Marisol Curilan and Amor Rebuyon, p.c.), Central Subanen (Lynne Pina, p.c.), Ilonggo, Kinaray-a (Mafe Pena, p.c.), and Tagalog. For Kinamayo, switching positions with a monosyllabic pronoun results in a meaningless utterance, while switching positions with a disyllabic pronoun results in an awkward utterance (Mely Estoque, p.c.). For Tagalog, switching the position of the reportative with the pronoun would result in an ungrammatical utterance (Ann Atienza, p.c.).

Reportative *kun* 'REP' of Kagayanen follows personal pronouns coming from a majority monosyllabic set and precedes those coming from the majority disyllabic set (Manilyn

Fresnillo, p.c.). The former constitute the absolutive and ergative/genitive personal pronoun sets, while the latter set is classified as emphatic absolutive (Pebley 1999: 57).

Ilocano has trisyllabic personal pronouns. *Kanu* 'REP' follows monosyllabic and disyllabic pronouns but precedes trisyllabic ones. Switching order with the former results in a meaningless or very unnatural utterance. But switching order with the latter can be acceptable and useful for emphasis, to sow doubt, or to tease (Rosario Viloria, p.c.).

In Northern Kankanay, *kanu* 'REP' follows monosyllabic and disyllabic S and A personal pronouns, except for *siya* '3SG.S', which is preferably preceded by *kanu* 'REP' (Juana Bannawe, p.c.). O personal pronouns do not behave as second-position clitics and therefore do not cluster with *kanu* 'REP'. They typically occupy the clause-final position. Four out of seven of them are trisyllabic and the remaining three are disyllabic.

In Cebuano, *kunu* 'REP' strongly prefers to occur before the personal pronoun, regardless of the number of syllables of the pronoun. Occurrences after monosyllabic pronouns tend to result in ungrammatical utterances while occurrences after disyllabic pronouns tend to result in understandable but awkward utterances (James Daguman, p.c.). In the special case of *ku* '1SG', its position relative to *kunu* 'REP' distinguishes its syntactic function (that is, whether S/O or A) and grammatical case (that is, whether absolutive or ergative): *kunu=ku* (p. 681) is 'REP=1SG.ABS' while *ku=kunu* is '1SG.ERG=REP'. The former is the order that applies in 'I cried.' and 'The mosquito bit me.' The latter applies in 'I pinched the child.'

32.3.3. Position in a noun phrase

In Ilonggo, the reportative is found to occur within a NP, taking the NP only as its scope. Example (17) illustrates this. The reportative immediately follows the absolutive case marker, which is the first grammatical word of the phrase. The case marker is itself a clitic, more precisely a proclitic. The position that *kunu* takes here is an adjectival position, so here, it becomes a modifier that means 'purported'.

(17)

Matapus	mabuhin	[ʔaŋ	**kunu**	ʔutaŋ	niya…]$_{NP}$,				Ilonggo
after	deducting	ABS	purported	debt	3SG.GEN				
naka-kaput	gid	man	siya	siŋ	diyutay	ŋa	kwarta.		
ABIL.REAL-hold	INTENS	?	3SG.ABS	OBL	little	LK	money		

After deducting her purported debt…, she was able to keep some money at last.[9]

9

Compare this with (18) where *kunu* also occurs within an NP but not in the position described above. In this position, *kunu* retains its clausal scope and plain evidential meaning.

(18)

[ʔaŋ	ʔimu	**kunu**	duha	ka	maŋhud]$_{NP}$	didtu	Ilonggo
ABS	2SG.GEN	REP	two	LK	younger.sibling	there	
sa	ʔinyu	lula		kag	naga?iskwila	man.	
LOC	2PL.GEN	grandmother		and	go.to.school	also	

Your two younger siblings, they say, are with your grandmother and are going to school also.[10]

[10]

Ilocano is another language in the Philippines wherein the reportative is attested to occur within a NP, taking the NP only as its scope. In this position it also conveys the meaning 'purported'.

32.4. Semantic and pragmatic effects

32.4.1. In a declarative clause

The semantic effect of a reportative in a declarative construction can be seen by comparing (3) and (19). In the former, where the reportative is used, the meaning that 'the (p. 682) information being conveyed by the speaker came from a source other than the speaker and the addressee' is added.

(19)

Lumiku?	sa	ʔəma?	ko	simag.	Dulangan Manobo
come.home	CORE	father	2SG.GEN	tomorrow	

Your father is coming home tomorrow.

The reportative is used when the speaker acquired the information from the source by being told about it orally, by sign, in writing, or through some other code. The reportative cannot be used to mark information the speaker acquired by witnessing the facts themself, or by directly sensing them, or inferring them from circumstances.

The source of information is always the third person. It is typically human but can also be a book, a reference material, a story, or a dream. The cline in Figure 32.1 represents the range of possible identities of the source of information that a reportative refers to, from being identifiable to unidentifiable.

The source can be identifiable or unidentifiable. Some sources are individually identifiable because they are persons or references named specifically in the discourse, as in (1) where the mother of the person talked about was identified in the main clause as the source of information about 'rain' in the complement clause, and in (20), which is an ex-

cerpt from a retelling of a particular dream of Nabulay upon the behest of the people crowding around her.

(20)

'Umunad=ak	pay	**kanu**	yan…'	Kankanaëy
followed=1SG	still	REP	and	
I was following (after him), so goes my dream, and …				

Some sources are specified as a generic group of people, like 'the older people' in (13) or just 'they'. Others are not overtly specified as such but are understood to be the old people in the community who passed on traditional bodies of knowledge, as in (14), or simply people in general who are 'in the know', as would be the case in (21).

(21)

Baratu	laŋ	**kunu**	kaʔayu	aŋ	maŋa	cell phone	didtu.	Cebuano
cheap	just	REP	very	ABS	PL	cell phone	there	
Cellular phones are reportedly very cheap there.								

There are sources that are simply unknown, as in the case of a rumour, as in (22).

IDENTIFIABLE		UNIDENTIFIABLE	
SPECIFIED		UNSPECIFIED	
specific person/s, book, story, dream, etc.	generic group of people, 3SG or 3PL	understood	unknown

Figure 32.1. A cline of information source types referred to by the reportative 'REP'

(p. 683)

(22)

…Dilikadu,	may	kaliwat	ra=ba	**kunu**=ŋ	baraŋan.	Cebuano
dangerous	EXIST	ancestry	CAUT	REP=LK	sorcerer	
…That's dangerous, (she) has an ancestry of sorcerers, it is rumoured.[11]						

11

Some sources are not identified because they are irrelevant in the discourse. In the story from which (23) is taken, it is not mentioned who passed on the information that Cirila is coming home. In the flow of the story it didn't matter who said it and so it was not specified in the text.

(23)

Saba	diha?,	Eking!	Naghulat	baya	ta=ŋ	Cirila.	Cebuano
noisy	there	PersN	waiting	ASS	1PL.ABS=LK	PersN	
Mu?uli?		**kunu**	karun!				
coming.home		REP	today				

Shut up, Eking! We are waiting for Cirila. She is, reportedly, coming home today![12]

12

32.4.2. In an imperative clause

An imperative clause with a reportative repeats a command or an instruction made earlier by someone other than the current speaker. This repetition has several purposes. It can be used to urge the addressee to obey a command or to prompt him to follow a previously given instruction. A customer was about to make a payment for a purchase. Occupied with another customer, the proprietor hurriedly gave an instruction to her assistant who did not hear clearly what she said. Someone else in the shop heard the instruction and told the assistant:

(24)

Batun-a	**kʊnʊ**	ʔaŋ	bayad.	Ilonggo
receive-IMP.TR	REP	ABS	payment	

Receive the payment, she (the proprietor) told you to.

The repetition can also be used to pass on a command to someone else. To avoid doing a task her mother told her to do, an elder daughter can pass on the command to her younger sister. For an example, see (4), from Ilocano. Sometimes it is not even true that the command was originally issued by the mother; the elder sibling could merely be making it sound so by using *kanu* 'REP' to bolster the authority of her command to her younger sibling.

Cebuano, on the other hand, adds a reportative in an imperative construction as a politeness strategy and a mitigating device. Adding *kunu* softens a command into a request. Compare (25) and (26). (p. 684)

(25)

ʔandam-a	ʔaŋ	maŋa	papilis.	Cebuano
prepare-TR.IMP	ABS	PL	documents	

Prepare the documents.

(26)

ʔandam-a	**kunu**	ʔaŋ	maŋa	papilis.	Cebuano
prepare-TR.IMP	REP	ABS	PL	documents	

Please prepare the documents.

In the same language, a reportative also occurs in an imperative construction that functions as a negative imperative strategy. Example (27) is usually spoken to an addressee who, despite previous instructions, insists on continuing to do what he is told not to do. To deter the addressee from doing it again, he is challenged to do so under threat of severe consequences. This construction functions as a warning and is spoken with a threatening intonation. In the culture, this is popularly referred to as a kind of ‘reverse psychology’.

(27)

Sigi,	buhat-a	**kunu**.	Cebuano
come.on	do-IMP.TR	REP	

Come on, try doing (it).

32.4.3. In an interrogative clause

32.4.3.1. In a polar interrogative

Yes-no interrogatives in some of the languages are marked by intonation only but in others by intonation and a question marker. A yes-no interrogative with a reportative could be one of two things. First, the questioner heard something and he is seeking confirmation about it from the addressee. For instance, plans are underway for a family reunion and one heard only on the grapevine that the rich relative—who, when he comes, always pays for a cow to be butchered—will be coming. The question in (28), which is given in Inonhan, can be directed to relatives who can confirm the information.

(28)

Maʔabut	**kunu**	ʔaŋ	maʔihaw	ʔit	baka?	Inonhan
arrive	REP	ABS	will.butcher	OBL	cow	

Will (the relative who will pay for) the cow to be butchered come; they said it, is it true?

What the questioner heard from some source in the case of (28) is a statement. It could also be a question that the questioner then repeats for he too is interested to know the answer.

Second, the questioner is seeking to know something that the addressee has learned from some source. This is a case of evidential shift. Example (29) is given in Tagalog. It is a question that someone who has just arrived at the bus terminal asks people who have been there longer waiting for instructions to board their bus. (p. 685)

(29)

Dito	laŋ	**daw**	ba	muna	tayo?	Tagalog
here	only	REP	Q	temporarily	1PL.INCL.ABS	

Should we just stay here for the time being, is this what you were told?

The possible answers to a yes-no question are ‘yes’, ‘no’, or a reportative spoken in isolation or within a phrase. If the basis of the claim is only hearsay, answering with a reportative enables the speaker to be exact. It also enables him to inject caution into the claim or to be tentative in the statement. If the question happens to be related to the status of the addressee or to his achievement, as for example in, ‘Did you pass the interview?’ or ‘Did you rate high in the test?’ or ‘Did you get the job?’, responding with the reportative provides the addressee with a way to avoid any sense of bragging when a positive answer would lift him up to a status or position above others.

32.4.3.2. In a content interrogative

A *wh*-question word occupies the initial position of a content interrogative construction. When a reportative occurs in this construction, the questioner could be asking the question on behalf of another, as in the Boi'nun example (30).

(30)

Taga-sari	**kʊnʊ**	ʔika?	Boi'nun
from-where	REP	2SG.ABS	

Where are you from? Someone is asking this.

The questioner could also be seeking information that the addressee has learned from some source. This is another case of evidential shift. Example (31) is a question in Northern Kankanay to a student who just came from a cooking class.

(31)

ʔaysinu	**kanu**	nan	ʔikkan	ʔay	mangutu?	Northern Kankanay
how	REP	CORE	do	LK	cook	

How, according to (the teacher), is (the recipe) cooked?

32.4.3.3. In rhetorical questions

In some of the languages, reportative forms are found to occur in interrogative constructions that do not function as straightforward questions. They are used instead to express surprise, criticism, or rebuke as well as to drive home a point. Consider the examples below.

Kagayanen is spoken by islanders whose typical vegetable soup includes fish. Cooking a plain vegetable soup can generate a comment like (32) (Manilyn Fresnillo, p.c.).

(32)

ʔaran	**kun**	tan	na	gulay	ʔa	ʔula	sida?!	Kagayanen
what	REP	that	LK	vegetable.soup	REL	NEG.EXIST	fish	

What kind of vegetable soup is that which has no fish in it?!

(p. 686)

Unexpected or undesirable happenings draw similar comments in Ilonggo (33) and Tagalog (34).

(33)

ʔanu	ʔina	ʔiya	**kunu**?!	Ilonggo
what	that	CMP	REP	

What kind of stuff is that?!

(34)

ʔano	**daw**	yon?!	Tagalog
what	REP	that	
What kind of stuff is that?!			

All three (32)–(34) are exclamations spoken in non-question intonation. They express a combination of surprise and criticism, with discourse context allowing one meaning to be made more prominent than the other.

Cebuano uses an interrogative construction with a reportative to express a rebuke. A story tells of a father preventing his children from seeing their grandmother. Appalled by this action, his brother responds (35). Although this takes the form of a question, it does not so much require an answer as underline the unreasonableness of the action being talked about.

(35)

ŋanu	man	**kunu**=ŋ	di	man	nimu	padu?uwun?!	Cebuano
why	DN	REP=LK	NEG	DN	2SG.ERG	come.near	
And why will you not let them come near (her)?![13]							

13

Similarly, to chide someone who is in doubt, a Cuyonon speaker says (36).

(36)

ʔayamu	**kunu**	maduda	ka	pa?	Cuyonon
why	REP	doubt	2SG.ABS	still	
Don't doubt! (Literally, And why will you still doubt?!)					

Cebuano uses an interrogative construction with a reportative as a powerful means of driving home a point. A common way to win an argument in the culture is for the speaker to line up a series of factual evidence or counter-evidence to an opposite claim and then close the enumeration with (37) as the punchline. The rhetorical question engages the addressee to draw the obvious conclusion for himself.

(37)

ʔunsa	man	**kunu**	na?	bi?	Cebuano
what	DN	REP	that	say	
Now what do you say that is?					

(p. 687) 32.4.4. In discourse

The reportative is often used in the opening statement of an oral traditional narrative. It immediately establishes that the story is not the current storyteller's own but was passed on to them by another storyteller. Technically, they are simply retelling the story. If they choose to, they can continue using the reportative as they progress in the storytelling.

The practice of using the reportative in traditional storytelling is old and has fossilized into formulaic expressions marking traditional narratives and distinguishing them from non-traditional. This characteristic is most striking in the retelling of an epic. Gaano Laudi, for example, began his retelling of the Kalinga epic *Ullalim Banna* with *Kan**kanu**di ʔullalim kanan ne* 'They say the *Ullalim* said this.' As he continued, he used the phrase *kana kanu* 'So said the Ullalim.', usually to end episodes. He finally concluded the epic with *kana kanu* 'So said the Ullalim.'[14]

Some non-canonical distributions of the reportative can be explained through analysis of the discourse texts. For instance, the two occurrences of clause-final reportatives in the corpus are found to be sentences that encode key information in the discourse. One of these comes from a Kankanaey story about a person who died and came back to life. This main character is first introduced by name and the place from where she came. This is then followed by the piece of information about her that is key in the story; see how this is expressed in (38).

(38)

Matəy	pay	si	Nabulay	**kanu**.	Kankanaëy
die	?	ABS	PersN	REP	

Nabulay was, they say, about to die.

The other clause-final occurrence of the reportative in the corpus comes from Ilonggo romantic fiction. The female character in the story will decide to end the relationship with the male character due to conflicting priorities. Example (12) is the start of the discussion that the male character did not expect would lead to the break-up.

However, clause-final occurrence of the reportative contrasts with the right-dislocated occurrence of the same, as in (39). In this construction, *kunu* 'REP' injects doubt into the truth of the information being put forward.

(39)

May	kinahanglan	siya,	**kunu**.	Ilonggo
EXIST	need	3SG.ABS	REP	

She needs something (from him), that's what she said.

Occurrences of seemingly clause-initial reportatives are used only mid-stream in conversations. In Inonhan, *kunu* in the said position serves as a discourse connector that relates a previous piece of conversation to an ensuing one, for example: '*Kunu*, the principal said that the project chosen in last month's meeting will be started soon.' (Leilani Mallorca, p.c.). In Ilonggo, *kunu* (in its extended meaning 'as if' or 'pretend') can be used to begin a second sentence in the series (p. 688) like: 'The director of the play told us to move back and forth looking down. *Kunu abi* "as if" we are looking for something that fell on the floor.' In this position, *kunu* appears to be an adverbializer that has detached itself and the adverbial clause from the main clause.

32.5. Derivations from a reportative evidential root

Full reduplication of the reportative form to derive an abstract noun that means ‘a perception or belief that is not based on facts or solid evidence’ is attested in Ilonggo (*kunukunu*), Kinaray-a, and Boi’nun (*kʊnʊkʊnʊ*). The perception or belief is likely to have been arrived at after a spread of information and processing of details surrounding the matter through some informal conversation. The perception or belief is shared by at least a segment of the community so *kunukunu* or *kʊnʊkʊnʊ* is like a communal suspicion. It could be proven true or false. Consider the repartee in Ilonggo in (40).

(40)

A:	ʔamu	ʔinaʔ	ʔaŋ	**kunukunu**	diri,	Ilonggo
	that.be	that	ABS	communal.suspicion	here	
	gabaligyaʔ	sila	druga.			
	sell	3PL	illegal.drugs			
	That is the suspicion of people here, that they sell illegal drugs.					
B:	**Kunukunu**	man	laŋ	ʔina!		Ilonggo
	communal.suspicion	EMPH	just	that		
	That is just a suspicion! (Not based on fact.)					

A near synonym of *kunu'kunu* in Ilonggo is *batiʔ'batiʔ* ‘information that is going around the community but has not been publicly declared by the parties concerned’. It is a reduplication of the root *ba'tiʔ* ‘hear’. Another near synonym is *hambal'hambal*, a reduplication of *hambal* ‘say’. Its meaning ranges from ‘non-serious talk to unsubstantiated claim to empty promise’. There is also *huriŋ'huriŋ* ‘something that people talk about, characteristically, not so openly’. It is onomatopoeic of the combined sounds of a whisper and buzzing of insects; the equivalent term in Cebuano is *huʼŋihuŋ*, which is insightfully glossed in an online dictionary as ‘rumour, gossip (usually a mixture of truth and untruth) passed around by word of mouth’[15]. The term *ʔisturyaʔis'turya* is often used to mean ‘casual talk, usually to pass away the time’ while *sugidsu'gid* can mean ‘a brag’ or ‘a promise that the person making it cannot or does not intend to deliver’. Except for *hambal'hambal*, all of the above derivations are also attested in Kinaray-a but with minor variations in meaning (Emilia Ballenas, p.c.). The foregoing near-synonyms and the following derivations are not attested in Boi’nun.

The word *kunu*'*kunu* can take a limited number of verbal affixes. When it takes the *realis* transitive affixes *gina-* 'TR.PAT.PROG.REAL'/*gin-* 'TR.PAT.REAL', it becomes the verb (p. 689) *ginakunu'kunu* 'being suspected of'/*ginkunu'kunu* 'suspected of'. It cannot take *-un,* the *irrealis* form of the affix. As the Kinaray-a example (41) shows, the A argument of the resulting transitive verb is not expressed; it is understood to be people in the community.

(41)

Gin-kunukunu	tana	ŋa	smaglir.	Kinaray-a
TR.PAT.REAL-communal.suspicion	3SG.ABS	LK	smuggler	
He was suspected of being a smuggler.				

When *kunu'kunu* takes the affix *magpa-* 'INTR.AG.IRR'/*nagapa-* 'INTR.AG.PROG.REAL'/ *nagpa-* 'INTR.AG.REAL', it becomes the verb *magpakunu'kunu* 'will pretend'/*nagapakunu'kunu* 'is pretending'/*nagpakunu'kunu* 'pretended'. With the affix *pagpa-* 'NOMZ', it becomes *pagpakunu'kunu* 'pretence' or 'an act'. Culturally, actions encoded by these sets of derived words can be viewed positively or negatively, depending on the context. For instance, the Kinaray-a example (42) is a positive act of humility while (43) is a negative act of pretence.

(42)

Nagapa-kunukunu	ra	tana	ŋa			Kinaray-a
INTR.AG.PROG.REAL-pretend	just	3SG.ABS	COMP			
wala	ʔit	maʔan	piro	maʔalam	tana.	
NEG.EXIST	LK	knowledge	but	smart	3SG.ABS	
He is just pretending to be ignorant but he is really smart.						

(43)

Nagpa-kunukunu	tana	ŋa	maŋgaranən	kundi	Kinaray-a
INTR.AG.REAL-pretend	3SG.ABS	COMP	rich	RES	
ginholdʔap.					
held.up					
He acted as if he was rich so as a result he was held up.					

Cebuano allows a single derivation of *kunu* in the language using the suffix *-hay*, which results in *kunuhay* 'as if, pretend'. Compare the use of the underived and derived forms in (44) and (45).

(44)

Naguʔul **kunu** siya. He is sad, someone said. Cebuano

(45)

Naguʔul **kunuhay** siya. He pretended to be sad. Cebuano

32.6. Other observations

32.6.1. The reportative in newscasting

The form of the reportative in Tagalog newscasting is *ʔumano* 'REP'. When its scope is the clause, it typically follows the clause-initial verb, as in (46). When a negator precedes the (p. 690) verb, it follows the negator, which in this construction, as (47) illustrates, occurs in its contracted form. Example (48) is a restatement of (47) in the same news item; it supports the claim that *diʔ* is a contracted form of *hindiʔ* and *ʔumano* is the reportative in the newscasting register. Furthermore, (49) and (50) are both ungrammatical.

(46)

…pinahiya	**ʔumano**	naŋ	kongresista	ʔaŋ	kasama	nila…	Tagalog
shamed	REP	ERG	legislator	ABS	colleague	3PL.GEN	

…the congresswoman allegedly shamed their colleague…[16]

16

(47)

…(hin)diʔ	**ʔumano**	kinukutyaʔ	ʔaŋ	pagiginʔampon	ni…	Tagalog
NEG	REP	malign	ABS	being.an.orphan	ERG	

…(he) is not maligning (his opponent's) being an orphan…[17]

17

(48)

…hindi	**daw**	kinukutya	ʔaŋ	pagiginʔampon	ni…	Tagalog
NEG	REP	malign	ABS	being.an.orphan	ERG	

…(he) is not maligning (his opponent's) being an orphan…[18]

18

(49)

*…hindi diʔʔumano kinukutya and pagiginʔampon ni…

(50)

*…diʔ diʔʔumano kinukutya and pagiginʔampon ni…

It appears that the contracted form *di?* has attached to *?umano* and together formed *di?umano* 'REP', which is now functioning as a variant of *?umano* 'REP' on the phrasal level. When the scope of the reportative is the NP, it occurs in two possible positions. It can come immediately after the phrase-initial case marker; in this position, it takes the form *di?umano* 'REP', as shown in (51). It can also occur in the relative clause that modifies the NP, immediately following the relativizer. In the latter position, it is found to take the form *?umano* 'REP', as shown in (52).

(51)

…hinanap	niya	ʔaŋ	**di?umano**=y	buto	ng	higante	Tagalog
look.for	3SG.ERG	ABS	REP=LK	bone	GEN	giant	

sa Samar.
LOC PLN
…he looked for the alleged bones of a giant in Samar.[19]
19

(p. 691)

(52)

…ipinakita	ʔaŋ	palad	na	**ʔumanoy**	may	hawak	na	bala…	Tagalog
showed	ABS	palm	REL	REP	EXIST	hold	LK	bullet	

…showed his palm that is allegedly holding the bullet in question…

32.6.2. The reportative in oral and written materials

Use of the reportative is a strong feature of the oral form of the languages. While there is no indication that the practice is waning in conversation, the formulaic and other discourse functions of the reportative in traditional oral storytelling is disappearing as fast as the verbal arts are falling out of use. Documentation of the verbal arts may preserve them digitally but not necessarily pass them on to the next generation. Written forms of traditional stories are not inclined to keep the reportative as it is used in the source genre. A search for the reportative as a discourse token in a collection of written folk stories for use in grade school classrooms, for instance, found no such token. But a different scenario obtains in written literary pieces for general audiences, including award-winning short stories and feature articles. A search among such yielded a good number of the reportative as discourse tokens. Their presence in these literary pieces contributes to making the written material sound natural rather than staid.

