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**explore** /ɪk'splɔːr/

(a country etc.) to visit or  
2 inquire in

examine (a person or thing)  
/ɪk'splɔːrətiʋ/

# Adjective Classes

*A Cross-linguistic Typology*

EDITED BY

R. M. W. Dixon and  
Alexandra Y. Aikhenvald

*Explorations in Linguistic Typology*

*Explorations in Linguistic Typology* 1  
Adjective Classes

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edited by

R. M. W. DIXON

and

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Research Centre for Linguistic Typology

La Trobe University

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# Preface

This volume includes a typological introduction, plus revised versions of fourteen of the sixteen presentations at the International Workshop on 'Adjective Classes', held at the Research Centre for Linguistic Typology (RCLT), La Trobe University, 12–17 August 2002. An earlier version of Chapter 1 had been circulated to contributors, to ensure that the detailed studies of 'adjective classes' in individual languages were cast in terms of the same typological parameters. This is the first monograph in the series *Explorations in linguistic typology*, which will be devoted to volumes from the annual workshops sponsored by RCLT.

The week of the workshop was an intellectually stimulating and exciting time, full of exchange and cross-fertilization of ideas. All of the authors have pursued intensive investigations of languages, some of them little-known in the literature. They were asked to write in terms of basic linguistic theory—the cumulative framework in which most descriptive grammars are cast—and to avoid formalisms (which come and go with such frequency that any statement made in terms of them will soon become dated and inaccessible).

We owe a special debt of gratitude to Siew Peng Condon and Abby Chin, Executive Officers of RCLT, for organizing the workshop in a most efficient and caring manner, and to Adam Bowles for assisting with the preparation of the volume and for compiling the indices in his normal professional manner.

This volume owes its existence to the vision and care of Professor Michael Osborne, Vice-Chancellor and President of La Trobe University. He sponsored the establishment of RCLT within La Trobe's Institute for Advanced Study, and specified that its activities should include an annual International Workshop with stringent quality control. Professor Osborne opens each workshop, launches our volumes, and every year hosts a convivial dinner for the participants.



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# List of abbreviations

1	first person
2	second person
3	third person
A	transitive subject function
A	set A
ABL	ablative preposition
ABS	absolute
ABST N	abstract noun
ACC	accusative
ACHV	achievement
ADJ, Adj	adjective
ADJLZR	adjectivalizer
AdjP	adjective phrase
ADJR	adjectivizer
ADNOM	adnominal
ADVM	adverbial marker
AGT	agent
AH	addressee honorific suffix
ALL	allative
ANIM	animate
ANTI	anticausative prefix
AP	antipassive
APPL	applicative suffix
APPR	approximative
APPRE	apprehensive mood particle
ART	article
ASP	aspect
ASS	associative suffix
ATR	advanced tongue root
ATT	attenuator
ATTR	attributive
AUG	augmentative
AUX	auxiliary
B	set B
BCS	causal
BEN	benefactive
C	consonant

CAUS	causative
CC	copula complement
CERT	certain
CH	clause chainer
CL	classifier
CLAS	noun classifier
CL. NAT	natural object relational classifier
COLL	collective
COM	comitative
COMP	comparative
COMPL	completive
COMPLR	complementizer
CPL	completive aspect
CONJ	conjunctive, conjunction
CONT	continuous
COP	copula
CRV	curved
CS	copula subject
CSM	change of state marker
CT	class term
DAT	dative
DC	declarative ender
DECL	declarative
DEF	definite
DEHOR	dehortative mood particle
DEM	demonstrative
DEP	dependent aspect
DET	determiner
DETR	detrimental
DIM, dim	diminutive
DIR	directional
DISP	displacement
DIST	distributive
DIST. DEM	distal demonstrative
dl	dual number particle
DS	different subject
DTV	directive
EMPH	emphatic
EQUIP	causative of nominals
ERG	ergative
EVID	evidential
EXC	exclamatory ender
EXCL, exc, ex	exclusive

---

EXIST	existential predicate
EXP	experiencer
fam	familiar
FEM, f	feminine
FOC. A/S	focused subject
FR	frustative
FUT	future
GEN	genitive
GNL	general
HAB	habitat
HAB/IMPERS	habitual/impersonal
HAPP	happenstance
ICPL	incompletive aspect
IDEO	ideophone
ILLOC	illocutionary marker
IM	imperative ender
IMM	imminent aspect
IMP	imperfective, imperfect
IMPCR	impersonal cross-reference
IMPER	imperative
IN	indicative mood suffix
INAN	inanimate
INCH	inchoative
incl, inc, in	inclusive
INDEF	indefinite
INF	infinitive suffix
INGR	ingressive
INST	instrumental
INT	interjection
INTE	interrogative ender
INTENS	intensifier
INTER	interrogative
INTNS	intensification
IRR	irrealis
LF	long form of adjective
LOC	locative
MASC, m	masculine
MD	modal suffix
MID	middle voice
N	noun
NCL	noun class
NEG	negative, negation
NEGAT	nominal negator



NEG:IMP	negative imperative
NEUT	neuter
nf	nonfeminine
NK	native Korean word
NO	metalinguistic negator—verbal
NOM	nominative
NOM. PAST	nominal past
NONPROX	non-proximal
NONVIS	nonvisual
NP	noun phrase
NR	nominalizer, nominalization
nsg	non-singular
NUMCL	numeral classifier
O	transitive object function
OBJ	object
O. BRO	older brother
OFOC	object focus
OR	orientation (direction) marker
ORD	ordinal number
ORDIN	ordinator
P	possessive suffix
PASS/IMPERS	passive-impersonal
PAT	patient
PCL	particle
PEJ	pejorative
PERF	perfective, perfect
PFV	perfective aspect
PL, pl	plural
PN	possessed noun
PP	prepositional phrase
PPS	past/perfect suffix
POSS	possessive
PRED	predicate
PREP	preposition
PRES	present
PRG	progressive aspect
PROG	progressive
PROH	prohibitive
PROSP	prospective aspect
PROX	proximal demonstrative
PST	past
QUANT	quantifier
RA	repeated action

---

RDP	light syllable reduplication of verbs
REAL	realis mood particle
RECIP	reciprocal
REC. P	recent past
REDUP	reduplication
REL	relative, relativizer
REM. P. REP	remote past reported
RL	relativizer suffix
RN	relational noun
S	intransitive subject function
S <sub>a</sub>	active intransitive subject
S <sub>io</sub>	subject of stative verb which requires noncanonical marking
S <sub