32.6.3. Diffusion of reportative forms

As Figure 32.1 indicates, *daw* is the reportative form in Tagalog, a language traditionally spoken in the north-central portion of the Philippine islands. But in 1937, Tagalog was chosen as the basis of the national language, initially named Pilipino, and thereafter was taught in schools and used in mass media nationwide. Today, speakers of Cebuano and

Ilonggo in the central and southern portions of the country have started to include *daw* ‘REP’, along with *kunu* ‘REP’ in their conversations. This is most noticeable among migrant communities of these two major languages in Mindanao, the large southern island of the archipelago. Example (53) is a statement heard from Zeny Lomocso, who is of Ilonggo ancestry but has lived a long time in Mindanao. The Cebuano of Davao City in Mindanao can also be characterized as using *daw* ‘REP’.

(53)

Nakadumdum	**daw**	siya …	Mindanao Ilonggo
remembered	REP	3SG.ABS	
According to her, she remembered …			

Conversely, people have been travelling and migrating from their traditional homelands to other parts of the archipelago. The metropolis of Metro Manila is becoming a melting pot. The national language, now named Filipino, was conceptualized to continually be enriched by linguistic contributions from other languages within the republic. The world wide web has opened the way to netizenship. Today, *kunu* ‘REP’ is part of contemporary Tagalog and, Filipino speakers’ vocabulary. Its use is robust in informal speech, in jokes, and in social media. The meaning it encodes ranges from ‘they say’, to ‘it is claimed’, to ‘as if’, to ‘pretend’. (p. 692) The example in (54) comes from an internet post[20]. It illustrates that *kunu* is now in free variation with *daw*, as *daw* is with *kunu* among young speakers of Cebuano and Ilonggo.

(54)

Liligawan	ka	**kunu**,	mahal	ka	**daw** …	Informal contemporary
court	2SG.ABS	REP	love	2SG.ABS	REP	Tagalog/Filipino
(He) will pretend to court you, pretend to love you …[21]						

21

32.7. Summary

Reportatives in the languages spoken in the Philippines are syntactically optional second-position clitics that indicate that the information being conveyed was acquired by the speaker from some source, and not by knowing the fact directly or inferring it from circumstance. The source can be identifiable or unidentifiable, human or non-human like, for example, a story or a dream. A reportative can occur in a declarative, imperative, or interrogative construction with the entire clause as its scope. It can also occur in an NP, with just the NP as its scope. It is deployed strategically in texts to serve discourse functions. Its meaning can be purely reportative or extended to ‘purported’, ‘as if’ and ‘pretend’. Similarly, its function can be purely evidential or expanded to include a variety of purposes such as conveying tentativeness, signalling caution, injecting doubt, expressing surprise, criticism, rebuke or emphasis, as well as to be polite, modest, and also exact. There is a distinct reportative form for the newscasting register. In some of the languages, reportative forms undergo morphological processes that derive new words. Mi-

gration, mass media, language policy, and the rise of the internet have accelerated diffusion of reportative forms beyond the homeland of their original users resulting in interesting combinations and uses that merits further study.

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Notes:

([1]) Earlier works on Philippine-type Austronesian languages have referred to the linguistic unit as hearsay (HSAY) particle, e.g. Ballard (1974); reported speech (RS) marker, e.g. Pebley (1999); and Quakenbush 1999; or evidential (EVID) enclitic, e.g. Tanangkingsing (2013) see also Daguman 2013.

([2]) These clitics are collectively referred to in the literature as adverbial second-position clitics and are often distinguished from pronominal argument second-position clitics. See e.g. McFarland 2001.

([3]) Taken from N.E. Jedeliz, Jr., 'Baha,' Tambubo Hiligaynon, Blogspot, 28 June 2015, http://tambubohiligaynon.blogspot.com/2015/06/baha-malip-ot-nga-sugilanon-ni-nerio-e.html (accessed 13 February 2016).

([4]) Taken from L. B. Cabual, 'May Lihim ang Bahay-bahayan,' OFW-Ang Bagong Bayani. 1999–2012. http://ofw-bagongbayani.com/mk-may_lihim_ang_bahay-bahayan.html (accessed 11 February 2016).

([5]) Taken from J. Lobedica, 'Mapasigarbohon Si Dodong Bisaya,' Cebuano Short Story, Patnubay Online, 12 January 2013, http://patnubay.org/?p=8151, (accessed 11 November 2016).

([6]) Taken from A. T. Gonzales, 'Pinustahan nga Gugma', Tambubo Hiligaynon, Blogspot, 12 May 2014, http://tambubohiligaynon.blogspot.com/2014/05/pinustahan-nga-gugma-sarswela-sa-lima.html (accessed 13 February 2016).

([7]) See Tanangkingsing (2013: 244) for a similar observation regarding *kunu* and *lagi* 'AST'.

([8]) Taken from E.T. Acampado, 'Kasingkasing Sa Anak Sa Dagat,' BISAYA, You Are Number One!, 22 October 2007 http://bisaya-you-are-number-one.weebly.com/short-stories/kasingkasing-sa-anak-sa-dagat (accessed 3 December 2015).

([9]) Taken from N.E. Jedeliz, Jr., 'Baha,' Tambubo Hiligaynon, Blogspot, 28 June 2015, http://tambubohiligaynon.blogspot.com/2015/06/baha-malip-ot-nga-sugilanon-ni-nerio-e.html (accessed 13 February 2016).

([10]) Taken from N.E. Jedeliz, Jr., 'Baha,' Tambubo Hiligaynon, Blogspot, 28 June 2015, http://tambubohiligaynon.blogspot.com/2015/06/baha-malip-ot-nga-sugilanon-ni-nerio-e.html (accessed 13 February 2016).

([11]) Taken from J. Lobedica, 'Busikad Sa Kabuntagon', Cebuano Short Story, Patnubay Online, 14 December 2013 http://patnubay.org/?p=10085 (accessed 3 December 2015).

([12]) Taken from E.T. Acampado, 'Mata Sa Bagyo,' BISAYA, You Are Number One!, 22 October 2007; http://bisaya-you-are-number-one.weebly.com/short-stories/mata-sa-bagyo (accessed 3 December 2015)

([13]) Taken from E.T. Acampado, 'Mata Sa Bagyo,' BISAYA, You Are Number One!, 22 October 2007; http://bisaya-you-are-number-one.weebly.com/short-stories/mata-sa-bagyo (accessed 3 December 2015).

([14]) From Constantino, E., ed. 2002. 'Ullalim banna: a Kalinga epic.' *Endangered languages of the Pacific rim.* Kyoto: Nakanishi.

([15]) Retrieved from http://www.binisaya.com/cebuano/hungihong. Accessed 20 February 2016.

([16]) Taken from R. Cruz, 'Solon accused of badmouthing airline staff,' *ABS-CBN News*, 12 January 2011; http://news.abs-cbn.com/video/nation/01/11/11/solon-accused-bad-mouthing-airline-staff (accessed 11 November 2016).

([17]) Taken from the title of a news report retrieved from UB: VP Binay, 'di umano kinukutya ang pagiging ampon ni Sen. Grace Poe, [online video], 4 June 2015, https://www.youtube.com/watch?v=qtrMalfJE9A (accessed 6 November 2016).

([18]) Taken from a caption in a news video retrieved from UB: VP Binay, 'di umano kinukutya ang pagiging ampon ni Sen. Grace Poe, [online video], 4 June 2015, https://www.youtube.com/watch?v=qtrMalfJE9A (accessed 6 November 2016).

([19]) Taken from the news video 'Ang paghahanap sa di umano'y buto ng higante sa Borongan, Eastern Samar', [online video], 4 February 2013, http://www.gmanetwork.com/news/

video/150607/aha/ang-paghahanap-sa-di-umanoy-buto-ng-higante-sa-borongan-eastern-samar, (accessed 3 November 2016).

([20]) Retrieved from https://whisper.sh/whisper/051aff170deca63244547941c4416395323bfe/Ang-sarap-sakalin-ng-mga-tipong-liligawan-ka-kuno-mahal-ka-raw-tapos- Accessed 25 February 2016.

([21]) N.A., from Bacoor (place), 2016 [online photograph], retrieved from http://whisper.sh/whisper/051aff170deca63244547941c4416395323bfe/Ang-sarap-sakalin-ng-mga-tipong-liligawan-ka-kuno-mahal-ka-raw-tapos (accessed 8 November 2016).

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Evidentiality in Korean

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Abstract and Keywords

This chapter investigates the grammatical phenomenon of evidentiality in Korean. While referring to the diverse proposals on Korean evidentiality, it is proposed that the Korean evidential system consists of three grammatically and semantically distinct subclasses: perceptual, quotative/reported, and inferential, each of which has two or more member evidentials. The three subclasses are syntagmatically related, occurring in the order of inferential, perceptual, and quotative/reported. As inflectional suffixes, all evidentials occur optionally in pre-final or final slots in predicate constructions. It is also proposed that Korean evidentials are distinguished from TAM suffixes; when they occur together in predicate constructions, evidentials are always preceded by TAM elements. A further proposal is that all Korean evidentials have developed from non-evidential suffixes, phrases, or biclausal constructions via subjectification in grammaticalization.

Keywords: grammaticalization, inferential evidential, inflectional suffix, instantaneous evidential, Korean evidential system, perceptual evidential, quotative/reported evidential, retrospective evidential, subjectification

33.1. Introduction

THE grammatical concept of ‘evidentiality’ or ‘evidentials’ as the linguistic encoding of information source was barely mentioned in traditional linguistic descriptions of Korean. Inspired largely by Aikhenvald and Dixon (2003) and Aikhenvald (2004a), however, a number of Korean linguists have recently begun to explore evidentiality phenomena in Korean, including half a dozen recent doctoral dissertations from U.S. institutions alone (e.g. N. Kim 2000; J. Song 2002, 2013; Strauss 2005; K. Chung 2005, 2006a, 2007; M. Kim 2005, 2006, 2007; Papafragou, Li, Choi, and Han 2007; J. Chung 2009, 2010; Kwon 2009, 2011, 2012a, 2012b; J. M. Lee 2010, 2011; K. Song 2010; C. Lee 2010; Lim 2010; Lim and C. Lee 2012; J.W. Lee 2012; J. Kim 2012; Rhoades-Ko 2013; H. Lee 2014; and Ahn and Yap 2014, 2015).

It is generally agreed that Korean does have a set of inflectional suffixes that function as evidential markers and that their uses in discourse are optional unlike such other grammatical categories as tense, honorifics, speech levels, and sentence types which are obligatorily marked. There is a wide spectrum of disparity in opinion, however, as to the number and kinds of evidential markers, their syntactic and semantic functions, and their grammatical status vis-à-vis the other grammatical categories such as tense, aspect, and modality. Some recent proposals are given below to showcase to what extent linguists differ even in identifying evidentials in Korean.

N. Kim (2000) proposes three forms of reportative evidential in Korean: *-ta-ko han, -ta han*, and *-ta-n*, all translated as 'they say'. J. Song (2002, 2013) deals only with the inflectional suffix *-te* as evidential. Strauss (2005) proposes that there are at least three direct evidential/mirative markers: *-te, -ney,* and *-kwun*.

K. Chung (2005) proposes that the suffix *-te* and its 'present tense' counterpart *-ney* are evidential, admitting that some suffixes such as *-ess* are ambiguous between aspects or moods and evidentials. Similarly, J. M. Lee (2010, 2011) analyses *-te* and *-ney* as evidentials and argues that the direct versus inferential versus reportive evidential readings arise from *-te* and *-ney* by means of their interactions with tense and mood. She offers a modal analysis of the evidentials.

(p. 694) K. Song (2010) identifies the 'visual/sensory' *-te,* report/hearsay *-(nu)n-tan-ta, -tay, -ta-mye(nse), -ta-ko;* inferential *-nun-ka-po*; visual passive predicate *po-i*; and inferential predicate *moyang-i* as evidential markers. Kwon (2012b) proposes as evidential markers the direct/firsthand *-te-,* inferential *-napo-,* and the quotative/reportive *-ay*, and claims that the Korean verbal complex can express three types of modes of access to information using the three evidential markers. J. Kim (2012) recognizes three evidential types in Korean: direct *-te,* reportative *-tay,* and inference *-ci*, proposing that the Korean evidential system corresponds to B-1 system ('Direct/Visual, Inferred, Reported') in Aikhenvald (2004a: 42). He further argues that Korean evidentials are presuppositional triggers and that Korean evidentials are classified as one category.

Viewing evidentials as a subclass of epistemic modality, H. Lee (2014: 252–5) proposes the following suffixes and periphrastic forms as indicating evidentiary sources of various information conveyed: (a) hearsay evidentials *-tay* and its sentence-type variants (*-lay, -nyay, -(u)lay,* and *-cay*), (b) deductive reasoning *-keyss*, (c) abductive reasoning *-na-po* and *-(nu)nka-po*, (d) presumption *-(u)l ke(s)-i* and *-(u)l-kel*, (e) approximation *-(u)n/-nun/-(u)l kes kath, -(u)n/-nun/-(u)l tus-ha, -(u)n/-nun/-(u)l moyang-i*, and (f) retrospection of past experience *-te.* In addition, he (ibid.: 260) indicates that the verbal suffix *-ney* represents a genuine example of 'immediate' evidential as it can only refer to the speaker's current experience of the situation.

Thus far, more than twenty different items have been proposed as evidentials in Korean. These varying proposals appear to be due partly to different interpretations of the definitions and criteria of evidentials, partly to the intersection of modality and evidentiality,

and partly to the polysemous nature of the suffixes and periphrastic constructions in question.

Amidst the diverse proposals on Korean evidentiality, I would like to present, tentative as it may be, what I think is a grammatical system of Korean evidentials in what follows. Extensive reference will be made to the various proposals advanced thus far.

33.2. The Korean evidential system

33.2.1. Background

Typologically, Korean is a language with head-final, predicate-final syntax in both main and subordinate clauses and typical agglutinative morphology. Thus, all lexical, phrasal, and clausal modifiers precede their heads and several scores of inflectional suffixes are attached to predicates (verbs, adjectives, copulas) to perform various grammatical functions, such as tense/aspect, subject honorifics, addressee honorifics, modality, speech levels, sentence types, and clause types. Furthermore, being a language with honorifics, Korean sentences cannot be communicated in discourse without the use of appropriate speech levels that are portmanteaued with sentence-type enders. Five speech levels (plain, intimate, familiar, polite, and deferential) are of common use in contemporary Korean.

Until very recently, evidentiality was a novel concept in Korean linguistics. Even at present, a majority of Korean linguists and grammarians are either still unfamiliar with it or not ready to accept it as a grammatical category in Korean. No contemporary dictionary of Korean has yet included it as a grammatical category. My own grammars (Sohn 1994, (p. 695) 1999) depict the inflectional system of Korean predicate constructions without reference to evidentiality.

This does not mean that Korean has no way to grammatically mark information source regarding whether the speaker saw an event, or heard it, or inferred it based on visual evidence or on common sense. I will look into the following issues:

1. What inflectional suffixes are to be considered as evidentials? Why?
2. How have these suffixes developed as evidentials?
3. What is the grammatical status of Korean evidentials?
4. How does evidentiality differ from and interact with tense/aspect and modality?
5. What are the typological features of Korean evidentials?

I will follow the definition of evidentials in Aikhenvald (2004a) that evidentiality is a linguistic category whose real-life counterpart is information source and that it is a grammatical category which has source of information as its primary meaning—whether the narrator actually saw what is being described, or made inferences about it based on evidence, or was told about it. For typological discussion of Korean evidentiality, reference

will be made to the following semantic types that Aikhenvald (2004a: 63) has observed as recurring.

I. VISUAL covers evidence acquired through seeing.
II. SENSORY covers evidence through hearing, and is typically extended to smell and taste, and sometimes also touch.
III. INFERENCE based on visible or tangible evidence or result.
IV. ASSUMPTION based on evidence other than visible results: this may include logical reasoning, conjecture, or common sense.
V. REPORTED, for reported information with no reference to who it was reported by.
VI. QUOTATIVE, for reported information with an overt reference to the quoted source.

Aikhenvald adds that further parameters may involve general knowledge, different kinds of assumption and reasoning, and degrees of verbal report—secondhand and thirdhand.

My main concern is the structural aspects of the grammatical system of evidentials in Korean, dealing only with relevant inflectional suffixes. Thus, I will not deal with lexical devices and periphrastic constructions that are available to refer to information source as well. Nor do I touch on the pragmatic analysis, discourse strategies, and first or second language acquisition of evidentiality in Korean. Some of the works dealing with such non-structural aspects include M. Kim (2005, 2006, 2011); Papafragou, Li, Choi, and Han (2007); J. Kim (2012); Rhoades-Ko (2013); and Ahn and Yap (2014, 2015).

Although not as strictly as languages like Quechua's three evidentials (Faller 2002) and Tariana's five evidentials, as illustrated in Aikhenvald (2004a), which obligatorily specify distinct sources of information with distinct morphemes, Korean has a set of inflectional suffixes that satisfy Aikhenvald's definition of evidentiality and thus can be classified as evidentials. As in many languages, Korean evidentiality has a clause or a sentence as its scope and is marked on the predicate (verb, adjective, and copula) as inflectional suffixes. (p. 696)

All Korean evidentials are optional in occurrence. Thus, omitting an evidential does not produce an ungrammatical or unnatural sentence, although the hearer might be curious about or ask how the information was acquired.

33.2.2. Evidential markers in Korean

The inflectional suffixes in Korean whose primary meaning is viewed as encoding the source of information can be classified into (a) perceptual, (b) quotative and reported (hearsay), and (c) inferential.

33.2.2.1. Perceptual evidentials

[1] The suffix *-te*

The pre-final inflectional suffix *-te* (and its variants *-tey* in familiar or polite-level ender *tey(-yo), -ti* in deferential-level ender *-sup-ti-ta, -t* in plain-level question ender *-ti* [*-t* + archaic ender *-i*], and dialectally *-tu*) is the most extensively discussed suffix in regard to evidentiality and is recognized by most linguists working on Korean evidentiality as a direct or firsthand evidential. Translated as 'I have found that; I have realized that; it is known that; I heard that' in dictionaries, this suffix denotes that the speaker has firsthand information about the situation, which was acquired prior to the speech time. Since this suffix is used when the speaker wants to communicate that (s)he has visual, sensory, or inferential evidence (e.g. 'saw, felt, realized') for what (s)he is talking about, its primary meaning and function is to refer to the source of the information expressed by the proposition.

In traditional and contemporary Korean grammar, this suffix is categorized variously as a tense marker (e.g. H. Choi 1965: 348; Na 1971: 129; Yeon and Brown 2011: 200), an aspect marker (e.g. Martin 1954: 37–40; H. Lee 1991), a mood marker (e.g. Yang 1972: 4; Sohn 1975) or a manner marker (e.g. Chang 1973: 40). These various categorizations are obviously due to its historical evolution, composite semantic contents, and syntactic functions.

In Sohn (1975), I analysed *-te* as a retrospective mood marker with the semantic content of the speaker's (in statement) and hearer's (in question) past perception of a propositional content through (a) observation (e.g. see, witness, observe), (b) experience (e.g. feel, sense, experience), or (c) inference (realize, find out, notice, hear, learn, infer). I would like to essentially maintain the semantic contents of *-te* that I proposed then. Observe the plain-level sentences in (1), where the evidential readings are represented in square brackets.

(1)

a. John-i ttena-ss-ta
John-SU leave-PAST-DEC
John left

a'. John-i ttena-ss-n-i?
John-SU leave-PAST-INDIC-INTER
Did John leave?

b. John-i ttena-**te**-la [speaker's past perception]
John-SU leave-RETRO-DEC
i. [I saw] John leaving
ii. [I realized/noticed/learned] that John would be leaving

b'. John-i ttena-**te**-nya/ttena-**t**-i? [hearer's past perception]
John-SU leave-RETRO-INTER
i. [Did you see] John leaving?
ii. [Did you realize/notice/learn] that John would leave?
c. John-i ttena-ss-**te**-la [speaker's past perception]
John-SU leave-PAST-RETRO-DEC
[I realized/noticed] that John had left
c'. John-i ttena-ss-**te**-nya/-**t**-i? [hearer's past perception]
John-SU leave-PAST-RETRO-INTER
[Did you realize/notice/learn] that John had left?

(p. 697)

Notice that while simple past sentences with the past/perfect marker *-ess* in (1a, a') do not indicate any information source, the sentences with *-te* indicate that the information was obtained via the speaker's (or hearer's in question) visual or inferential perception of the event. In a non-past sentence, *-te* has two readings: the speaker's direct past perception through direct visual observation, as in (1b-i, 1b'-i), and indirectly through inference based on the concrete evidence or knowledge that the speaker had obtained through seeing or hearing, as in (1b-ii, 1b'-ii, 1c, 1c'). Which reading is actually involved in a given situation is determined by a time adverbial such as *nayil* 'tomorrow' or *cikum* 'now' or a given discourse context.[1]

In a past sentence, *-te* always denotes the speaker's past perception of the propositional content through inference based on concrete evidence or acquired knowledge (e.g. result states, TV, newspapers, books, internet, announcements). Dual interpretation of *-te* in non-past sentences apply to all action verbs, descriptive adjectives, and copulas, as illustrated in (2).[2]

(2)

a. John-un solcikha-**te**-la
John-TOP open-hearted-RETRO-DEC
i. [I saw] John was open-hearted
ii. [I learned] that John was open-hearted
b. John-un solcikhay-ss-**te**-la
John-TOP open-hearted-PAST-RETRO-DEC
[I learned] that John had been open-hearted

(p. 698)

Another essential meaning of *-te* is the speaker's (hearer's in question) past perception of a propositional content through his/her own firsthand experience (felt, sensed, experienced, etc.). This meaning occurs mainly with sensory/emotive adjectives, unaccusative verbs, and the conjecture suffix *-keyss*, and with the experiencer subject who is the speaker in statement and the hearer in question. Since the speaker's own feeling is involved and predicate referents are unobservable, perception through observation is vacuous.

(3)

a. na-nun kimchi-ka mayp-**te**-la
1-TOP kimchi-SU hot-RETRO-DEC
[I felt] the kimchi was hot.

b. ne-nun mopsi cichi-**te**-nya?
2-TOP very be-tired-RETRO-INTER
[Did you feel] you were very tired?

c. ne-nun cwuk-keyss-**t**-i?
2-TOP die-may-RETRO-INTER
[Did you feel] you would die?

Sentence (3a) contains sensory/emotive adjective, while sentence (3b) has sensory/emotive unaccusative verb. In (3c), *-te* follows *-keyss*, an inflectional suffix denoting the speaker's (hearer's in question) conjecture.

It is well-known that the retrospective suffix *-te* cannot be used in predicate constructions that refer to the speaker's conscious action (e.g. H. Lee 2014: 254). A more precise statement may be that this suffix cannot be used to indicate the speaker's visual perception of his/her own action or state. If it is used, the sentence would unintentionally third-personify the speaker, making the assertion pragmatically anomalous.

(4)

a. ??na-nun nol-ko.iss-te-la
1-TOP play-PROG-RETRO-DEC
??[I saw] myself playing around.

b. ??na-nun solcikha-**te**-la
1-TOP open.hearted-RETRO-DEC
??[I saw] I was open-hearted.

As a pre-final inflectional suffix, *-te* is used in limited contexts of relative and conjunctive clauses. It occurs in relative clauses as in *coh-(ass)-te-n salam* 'a person who (I perceived) used to be good', and in conjunctive clauses as in *John-i ka-**te**-ni* '(I saw) John went, and then …' and *nay-ka ka-ss-**te**-ni* 'When I went, … '. Space does not allow me to go into the discussion of the embedded use of *-te* (cf. Sohn 1975; C. Lee 2010). (p. 699)

In terms of its origins, the evidential meaning of *-te* appears to have evolved from the assumed past/perfect *-tɔ* (> *-te*). Traditional linguists like Na (1971) regard *-te* as a genuine past-tense morpheme in Korean on historical grounds, in that the suffix *-tɔ* functioned as the only past tense in Middle Korean when the contemporary past/perfect suffix *-ess* and *-ess-ess* did not develop from the resultative state *-e isi* yet. Similarly, D. Choi (1988) points out that the fifteenth-century data showed that *-te* was used to indicate the speaker's own action as well (cf. H. Lee 2014). Unlike its contemporary use as a pre-final suffix (a domain of the speaker's subjective stance), in Middle Korean, *-te* was placed immediately after predicate stems, even before the subject honorific suffix, suggesting that it functioned as a past tense/aspect marker.

Although *-te* still incorporates past time as an inherent semantic feature, it cannot be regarded as a past tense or aspect marker in contemporary Korean, as (a) the meaning of the speaker's perception is primary, (b) there are genuine past/perfect markers *-ess* and *-ess-ess* that fill an independent morphosyntactic slot preceding the *-te* slot in predicate constructions, (c) it cannot be used with a proposition that denotes the speaker's activity or non-sensory state, and (d) it does not make the proposition a past or perfective event, as seen in *John-un nayil ttena-**te**-la* '[I found out] that John leaves tomorrow.'

In my earlier studies (Sohn 1975, 1994, 1999), I have termed *-te* as the retrospective mood along with the indicative mood *-(nu)n/ni* and the requestive mood *-si* in view of their morphosyntactic parallelism. For the reasons discussed thus far, however, it is more appropriate for *-te* (perceptual evidential) and the elements to be discussed below to be subsumed under the category of evidentiality.

[2] The sentence ender *-ney*

Another direct, firsthand evidential in Korean is the sentence ender *-ney* (e.g. Strauss 2005; K. Chung 2005; J. M. Lee 2011; H. Lee 2014: 260). It refers to the speaker's instantaneous perception of a situation or event, often with mild exclamation. Thus, traditionally and in most dictionaries, it is treated as an exclamation sentence ender. Strauss (ibid.) terms *-ney* as a cognitive realization marker along with *-te-la* and the mirative *-kwuna*.[3] K. Chung (2005) proposes that *-ney* is the 'present tense' counterpart of the evidential *-te.* J. Lee (ibid.) similarly views *-te* and *-ney* as evidentials. H. Lee (ibid.) indicates that *-ney* is an immediate evidential. Observe the sentences in (5) where *-ney* is used as a sentence ender.

(5)

a. pakk-ey pi-ka o-**ney**(!)
outside-at rain come-DEC/INS
i. It's raining outside. (familiar level)
ii. Ah, [I see] it's raining outside! (evidential)

b. John-un nayil ttena-**ney**-yo
John-TOP tomorrow leave-INS-POL
[I realize] John leaves tomorrow.

c. cengmal sok sangha-**ney**-yo
really inside/mind hurt-INS-POL
[I feel] I am really upset!

d. John-un pelsse ttena-ss-**ney**-yo
John-TOP already leave-PAST-INS-POL
[I realize] John has already left.

e. na-nun phikonhay cwuk-keyss-**ney**-yo.
1-TOP tired die-may-INS-POL
[I feel] like I am dying of exhaustion!

(p. 700)

When *-ney* is used without the politeness particle *-yo*, it may denote two different situations. First, it is used as a familiar-level declarative sentence ender, as opposed to other speech levels and other sentence types. In this prototypical use, the intonation contour usually ends in a low tone with no exclamation. In this use, *-ney* does not function as an evidential, but simply denotes an assertive illocution in a familiar-level speech act. The second use is to express the speaker's instantaneous perception of an event or state (fre-

quently unexpected ones), in which case the intonation contour usually ends in a slightly raised (mid) tone unless it is followed by the politeness particle *-yo* with a low tone. This second use of *-ney* is as an evidential since it expresses the source of the information of the propositional content, namely the speaker's instantaneous perception.

Notice in the illustrative sentences in (5) that *-ney,* as an evidential, carries the meaning of the instantaneous (here and now) perception of the proposition through observation, experience, and inference. This semantic content of *-ney* is not different from that of *-te,* except that the perception time is the utterance time (here and now) in the former and prior to the utterance time in the latter. In this respect, K. Chung's (2005) proposal that *-ney* is the present-tense counterpart of the evidential *-te* appears partly correct, although I disagree with the view that both *-te* and *-ney* mark tense in contemporary Korean. On the other hand, there are several morphosyntactic disparities as well as similarities. Disparities include that (a) *-te* is a pre-final suffix, whereas *-ney* is a sentence ender; (b) *-te* refers to the hearer's perception in question, whereas *-ney* cannot be used in question at all; (c) *-te* can be used in a relative and conjunctive clauses, but *-ney* cannot be used in any embedded clause; and (d) *-te* is used in all speech levels, whereas *-ney* is used only in two levels: familiar *-ney* and polite *-ney-yo.* One similarity is that both can occur after the conjecture *-keyss* as in *ka-ss-keyss-tey-yo* 'I perceived (someone) might have gone' and *ka-ss-keyss-ney-yo* 'I perceive (someone) may have gone'. Also, both occur after the inference evidential suffix *-na-po* (to be discussed in §33.2.2.3), as in *ka-na-po-tey-yo* 'I perceived (someone) appeared to be going' and *ka-na-po-ney-yo.* 'I perceive (someone) appears to be going.'

All the abovementioned disparities will disappear if *-ney* is compared to *-tey,* instead of *-te.* I assume that the contemporary familiar-level ender *-ney* developed from the fusion of the indicative suffix *-ne* (< *-nɔ*) and the archaic familiar-level ender *-i.* As we observed in (5a), the evidential meaning must have diverged from this familiar-level ender *-ney.* When the polite-level ender *-yo* is attached to *-ney* (as in *-ney-yo*), *-ney* lose its level (p. 701) meaning while retaining only the evidential meaning. Similarly, *-te* has fused with the archaic ender *-i* to develop the familiar-level ender *-tey* and loses its level meaning in the polite level *-tey-yo.* Thus, K. Chung's (2005) proposal that *-ney* is the present-tense counterpart of the evidential *-te* is misleading. A more correct statement may be that *-ney* is the present counterpart of *-tey.* One difference, however, is that the suffix *-te* is inherently an evidential in all contexts, whereas the indicative *-ne* by itself cannot function as an evidential.

[3] The sentence ender *te-la-ko*

The sentence ender *-te-la-ko* [intimate level] and *-te-la-ko-yo* [polite level] have been fossilized as a retrospective evidential in the rough meaning of 'You know, I saw/experienced/inferred that'. This frequently used casual ender consists of the declarative evidential ender *-te-la* + quotative particle *ko.* The particle *ko*, however, has lost its quotative function due to the loss of the following main verb *ha* 'say' and obtained the grammaticalized and subjectified meaning of the speaker's own casual/emphatic report of the proposi-

tion to the addressee. Compare the retrospective evidential sentences (6a,b,c) with *te-la-ko* constructions (6a',b',c').

(6)

a. pakk-ey pi-ka o-**tey**-yo
outside-at rain-SU come-RETRO-POL
[I saw] it raining outside.

a'. pakk-ey pi-ka o-**te-la-ko-yo**
outside-at rain-SU come-RETRO-DEC-QT-POL
[You know, I saw] it raining outside.

b. ku ttay cengmal sok sangha-**te**-la
that time really inside/mind hurt-RETRO-DEC
[I felt] I was really upset that time.

b'. ku ttay cengmal sok sangha-**te-la-ko**
that time really inside/mind hurt-RETRO-DEC-QT
[You know, I felt] I was really upset that time.

c. John-un nayil pwusan-ey ka-**tey**-yo
John-TOP tomorrow Pusan-to go-RETRO-POL
[I learned] John is leaving for Pusan tomorrow.

c'. John-un nayil pwusan-ey ka-**te-la-ko-yo**
John-TOP tomorrow Pusan-to go-RETRO-DEC-QT-POL
[You know, I learned] John is leaving for Pusan tomorrow.

The semantic differences between the two sets are minor. While (6a, b, c) are straightforward expressions of the speaker's visual observation, experience, and inference, (6a',b',c') express the speaker's visual observation, experience, and inference with the connotation of (p. 702) the speaker's casual/emphatic report with some emotive appealing to the addressee, comparable roughly to the English discourse marker 'you know'.

Unlike the pre-final *-te,* which is used in question, *-te-la-ko(-yo)* is used exclusively in statements and cannot be used in questions, except in echo questions like *pakk-ey pi-ka o-te-la-ko-yo?* 'Are you saying that you saw it raining?' Another restriction is that only the intimate (*-te-la-ko*) and polite level (*-te-la-ko-yo*) are available. The evidential *-ney* has not been extended to a similar construction.

33.2.2.2. The quotative and reported (hearsay) evidentials

Quotative and reported (or hearsay) evidentials are indirect and secondhand ones. Discussions on these evidentials have focused on the sentence enders *-ta-n-ta/-la-n-ta* and *-tay/-lay* (and their variants), both translated as 'someone reports that, I heard that', where *-la* and *-lay* occur immediately after a copula (*i*) or the retrospective evidential *-te* (e.g. H. Lee 1991, 2014; N. Kim 2000; S. Sohn and Park 2003; Chung 2005; J. Chung 2009, 2010; Lim 2010; J. Kim 2012). K. Song (2010) discusses *-ta-mye(nse)* and *-ta-ko*, in addition to *-ta-n-ta* and *-tay,* while Ahn and Yap (2014, 2015) examine the development of *-ta-ko, -ta-mye, -ta-myense, ta-nu-n*, and *-ta-n-ta*, tracing their pragmatic functions in discourse.

The genesis of quotative/reported evidentials is caused by the omission of the quotative particle *ko* 'that' in a plain-level quotative clause and the verb of saying *ha* (contracted from *malha* 'say, talk') in the main clause. The reduction process is assumed to be initiated by the omission of *ko*, as its omission is predictable and recoverable before a main clause verb of saying and does not affect the bi-clausehood. The next step is the omission of the main clause verb *ha* due arguably to the well-known intervocalic *h* weakening in Korean (e.g. Sohn 1999: 175) and subsequent shortening of geminate *aa* (e.g. Sohn ibid.: 176). When this so-called *ko ha* 'say that' omission happens, the orphaned suffixes in the main clause are agglutinated to the embedded sentence ender, deriving new monoclausal enders.

Depending on the embedded sentence types, the innovated enders are (a) declarative series 'X reports that': plain *-ta/la-n-ta* (< *-ta/-la ko ha-n-ta*), intimate *-tay/-lay* (< *-ta/-la ko hay*), familiar *-ta/la-ney* (< *-ta/-la ko ha-ney*), polite *-tay/lay-yo* (< *-ta/-la ko hay-yo*), deferential *-ta/la-p-ni-ta* (< *-ta/-la ko ha-p-ni-ta*), and relative *-ta/la-nu-n* (< *-ta/-la ko ha-nu-n*), (b) interrogative series 'X asks Y whether': plain *-nya-n-ta* (< *-nya ko ha-n-ta*), intimate *-nyay* (< *-nya ko hay*), etc. and relative *-nya-nu-n* (<*-nya ko ha-nun-n*), (c) propositive series 'X suggests that': plain *-ca-n-ta* (< *-ca ko ha-n-ta*), intimate *-cay* (< *-ca ko hay*), etc. and relative *-ca-nu-n* (< *-ca ko ha-nu-n*), (d) imperative series 'X commands that': plain *-(u)la-n-ta* (< *-(u)la ko ha-n-ta*), intimate *-(u)lay* (< *-(u)la ko hay*), etc. and relative *-(u)la-nu-n* (< *-(u)la ko ha-nu-n*).

The whole reduction processes involved may be schematized as: Plain-level embedded sentence ender (*-ta/-la, -nya, -(u)la, -ca*) + *ko # ha(y)*-suffixes > (predictable *ko* deletion) *-ta/-la, -nya, -(u)la, -ca # ha(y)*-suffixes > (intervocalic *h* weakening) *-ta/-la, -nya, -(u)la, -ca # a(y)*-suffixes > (geminate-vowel shortening) *-ta/-la, -nya, -(u)la, -ca + (y)*-suffixes > (agglutination of orphaned ender) *-ta(y)/-la(y), -nya(y), -(u)la(y), -ca(y)* + main clause suffixes. The innovated enders can be made interrogative like *-ta/la-ni?, -tay/lay-ni?, -tay/lay-yo?,* and *-ta-p-ni-kka?*, but cannot be made imperative nor propositive. Notice that the most frequently discussed *-ta/la-n-ta* and *-tay/-lay* are only a frequently used subset of the whole set of innovated enders. **(p. 703)**

The distinction is made between quotative and reported evidentials. If the reporter is specified overtly or covertly in a sentence (less grammaticalized), it is interpreted as a

quotative. If the reporter is so general and thus unspecifiable (slightly more grammaticalized), the reported reading is obtained.[4]

[1] Quotative evidentials: declarative *-ta(y)/-la(y),* interrogative *-nya(y),* imperative *-(u)la(y),* and propositive *-ca(y)*

The plain-level embedded sentence enders of the four sentence types function as quotative evidentials if, due to *ko ha* omission, followed by one or more inflectional suffixes, including a sentence ender. The variants *-tay/-lay, -nyay, -cay,* and *-(u)lay* are evidentials by themselves since they have absorbed the segment *-y* of the saying verb *ha(y),* as in *ka-cay* < *ka-ca (ko ha)y* 'someone suggests us to go', *ka-lay-yo* < *ka-la (ko ha)y-yo* 'someone commands us to go'. I assume that the quotative meaning of the omitted *ko ha* is not lost but attached to the embedded enders to render them quotative evidentials. Native speakers can readily recover the bi-clausal form *ko ha* based on the quotative meaning in the embedded enders. Thus, the evidential *-tay* in (7d) is generated from (7a) via (7b) and (7c), while (7a) can be readily recovered from (7d) based on the quotative meaning of *-tay*.

(7)

a.	nayil	pi-ka	o-n-ta	ko	hay-yo
	tomorrow	rain-SU	come-INDIC-DEC	QT	say-POL
b.	nayil	pi-ka	o-n-ta		hay-yo
	tomorrow	rain-SU	come-INDIC-DEC		say-POL
c.	nayil	pi-ka	o-n-ta		ay-yo
	tomorrow	rain-SU	come-INDIC-DEC		say-POL
d.	nayil	pi-ka	o-n-**tay**-yo		
	tomorrow	rain-SU	come-INDIC-QUOT-POL		

They said it will rain tomorrow.

All the sentences in (7) are grammatical and largely synonymous. In view of the seeming synonymy, one may want to argue that the evidential suffixes are not grammaticalized ones but merely synchronic contractions that can easily be recoverable by native speakers to full bi-clauses. Indeed, the omitted *ko ha* seems to be present in native speakers' psychological reality, suggesting that they are a recoverable deletion.

Yet, there are some reasons to treat the innovated suffixes as evidentials as against their bi-clausal counterparts. First, native speakers use them as regular monoclausal suffixes in a manner parallel to *-tey-yo* and *ney-yo,* as in *ttena-keyss-tey/ney-yo* 'I perceive(d) that X might/may have left' and *ttena-keyss-tay-yo* 'X said that (s)he will leave'. Second, unlike in a bi-clausal situation where the verb *ha* can be preceded by a negative adverb *an* 'not' or *mos* 'cannot' and followed by a subject honorific *-(u)si* or a modal, the evidential suffixes (p. 704) cannot be negated, subject-honorified, or modalized. Third, there are connotative differences in the apparent synonymy. The meaning in the un-omitted *ko ha*

constructions carries relatively more formal connotation with the speaker's objective stance, whereas the meaning of the *ko ha*-omitted enders carries more casual connotation with the speaker's somewhat subjectivized stance (sometimes with emotive connotation). Finally, there is some evidence that quotative/reported evidentials are in the process of incipient grammaticalization, as shown in the unnaturalness of evidential constructions with two subjects (upper and lower). For instance, (8a) where only one subject occurs as the reporter is natural, but (8b) in which two subjects appear sounds unnatural, requiring forced interpretation.

(8)

a. kyoswu-nim-un phathi-ey o-si-keyss-**tay**-yo
professor-HT-TOP party-to come-SH-will-QUOT-POL
The professor said he would come to the party.

b. ?John-i kyoswu-nim-un phathi-ey o-si-keyss-**tay**-yo
John-SU professor-HT-TOP party-to come-SH-will-QUOT-POL
John says the professor will come to the party.

[2] Reported (hearsay) evidentials: the declarative *-ta(y)/-la(y)*

Only the declarative evidentials *-ta(y)/-la(y)* may function as hearsay evidentials, as in *han-kwuk-ey cwungkwuk haksayng-i manh-tay-yo* '[they say/I heard/it is said] that there are many Chinese students in Korea'. Some linguists include the sentence-type variants, such as *-nyay, -(u)lay,* and *-cay* as quotative/reported evidentials (e.g. H. Lee 2014). Thus, Kwon (2011) sets up *-ay* to cover all these variants as well as *-tay*. These variants, except the declarative, however, function as quotative but not as reported, as they require an overt or covert reporter, as in *John-un na-eykey mikwuk ka-**nyay*** 'John asked me whether I am going to America'.

[3] The sentence ender *-ta/la-mye(nse)* 'I heard that, is it true?'

The sentence ender *-ta/la-mye/mey* and its source form *-ta/la-myense* are used when the speaker heard the propositional content indirectly and would like to mildly confirm what (s)he has heard. This ender is viewed as a reported or hearsay evidential (e.g. K. Song 2010; M. Kim 2011; Ahn and Yap 2014, 2015).[5]

I speculate that this ender has developed from *ko ha* omission in a conjunctive clause and the omission of the main interrogative clause. The processes involved may have been: plain-level ender *-ta/-la ko# ha-myense ##* interrogative clause > (*ko ha* omission) *-ta/-la-myense ##* interrogative clause > (main clause deletion while attaching the interrogative connotation to *-myense*) *-ta/-la-myense?!* Hypothetically, the historical source of (9) is assumed (p. 705) to be *John-un aphu-ta (ko ha)-myense (cip-ey iss-ni)?* 'Is John staying home saying that he is sick?', if the parenthesized parts are lost and the ender *-ta-myense* was subjectified and optionally contracted.

(9)

John-un	aphu-**ta-mye(nse)**-yo?!	
John-TOP	sick-DEC-while-POL	
I heard that John is sick, is it true?		

33.2.2.3. Inferential evidentials

[1] The phrasal suffix *-na/nunka-po* 'it seems, it looks like'

The innovated inflectional suffix *-na-po* and its free variant *-(n)un-ka-po* are viewed as (indirect or secondhand) inferential evidentials (e.g. Strauss 2005: 440; K. Song 2010; Sohn 2012; Kwon 2012a,b; H. Lee 2014). Notably, Kwon (2012b: 114) argues that *-na-po* is an inferential evidential marker, defining 'inferential evidentiality as a situation in which information has been inferred using inductive logic applied to circumstantial sensory evidence (Aikhenvald 2004a: 36).' H. Lee (2014) indicates that abductive reasoning is manifested by *-na/nunka-po* in that a source or cause is conjected based on a situation that is known to be its consequence. Thus, for example, seeing someone yawning, one can say *phikonha-**na-po**-ayo* 'he seems to be tired.'

As I indicated in Sohn (2012), *-na/nunka po-* has two distinct usages: the indirect question in the literal meaning of 'see whether' (10a) in a bi-clausal construction and the evidential function of the speaker's inference as a monoclausal suffix in the sense of 'it seems (looks, appears), I guess' (10b). The evidential suffix is assumed to have diverged from the bi-clausal indirect question construction through structural reanalysis and semantic shift. Due to the decategorization involved (cf. Hopper 1991), the suffix is unable to take any TAM suffix, including subject honorific *-usi*, past/perfective *-ess(-ess),* modal *-keyss*, or indicative *-n*, nor negation *an/mos*, as in (10b, cf). In the evidential usage, no imperative, propositive, or interrogative sentence is allowed. In all speech levels, only the declarative occurs.

(10)

a.	pi-ka	o-**na/nunka**	**po**-ass-eyo
	rain-SU	come-whether	see-PAST-POL
	I checked whether it was raining or not.		

b. pi-ka o-**na/nunka-po**-ayo
rain-SU come-seem-POL
It seems to be raining.

cf. *pi-ka o-**na/nunka-po**-ass-eyo (use of past/perfective –ass)
rain-SU come-seem-PAST-POL
It seemed to be raining.

*pi-ka o-**na/nunka-po**-n-ta (use of indicative -n)
rain-SU come-seem-INDIC-DEC
It seems to be raining.

(p. 706) [2] The phrasal suffix *-nun/un/ul-moyang-i* 'it appears, it seems'

The phrasal suffix *-nun/un/ul-moyang-i* is regarded as an inferential evidential (e.g. K. Song 2010; H. Lee 2014). This suffix has developed from a relative clause ender *-(n)un* (non-past in verb), *-un* (past in verb or non-past in adjective), or *-ul* (prospective) + noun *moyang* 'appearance, shape' + copula *i* 'is the appearance that'. The decategorization of the bi-clausal construction to a suffix is observed in the fact that the copula *i* cannot be inflected in terms of tense, subject honorific, or modal. The speaker can use this phrasal suffix only when there is external circumstantial sensory evidence for saying the proposition. For instance, hearing (but not seeing) rain falling, the speaker may utter (11a), while seeing the overcast, (s)he may utter (11b).

(11)

a. pi-ka o-**nun-moyang-i**-eyyo
rain-SU come-REL-appearance-be-POL
It seems to be raining.

b. pi-ka o-**l-moyang-i**-eyyo
rain-SU come-REL-appearance-be-POL
It appears that it will rain.

Now the question is how the inferential evidential *-na-po* and *-nun/un/ul-moyang-i* are different from the inference-based perceptual evidentials *-te* and *-ney*. The former convey the speaker's inference made on the basis of what (s)he has seen or heard. The latter, on the other hand, do not convey an inference but the speaker's perception of an inferred situation as if it is an observed fact. The former have inferences as core meanings, whereas the latter have visual, experiential, or inferential perceptions as their core meanings.

[3] Evidential or modal?: *-keyss, -ci, -ul-kes-i, -ulkel,* etc.

Inflectional suffixes like the speaker's volition/conjecture *-keyss,* speaker's committal/suppositive/suspective *-ci,* speaker's prediction *-ul-kes-i,* and speaker's presumption *-ulkel* are treated as evidentials by some linguists (e.g. K. Song 2010; J. Kim 2012; H. Lee 2014). As the authors concerned argue, all these suffixes cannot be felicitously used without the speaker's having some background evidence or knowledge. For example, some linguists regard the suffix *-keyss* as evidential because it indicates that the propositional content conveyed is the speaker's conjecture made through his/her deductive reasoning based on the evidence that (s)he has acquired or the relevant knowledge (s)he has.

The same suffixes, however, are treated as epistemic modal elements by many linguists as well, because they satisfy the common definition of epistemic modality that it refers to the way the speaker communicates his/her doubts, certainties, and guesses or to the degree to which the speaker is committed to the truth of the propositional content conveyed.

The issue is: what is the *primary* meaning of these suffixes, the source of information or the speaker's evaluation/judgement/belief of the knowledge upon which a proposition is based? In this respect, I would prefer to view these elements as modal, rather than evidential. It is undeniable, however, that all evidentials have some modal force, while all modal elements have some evidential force. (p. 707)

33.3. Grammatical status of Korean evidentials

As observed thus far, the Korean evidential system consists of the three subclasses: perceptual, quotative/reported, and inferential. All the members of the three subclasses are inflectional suffixes that occur optionally in predicate constructions. In view of their broad semantic scopes, they are placed at the pre-final or final slots in predicate constructions.

The three subclasses are in a syntagmatic relationship and can occur in sequence in a predicate construction, while the members of each subclass are in a paradigmatic relationship and only one member may occur in a given sentence. When all three subclasses happen to occur in a simple sentence, the syntagmatic order among them is Inferential + Perceptual + Reportative/hearsay. Furthermore, evidentials occur after the subject honorific (*-usi*), tense/aspect (*-ess(-ess)*), and volitive/conjecture/future (*-keyss*) if any of these occurs, as illustrated in (12).

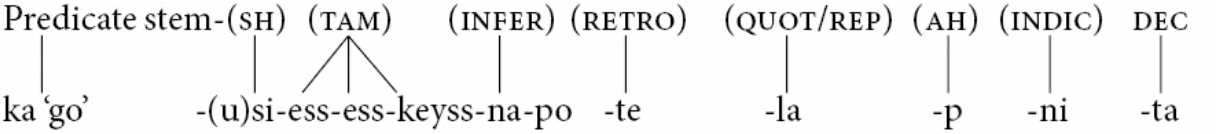
(12)

a. John-un ttena-**na-po-te-lay**-yo
John-TOP leave-INFER-RETRO-QUOT-POL
(Someone) says that (s)he perceived that John seemed to be leaving.

b. kyoswu-nim-un ttena-si-ess-keyss-**ney/tey**-yo
professor-HT-TOP leave-SH-PAST-may-INS/RETRO-POL
I perceive(d) that the professor may/might have left.

Thus, I propose that the inflectional structure of Korean predicates include the evidential categories as illustrated in (13), where () stands for optional occurrence. Notice that only the stem and sentence/clause type suffixes occur obligatorily.

(13)



'(The reporter) says [-*la*] (s)he perceived [-*te*] that it appeared [-*na-po*] (to him/her) that (a senior person) might [–*keyss*] have gone' (talking to a senior addressee [-*p-ni-ta*])

33.3.1. A brief conclusion

Based on the foregoing observation, Korean evidentials may be characterized as follows. First, Korean evidentials, all optional in occurrence, are classified into three subclasses: perceptual, quotative/reported, and inferential, each of which has two or more paradigmatically related member evidentials. The three subclasses are syntagmatically related, occurring in the order of inferential, perceptual, and quotative/reported.

(p. 708) Second, perceptual evidentials manifest a contrast between a prior perception (retrospective) evidential and an instantaneous perception evidential. The semantic feature of pastness is built in the former, but the evidential marker does not function as a past-tense marker in contemporary Korean.

Third, all the proposed evidentials are inflectional suffixes. They are distinguished from and interact with TAM elements. All three subclasses occur only after TAM, indicating that they are distinct from TAM and their semantic scopes are broader than TAM.

Fourth, all the proposed evidentials are reanalysed, subjectified products through grammaticalization from non-evidential constructions. Past perception *-te* was assumed to have developed from the past-tense marker, instantaneous perception *-ney* from the familiar-level sentence ender, quotative/reported evidentials from bi-clausal quotative sentences, and the inferential evidentials from complex sentences with a verb of seeing or a noun of appearance.

Finally, some periphrastic constructions, which are yet to be grammaticalized, function like evidentials. This is an interesting topic for further study.

Notes:

([1]) This suggests that J. Lee's (2010) claim that inferential evidential reading occurs with past tense and direct evidential reading with present tense is only partly true.

([2]) The dual interpretations of *-te* in non-past sentences is due to the nature of non-past (unmarked). Non-past denotes not only the moment of the speaker/hearer's perception, but also the generic and future time in Korean. Only when the propositional content was in progress at the time and place of the speaker/hearer's perception, the direct observation interpretation holds.

([3]) As H. Lee (2014: 260) points out, the so-called mirative *-kwun(a/yo)* cannot be regarded as an evidential marker because, unlike *-ney*, it can refer to both present and past experience (e.g. *pi-ka w-ass-te-**kwun**!* 'It rained!')

([4]) This ender has been even more grammaticalized via the speaker's subjectification, to indicate the speaker's own affection-laden informing to the addressee, as in *seysang-ey-nun chakha-n salam-to manh-ta-n-ta* 'There are many good people in the world as well, my dear.' (Sohn 1978).

([5]) K. Chung (2005) and Ahn and Yap (ibid.) include the speaker's emphatic assertion *-ta/la-ko* 'I am saying that' (e.g. *na-nun an ka-n-ta-ko* '[I say] I won't go') in their list of evidentials. This form developed from main-clause omission in a reportative sentence, leaving the quotative particle *ko* intact. The orphaned *ko* in the sentence-final position has been subjectified as the speaker's own emphatic and casual report of the propositional content.

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Abstract and Keywords

This chapter provides an overview of the structure, meaning and use of evidential markers in Modern Japanese and a brief summary of evidential markers through Japanese language history. Japanese has inferential evidentials and reportive markers. They are realized as suffixes on a variety of (mainly verbal) predicates, and as grammaticalized nouns. Issues that arise and are discussed in this chapter include the differentiation between markers that are semantically similar, the purported existence of direct evidential uses, the distinction between evidentials (reportives) on the one hand and quotatives on the other, the interaction with other categories of (mainly verbal) predicates such as tense, aspect, and modality, and the use in interrogatives.

Keywords: Japanese, inferential evidentials, reportives, quotatives, modality, tense, interrogative, stylistics, connotations

34.1. Evidential markers in Modern Japanese

EVIDENTIALITY, in short, is a ‘grammatical category that has source of information as its primary meaning’ (Aikhenvald 2006c: 320). In Modern Japanese, it is possible to identify a number of linguistic forms that both adhere to this semantic definition and are grammaticalized. These markers are used very frequently in written and particularly spoken language. Whether evidentiality is a grammatical category in a strict sense of obligatoriness (cf. Aikhenvald 2004a: 6) in this language is a matter of debate, because there is no neutral evidential marker and thus no necessity to have an evidential marker in every grammatically well-formed sentence of the language. On the other hand, in a language like Japanese that is characterized by frequent elision of lexical and grammatical material and by a prominent role for inference, the question of what is obligatory is rather tricky. We therefore assume that evidentiality is a grammatical category in Japanese.

Its exponents are as follows, grouped by their semantics[1]:

i. Hearsay markers: *soo* (=p), *rasi-* (=a)
ii. Inferential evidentials: *-soo* (-na), *rasi-* (=a), *ppo-* (=a), *yoo* (NA/=na), *mitai* (=na)

Some scholars may want to add a third category of 'direct evidential', realized by *yoo* and *mitai*, but this is a contested issue that will be discussed later in §34.2.3. The letters in brackets refer to morphological categories of Modern Japanese. The evidential markers listed are particles (=p), particle adjectives (=a), nominal adjective or particle nominal adjective[2] (NA/=na) and suffix nominal adjective (-na). Their position in a template of the extended word in Japanese can be seen in Table 34.1. (p. 710)

Table 34.1. Morphology of the verb and adjective in Japanese

	-v		=v		
V	-a	-f	=a	-f	=p
A	-n		=n		
	-na		=na		
	-adv		=p		
	-adn				

Morphological labels (note that these do NOT occur together with the abbreviations used for glosses): A/-a/=a = adjective/suffix adjective/particle adjective; -adn = suffix adnominal; -adv = suffix adverb; -f inflection; -n/=n = suffix noun/particle noun; -NA/na/=na = nominal adjective/suffix nominal adjective/particle nominal adjective; =p = particle, V/-v/=v = verb/suffix verb/particle verb

As can be seen from the table, the evidential markers, except the nominal adjectival suffix *-soo*, all line up in the third slot after the stem. The overall structure is highly flexible, though, and not a strict template. Nor do the evidential markers form a strict morphological paradigm, since only inflections (-f) on verbs and adjectives are truly paradigmatic, excluding each other in the same position, and none of the positions is obligatory. Concerning individual markers, as we will see in §34.2.1.1, *-soo* is different not only with respect to its morphological position but also with respect to semantics. *Yoo* is tagged as a nominal adjective[3] 'or' particle nominal adjective, since *yoo* has retained lexical features, such as the ability to be modified by adnominals *kono, sono,* etc. On the other hand, these features are only valid in non-evidential uses. So, from the limited perspective of its evidential use, *yoo* can be classified as a particle like most of the other evidential markers as well.

In the Japanese linguistic literature, evidentials have been discussed since the 1930s, though the term for the category had not been coined, using labels such as 'inferential hearsay' (Kasuga 1955), 'vision', 'audition' (Kasuga 1957), 'hearsay', or 'inference' (Yuzawa 1936: 288). *Yoo* and *mitai* have also been called 'auxiliaries of simile' because simile is one of their main functions. *Soo* and *-soo* have been labelled 'auxiliary of hearsay and appearance' while *rasi-* bears the name of 'auxiliary of inference'. Teramura was the first Japanese linguist to describe the distinction among Japanese evidentials in the way that the speaker gets access to information (Teramura 1979, 1984). He used 'presumptive mood' as a cover term for evidentials and a number of other morphemes now referred to as epistemic modals. After Teramura, Moriyama (1988) and Kamio (1990) introduced the concept of 'evidentiality' to Japanese linguistics. The Japanese translation of evidentiality, *shōkosei*, came into use (p. 711) in the 1990s, and the notion itself has become gradually known since then. Evidentiality is treated as a subcategory of epistemic modality in most of the recent domestic literature.

The first use of the English term 'evidential' for Modern Japanese evidential markers can be attributed to Martin (1975: 13, 33). The most detailed descriptions published in English are Aoki (1986) and Narrog (2009: Ch. 10). Furthermore, there are also at least two English-language PhDs written on the topic (Trent 1997; Sugi 2004), and many individual papers dealing with specific issues concerning evidentiality.

The main part of this chapter will be a description of the semantics (and stylistics) of the Japanese evidential markers (§34.2). It will be followed by a section on interaction with other categories (§34.3), a short discussion of the issue of evidentials versus quotatives (§34.4), and a brief look at the history of evidentiality in Japanese (§34.5).

34.2. Semantics and stylistics of the evidential markers

In the list of evidential markers given in §34.1, most of the markers were tagged as 'inferential evidentials'. The concentration on the domain of inferential evidentiality inevitably raises the question of the differences between individual markers. This question has been the topic of numerous studies in Japanese linguistics on semantic distinctions between some of the evidential markers. We will start with the inferential evidentials and then proceed to the other subcategories.

34.2.1. Inferential evidentials

First, it may be questioned whether, or in which way, inferential evidentials are distinct from epistemic modal markers. In Japanese, this distinction is rather clear-cut and can be shown with a number of tests that were demonstrated in Narrog (2009: 114–16) and are not repeated here.

All of the inferential evidentials denote that the factuality of the state-of-affairs is not directly accessible to the speaker, but merely based on some evidence or information, which is typically (but not necessarily) visual appearance. *-Soo, soo*, and *yoo* are all derived from Chinese nouns denoting appearance (*-soo/soo: xiàng, yoo: yàng*), while *mitai* is grammaticalized from *mi.ta yoo=na* (see.PAST*yoo*=ADN) 'looking like', and the original lexical sources of *rasi-* and *ppo-* are unclear.

34.2.1.1. *-soo*

In our view, the first semantic subgrouping of the five inferential evidentials is between *-soo* on the one hand and the other four markers (*yoo, rasi-, mitai, ppo-*) on the other. *-Soo* is fundamentally distinct from the other markers in that it is basically future-oriented, or bi-phasic. That is, *-soo* implies two phases, one at a point in time 1, at which the state-of-affairs is not yet realized, and another one at point in time 2, at which the event is going to (p. 712) be realized. The other inferential evidentials present the state-of-affairs as a whole, and are therefore monophasic. Thus, *-soo*'s basic meaning can be labelled as 'apparent imminence' (Narrog 2009: 120)[4]. For example, in a sentence like (1), only *-soo* expresses a state-of-affairs in which the speaker looks at the clouded sky and based on appearance concludes that it is going to rain at a point of time after the speech event.

(1)

Ame=ga	huri-soo=da/	??hur.u	yoo=da/	??hur.u=rasi.i.
rain=NOM	fall-EVID=COP /	fall.NPAST	EVID=COP/	fall.NPAST=EVID.NPAST

It looks like it's going to rain.

Rasi- could only be interpreted as hearsay in this context, and *yoo* would be difficult to interpret in any sense. An unmarked verb would be infelicitous as well, unless the rain is al-

ready a fact. The future orientation of *-soo* can also be demonstrated with an example like (2), where *-soo* is added to a stative predicate.

(2)

A:	Kono	moNdai=wa	saN-zip-puN=de	toi.te	hosi.i.
	DEM	problem=TOP	three-ten-minute=ESS	solve.GER	want.NPAST
	I want you to solve this problem within thirty minutes				
B:	Sore=wa	**muzukasi-soo=des.u/**	**??muzukasi.i**	**yoo=des.u.**	
	that=TOP	difficult-EVID=COP.NPAST/	difficult.NPAST	EVID=COP.NPAST	
	That looks like it's going to be difficult. (*-soo*)				
	# That appears to be difficult. (*yoo*)				

The adjective *muzukasi-* 'difficult' basically denotes a stative state-of-affairs. However, if *-soo* is added the proposition as a whole becomes future-oriented, in the implied sense of 'it will be difficult [if I/you attempt to solve it]'.

One major use of *-soo* cannot be subsumed within the pattern described so far, namely when it marks the inferred physical or mental state of a second or third person, such as 'You *look* lonesome' (cf. also the discussion in §34.3). Perhaps one could argue that here as well the state-of-affairs 'be lonesome' can only be realized as a fact in a hypothetical future state in which the speaker has direct access to the second or third person's feelings.

An alternative explanation of the differences between *-soo* and the other inferential markers besides their aspectuality is in terms of reasoning, namely as deductive (*-soo*) versus abductive (the others) (cf. Lee 2006: 102–9). More details on *-soo* can be found in Narrog (2009: 119–23).

34.2.1.2. *yoo, mitai, rasi-, ppo-*

Yoo, mitai, rasi-, and *ppo-* are not future-oriented like *-soo*, so the semantic difference between them is more subtle. However, these are in fact not four semantically different markers. Only *yoo* and *rasi-* can be clearly differentiated on semantic grounds, while *ppo-*, and especially *mitai*, are best conceived of as stylistic variants of *yoo*. The following discussion of semantics therefore focuses on *yoo* versus *rasi-*. The distinction between the two has (p. 713) attracted substantial attention in domestic Japanese linguistics, and it is impossible to do justice to the rich literature here. A more detailed discussion of the literature, at least up to around 2008, can be found in Narrog (2009: 117–19, 123–6).

First of all, *yoo* and *rasi-* (and the other inferential evidentials as well) are polysemous and differ in non-inferential evidential uses. *Yoo* also denotes similarity, comparison and category membership, and is even used as a complementizer, while *rasi-* is also a reportative evidential and has a typicality use ('property X is typical for referent Y') as a suffix to nouns. The point here is the overlap in their use as inferential evidentials. They do overlap in expressing an inferred reason behind the resulting factual state of affairs, that is, a

'reverse conclusion' as in (3). The speaker knocks on the door and upon receiving no answer states (3) as a conclusion.

(3)

Ano	hito=wa	**i-na.i**	**yoo=da/**	**rasi.i.**
DEM	person=TOP	be-NEG.NPAST	EVID=COP/	EVID.NPAST

She's apparently not here.

Note that if reversely a result is inferred from a reason, epistemic modal markers must be used instead of inferential evidentials.

As for the differences between *yoo* and *rasi-*, the general tenor in the research literature (e.g. Hayatsu 1988; Kikuchi 2000) is that *yoo* can express the speaker's own judgement, or a judgement based on evidence immediately available to her/him, as in (4), while *rasi-* signifies a distance between the speaker and the judgement; that is, that the judgement is secondhand, or based on evidence not immediately available to the speaker him- or herself, as in (5), or is unexpected. This difference feeds into the presumptive direct evidence use of *yoo* (cf. §34.2.3) and the reportative use of *rasi-* (cf. §34.2.2).

(4)

Kao~iro=ga	**yo.ku**	**na.i**	(cf. Tanomura 1991: 72)
face~colour=NOM	good-ADV	not.be.NPAST	

yoo /??-rasi.i=des.u=na.

EVDI/EVDI.NPAST=COP.NPAST=ILL.M

You look pale.

(5)

Saru=ni=wa	sikasi,	saru=nari=no	mokuteki=ga	(cf. Kamitani 1995: 566)
monkey=DAT=TOP	but	monkey=COP=GEN	goal=NOM	

ar.u=rasi.i/ **??yoo=da.**

be.NPAST=EVID.NPAST/ EVID=COP

But monkeys appear to have their own goals.

Example (5) would presumably only be felicitous with *yoo* if the speaker is an expert on monkeys him- or herself. Given that there is a real semantic overlap in *yoo* and *rasi-*, non-semantic factors probably also play a role in selecting one of them. *Yoo* is simply the more general marker. Together with its colloquial variant *mitai, yoo* was found to be double as frequent as *rasi-* in a mainly written corpus of Modern Japanese (cf. Narrog 2009: 169). *Rasi-* is the 'marked' form that more specifically indicates a distancing of the speaker from the evidence and the judgement.

This system with *yoo* and *rasi-* is in apparent decline in the spoken language. *Mitai* is a recent colloquial semantic equivalent to *yoo* that is also in the process of taking over the inferential functions of *rasi-*. As Yang (2014: 106–7) showed in a study of evidentials (p. 714) in a television series, *mitai* is becoming far more frequent in conversation than *yoo* and *rasi-* in their evidential function combined. *Ppo-* is a very recently developed evidential

that expresses certain connotations, especially negativity either towards the proposition or towards the judgement itself, which means it can also be used to express a higher degree of uncertainty of judgement or doubtfulness. Both could be the case in (6).

(6)

S1:	Konpurekkusu=to=ka		ar.u=N=da.	
	complex=QUOT=INTER		be.NPAST=NOMZ=COP	
	He has some sort of complex.			
S2:	NaNka	ki=ni	si.te	**'r.u=ppo.i.**
	something	mind=DAT	do.GER	be.NPAST=EVID.NPAST
	Seems like he's nervous about something. (Conversation, 2002)			

Ppo- is also found in contexts of inference based on direct perception, implying some logical reasoning. In (7), the speaker didn't see the scene and only heard the crash sound of some metal and the instructions of the co-pilot for everyone to keep away from the helicopter until it had completely stopped.

(7)

Tyakuriku=ka	tyakuriku~teNtoo=ka	bimyoo=na	koto=da=na.	Kekkoo
landing=INTER	landing~tumble=INTER	subtle=ADN	thing=COP=ILL.M	fairly
hade=ni	**koware.ta=ppo.i.**	Soojyuusya	ni-mei=ga	
gorgeous=ADV	break.PAST=EVID.NPAST	pilot	two-CL=NOM	
husyoo=de	suN.da=no=wa	nani=yori=da=kedo.		
be.wounded=ESS	be.over.PAST=NOMZ=TOP	what=ABL=COP=AVS		
Whether it safely landed or tumbled is a subtle question. It seems to have broken seriously. Fortunately the two pilots only got wounded. (Hiroshi Arikawa: *Tosyokan Kakumei*, 2007 [Iwasaki 2012: 102])				

The differences between the five inferential evidential markers are summarized in the 'decision trees' in Figure 34.1 and Figure 34.2 which show how each marker can be selected in (p. 715) different styles. We are aware that these flow charts are a simplification, and the differences between the markers are more complex and intricate than we have been able to present within the limited space here. Furthermore, individual speakers will employ slightly different systems.

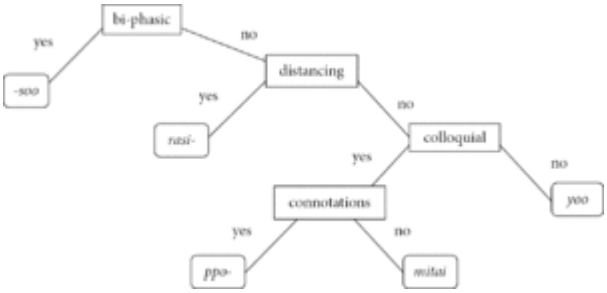

Figure 34.1. Decision tree for selecting an inferential evidential in Modern Japanese (overall version)

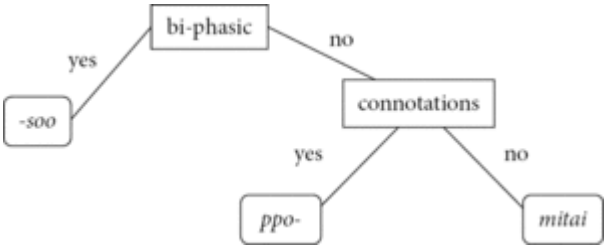

Figure 34.2. Decision tree for selecting an inferential evidential in Modern Japanese (simplified colloquial version)

Figure 34.1 indicates that *-soo* is the default choice for a biphasic state-of-affairs, and *yoo* and colloquially *mitai* for a monophasic state-of-affairs. *Rasi-* is marked for speaker's distance from the judgement and *ppo-* for being slang and having an evaluative connotation. The hierarchy of markedness also roughly corresponds to their frequency in Modern Japanese discourse. In a large corpus heavily slanted towards written language, *-soo* is the most frequent evidential, closely followed by *yoo* and, at a distance, *rasi-* (cf. Narrog 2009: 169). *Mitai* and especially *-ppo-* are rare in written language. Figure 34.2 shows the simplified tree that does not need much further explanation.

34.2.2. Reportative markers

As already noted, the ‘distancing’ inferential evidential *rasi-* also has a reportative use, in which it ‘competes’ with *soo*, a marker that was originally identical with the future-oriented inferential evidential *-soo*, but later became formally independent (cf. §34.5). In the colloquial style of many speakers, *rasi-* may have lost its inferential function and may now function exclusively as a reportative. In the research literature, one difference has been identified between *rasi-* and *soo. Soo* is more pure reporting, i.e. delivering a message, while *rasi-* positively indicates that the judgement is filtered through the speaker’s own reasoning (cf. Nobayashi 1999: 61, 65; Kikuchi 2000: 48). This property makes the use of *rasi-* possible in (8), which is compatible with the speaker’s own cognitive filtering and infelicitous in (9), which is unambiguously pure reporting (both examples are from Nobayashi 1999: 61).

(8)

Kuraisuraa=wa	sono	bubuN=o	appubou=de	hii.ta=no=ka
PN=TOP	DEM	part=ACC	up-bow=ESS	play.PAST=NOMZ=INTER
dauNbou=de	hii.ta=no=ka=sae			**kidui.te**
down-bow=ESS	play.PAST=NOMZ=INTER=FOC			notice.GER
i-na-kat.ta=soo=da/		**rasi.i.**		
be-NEG-VBZ.PAST=EVID=COP /		EVID=COP.NPAST		

Kreisler allegedly didn’t even notice whether he played that part up-bow or down-bow.

(p. 716)

(9)

Inori=to	keiai=to=o	itu=mo	uke.te
prayer=COM	love=COM=ACC	when=FOC	receive.GER
itadaki-ta.i=soo=des.u		**/?rasi.i=des.u.**	
get-BOU.NPAST=EVID=COP.NPAST/		EVID=COP.NPAST	

(A message from the vice abbot) He wants you to always receive his prayers and his love.

Arguably, the quotative particle *tte* has also become a reportative. We will discuss the distinction between evidentials and quotatives in §34.4.

34.2.3. The issue of direct evidential uses

Plain facts that are visually directly accessible to the speaker are not marked as evidential. The following sentence (10) would be odd with an evidential if the speaker had direct visual access to the state-of-affairs described in it.

(10)

Kono	hito=wa	se=ga	**taka.i**	**??yoo=da**	**/??rasi.i**
DEM	person=TOP	back=NOM	high.NPAST	EVID=COP	/ EVID.NPAST/

/??taka-soo=da.
high-EVID=COP
This person is tall /??looks tall/??seems to be tall.

The meaning of evidentials in Japanese is precisely that the speaker him- or herself has no direct full access to the factuality of a certain state-of-affairs. Nevertheless, it has been observed that *yoo* and *mitai* can express meanings which are labelled as ‘speaker’s impression’ (Tanomura 1991: 63; Nobayashi 1999: 57–9; Nitta 2000: 144) or ‘sensory’ (Kudō 2014), and whose interpretation is close to direct evidentials. Similar descriptions can also be found for *yoo* in Early Modern Japanese, in Yuzawa (1957: 498), Matsumoto (1998: 99–100) and Okabe (2002: 65). Following is an example from Nitta (2000: 144).

(11)

(Looking into the hole and seeing some sparkling reflection like eyes)

Nani=ka	**i.ru**	**yoo=da.**
what=INTER	be.NAPST	EVID=COP

There seems to be something [animate].

For those arguing in favour of the direct evidential use, the proposition to which *yoo* is added, expresses a fact, and *yoo* marks the sensory (in this case visual) impression of that fact. In contrast, those unconvinced can point out that the truth of the proposition in (11) is still dependent on inference, and even if the speaker is actually entirely certain, the proposition is linguistically expressed as something for which the truth value depends on inference, as a hedge.

Kudō (2014) argues that 'sensory' *yoo* and *mitai* differ from their inferential usage in that the former retain a past/non-past distinction, whereas the latter can only be used with non-past tense in spoken language. According to her, while for the inferential, the time of (p. 717) inference has to be the same as the speech time, in the sensory use it is possible to express one's direct access to the information in the past with the past tense form, as in (12).

(12)

Kono	ie=o	**mi.te**	**i.ta=mitai=dat.ta?**	
DEM	house=ACC	look.GER	be.PAST=EVID=COP.PAST	
Iya,	nani=ka	tuti=o	**sirabe.te**	**'ru=mitai=desi.ta.**
no	what=INTER	soil=ACC	check.GER	be.NPAST-EVID=COP.PAST

(Did you see) they were watching this house?
No. (I saw) they were checking the soil. (Natsuo Kirino: *OUT*, 2002)

Another difference lies in whether clauses with *yoo* or *mitai* can be questioned. In (12), the first speaker asked the second speaker about what he actually saw. In both the question and the answer, *mitai* is in the scope of past tense. Also note that neutralization of past and non-past arises in the embedded clause of direct evidential when the evidential itself is in past tense, i.e., the past form in the first sentence and the non-past form in the second sentence are interchangeable. According to Kudō (2014: 281–3), this is not allowed for inferential *yoo, mitai*, and *rasi-*.

If we admit that *yoo* or *mitai* can be direct evidentials, the question arises as to why they are not commonly used in cases when the speaker has direct access to the information. Overall, the question of direct evidentials in Japanese remains open.

34.3. Interaction with other categories

In studies with a relatively large corpus (the equivalent of ca. 40 million words in English), Narrog (2009, 2010) showed differences in the interaction of the evidential markers with other grammatical categories in the verb cluster. An excerpt of the results is represented in Table 34.2.

The categories in the rows are modal (DEO = deontic, BOU = boulomaic, DYN = dynamic, EPI = epistemic[5], MOO = mood) and evidential (EVID) categories, and those in the columns are other categories with which they interact. *Ppo-* was not part of the investigation, and data on *mitai* were subsumed under *yoo*. ⊃ means 'scope over' and ⊂ means 'take scope under'. The letters B to D grade occurrence in non-matrix clauses, indicating clauses with a high degree of integration into the main clause (B) to main clause only (D). The modal and evidential categories on the left are arranged up–down in order of increasing scope. Thus, the table reveals that the reportative *soo* has the widest scope among the evidentials. It can scope over tense, aspect, internal and external negation, and formally

nominalized clauses, while the biphasic 'appearance of imminence' marker *-soo* has the narrowest scope, resembling more a deontic or boulomaic than an evidential marker. It can take scope under practically all categories included in the study. *Yoo* and *rasi-* are in the middle. While *soo* has the widest scope it can still take scope under tense. Example (13) (constructed) shows (p. 718) (p. 719) *-soo* taking scope both under resultative aspect and past tense, and example (14) shows the reportative *soo* in the scope of past tense, indicating that something was reported in the past. In these cases the embedded state-of-affairs is also in the past, but often not marked with past tense.

(13)

Hagesi.i	ame=de	kawa=ga	**ahure-soo=ni**	**nat.te**	**i.ta.**
heavy.NPAST	rain=ESS	river=NOM	flow.over-EVID-ADV	become.GER	be-PAST

The river looked like flowing over in the heavy rain.

(14)

Seiseki=no	yo.i	syooneN=wa	syuuyoo	kikaN	manryoo~mae=ni
record=GEN	good.NPAST	youth=TOP	detention	period	expiration~before=ADV
kari-taiiN~s-ase.ru		koto=ga	**ar.u=soo=de**		**at.ta.**
provisional-discharge~do-CAUS.NPAST		thing=NOM	be.NPAST=EVID=ESS		be.PAST

Allegedly, youths with a good record were provisionally released before the end of their detention period. (Masaaki Tachihara: *Fuyu no Tabi*, 1968)

Table 34.2. Modal, evidential, and mood markers arranged by scopal behaviour, excerpt from Narrog (2009: 227)

Marker	**Modal category**	**Layering with other modals**	**STATIVE ASPECT**	**COMPL. ASPECT**	**INTERNAL NEG**	**EXTERNAL NEG**	**TENSE**	**NOMINALIZATION / COMPLEMENTATION**	**ILLOCUTIONARY MODULATION**	**Layering in non-matrix clauses (Minami model)**
-(r)areru	DYN	4	⊂|⊃	⊂|⊃	⊂|⊃	⊂	⊂	⊂|⊃	⊂	B
-soo	EVID	3b	⊂|⊃	⊂|⊃	⊂|⊃	⊂|⊃	⊂	⊂	⊂	B
-tai	BOU	3b	⊂°|⊃	⊂|⊃	⊂|⊃	⊂	⊂|⊃*	⊂|⊃	⊂	B
-(a)naker eba naranai	DEO	3b	⊂°|⊃	⊂|⊃	⊂|⊃	⊂	⊂|⊃*	⊂|⊃	⊂	B
beki	DEO	3a	⊃	⊃	⊂|⊃	⊂	⊂|⊃*	⊂|⊃	⊂	B~C
yoo	EVID	2	⊃	⊃	⊂|⊃	⊂|⊃	⊂|⊃	⊂|⊃	⊂	B~C
rasii	EVID	2	⊃	⊃	⊂|⊃	⊂|⊃	⊂|⊃	⊂|⊃	⊂	B~C

ka mo sirenai	EPI	2	⊃	⊃	⊃	⊂|⊃	⊂|⊃	⊂|⊃	⊂	B~C
soo	EVID	1	⊃	⊃	⊃	⊃	⊂|⊃	⊂|⊃	⊂	C
daroo	EPI	1	⊃	⊃	⊃	⊃	⊃	⊂|⊃	⊂	B~C
Impera-tive I	MOO	0	⊃	⊃	⊃	—	—	⊃	(⊂)	D

Evidentials cannot be used in imperatives. Use in interrogatives is a more tricky issue, and we have not collected data on this in the corpus study. Our searches on the internet suggest, though, that all of the evidential markers except *rasi-* can be used in interrogatives. (15) is an example for *-soo*, (16) for *yoo*, and (17) for *soo*.

(15)

Syoogakkoo=no	eigo	kyooiku=wa
elementary.school=GEN	English	education=TOP
seikoo~si-soo=des.u=ka?		
success~do-EVID=COP.NPAST=INTER		

Does it look like the English education in elementary schools will be successful? (https://senseinote.com/lp/detail/q/510)

(16)

Ikeda toosyu=wa	**tukare.te**	**i.ru yoo=des.u=ka?**
PN-pitcher=TOP	tire.GER	be.NPAST.EVID=COP.NPAST=INTER

Does it look like (the pitcher) Ikeda is tired? (from Miyake 2006: 129)

(17)

Ooshima	Yuuko=mo	**iNtai~s.uru=soo=des.u=ka?**
PN	PN=FOC	retire~do.NPAST=EVID=COP.NPAST=INTER

Is it being said that Yuko Oshima also retires? (www.ztcizpnqixeh.exwweragi.xyz/)

The fact that *-soo* can be questioned is not so surprising because of its general narrow scope properties, i.e. the capacity to take scope under negation and aspect etc. Here, the speaker asks for the interlocutor's judgement, including whether the 'apparent imminence' of the event holds. The fact that the wider scope *yoo* and *mitai*, and even the reportative *soo* with the widest syntactic scope can also be made subject to interrogation is more surprising. With *yoo*, one could argue that merely the proposition is questioned, that is, the sentence, with which a TV announcer addresses the reporter on site, could be paraphrased as, 'According to your visual impression and inference, is Ikeda tired?' With *soo* in (17), it (p. 720) is apparently the reporting as such, which unlike in the case of the reportative *rasi-* is independent of speaker judgement (cf. §34.2), that is questioned.

The best-known case of interaction of Japanese evidentials with other categories may be the already mentioned obligatory use of inferential evidentials to mark physical and mental states of second and third persons which are not immediately accessible to the experience of the speaker. There are numerous publications on this issue (e.g. Aoki 1986 (also in Aikhenvald 2004a: 128); Kamio 1997, Ch. 4; Tenny 2006) and since we do not have much original to add to it, we refer the reader to the literature.

There is just one issue that we wish to raise in connection with this, namely, the status of the morpheme *-gar-* that the evidentials proper discussed in this chapter compete with in this function, and that is sometimes labelled as 'evidential' itself (e.g. Aoki 1986). The morpheme *-gar-* 'objectivizes' state-of-affairs that are usually bound to the present and

the first person. It is probably not an evidential for two reasons. First, it is used to state a fact about a second or third person entity, not information obtained through some source, or an inference based on such information, as rendered in the translation to (18).

(18)

Ayako=wa	(a)	sabisi-soo=da/	(b)	sabisi.i	yoo=da
pn =TOP		lonesome-EVID=COP/		lonesome	EVID=COP/
/ (c)	sabisi-gat.te	i.ru.			
	lonesome-VBZ.GER	be.NPAST			

Ayako seems to be lonesome (a,b); Ayako is lonesome (c)

Second, its use is not even limited to second and third person, since it can also be used to remove the constraints of the immediacy of the present and short duration from the speaker's own physical and mental states, and convey that a state-of-affairs was something persistent, as in (19).

(19)

Toozi	boku=ga	**hosi-gat.te**	**i.ta=no=wa**	'seikai'=desi.ta.
That.time	I=NOM	want-VBZ.GER	be=PAST=NOMZ=TOP	right.answer=COP.NPAST

At that time what I really wanted was 'the right answer'. (http://ameblo.jp/health-harmony/entry-11156021902.html)

34.4. Evidentials versus quotatives

We have not included quotative markers in the discussion of evidentials in Japanese. In fact, this is the common treatment in Japanese linguistics, where quotatives (*in'yō*) are classified as a category of their own, comprising both constructions with verbs like *to it.te i.ta* 'has said' and simple quotative particles like *to* or *tte*. In contrast, in the English-speaking literature some papers discussing issues concerning Japanese evidentiality also include simple quotative particles among evidentials. However, usually no effort is made to clarify the relationship between evidentiality and quotation or justify the inclusion (or exclusion) of quotatives in evidentials. In fact, there are arguments in favour of both views. (p. 721)

Before reviewing these arguments, let us briefly mention the quotative markers that we are referring to. In Modern Japanese, these are *to, tte(/datte), ttara, tteba*, and *naNte*. *To* is the standard quotative particle and *tte* (*datte* is the same form with a preceding copula) its colloquial equivalent. Both particles can be used with or without a verb of communication or mental activity following, whereby clause-final use without following predicate is more common with the colloquial *tte* than with *to*. The other three particles have rather specific uses and connotations. *Ttara* and *tteba* are the result of fusion of the quotative particle *tte* and a following verb *i(w)*- in its conditional form. That is, literally they mean 'if

I/you say', and they are not followed by another predicate, because the predicate is already merged into the form. *NaNte* signals surprise or negative evaluation.

If only one quotative particle is included in the discussion of evidentiality, it is usually *tte;* other quotative particles, or all quotative particles, may or may not be included among evidentials. *Tte* is very commonly used, neutral with respect to connotations, and because it belongs to spoken language, the elliptic pattern without following predicate is well-established. Therefore, we will use *tte* in the following discussion.

The most powerful argument for including a quotative like *tte* among evidentials is that it fulfils the condition of indicating a source of information, namely hearsay, and is therefore functionally similar to reportatives, which are unquestionable evidentials. In the case of Modern Japanese, the reportative *soo*, which is close to pure reporting, is the marker most similar to *tte*. Thus, in the constructed example (20), *soo* and *tte* are semantically practically interchangeable.

(20)

Tarō=wa	guai=ga	waru.i=tte	/soo=da.
PN=TOP	condition=NOM	bad.NPAST=INTER	/EVID=COP

[According to X] Tarō doesn't feel good.

Note that both with the evidential and the quotative the source of information can optionally be added in case the source needs to be emphasized, with the evidential through a fixed phrase like 'X=*ni yoreba*' 'according to X', and with the quotatives through a sentence topic at the beginning of the sentence. There are some subtle differences between the two markers, though, with respect to the source, that need to be resolved in context. In principle, both the quotative and the evidential presuppose a specific source of information. If the speaker wants to specifically indicate that the source of information is unknown, (s)he can use lexical constructions like *to iwarete iru* 'it is said that'. However, in the sentence with *tte* the default assumption is that the topic Tarō himself is the source 'X', because as a default the topic would also be the subject of the following verb of communication. In contrast, *soo* is more neutral with respect to source, since *soo* has no grammatical relationship to the subject. Without further contextual information, though, with *soo* as well, the assumption would be that the topic/subject Tarō himself is the source. However, *soo* will be a particularly appropriate choice if an abstract entity or an entity remote from the speech situation like a newspaper or television is the source, while *tte* would be a natural choice for a concrete person in the context of the speech situation. Overall, the differences with respect to source are subtle and in many contexts are not decisive for the choice between a reportative evidential and a quotative. Lastly, it should be noted that there is a stylistic difference, since *tte* is colloquial while *soo* is largely formal. (p. 722)

Nevertheless, there are three arguments for making a distinction between evidentials and quotatives in Japanese. The first argument is differences in morphology. All evidential markers either inflect or are followed by an inflecting copula. In traditional grammar, they are therefore all classified as auxiliaries (*jodōshi*). Furthermore, with the exception of *-soo*, they occur in the third slot after the stem in the template of Table 34.1. In contrast, the quotatives are all non-inflecting particles occurring in the last slot of the template. In traditional grammar as well, they were tagged as particles (*joshi*). Japanese traditional grammar has been especially sensitive to these morphological differences.

The second reason is that the evidentials are semantically self-sufficient, signalling source of information by themselves; that is, having a predication of their own (which is also implied in their classification as auxiliaries in traditional grammar), while the quotative particles are in well-formed sentences followed by verbs of communication or mental activity (except those two particles that are the result of a merger with the verb for 'say'). However, as already mentioned, the quotative particles are quite often used without a following verb, especially in colloquial speech, eventually becoming similar to evidentials.

The third reason is syntactic-semantic. Quotative markers differ fundamentally from all evidentials in that they can embed entire utterances including all illocutionary force marking, such as imperatives, hortatives, or illocutionary particles. In contrast, evidentials can only mark propositions without illocutionary force marking. This difference is shown in the constructed example (21).

	Yame~nasa.i=tte	/*rasi.i	/*soo=da.
(21)	stop~do.IMP=QUOT	/EVID.NPAST	/EVID=COP
	[X said] Stop this!		

The fact that the evidentials cannot mark whole utterances including illocutionary information shows that they always present information through the speaker's perspective. That is, there is always a deictic realignment towards the speaker, which does not necessarily take place with quotatives, which simply quote without realigning the utterance deictically (space, time, person) to the speaker. This is also true with respect to person reference. Thus, 'I' in (22) can either refer to the speaker or to the quotee in the case of the quotative, but only to the speaker in the case of the reportatives.

(22)

Boku=ga	waru.i=tte	/rasi.i	/soo=da.
I=GEN	bad.NPAST=QUOT	/EVID.NPAST	/EVID=COP
He said, it's my fault./He said, 'it's my fault'.			

Wu (2012: 143–8) framed this difference in terms of mental space theory, claiming that the reportatives *soo* and *rasi-* present the information from the mental space of the speak-

er, while quotatives refer to a third, neutral mental space outside of the speaker's and the hearer's.

Overall, then, there are significant differences between evidentials and quotatives that makes it plausible to keep these categories apart, at least in Japanese. (p. 723)

34.5. Evidential markers through Japanese language history

This section is deliberately kept short, since many languages treated in parallel chapters have less of a documented history than Japanese, and therefore diachronic issues cannot be compared across chapters.

In Old Japanese, the oldest period of documented language history (eighth to ninth century), and Late Old Japanese (tenth to twelfth century) we find two grammatical markers of evidentiality, namely the visual appearance evidential *meri*, derived from *mi ari* 'there is a sight', and the auditive/reportative *nari*, derived from *ne ari* 'there is a sound'.

(23)

Wa=ga	seko=ga	puru~pe=no	sato=no	Asuka=ni=pa
I=GEN	male.lover=GEN	old~house=GEN	town=GEN	pn=LOC=TOP
ti~dori	**nak.u=nari.**			
thousand~bird	cry.NPAST=EVID			

I have heard that in the town of Asuka, where there is your old house, a thousand birds cry [longing for your return]. (Man'yōshū 3/268; eighth century)

(24)

Tatutagawa	momidi	midare.te	**nagar.u=meri.**
PN	autumn.leaves	be.in.disorder.GER	flow=NPAST.EVID

It looks like the autumn leaves on the Tatsuta River are drifting [down the river] in confusion. (Kokin Wakashū Fall 2/283; tenth century)

Unlike *nari, meri* is mainly found in documents of the Late Old Japanese period. In Middle Japanese both *nari* and *meri* declined.

The Modern Japanese evidential *yoo* was attested as early as Late Old Japanese, and is the oldest evidential still in use today. Originally it was a loanword noun from Chinese, meaning 'appearance' or 'manner', and reanalysed to express an inferential meaning. As an evidential, *yoo* was not common until the second half of Early Modern Japanese (eighteenth to nineteenth century).

Middle Japanese (twelfth to eighteenth century) saw the emergence of two evidentials, *ge* and *soo*. They are both derived from suffix adnominals, *-ge* and *-soo* respectively, both of which meant 'having the appearance or characteristic of', and in turn were derived from the Chinese nouns *qì* 'spirit' and *xiāng* 'appearance'. Inferential is the first evidential func-

tion *ge* and *soo* acquired, and their hearsay function is believed to have evolved out of the inferential one (Senba 1976; Yamaguchi 1997; Urushidani 2010). In terms of morphosyntactic change, their scope expanded from nominal constituents (nouns as well as stems of adjectives and verbs) to clauses. By the end of Early Modern Japanese, *ge* had lost its evidential functions and has only retained its original suffixal usage in Modern Japanese. On the other hand, *soo* split into inferential *-soo* and hearsay *soo* which are still used today. Their bridging stage, namely inferential *soo*, yielded its function to *yoo* and *rasi-* at the end of Early Modern Japanese.

(p. 724) *Rasi-* evolved from an unproductive suffix adjective *-rasi-*, meaning 'having the characteristic of'. In late Early Modern Japanese, *-rasi-* after nouns developed new meanings of 'typicality' and 'semblance', and the latter further developed into inferential and then to hearsay in Modern Japanese (cf. Narrog 2012: 136–9). As mentioned in §34.2.1.2, in the spoken language of Present-Day Japanese, *rasi-* is losing its inferential function and tends to become a sole hearsay evidential. Therefore, *ge, soo*, and *rasi-* repeated a similar developmental path, morphologically from suffix to particle and semantically from 'likeness' to inferential and hearsay. Another striking similarity is that they seem to be in a similar cycle of change, gaining inferential and then hearsay meaning, and then losing inferential, and in the case of *ge* even hearsay meanings, again eventually.

Mitai came from the construction *mi.ta yoo*=na (see.PAST*yoo*=adn) 'looking like'. The verb *mi-* 'to see' bleached semantically in Early Modern Japanese, and as a result, the whole construction acquired the two same meanings as *yoo*, namely simile and exemplification. After dropping the final two /o/'s, the form *mitai* came into being in the 1880s (Haraguchi 1973). The first inferential use appeared in the 1930s. In Present-Day Japanese, *mitai* is almost as polyfunctional as *yoo*, but they belong to different registers, namely *mitai* mainly to spoken language and *yoo* mainly to written language.

The first evidential use of *ppo-* was attested in the 1980s (cf. Iwasaki 2012: 49). Its historical change resembles that of *rasi-* (Iwasaki 2012), except that *ppo-* has not extended to hearsay (reportative) yet. The suffix adjective *-ppo-* also means 'having the appearance or characteristic of', but with a connotation of negativity or doubt. Contemporarily, the inferential particle *ppo-* can already take clause-level scope, as exemplified in §34.2.1.2.

Lastly, it should be mentioned that if quasi-reportative uses of quotative markers are included in evidentiality, then Japanese has two sources of reportative evidentials, namely inferential markers (this section) and quotatives (§34.4).

34.6. Conclusion

This chapter has provided a brief overview of evidentiality in Japanese. We believe that evidentiality is a grammatical category of the language that has a good number of grammaticalized and frequently used exponents. Whether quotatives should be included in these exponents is a matter of debate. Evidentiality in Japanese offers many interesting

topics for further research, which we have only been able to begin to touch on, e.g. their history, or haven't been able to discuss at all, e.g. their properties in discourse.

Notes:

([1]) Particles, which are clitic-like, are indicated by an equal sign to distinguish them from other affixes.

([2]) 'Nominal adjective' refers to the class of adjectives in Japanese that is noun-like (cf. e.g. Backhouse 2004: 66; Rickmeyer 1995: 337–45). 'Suffix' and 'particle' verbs, adjectives, and nominal adjectives refer to specific classes of suffixes that have the morphological properties (e.g. inflection) of verbs, adjectives, or nominal adjectives. 'Particles' are distinguished here from other suffixes by the distributional property that they are always added to already inflected stems and therefore have a relatively higher degree of morphological independence; i.e. they are clitic-like (cf. Rickmeyer 1995: 38–41).

([3]) To be precise, based on its properties it should be classified as a nominal adjectival noun (cf. Rickmeyer 1995: 249; this term refers to a subclass of nouns that shares morphosyntactic properties with nominal adjectives) but in order not to complicate matters beyond necessity, we will label it as a nominal adjective here.

([4]) Skribnik and Seesing (2014: 152, 160) have proposed 'prospective evidentiality', which seems to be conceptually very similar. However, their concrete examples from Kalmyk do not coincide with the uses of *-soo*.

([5]) In our usage, deontic refers to the judgement made according to rules and social values, while boulomaic is according to someone's volition or intentions, dynamic is according to someone's dispositions, especially abilities, and epistemic is according to someone's knowledge.

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Dizque and other Emergent Evidential forms in Romance Languages

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Abstract and Keywords

This chapter addresses the origin, meaning, syntax, and classification of dizque 'they.say.that'. These questions are framed in the context of ongoing diachronic and synchronic investigations of new evidential markers (complementizer que 'that', digamos 'let's say') and dizque variants (que dizque, quesque). Contingent on the dialect, dizque is a reportative and/or quotative, with a higher or lower degree of epistemic extensions, and mirativity. Dizque can be primarily epistemic too. Syntactic distribution varies. Most forms behave as a particle, with variable scope, to include sentences, constituents, and predicates. Contact with Quechua is thought to accelerate grammaticalization in some dialects. The origin of dizque is unresolved. Dizque may be substratum influence from indigenous languages of South America. Because Romance presents similar forms, dizque could be part of a more general genealogical development. Considering its early presence in the seed Peninsular Dialect, borrowing from Basque, or a calque from Latin cannot be dismissed.

Keywords: Evidentiality, grammaticalization, emergent evidential, epistemic modality, quotative, reportative, mirativity, Spanish, Romance, Basque, Latin

35.1. Introduction

THIS section defers the contextualization and definition of technical terms such as *grammatical* and *lexical evidentiality*, and potential bridges between them, *evidential strategies* and *emergent evidentials*, to the introduction of this volume and the references presented therein. Suffice it to say that the italicized terms are used in the sense of Aikhenvald (2004a). Evidential strategies in general, and emergent evidentials in particular are at the centre of an important debate: whether or not lexical and grammatical evidentiality stand in a continuum (Squartini 2007b; Aikhenvald 2007a; Diewald and Smirnova 2010c).

There remains insufficient evidence to resolve this question satisfactorily for now, because comprehensive descriptions of emergent evidentials, the forms that seem to straddle the line, are hard to come by. *Dizque* 'they.say.that' (example (1) cf. Alcázar 2014), an emergent evidential in Spanish, along with similar developments in Romance (Cruschina and Remberger 2008; Casseb Galvão 2001 on Brazilian Portuguese *diz que*), lie at the centre of this debate.

(1)

a. Dic-e-n que llegaron tarde
say-THV-3PL COMP arrive late
They say that they arrived late.

b. Dizque llegaron tarde
DIZQUE arrive late
Dizque they arrived late.

(p. 726) The body of work on *dizque* is increasing, and gaining momentum. It has attracted the attention of formal and functional approaches to the study of language (typology, cognitive linguistics, generative grammar, corpus linguistics …). Yet the answer to most of the questions raised in this chapter are very much open to future debate. Further research and analysis are necessary.

The introduction is structured as follows: general characteristics of *dizque* are presented first (§35.1.1), followed by ongoing investigations into *dizque* and other emergent forms (§35.1.2), and theories regarding its origin (§35.1.3). The introduction ends with an outline of the review (§35.1.4). Due to space limitations, contact phenomena in the use of *decir* 'say' is excluded (see Klee and Lynch 2009; Andrade-Ciudad 2007; and references therein). The same goes for other potentially evidential phenomena (*dequeísmo*—the unnecessary addition of *de* 'of' with complementizer *que* 'that', Schwenter 1999, *inter alios*; uses of *como* 'like', Brucart 2009).

35.1.1. General characteristics of *dizque*

Decades after the pioneer work of Kany (1944) in diverse Latin American as well as Peninsular Spanish dialects, *dizque* has received due attention again, this time by scholars interested in evidentiality (Olbertz 2005, 2007: Mexican, Ecuadorian and Old Peninsular; Travis 2006: Colombian; López Izquierdo 2006: Old Peninsular; Lamy 2010: Panamanian; Babel 2009: Bolivian). These works are surveyed in Alcázar (2014), with reference to the grammaticalization of the form, and in an attempt to elucidate its origin. This survey concludes that there are two types of categories with evidential meaning, in a continuum. One is a PARTICLE; the other is a VERBAL MODIFIER.

PARTICLE *dizque* has a syntactic distribution of a parenthetical in that its position in the sentence is relatively unrestricted (see Kaltenböck et al. 2011: 852–4 on general charac-

teristics of parentheticals; pp. 855–6 and references therein on other terms used). *Dizque* may have originated as a parenthetical verb in the third person (on parenthetical verbs in the first person, see Urmston 1952: 491). It has diverse semantic and pragmatic functions, to include quotative, reportative, indirect evidence, epistemic, and mirative uses.[1] It is thus difficult to establish what the primary meaning of the form might be, but scholars have consistently pointed to the evidential function as primary. In its evidential uses, it is optional. Regardless of its semantic or pragmatic import, its scope is variable (predicate, constituent, sentential), as it may be expected in a particle. Yet associations are made between scope and interpretation (Travis 2006; Olbertz 2007), constituents and predicates readily associating with epistemic uses, while sentential scope is more likely interpreted as an evidential. Colombian, Mexican, Panamian, and Old Peninsular feature a form of *dizque* that behaves like a particle.

VERBAL MODIFIER *dizque* creates a new syntactic unit with the verb (Olbertz 2005). Semantically, it has a primary evidential function (indirect evidence). Epistemic (p. 727) associations are absent or weak (see Cruschina and Remberger 2008 for similar characteristics in other Romance forms). Its scope is exclusively sentential. It may be semi-obligatory and exhibit collocations with the lexical verb *decir* 'say'. *Dizque* as a verbal modifier is likely a sentential category (Cinque 1999; Speas and Tenny 2003). It has characteristics expected of a grammatical evidential. In Ecuadorian Spanish, *dizque* is a verbal modifier. In Bolivian Spanish, *dizque* may not yet form a unit with the verb, but it is on its way. This form, particularly in Ecuadorian Spanish, merits consideration as a grammatical evidential.

The evolution from a particle use to a sentence level particle, to a verbal modifier suggests a continuum between lexical and grammatical evidentiality. Yet this may be the only well-documented case. The relationship of evidentiality to epistemic modality in earlier particle-like stages requires further research. On the face of it, it appears to contradict De Haan (1999); and Aikhenvald (2004a, 2007a) in their separation of evidentiality from epistemic modality. That said, this may be an epiphenomenon of subjectification in primary grammaticalization (Traugott and Dasher 2002). Evolution into a grammatical evidential with sentential scope appears to be accompanied by a loss of epistemic (and mirative) uses that were associated with the earlier particle use.

35.1.2. Ongoing investigations into *dizque* and other emergent forms

Current studies of *dizque* focus on a number of varieties of Latin American Spanish and Portuguese. de la Mora and Maldonado (2015) present data where Mexican *dizque* is primarily epistemic, in contrast to previous research in Mexican Spanish, and other dialects. Treviño (2008); Demonte and Fernández Soriano (2013, 2014); de la Mora and Maldonado (2015) argue that complementizer *que* has reportative uses (in Mexican Spanish it co-occurs with *dizque*, de la Mora and Maldonado). With a different dialectal distribution, in Peninsular Spanish, Porroche-Ballesteros (2000) had viewed similar uses as reportative, and Etxepare (2007, 2010) as quotative. A highly relevant, yet lesser-known contribution, is that of Miglio (2010), a diachronic study based on several historical corpora (but see al-

so López Izquierdo 2006). Miglio argues that *dizque* began grammaticalization by the thirteenth century in impersonal uses; that is, prior to contact with indigenous languages of South America, as an evidentiality strategy: 'the context in which it was used, in historical or legal prose, even cases of personal occurrences of *decir* tended to have an inanimate subject, often "the document" or "the law" ' (p. 14). The following example refers to Roman times: *et**diz que**auia ally vna puente de canto con un arco muy grand que cogie este rio todo* or 'And *diz que* there was a stone bridge there whose arch spanned the whole river' (Alfonso X, Estoria de España, Corpus del español, corpusdelespanol.org, 1200s; cf. Miglio 2010: p. 14, in-text example). Miglio also points to calques from Latin as a potential source (*dicitur* 'it is said (that)'). In her dissertation on the use of Bolivian Spanish in bilingual communities, Quartararo (2015) suggests that *digamos* 'let's say' (as a form of *decir* 'say') can be interpreted as a further evidential (additional to *dizque*). This form has evidential and epistemic uses.

(p. 728) The analysis of *dizque* lies at the centre of rapidly evolving assumptions regarding the complexity of languages without grammatical evidentiality. This is an active line of research in the community, but finds itself at its early stages. Preliminary assumptions include that western Indo-European languages, for example, do not possess incipient forms of emergent evidentials, but are limited to semi-lexical, polysemous forms (Spanish *parecer* 'seem', Cornillie 2007a, 2007b), and (pragmatic) extensions of non-evidential categories, such as tense or modality (see again Squartini 2001, 2007b; Aikhenvald 2004a, 2007a). Spanish stands apart from other Romance languages in that it features emergent evidentials *dizque, que*, and *digamos*, as well as compositional evidentials in *que dizque* and (potentially) *quesque* (de la Mora and Maldonado 2015). Are Spanish and Portuguese different from Romance languages in being in contact with indigenous languages of South America (and Basque)? Or is lexical evidentiality substantially more complex than we previously entertained?

35.1.3. Theories regarding the origin of *dizque*

Diverse evidence supports three hypotheses (Alcázar 2014). First, *dizque* could be due to SUBSTRATE INFLUENCE from indigenous languages of South America with grammatical evidentiality (and mirativity). It seems safe to assume that contact with Quechua has at least accelerated the evolution of *dizque* in Ecuadorian and Bolivian Spanish (Olbertz 2005; Babel 2009). Due to the early presence of *dizque* in the seed dialect (CORDE, Historical Corpus of the Royal Spanish Academy), Basque substrate influence cannot be completely ruled out. The second hypothesis is HISTORICAL DEVELOPMENT across Spanish dialects and/or Romance. Kany (1944) offers evidence in favour of *dizque* as a Pan-Hispanic phenomenon, dating back to Old Spanish, regardless of language contact situations. Parallel developments are underway in Romance, as noted. The patterns attested in these languages do not differ from others found across languages (Aikhenvald 2004a; see note 2). This second hypothesis is thus tenable, and compatible with indigenous languages of South America accelerating grammaticalization in Spanish and Portuguese. In effect, the evidential interpretation of *dizque* is supported by Quechua varieties where *dizque* is borrowed from Spanish as an additional reported evidential (de Granda 2003d: 123–9). Relat-

ed to the second, a third hypothesis is NATIVE DEVELOPMENT. Taken collectively, recent research casts Spanish as a language with multiple emergent evidential forms.[2] (p. 729)

35.1.4. Chapter outline

§35.2 discusses the status of *dizque* with reference to its interpretation and syntactic distribution. §35.3 reviews competing analyses of evidential *que*, and it introduces the emergent evidential *digamos*. §35.4 presents an overview of diverse lexical means to express indirect evidence in Spanish, along with evidentiality strategies. §35.5 presents the conclusions.

35.2. *Dizque* in Latin American and Peninsular Spanish

In contrast to lexical/semi-grammatical means (§35.4) and, to a certain extent, evidential *que* and *digamos* (§35.3), *dizque* presents advanced features of grammaticalization (see Giacolone Ramat and Topadze 2007). *Dizque* (2d) is phonologically reduced, a merger of *decir* 'say' with the complementizer of its complement clause (2a,b,c; 2 is adapted and expanded from Alcázar 2014, ex. 1). *Dizque* is the citation form commonly used in the specialized literature. Note that Kany (1944) had already presented severely reduced forms (*ihke*).[3] In the following sections, we will see examples where *dizque* appears in multiple syntactic positions where the original verb and complementizer could not occur. The form *dizque* originally consisted of a lexical verb 'say' and a complementizer. As a result of grammaticalization, the composite form *dizque* changed its status and developed into a particle or verbal modifier. As such, it acquired new evidential and epistemic functions.

(2)

a.	Dic-e	que	llegaron	tarde
	say-THV	COMP	arrive	late
	She/he says that they arrived late.			
b.	Dic-e-n	que	llegaron	tarde
	say-THV-3PL	COMP	arrive	late
	They say that they arrived late.			
c.	Se dic-e	que	llegaron	tarde
	3SG.IMP say-THV	COMP	arrive	late
	It is said that they arrived late.			

d. Dizque llegaron tarde
DIZQUE arrive late
Dizque they arrived late.

It may not be possible to establish what the particular source of *dizque* is in (2). It could be (a) third person singular or (b) plural form, or (c) the impersonal passive (but see Miglio 2010). (p. 730)

This section is structured in three parts. The more familiar data and analysis of *dizque* as an evidential with epistemic and mirative extensions is presented first (§35.2.1). A brief comparison follows of the semantics and pragmatics of *dizque* with Romance developments and Brazilian Portuguese (§35.2.2). The data and epistemic analysis of de la Mora and Maldonado (2015), which includes compositional evidentials, concludes this section (§35.2.3).

35.2.1. *Dizque* as an emergent evidential form

Dizque is widely characterized by two meanings not yet recorded for *digamos* (§35.3): quotative (3) and reportative (4). The following examples are taken from Travis (2006), who studied Colombian Spanish. Regarding the reportative function, Travis notes that *dizque* may function as a neutral reportative, where the speaker asserts there is a source of evidence. Alternatively, *dizque* is also used to cast doubt on the information relayed (p. 1284). Travis also talks of a *labelling function* (a strong disclaimer where the speaker does not vouch for the information). Labelling uses seem to be limited to constituent scope.

(3)
A: Y yo dizque
M: @@@
A: [XXX], <VOX mi amor, A qué horas fue que llegamos VOX:?>
Y <@ *no*, dizque @>, <VOX No=, *hace como dos o tres horas* VOX>
Y hacia como media hora acabábamos de llegar.
Angela: And I *dizque*,
María: @@@
Angela: XXX, 'Darling, what time did we get home?' And no, *dizque*, 'No, two or three hours ago.' And we'd only just got home about half an hour before.
Travis (2006: 1281–2; ex. 6)

(4) porque dizque iba a enterrar a una persona
. . . because dizque she was going to bury a person.
Travis (2006: 1282; ex. 9)

Working on Mexican Spanish, Olbertz (2007) finds a correlation between the relative length of the constituent modified (or scope) and evidential or epistemic meaning. In predicative adjuncts and verbs (5) 'the expression of epistemic modality has in fact become the exclusive function of *dizque*' (p. 161). Adjectives (6) favour an epistemic interpretation. Yet when *dizque* modifies constituents and, especially sentences, the preferred interpretation is evidential.

(5)

- Pues, ¿qué oíste?
Una cosa que dijeron los del gobierno ese dizque provisional
- So, what did you hear?
Something that those people of that *supposedly* provisional government said.
Olbertz (2007: 161, ex. 22; cf. *La casta divina* by Felipe Victoria Zepada)

(p. 731)

(6)

A los seis meses de andar dizque gobernando se puso enfermo.
After having gone about *pretending* to rule for six months he fell ill.
Olbertz (2007: 162, ex. 25; cf. *Arráncame la vida* by Ángeles Mastretta)

In other dialects of Spanish, as noted, *dizque* becomes closer to a grammatical evidential. Babel (2009) focuses on Bolivian Spanish, where *diz(que)/dice* marks direct/indirect speech and reported information (7). In the example we can see double marking. According to Babel, Bolivian *diz(que)* is 'a true evidential, a reportative marker' (p. 10) and it is semi-obligatory. She acknowledges epistemic uses similar to Colombian Spanish, yet these do not undermine establishing evidentiality as the primary function of Bolivian *diz(que)*. In Bolivian Spanish, there is no apparent relationship between scope and interpretation noted for Colombian and Mexican Spanish (Babel, p.c.). Bolivian *diz(que)* sits somewhere between the particle use and the verbal modifier use.

(7)

dizque	ahicito	estaba	el	charango	dice
dizque	right.over.there	was	the	musical.instrument	say

dizque the musical instrument was over there *dice*
(Babel 2009: 14, ex.1; spoken corpus)

Olbertz (2005) studied Ecuadorian Spanish. Ecuadorian Spanish differs from Bolivian Spanish in two distinctive ways—first, in that *dizque* can only modify sentences and second, in that its syntactic position is not variable. It occupies the immediately preverbal position, even in negative sentences (8). For Olbertz, (8) demonstrates that *dizque* + V constitutes a complex verbal construction (p. 90). With particular reference to the quota-

tive function, it presents a semi-obligatory collocation with the verb *decir* 'say' (9). Thus, *dizque dijo* has become a conventional way of framing a speech report.

(8)

No	dizque pod-ían	pag-a-r	a nadie
NEG	can-3PL.PAST	pay-THV-INF	to nobody

They say they could not pay anybody.
(Olbertz 2005: 7, ex. 27; Salcedo)[4]

(9)

'Patrón	se	enoja	conmigo'	dizque dijo él.
boss	3SG.REFL	get.angry	with.me	said he

'My boss gets angry with me', he said.
(Olbertz 2005: 5, ex. 16; Salcedo)

The association of epistemic modality to evidential interpretations in other Romance languages, for forms similar to *dizque*, ranges from the *rather epistemic* to the *barely epistemic*.

(p. 732) 35.2.2. Comparison with other Romance languages: focus on Brazilian Portuguese

Regarding emergent evidentials in Romance, developments parallel to Spanish *dizque* are attested in Galician, Romanian, Sardinian, and Sicilian, where the evidential meaning is core and its relation to subjectivity is tenuous (Cruschina and Remberger 2008; see also French *Il dit*, Hassler 2002; López Izquierdo 2006; and Romanian, Friedman 2000a; Romanian is spoken in the Balkans linguistic area, whose one characteristic feature is evidentiality). Cruschina and Remberger compare the semantics of Colombian *dizque* with its European counterparts: 'the labelling function is less easy to find—perhaps even impossible—in the varieties under discussion. It is also not yet clear whether each variety has a genuine dubitative […] or if the dubitative interpretation is due to pragmatic implicatures.' (p. 13). By contrast, Brazilian Portuguese *diz que* displays such uses. Casseb Galvão's (2001) detailed study of non-predicative *diz que* finds many evidential and some epistemic functions. *Diz que* features a diversity of quotative and reportative/hearsay uses; narrative uses 'once upon a time …' (see Adelaar 1977; McLendon 2003; Aikhenvald 2004a, Ch. 10); strengthening of a presumed truth/general knowledge; inferential and epistemic uses (to include disclaimers of not vouching for the information presented). Under the analysis presented in Alcázar (2014), the presence or absence of these epistemic uses can be taken as markers of primary and secondary grammaticalization (Traugott and Dasher 2002). Discrepancies among these forms do not signal inconsistency but an ongoing process of grammaticalization. Having said that, there is one particular

case, in Mexican Spanish, where *dizque* appears to be primarily epistemic (de la Mora and Maldonado 2015). We turn to this issue next.

35.2.3. *Dizque* as an epistemic form and compound evidentials *que dizque* and *quesque*

De la Mora and Maldonado (2015) present corpus data and interview questionnaires in their analysis of *dizque*, and less frequent forms *quesque* and *que dizque*. The authors argue that, in *dizque* and *quesque*, the dominant interpretation is epistemic (doubt, falsity, pretending): about 90% and 66%, respectively. Speakers find *dizque* and *quesque* to be interchangeable (the authors find minor differences). The authors consider that *quesque* could be compositional if it derives from *que* + *es que* (a weak explicative, in their view). A critical factor not considered is the scope of these forms. We know through the work of Travis (2006) and Olbertz (2007) that there are correlations between interpretation and scope, constituent and predicate level scope being strongly or exclusively identified with epistemic interpretation. The authors may have intended to talk about scope correlations: 'As a nominal modifier dizque undertakes evaluative meanings, as a clause modifier it undertakes epistemic meanings' [cf. abstract]. The issue of the potential scope of *dizque* remains outstanding. A review of the data could contradict the authors and throw results similar to those reported earlier. (p. 733)

According to de la Mora and Maldonado, the reportative function of *dizque* is 'salvaged' by co-occurrence with reportative *que* (about half of the uses are reportative). Consider the following example (10) (cf. p. 9, ex. 22; emphasis in the original).

(10)

No supo nunca lo que había hecho; usted cree, que dizque el guey lo hizo para las señoras embarazadas

He never knew what he had done; can you believe it? **Que dizque (he said that he supposedly)** did that for the pregnant women. (CREA [corpus], Fiction, 1991)

The authors claim this is an interaction between evidentiality and epistemic modality: 'The reportative part is taken care of by *que*, while the epistemic meaning is encoded by *dizque*.' (p. 9). This may be the case. In an alternative interpretation of *que dizque*, both could be viewed as evidentials. Evidential stacking is a familiar phenomenon in the evidential literature (Eastern Pomo, McLendon 2003; Aikhenvald 2004a; San Roque et al. 2017). In the alternative analysis these emergent evidentials emulate a characteristic associated with grammatical evidentiality.

The change to a predominantly epistemic form in twentieth-century Mexican Spanish is presented as also innovative in morphosyntactic changes and new epistemic interpretations. For example, 'Even more innovative changes are to be found in the twentieth century. […] *dizque* has undergone a shift to modify nouns, adjectives, and prepositional phrases instead of sentential complements' (p. 4). The syntactic changes are not innovative. The authors must have missed that, in López Izquierdo (2006, written in French), subsen-

tential scope for constituents and predicates was attested in the (very) early sixteenth century. By then, those scope possibilities already appeared to be epistemic (cf. López Izquierdo: pp. 491–3). If one has access to the literature on *dizque*, epistemic uses of doubt, falsity, or pretending do not seem innovative (cf. references in this chapter; *bragging* might be new, although this is only mentioned in the abstract).

The authors see *dizque* as a formerly evidential form. It is important to clarify what this means. The literature they refer to (p. 4) does not report a prior evidential-only use, Miglio (2010) excepted. The evidential-only uses of the thirteenth century concern impersonal uses of the (still) verb *decir* 'say' and (still) complementizer *que* 'that'; that is, a necessary, preliminary step. López Izquierdo documents the grammaticalization of the form into four stages. It is in the second stage (fifteenth to seventeenth century) where *diz que/ dizque* aquires a new syntactic behaviour. It is in this stage where epistemic uses are found as well (pp. 491–3). I am not aware of an evidential-only *dizque*, understood as a particle or adverbial with category change. Evidential and epistemic interpretations surface together. But the latter may be an epiphenomenon, as noted.

De la Mora and Maldonado lament that only a few scholars 'recognize' the mirative interpretations of *dizque* (Olbertz 2007; Miglio 2010; but also Kany 1944). The authors view mirative extensions as epistemic. While mirativity is a category independent of evidentiality (§35.2.2), it strongly associates to grammatical evidentiality: mirativity is 'indubitably related' to evidentiality (DeLancey 1997: 33). This is not the case with epistemic modality according to De Haan (1999); and Aikhenvald (2004). Mirative interpretations bring *dizque* closer to evidentiality and emanate from its evidential meanings. **(p. 734)**

35.3. Other emergent forms: *Que* and *digamos*

This section begins discussing evidential uses of the complementizer *que* (§35.3.1). Although the specialized literature has concentrated on *dizque*, arguably, as Demonte and Fernández Soriano (2013, 2014) defend, certain root clause uses of *que*, where *que* is not introduced by a verb of speech, constitute a grammatical evidential form in the language. An overview of Quartararo (2015) on *digamos* follows (§35.3.2).

35.3.1. Evidential uses of *que*

With reference to the peninsular dialect, Etxepare (2007, 2010) and Demonte and Fernández Soriano (2013, 2014) examine certain uses of complementizer *que* without a verb of speech in what appear to be root clauses (e.g. 'Hey, THAT Barcelona has won the Champions League', adapted from Etxepare 2007, see 11a), as well as certain paratactic and subordinate contexts (not shown). The authors disagree on the analysis of the data. Etxepare adopts the view that many such uses can be brought under the umbrella of a quotative function. For Demonte and Fernández Soriano, some of Etxepare's data is better analysed as 'echoic' sentences that repeat or reiterate the information that was presented before (8b). Verbs of communication may underlie other uses (12a). Yet (11), Demonte and Fer-

nández Soriano argue, are better analysed as reportative (11) and (12) (cf. Demonte and Fernández Soriano 2013: 3; exs. 1–2).[5]

(11)

a. Oye, que el Barça ha ganado la Champions.
listen that the Barça has won the Champions-League
(Etxepare 2007: 25–6)

b. Que el paquete no ha llegado
That the parcel not has arrived

(12)

a. Que si me das un kilo de tomates
that if to-me you-give one kilo of tomatoes
(I have said that) if I can have one kilo of tomatoes.

b. Speaker A
–No me he acordado de sacar las entradas
not REFL I-have remembered of get the tickets
I did not remember to get the tickets.

–¿Qué no te has acordado?
that not REFL you-have remembered
(Are you saying/do you mean) that you did not remember?
(Porroche-Ballesteros 2000: 104)

(p. 735)

Beyond the plurality of functions of complementizer *que* (e.g, see Porroche-Ballesteros 2000, *inter alios*), these examples are complicated by MIRATIVE READINGS.[6] These may not simply be pragmatically intertwined with quotative and/or reportative functions. They could be dominant (see (12b), and below)—authors may have ruled out mirative readings as pragmatic extensions. Demonte and Fernández Soriano (2014: 12; ex. 16) illustrate the use of reportative *que* with first person subjects (13). This creates what is known as a 'first person effect', that is, a mirative interpretation involving surprise and unprepared mind. Such an effect is widely reported for indirect evidence markers in grammatical evidential systems (Aikhenvald 2004a: 219–31). It is one of several arguments they offer to consider reportative *que* a grammatical evidential.[7]

(13)

a. Scenario: Listening to the lottery results, someone suddenly hears his number:
(Oye,) **que** he ganado la lotería.
Listen that I-have won the lottery [Surprise]

b. Scenario: Someone receives a letter saying that she has been nominated Dean:
(Oye,) **que** soy la nueva decana.
Listen that I-am the new dean [Unawareness]

c. Scenario: There is a party, the bell rings, a neighbour complains about the noise:
(Oye,) **que** somos muy ruidosos y tenemos que irnos.
Listen that we-are very noisy and we-have to leave [Surprise, disagreement]

(p. 736)

35.3.2. *Digamos*

One of the forms studied by Quartararo (2015) is *digamos* 'let's say'. Her dissertation examines Bolivian bilingual communities. The forms considered include the verb *decir* 'say', and *dizque* (low frequency in her elicitation tasks). Beyond the expected lexical meaning of *digamos*, she finds evidential and epistemic uses. These are not limited to a contact situation with Quechua. They are attested in monolingual communities (e.g. Peninsular Spanish and Italian). Her research may lead to mirror studies in Romance and other languages.

Quartararo finds the three most frequent lexical uses of *digamos* are (i) paraphrasing (14), (ii) self-correction, and (iii) exemplification. Evidential uses seem to be restricted to inferences. If reported information is excluded in *digamos*, it may be, as Quartararo suggests, because it could be conditioned in the nature of the experiment (elicitation tasks). Like *dizque, digamos* has epistemic uses. In the particular context of elicitation tasks, the speaker may imply a disclaimer in the weakness of the inference. *Digamos* tends to associate with low validation (at least in this context). Scope varies: *digamos* expresses inference with sentential scope in (15a); predicate level scope in (15b). These examples need to be understood in context, in relation to the deductions or conjectures the subjects make in the elicitations tasks.

(14)

A: aquí se mofan/ digamos/se hacen la burla/dig-ah no aquí está un chiquito.
Here they mock me/*digamos*/they make fun/sa[y]-ah no here is a small one.
(cf. ex. 25a; 9_SP_TASK: 7)

(15)

a. A: con su pareja vivía bien digamos ¿no ve? [...].
(cf. ex. 42; 3_SP_TASK: 9)
She[or he] got along with her partner digamos can't you see?

b. A: [...] después de eso/ya había sido esta persona de un lugar/digamos rural ¿no? [...]
After that/this person had already been from a place/*digamos* rural.
(cf. ex. 40; 3_SP_TASK: 14)

Quartararo's data and analysis are relevant for several reasons. One is that *decir* 'say' appears to gain evidential functions outside *dizque*, in what constitutes a **second emergent evidential**. *Digamos* is less grammaticalized than the verbal modifier in Ecuadorian *dizque*: the former features variable scope (predicate, constituent, sentential scope) and epistemic extensions. *Digamos* also seems less grammaticalized than particle *dizque*. In the former, it would seem than phonological reduction has not yet taken place. Considering these characteristics, *digamos* can be accounted for under Aikhenvald's (2004, 2007a) position. (p. 737)

35.4. Lexical evidentiality in Spanish

This section presents an overview of diverse means to express evidential meaning in Spanish: lexical, semi-grammatical forms, and set expressions (§35.4.1); evidential and mirative strategies (§35.4.2).

35.4.1. Lexemes and semi-grammatical forms

In the interest of space, Table 35.1 ((16) cf. Alcázar 2010) is a comprehensive and concise overview of the array of lexical and semi-grammatical resources to express indirect (p. 738) evidence in contemporary journalistic prose (Peninsular). The data was extracted

from a parallel corpus of consumer reports, the *Consumer Eroski Parallel Corpus* (Alcázar 2007). CEPC is a tetralingual corpus, consisting of Spanish originals, and translations into Basque, Catalan, and Galician. Table 35.1 is limited to reported evidence. The data was collected performing a search for the proclitic *omen* 'reported evidence' in Basque translations. The Spanish originals were collected and analysed. The original Spanish sentences contain forms that, in the eyes of Basque translators, merit the use of *omen*. This is not tantamount to saying that said Spanish forms are restricted to expressing reported evidence alone. For example, Cornillie (2007a, 2007b) finds that *parecer* 'to seem', the most frequent form in Table 35.1, is also used for inference and various epistemic uses.

Table 35.1. Evidentiality strategies replaced by OMEN and their frequency.

Spanish ES	**Frequency**	**Percentage**	**Translation**
NB: In 23% of all cases there is no ES in Spanish	40	23.1	OMEN
parece (18), *parecen* (4), … it seems, they seem, …	26	15.0	
se estima it is estimated	11	6.3	
al parecer (5), *aparentemente* (2) apparently, apparently	7	4.0	
se calcula it is calculated	6	3.4	
se considera (4), *considerarse* (1), … it is considered, to consider.REFL	6	3.4	
se prevé (4), *se prevén* (1) it is/they are foreseen	5	2.8	
dicen (3), *dice* (1) they say, he/she says	4	2.3	
se atribuyen (3), *se atribuye* (1) they are/it is attributed to	4	2.3	
pretende (2), *se pretende* (1), … plans, it is planned	4	2.3	
todavía (2), *aún* (1) still, yet	3	1.7	
supuestamente supposedly	2	1.1	
NB: other forms (mostly single occurrences of verbs)	55	31.7	
TOTAL	173	100	

In Table 35.1, we can see a diversity of elements that can be recruited to express reported evidence in Spanish. An important observation to make, at the top of the table, is that translators *insert omen* in about a quarter of the sentences for which it is chosen, when, in fact, the Spanish original does not use any apparent reported evidence marking. Another, at the bottom of the table, is that the expression of reported evidence is *highly dispersed*, mostly carried out by single occurrences of verbs. The semi-auxiliary *parecer* 'to seem' is the most frequent form. *Parecer* has been described in non-evidential terms in earlier literature. It has been considered to be a near-copulative verb, raising verb and semi-modal form in its relation to the expression of probability and certainty (Bolinger 1972; Hernanz 1982; Gutiérrez Ordóñez 1986; Porroche Ballesteros 1990; Fernández Leborans 1999; Fernández de Castro 1999; Gómez Torrego 1999; Di Tullio 2005). In more recent studies, *parecer* has been analysed either as an evidential or epistemic/evidential semi-auxiliary (Bermúdez 2002; Cornillie 2007a, 2007b; Ferrari 2009, 2010). By contrast, most other forms have gone unnoticed. Among these, we find impersonal passives, like *it is estimated, it is considered* or *it is calculated*; the future-oriented *anticipate, foresee*; and adverbials like *supposedly, apparently*. Such forms are sometimes the subject of study of lexical evidentiality (e.g. Hassler 2007 on French, *inter alios*). Beyond the lexical markers presented in the table, many other forms exist (e.g. adverbials such as *por lo visto* 'apparently', González-Ramos 2005; or the perfect conditional characteristic of journalistic prose, see next section).

Looking back at earlier stages of the language, Miglio (2010) finds set expressions in Colonial Spanish (1500–1800) that express evidentiality. Some of these set expressions are still in use, like *tengo entendido que* 'I have heard that' or *tengo por cierto* 'I know for a fact'. Other set expressions are out of use: *Soy informado (y tengo muy certificado) que* 'I have been informed (and it has been guaranteed to me that)' or *sé decir y afirmo que* 'I can say and state that' (2010: 16). As we can see from all of the examples in this subsection, Spanish finds ample need to indicate information source, even if it lacks a system of grammatical evidentiality. This need also manifests in extensions of the use of other grammatical categories in the language.

35.4.2. Evidential strategies and mirative strategies

Parallel to lexical and semi-grammatical forms, Spanish has diverse evidential strategies, or evidential extensions of non-evidential categories (Aikhenvald 2004a). Modality and tense (p. 739) are two such categories (see Squartini 2001 on Romance). Aikhenvald (2004a: 143) reports on some of these for Spanish, although most of the examples concern varieties in contact with indigenous languages of South America or bilingual communities. For example, in Bolivian Spanish (referring to Laprade 1981) the pluperfect can have overtones of indirect evidence with strong disclaimers and mirative interpretation, which Laprade suggests come from Aymara.

Avellana (2013) points to varying interpretations of the pluperfect that depend on which indigenous languages of South America Spanish is in contact with. Thus, in northwestern Argentina, Spanish is in contact with Quechua; in the northeast, with Guarani. The plu-

perfect may be understood as mirative in the northeast ((16a) cf. ex. 2a, p. 32); indirect evidential in the northwest ((16b) cf. ex. 2b, p. 32). Avellana provides a paraphrase of the intended meaning in Spanish in the second line.

(16)

a. Mirá vos, había sido que la pistola de Robocop sí existe [W1].
(Resultó (ser) que la pistola de Robocop existe [pero yo no lo sabía hasta ahora].)
Hey, it turned out that Robocop's gun does exist [but I did not know it until now]
[Lit. It had been that Robocop's gun does exist.]

b. Le pegó otra vez. Lo agarra de la cabeza y va, lo mete en la pileta con agua. Lo baña bien.[…] Gritando había estado, el loro. [V:511, III]
(El loro estaba gritando [lo cual no me consta personalmente].)
He hit it again. Grabs it from the head and goes and puts it into the basin with water. He bathes it well. […] The parrot was shouting [which I did not witness directly].
[Lit. Shouting *had been*, the parrot]

A more general evidential strategy, seemingly independent of language contact, is the use of the future as an inferential (17a), akin to English or Spanish modals (glosses in (17); (18b)). Particular dialects may develop specific evidential strategies, again in the absence of contact with indigenous languages of South America. For instance, the imperfect has a 'quotative' use (Leoneti and Escandell Vidal 2003). Demonte and Fernández Soriano (2014) point to the perfect conditional as a reportative: 'It is quite common, at least in Peninsular Spanish press, to use the perfect conditional/potential tense to indicate reported information' (p. 27; (18), cf. ex. 29). López Izquierdo (2006) warns it is a French calque: 'Le conditionnel de discours rapporté en espagnol est une expansion récente, utilisée surtout dans le langage journalistique et absente de la langue oralle. Il est considéré comme un calque du français et les grammaires normatives condamnent son emploi' (p. 488). Evidential extensions thus have the potential to transfer through contact.

(17)

Las luces están encendidas. El coche está aparcado.
Lights are on. His car is parked.

a. Estará en casa.
He must/should be home. [lit. He will be home]

b. Debe de estar en casa.
He must/should be home.

(p. 740)

(18)

a. El acusado habría intentado fugarse.
the defendant would-have tried to-run away
Allegedly, the defendant tried to run away.

b.	La catástrofe	habría	sido	causada	por una explosión.
	the catastrophe	would-have	been	caused	by an explosion
	Reportedly, the catastrophe was caused by an explosion.				

Other well-known strategies are extensions that express mirativity, as in (16a). Mirativity is an independent category, closely related to evidentiality (DeLancey 1997, 2001, 2012; Aikhenvald 2004a: Ch. 6, 2012b). Mirativity expresses that information is new, unexpected to the speaker. The speaker's mind may be unprepared and find it difficult to integrate or accept this new knowledge. Mirativity is strongly associated with surprise (Slobin and Aksu 1982), and this appears to be a strong cross-linguistic pattern (Aikhenvald 2012b). In Latin America, perfect or pluperfect tenses can express mirativity as an extension (see Olbertz 2012 and references therein). Of these, Argentinian may be the better-known dialect. Consider (20), originally from Kany (1970: 208; cf. Olbertz 2012: 85, ex. 26). The context given is: '[speaker narrates that he had to sleep in a windy cave; he tried to find out where the wind came from]'

pero no había habido huecos en la roca.

(19) . . . but it turned out there were no holes in the rock.

[NB: literally, 'but there *had been* no holes in the rock']

35.5. Conclusion

The need for Spanish to express evidential meaning extends beyond lexical evidentiality/evidentiality strategies, into forms that are emergent evidentials, or evidentials in the making. This chapter has focused on emergent evidential forms *dizque, que*, and *digamos* (also *quesque, que dizque*) in relation to the theoretical debate of whether a continuum exists between lexical and grammatical evidentiality. Only a few years after the special volume of *Rivista di Linguistica,* new contributions to the study of evidential meanings in Spanish suggest a revision is due of the confines of lexical evidential systems. Documentation and analysis of emergent forms offers new opportunities to gain a principled understanding of grammaticalization and contact phenomena. *Dizque* continues to beg questions regarding coexistence of evidential, epistemic, and mirative readings, and their relationship to scope and syntactic structure.

Notes:

([1]) Kany (1944) finds mirative interpretations of the form in Spanish; Aikhenvald (2012b) reports mirativity in multiple evidential strategies in Spanish.

([2]) CONVERGENCE, in the sense of *parallel evolution* (versus languages becoming alike), as in biological systems, is an ever-present hypothesis, and thus always difficult to rule out. Evidence of convergence is plentiful in typology. Two examples are evidentiality

(Aikhenvald 2004a) and imperatives (Aikhenvald 2010). In evidentiality, with particular reference to *dizque*, it is common to find languages develop a quotative/reportative out of a predicate in the class of *verba dicendi*; typically, this predicate will be its maximum exponent, the verb *say*. Whether convergence is evidence of a bioprogram, as entertained in Universal Grammar, or not, continues to the subject of research in formal and functional approaches to the study of language.

([3]) Recent registers of the Internet may spell it with a 'k': *diske*.

([4]) Salcedo refers to an unpublished corpus of Spanish in contact with Quechua compiled by Pieter Muysken in 1978 in and near the town of Salcedo, province of Cotopaxi, Ecuador.

([5]) For reasons of space, I am not able to go into the intricacies of the data, which is rather complex and nuanced (see Porroche-Ballesteros 2000, Rodríguez Ramalle 2008a, 2008b), or do justice to the complexity of the analysis of Etxepare and Demonte and Fernández-Soriano. I focus on pointing out additional evidence that relates these uses to evidentiality.

([6]) In my reading of (11)–(12b), mirativity is also part of their meanings. If presented without a context, in other examples offered in the works cited, I tend to interpret them as mirative; though other readings are available (e.g. the examples in de la Mora and Maldonado (2015), which may be read as reportative, on first reading seemed mirative to me). In relation to this, note that part of the communicative function of many of these examples is to INCITE OR BEGIN CONVERSATION. In my ongoing corpus work on Basque, I find miratives have this function. This is another way in which mirative readings point to the evidential function of *que.*

([7]) In Demonte and Fernández-Soriano's analysis (2013, 2014), reportative *que* is a grammatical evidential form. Demonte and Fernández-Soriano (2013) compare reportative *que* with *dizque*. They conclude the former lacks the epistemic interpretations associated with the latter. In the examples I have read, I agree with the authors. But I am not sure how they view mirativity. *Dizque* has mirative uses. They note *que* has narrative uses as well—another use associated with grammatical evidentials. But so does *diz que* in Brazilian Portuguese (Casseb Galvão 2001). To some extent, the analysis of *que* as a grammatical evidential hinges on the underlying syntactic structure. If *que* is functioning as a subordinating complementizer, then reportative uses could be conceived as an evidentiality strategy. Evidentiality strategies can lead to evidential, mirative, and epistemic interpretations. If *que* is an early form, it may have not undergone primary grammaticalization, where subjectification is common (Traugott and Dasher 2002). In that sense, it may *appear* to look more as an evidential. There are dialectal differences between Peninsular and Mexican. Evidential *que* in the latter can be used sentence-medially, outside its expected position (Treviño 2008). This could be interpreted as an incipient particle use of a former complementizer, and thus as an indication of category change.

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Evidentiality and Information Source in Signed Languages

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Abstract and Keywords

This chapter examines evidentiality in signed languages. Data comes primarily from three signed languages—American Sign Language (ASL), Brazilian Sign Language (Libras), and Catalan Sign Language (LSC). The relationship between evidentiality, epistemic modality, and mirativity is examined across the expression of perceptual information as an evidential source, inference, and reported speech. It is suggested that evidentiality relies on simulation and subjectification. Finally, a proposal is offered that evidentiality, epistemic modality, and mirativity are primarily expressed through grammaticalized facial markers in signed languages, rather than by means of manual signs. These markers allow for simultaneous expression of grammatical markers. In signed languages, therefore, not only are the semantic components of evidentiality, epistemic modality, and mirativity integrated, so too are the phonological means of expression.

Keywords: signed language, gesture, simulation, subjectivity, facial marker, epistemic modality, mirativity, grammaticalization

36.1. Signed languages

SIGNED languages[1] are the naturally occurring languages of the world's deaf communities. Signed languages are linguistically unrelated to spoken languages. The historical and genetic relations among signed languages are thus distinct from those found for spoken languages. American Sign Language (ASL), for example, is historically related not to British Sign Language, but to French Sign Language. While we are still learning about the historical relations among signed languages, certain signed language families have been described, such as the French Sign Language family, which includes French Sign Language, American Sign Language, Brazilian Sign Language, Tunisian Sign Language, Russian Sign Language, and others; and the British Sign Language family, which includes

British Sign Language, Australian Sign Language, New Zealand Sign Language, and perhaps Maltese Sign Language and the Bangalore variety of Indo-Pakistani Sign Language, among others.

'Signed language' is a broad category which includes languages such as ASL which are used by relatively large communities sometimes across multiple countries (e.g. ASL is used in the United States and Canada), and village sign languages, which arise when a number of deaf children are born into an insular indigenous community (Meir, Sandler, Padden, and Aronoff 2010).

Our chapter offers a preliminary examination of evidentiality and epistemic modality in ASL, Catalan Sign Language (LSC), and Brazilian Sign Language. ASL is the language of the deaf community used in face-to-face communication, and learned as the first language or as a second and preferred language. It is used in the United States by an estimated (p. 742) 100,000–500,000 people, including deaf children and adults, hearing children of ASL-using deaf adults, and adult deaf signers who have learned ASL as their second language. Catalan Sign Language, or Lengua de Señas Catalana (LSC), is the primary language of deaf people living in Catalonia, Spain. It is estimated that LSC has 9,000–15,000 total users, and 6,000 deaf native users. Brazilian Sign Language, or Língua de Sinais Brasileira (Libras), is the primary language of the Brazilian deaf community. Libras has been reported to have 3,000,000 users. Libras was legally recognized by the Brazilian Government in 2002.

36.2. Evidentiality

Evidentiality and related discourse phenomena have been the subject of numerous studies, yet there is limited consensus as to the nature of the category. One of the broadest definitions of evidentiality is given by Chafe and Nichols (1986), who write that an evidential is any of the set of devices in a given language used to indicate the nature of evidence for a statement, and how a speaker chooses to mark the veracity of that statement. Evidentiality pertains to the source of information, the evidence on which a statement is based, its perceptual basis, reliability of knowledge, or the speaker's attitude toward the validity of information.

One complicating factor is the fact that evidentiality and information source may be expressed in different ways. Speakers may indicate the source of their information with a grammatical marker, sometimes referred to as a grammaticized evidential (Aikhenvald 2006c). Evidentiality also may have lexical and periphrastic expression. Often lexical and periphrastic expressions are the diachronic source of grammaticized evidentials.

While most researchers agree that evidentiality is best considered distinct from modality, Mithun (1986) suggests that evidentials can be qualified by specifying the probability of their truth, thus suggesting a link with epistemic modality. In some languages evidentiality and tense-modality markers may form an integrated system (Aikhenvald 2003a). Langacker (2014) notes that in some evidentiality specifications it may be difficult to distin-

guish modality because inference plays an important role in both. Evidentiality relates to information source—sensory (visual, auditory, olfactory), reasoning, inference, and report. By contrast, modality pertains to speaker commitment, degree of certainty, likelihood of a proposition being true, or evaluation of the prospect of an occurrence being realized. The relation between the expression of modality and evidentiality in signed languages will form an important focus of our chapter.

36.2.1. Evidentiality in a cognitive linguistic perspective

Our approach to evidentiality is situated within the framework of embodied cognition and language. The embodied view of cognition posits that 'the structures used to put together our conceptual systems grow out of bodily experience and make sense in terms of it; moreover, the core of our conceptual systems is directly grounded in perception, body movement, and experience of a physical and social nature' (Lakoff 1987: xiv). The embodied linguistic view assumes that language is built up from the language user's experience with (p. 743) actual language use. Language users abstract categories based on commonalities or similarities across recurrent usage events. Grammar is a reflection of patterns gleaned across those experiences (Bybee 2010).

Two cognitive linguistic theories that we will refer to in this chapter are mental space theory and Cognitive Grammar (CG). Mental space theory claims that meaning resides in a speaker's mental representations, and that grammatical structures are space-building devices (Fauconnier 1985, 1997; Coulson and Oakley 2000).

The basic claim of Cognitive Grammar (Langacker 1987, 1991a, 1991b, 2008) is that grammar is symbolic, consisting of a pairing of form (the *phonological pole*) and meaning (the *semantic pole*). Lexicon and grammar form a continuum of symbolic structures, varying along such dimensions as specificity, schematicity, complexity, and conventionalization.

Within the CG approach, an expression is said to select a portion of conceptual content for *profiling*: it is put 'onstage' conceptually and becomes the locus of one's conceptual attention. One function of grammar is to *construe* conceptual content in different ways. One aspect of construal is *objectivity* versus *subjectivity*. Langacker (2008) expands on the theatre metaphor of being 'onstage' or 'offstage' to explain. When you are in a theatre watching a play, your visual (and conceptual) attention is focused on the actor who is talking. You are unaware of yourself or your surroundings. The actors and their actions are objectively construed, being onstage as the focus of attention. The viewer is subjectively construed, the 'offstage locus of perceptual experience that is not itself perceived' (Langacker 2008: 77). When the viewing role is maximized, the conceptualizer as viewer is construed with maximal subjectivity and the viewed objects onstage are construed with maximal objectivity.

Langacker (2014) offers an analysis of evidentiality within the CG framework. He first notes that 'language is a basic means of achieving epistemic control and intersubjective alignment' (Langacker 2014: 2). Epistemic control refers to our knowledge of the world,

whether real or mentally constructed. In using language, speakers and signers attempt to achieve a momentary alignment with their interlocutor's scope of awareness and focus of attention. Langacker offers the following scenario. We are all trying to cope with a real world in which reality is the way things are, out of the infinite set of possible alternatives. Reality evolves through time, and thus consists of the history of all realized occurrences; future, unrealized occurrences are yet to be determined. Speakers (and signers) attempt to cope with this reality by continually building up their conception of reality. They use both their own knowledge as stored in memory, their continually updated understanding of the world through internal and external sources of information, and the knowledge of others.

In our discussion of the expression of evidentiality in signed languages, we will refer to the categories of evidence based on (1) perceptual experience (primarily vision, but as we will see LSC uses other senses as sources of information) and inference, and (2) report. Our rationale for collapsing perception and inference is simply that at this point, the data at hand do not permit us to reliably distinguish the two in use.

36.3. Evidentiality in signed languages

Research on evidentiality in signed languages is in its very early stages (Jarque and Pascual 2015; Shaffer 2012). More work has focused on the related conceptual domain of mood and (p. 744) modality (Shaffer 2002; Janzen and Shaffer 2003; Shaffer and Janzen 2016; Shaffer, Jarque, and Wilcox 2011; Wilcox and Shaffer 2006; Wilcox and Wilcox 1995).

The CG concepts described in §36.2.1 have important relevance for signed languages in two ways. First, they form the basis for a description of the semantic function of nominal and clausal grounding, modality, and evidentiality. The second implication is unique to signed languages and not immediately apparent. Not only do these concepts pertain to the semantic pole; they are also manifest at the phonological pole, in the nature of the articulators of signed languages. This point requires some elaboration.

Signed languages are produced by two broad classes of articulators: hands and faces. Hands are visually perceptible to the signer as onstage elements and thus invite an objective construal. The signer's face, however, is not perceivable by the signer. Perceptually, faces are offstage elements of articulation, and thus they invite a subjective construal. Faces and facial grammar are almost universally used in signed languages to encode grammatical content, especially information about the signer's subjective evaluation, judgement, or reaction to objective content. In fact, while faces typically encode grammatical functions such as epistemic modality (Shaffer 2004; Wilcox and Shaffer 2006), interrogatives (Zeshan 2004), conditionals (Wilcox 2014; Sandler, Meir, Dachkovsky, Padden, and Aronoff 2011), and topic and discourse markers (Janzen, Shaffer, and Wilcox 2000), it is exceptionally rare that facial articulations express lexical content. The type of

information conveyed by hands and faces is critical to understanding how the semantic functions of mood and modality, evidentiality, and mirativity are expressed and interact.

In the sections below we describe several types of expressions used to mark evidentiality. §36.3.1 presents data on evidentials of perception and inference. Reported speech is in §36.3.2. In §36.3.3 we explore mirativity and its relation to evidentiality. Finally, in §36.3.4 we take up the topic of subjectivity and simulation as a way of explaining some of the patterns we see in the emergence and grammaticalization of evidential and epistemic systems in signed languages. We suggest that modality and evidentiality are often integrated systems in signed languages. The integration of evidentiality and epistemic modality in ASL takes place by (1) indicating source of information with a manual sign; (2) marking the signer's attitude towards that information, both in terms of its veracity and whether it is assimilated or unassimilated by the speaker, by variations in the manner of movement of the manual sign, and (3) indicating the signer's epistemic commitment with facial grammar. We discuss this complex integrated system in more detail in §36.3.4.

36.3.1. Evidentials of Perception and Inference

As we have noted, epistemic modality and evidentiality interact because inference may be involved in both. Evidentiality not only points to the source of information, it also provides information about the reliability of that information and the speaker's attitude towards the veracity or validity of the information. Epistemic modals are also inferential because they indicate that an occurrence is not assessed as real, 'but that the speaker—by following an inferential path—projects its realization with greater or lesser confidence' (Langacker 2014: 5).

Wilcox and Shaffer (2006); and Shaffer (2004) described certain signs in ASL as epistemic modals which, in retrospect, seem better viewed as integrated expressions of (p. 745) modality and evidentiality. These include OBVIOUS and SEEM, which are used to lexically express clause-external assessments of the proposition expressed in the complement clause. OBVIOUS is used in situations in which visual information is available which leads to the signer making an inference. For example,[2]

(1)
[MAN PRO.3 RICH]-TOP [OBVIOUS]-BF/HN
That man is obviously rich.
(Wilcox and Shaffer 2006: 227)

In this example, the signer as conceptualizer obtains information from a visual source: OBVIOUS derives from a lexical sign meaning 'clear' or 'bright'—that is, from visual perception (the man's clothes, type of car he drives, etc.). The conceptualizer makes an inference based on that visual information, the proposition *The man is rich*. Finally, the conceptualizer makes a subjective assessment of the inference. This epistemic commitment is marked facially with brow furrow and head nod.

In the following situation, a signer has witnessed a truck pulling up to the library with cartons of Deaf Life magazine.

(2)
[LIBRARY HAVE DEAF LIFE]-TOP [OBVIOUS]-BF/HN
The library clearly has Deaf Life.

(Shaffer 2004: 191)

SEEM derives from a lexical sign meaning 'mirror' (visual image domain). SEEM is used in situations where the signer marks the source as visual and also makes an inference. Again, facial grammar indicates the signer's commitment to the inference. With SEEM, the signer can also mark her attitude toward the veracity of the evidence with changes to the manner of movement of the sign. The following example was used after the signer observed the behaviour of Tim and Jennifer.

(3)
[TIM, JENNIFER]-TOP [DIVORCE SEEM]-BF/SLOW HN
It looks like Tim and Jennifer are going to get a divorce/I think Tim and Jennifer are going to get a divorce.

(Shaffer 2004: 190)

(p. 746)

In this example, SEEM was produced with a default manner of movement, a single supinating movement of the forearm, indicating an unmarked assessment of the veracity of the evidence. The brow furrow and slow head nod mark the signer's default commitment to the inference.

In the dialogue in example (4), a trophy had been resting for quite a long time in its usual place on a shelf. One day, the signer noticed that it was missing. Here, the information is not something directly visible; rather, it is the absence of the trophy in its normally expected location. The Shipibo-Konibo evidential system makes a distinction between well-founded inference based on reasoning and observable evidence, and speculation, where the evidence is poor or non-existent (Valenzuela 2003). SEEM in this example marks the signer's lack of trust in the validity of the evidence with a slow, reduplicated movement, suggesting a more speculative reading.

(4)
(a) [FEEL SOMEONE CL:1 NOTICE GO.INTO SWIPE YOU]- Y/N Q
Do you suppose someone walked by, noticed it, and just went in and stole it?
(b) [NOT-KNOW]-HS [SEEM+]-HN
I don't know, apparently that's what happened.

(Wilcox and Shaffer 2006: 227, from Baker and Cokely 1980)

Certain perceptual signs in LSC also serve evidential function (Jarque and Pascual 2015). When used as a lexical morpheme SEMBLAR denotes physical resemblance (visual domain). As a grammatical morpheme, SEMBLAR may be used to express the speaker's inference that an event is or is not likely to occur. In example (5), a person has agreed to come to a meeting, but it is now long past time.

(5) SEEM PRO.3 TODAY COME NOT[3]
It seems that she's not coming today.

[3]

PRESENTIR also appears to serve both epistemic modal and evidential function. It is used to express the speaker's inferences about actions or intentions.

(6)
PRO.3 SAY GO HOLLAND NOT [pause] SENSE CHANGE.MIND [pause] LEAVE SURE
She said she wouldn't go to Holland, but I think (literally 'it smells like') she'll change her mind. I'm sure she'll go.

PRESENTIR derives from a lexical sign of perception, in this case one denoting the sense of smell, as the source of information on which the inference is based, although there is clearly semantic extension and grammaticalization leading from inference based on smell to more general inference. In its grammatical sense PRESENTIR also appears to involve not only inference but also future possibility.

Other inferential evidential markers in LSC which derive from a lexical source in the sensory domain include AMBIENT 'ambience' (touch), CLAR 'clear' (visual image), CAPTAR 'to (p. 747) capture' (touch), OLORAR 'to smell' (smell), and VEURE 'to see' (sight) (Jarque and Pascual 2015). For example,

(7)
PRO.1 SMELL + AMBIENCE [INDEPENDENCE]TOP [NOT]NEG
Lit. 'I smell in the ambience that the independence is not.'
It seems to me that (The Basque Country) is not going to become independent.
(Jarque and Pascual 2015: 426)

Jarque and Pascual point out that while olfactory perception verbs are often used to express suspicion, in this example OLORAR encodes an inferential function with a neutral value.

A similar semantic extension of smell is the Libras sign ACHO, which is signed on the nose. ACHO can be used to express an inference based on a perceptual source of information, as in ‘I think it is going to rain’ after looking at a very cloudy sky. It also can express an epistemic assessment.

(8)

I THINK(ACHO) FOR-EXAMPLE DEAF NEED INTEREST VIDEO TRUE

I really think deaf people need to be interested in videos.

Here, rather than profiling the activity of proposition assessment (*I think*) of the matrix clause, ACHO designates the activity of the complement (*interested*). The result is that ACHO has come to serve as a grammaticalized grounding element.

36.3.2. Reported speech

One source of knowledge is reported speech or hearsay.[4] For the purposes of this chapter, ‘reported speech’ will be used to describe forms that index information to a signed or written source, whether the source is explicitly stated or left unspecified (as in ‘someone said’).

Reported speech is not merely a rhetorical device in signed languages, but is also an unmarked means of providing hearsay information (Jarque and Pascual 2015; Shaffer 2012). Shaffer (2012) describes how signers use space and their bodies to report on others as an indirect source of information. Signers create complex mental space blends to visually reconstruct, in physical space, the past act of acquiring information. They do this by shifting their eye-gaze to an imagined physical space, thus temporarily disengaging from the current discourse space and inviting their interlocutors to view the previous discourse as they, the signer, had experienced it. They also employ grammatical devices, typically facial gestures, to indicate their reaction to that information.

The effect is twofold. First, they point to the source of the evidence with eye-gaze and convey their evaluation of the relative validity of that evidence by their re-constructed reaction to it, primarily with facial expression. Second, by inviting the interlocutors to view the previous discourse along with them, these constructions serve as instructions for the interlocutor to understand the information in the way that the signer understands it (cf. Dancygier and Sweetser 2012). In other words, these expressions establish intersubjective alignment. (p. 748)

In the following example the signer is discussing changes in how video relay services[5] (VRS) are provided. He starts by saying 'Someone said,' then he shifts his eye-gaze from his interlocutor towards the space where he depicts his prior conversation and his response to the information he acquired ('Oh, interesting, good idea'). He then returns his gaze to his current interlocutor, thus disengaging the blend, and tells his interlocutor what he has learned. He then once again looks off to the right again and very clearly indicates his reaction of surprise to what he has heard.

(9)

(eye-gaze shifts away from interlocutor) SOMEONE SAY
PRO.1 [OH.I.SEE GOOD IDEA]- SURPRISE DEPICTION
(eye-gaze returns to interlocutor) SUPPOSE PRO.1 NC CALL VRS PRO.3 CHARLOTTE
GO.TO OTHER STATE LESS CONFLICT INTEREST
KNOW EACH.OTHER LESS CONFLICT INTEREST
(eye-gaze shifts away from interlocutor) [PRO.1 OH.I.SEE] –SURPRISE-DEPICTION
Someone told me something interesting. I thought it was a good idea. If I'm in North Carolina and call the video relay service I won't get the one in Charlotte. I'll get one in another state. There's less conflict of interest that way, because we don't know each other. So there's less conflict of interest. Interesting.

(Shaffer 2012)

In the following example, the signer and her interlocutor are also discussing the use of video relay services. The signer says 'I heard', then pauses, shifts her eye-gaze from the interlocutor and gazes to the right, activating the blend and a new ground. Next she signs, 'I was told' (literally: 'it is signed to me'), and then responds (to her discourse partner in this reported discourse) to what she was told with a look of surprise and the reply 'what?!' She then returns her eye-gaze to her interlocutor, thus deactivating the blend, and only then relates what she was told in the past discourse event.

(10)

YES YES AND PRO.1 HEARD (eye-gaze shifts away from interlocutor) $_3$SIGN.TO$_1$ (leans forward) [#WHAT**]-SURPRISE-DEPICTION
(eye-gaze returns to interlocutor) V-R-S (nod) START CUT (left hand) CUT (right hand) CUT (left hand)
[HAPPEN SEE NAME]-TOP
[KNOW WHO]-TOP
CUT REFUSE ANSWER
[WHY]-TOP SOMETIMES SIT NAKED BODY SECOND BAD SWEARING
[TRUE]- Y/N Q
Yes, and I heard, well, I was told, and was shocked to hear, that the VRS (companies) are starting to disconnect calls. If they see a name that they know they don't answer, because sometimes people have answered naked, or used profanity. Is that true?

(Shaffer 2012)

(p. 749)

Finally, we note that even though deaf people have little or no access to information from auditory sources, a sign meaning ‘to hear’ is often used to mark evidentiality. The following example occurred in a discussion about whether the student population of a local school for the deaf was increasing or decreasing.

(11)
I HEARD FIVE NEW ENTER FALL FIVE, BUT NONE KINDERGARTEN NONE
I heard (the school) will get five new students this fall. Five. But none of them are kindergarteners.

The source of information here is another conceptualizer. Unlike a marker of direct report such as *Someone told me* or *I was told/It was signed to me,* a construction using *I heard* is more complex because it involves a metonymic shift from a sign referring to auditory perception to its role in the general transfer of information. For deaf people and signed languages, there is yet another metonymic shift from a sign referring to audition to the general, non-auditory acquisition of information.

36.3.3. Mirativity

As Aikhenvald (2012b: 474) notes, ‘Every language has a way of expressing sudden discovery, unexpected information, and concomitant surprise.’ This is the semantic function of mirativity. While some linguists (e.g. Lazard (1999)) suggest that mirativity and evidentiality are entwined in a single system and thus argue against recognizing mirativity as a grammatical phenomenon distinct from evidentiality, the consensus among typologists such as Aikhenvald (2012b) and DeLancey (2001) is that evidentiality and mirativity are distinct grammatical systems. It is true, nevertheless, that mirative forms intersect semantically with evidential systems (DeLancey 2001), and that evidentials may have mirative extensions, especially in the context of the first person subject (Aikhenvald 2012b).

DeLancey described the function of miratives as indicating ‘the status of the proposition with respect to the speaker’s overall knowledge structure’ (DeLancey 1997: 33) and ‘conveying information which is new or unexpected to the speaker’ (DeLancey 2001: 379). Mirative meanings include sudden discovery, surprise, and unprepared mind of the speaker (Aikhenvald 2012b). Mirative forms may have other discourse functions as well, including marking the main point of a story and the surprising and focal points of a narrative. Aikhenvald (2012b: 474) notes that this latter usage ‘is comparable to the ways in which evidentials as mirative strategies may be manipulated to create special discourse effects.’

We bring up the topic of miratives in signed languages because they interact semantically with the expression of evidentiality and modality. By marking information as new or unexpected, miratives reveal the speaker’s knowledge of the world. In so doing, miratives also provide information to the interlocutor about the speaker’s knowledge. Thus, miratives serve to bring the speaker and her interlocutor into intersubjective alignment. In the reported speech (i.e. sign) examples described above, miratives are marked with a surprise

depiction: eyes wide open, and a backward head lean or a forward head thrust. The mirative marker occurs before the report of information. This is important because it provides the interlocutor with a basis for interpreting this information. (p. 750)

The following example of mirativity in ASL indicates the moment of sudden realization or unprepared mind of the signer's past self (Shaffer forthcoming). The signer's body is partitioned to express both her present and her past self: while the signer's hands and body represent her present self, her eyes and head represent her past-self eyes and head at the moment of realization and signal her reaction to that realization. The interlocutor has asked the signer if her family still has pets. She replies that they used to have two cats until she realized that her daughter was seriously allergic to cats. The signer breaks eye-gaze with her interlocutor and looks towards her left to a space she has been using to represent her daughter at the time of the allergies. Next she looks to her right and says:

(11)

CAT index right
BACKWARDS HEAD LEAN/SURPRISE DEPICTION
FINISH BUSTED CAT
We realized it was the cats (causing the allergies).

The signer continues, saying she wondered what to do next and decided to remove the cats to another room. At this point she again shifts her eye-gaze to where the daughter had been conceptualized and signs:

(13)

BACKWARDS HEAD LEAN/SURPRISE DEPICTION
LESS** NO.MORE SLEEP INSIDE. STAY.AWAY
BACKWARDS HEAD LEAN/SURPRISE DEPICTION
TRUE.BUSINESS. LITTLE.BIT LESS
BETTER REMOVE.TO COUNTRY
REMOVE SEE
(eye-gaze to the left)
BACKWARDS HEAD LEAN/SURPRISE DEPICTION
(eye-gaze returns to addressee)
FINISH BETTER
So we removed the cats from the room. Lo and behold she improved! With the cats not sleeping in her room, she improved a bit. So then we moved the cats to the farm to see what would happen and sure enough she got completely better. All of her symptoms disappeared.

Miratives are marked in Libras with the same facial depiction of surprise and a sign glossed as SUDDEN. In a narrative, a Libras signer tells about a man who knocks on a door. The person who answers is a farmer, who looks quite poor. The man is surprised to

see that inside the house there are many children, an unexpected situation for such a poor farmer.

(14)

man walk CL_entity knock on door
POINT-left CL_ENTITY (person comes from left to signer)
CL_INSTRUMENT (farmer puts on his hat)
facial and body expression of a humble person) POOR POINT-left
SURPRISE DEPICTION-SUDDEN SON/DAUGHTER++ CHILDREN++

(p. 751) Finally, we note that the fully grammaticized facial marker of surprise depiction is polysemous, also marking questions, topics, and conditionals in several signed languages (Wilcox 2014; Janzen 1999, 2012; Morgan 2006; Massone and Curiel 2004; Dachkovsky and Sandler 2009).

36.3.4. Subjectivity and simulation

Cognition and language are said to be embodied because they are based on our interactions with the world through our sensory perception and our bodily and motoric actions. Our brains and our cognitive processing are engaged with the world. Clearly, though, we use language and cognition to deal with non-perceptual and non-physical activities. Our cognition and language can function in a way that is disengaged from the real world. In these situations, our disengaged cognition is a *simulation* of engaged cognition (Langacker 2008: 536). Simulation is closely linked to subjectivity: in the sentence *The path runs up the hill,* the motion verb 'runs' encodes mental, subjective scanning of a static scene—a mental simulation. CG calls this process *subjectification*.

Evidential and modal systems rely extensively on simulation. In saying *He might become our next president,* the speaker mentally simulates a conception of reality evolving in a certain way. Inference also relies on simulation: on the basis of a source of information, the speaker simulates a scenario, the inference, and optionally provides a judgement about the degree of certainty in that simulation/inference.

Subjectification, simulation, and grammaticalization operate in the emergence of evidentiality and modality systems in several ways. The use of reported speech is a clear example of simulation. Source of information falls along a conceptual hierarchy ranked by distance from centre, the conceptualizer. Distance from centre is manifest in two ways in signed language reported speech. First, at the semantic pole, reported speech is more conceptually distant than internal experience/perception or inference, because its source is another conceptualizer. Signed languages are no different from spoken languages in this regard.

Second, and unique to signed languages, the predominant means by which reported speech is coded is for the signer to shift her eye-gaze and body orientation from an axis linking the signer with her interlocutor in the current ground, to one spatially distinct from this axis, representing a secondary ground, that of the reported speech. This phonological coding thus literally creates spatial distance between the signer's ground and that of the alternate, reported conceptualizer's ground. Reported speech thus has a dual status in relation to the ground. It is both temporally non-immediate (reporting a past event) and, because it reports on another conceptualizer, it is distant in terms of the conceptual centre. In signed languages this dual status is reflected both semantically and formally.

When used in the scenarios presented here, the reporting of prior speech is not an end in itself; rather, the signer uses reported speech to provide information about the source and quality of information, that is, as an expression of evidentiality. This strategy can be carried a step further. As we have noted, simulation and subjectification are important factors in fictive motion, and indeed all types of fictivity. Fictive reported speech is often used in signed languages as a means of expressing evidentiality (Jarque and Pascual 2016). For example, in a news webpage presented in LSC to the Catalan deaf community, a narrator (p. 752) presented a contradictory report of an event. The report was presented as a fictive dialogue, one side given by the organizers and the other side given by the police. The purpose was clearly not to report prior speech, because in fact this dialogue never took place. Jarque and Pascual argue that LSC fictive dialogue serves as the means by which the narrator indicates the source of information.

Subjectification is an important factor in the process of grammaticalization (Langacker 2008), which has been shown to drive the emergence of lexical and grammatical markers from gestural sources in signed languages (Wilcox and Wilcox 1995; Janzen and Shaffer 2003; Janzen 1999). Wilcox (2004, 2009) has proposed two grammaticalization routes by which gesture can become incorporated into the grammar of a signed language. The first route begins with a manual gesture which enters a signed language as a lexical sign and then develops through grammaticalization into a grammatical morpheme. Perceptual and inferential evidentials in ASL and LSC are often grammaticalized from lexical items that had a manual gesture as their source (Wilcox and Wilcox 1995; Wilcox 2004; Wilcox and Shaffer 2006; Janzen and Shaffer 2003).

The second route proceeds along a distinctly different path. The source is not the manual gesture itself; rather, it is the way that a manual gesture is produced, its *manner of movement*, as well as various facial, mouth, and eye gestures that may accompany a manual gesture. Upon entering the linguistic system, these manner of movement and facial gestures follow a developmental path from prosody/intonation to grammatical marker. Notably, the second route bypasses any lexical stage.

This is the route that results in the markers we have described for indicating the signer's assessment of veracity or validity of the evidential source of information and the strength of her commitment to an inference. In the evidential SEEM, for example, the manner of movement of the sign indicated the degree of veracity in the source of information. This

can be interpreted as a type of semantic strength or intensification, marked phonologically (and iconically) by a stronger gestural movement (for stronger reliability) or weaker movement (less reliable). The head nod and brow furrow represent externally the internal mental effort required to evaluate a proposition and commit to its truth. These both represent simulations: objective, physical effort shown by manual and facial indicators of effort have become subjectified, marking instead the purely mental effort used in assessing information and in making an epistemic commitment.

The facial marker glossed as surprise depiction may accompany lexical signs. In telling someone of her surprise at seeing an old friend, a signer will sign SURPRISE and accompany it with a facial gesture of surprise. This in itself is a type of simulation—the signer is not at the current moment surprised, but simply simulating her past surprise. As we have seen, the facial marking of surprise can also accompany past reported speech. When reported speech is used to express evidentiality, the surprise depiction is literally a simulation for the purpose of marking mirativity.

36.4. Conclusions

Evidentiality is a vastly under-studied area of signed language linguistics, and we have only scratched the surface in this chapter. Although modality has received some attention, we (p. 753) also know little about this area of grammar except in a few, predominantly western signed languages such as ASL, LSC, German Sign Language (Pfau and Quer 2007), and Libras (Xavier and Wilcox 2014). Identifying how these two systems are expressed and how they interact will prove to be a difficult challenge.

The difficulty lies not only in the integrated nature of evidential and modality systems, but also in the integrated means of expression of the semantic components of each system. The nature of the articulators of signed languages allows for the simultaneous expression of grammatical markings. As we have seen, evidentials may be expressed by manual signs, while the signer simultaneously marks her assessment of the validity of the information source with manner of movement of the manual sign and indicates her epistemic commitment to the inference drawn from that evidence with facial grammar.

Deaf people often report that faces convey more information in signed languages than the hands. While it is clear that the signer's hands carry the vast majority of lexical material, what is said, it is the signer's face that conveys grammatical information essential in interpreting the significance of this lexical information. For evidentials this includes the signer's assessment of the reliability or validity of the information, the marking of mirativity, and the signer's epistemic evaluation of what is said. (p. 754)

Notes:

([1]) We use the term 'signed language', parallel in form to spoken language and written language, to refer to language types by means of expression. Just as particular spoken

and written languages are identified by their name, e.g. Japanese or Tariana, particular signed languages will be identified by their name, e.g. Catalan Sign Language.

([2]) Upper case word glosses indicate ASL signs. Words separated by a period (e.g. OH.I.SEE) indicate that more than one English word is used to denote a single ASL sign. Letters separated by hyphens (e.g. C-A-R) represents fingerspelling. Plus signs (++) denote repeated movement. The use of # indicates that the word is spelled rather than signed. An asterisk (*) indicates increased stress on a sign. Square brackets indicate that a facial gesture is maintained throughout the phrase enclosed. […]-top represents topic marking, […]-surprise-depiction indicates facial gestures indicating surprise. bf/hn indicates the furrowing of the brow and concomitant head nod, hs indicates a head shake, and y/n q is a yes/no question. Subscript letters represent spatial locations associated with entities positioned in the space around the signer, and are labelled ‘a’, ‘b’, etc., arbitrarily. Subscript numbers represent locations near 1s, 2s, or 3s. PRO.1, PRO.2, and PRO.3 are 1s, 2s, and 3s pronouns. POSS.1 is 1s possessive. PRO.3p is third person plural. Classifier constructions are CL: plus a hand shape label or description. The translation line is an English approximate that does not necessarily represent equivalent grammatical features or lexical categories to those found in ASL.

([3]) Wherever possible we have standardized the transcriptions of examples for this discussion. However, if examples appeared in earlier publications, we have left the transcriptions as they appeared.

([4]) Although the term ‘hearsay’ seems infelicitous when referring to deaf people and signed language, we will see that deaf people often do use the signed phrase ‘I heard’ to mark reported ‘speech’—that is, reported signed utterances.

([5]) VRS is a telephone service provided to deaf individuals in the United States. The deaf person has a video camera that connects to an interpreter in a call centre, who then interprets telephone calls between the deaf person and a hearing standard telephone user.

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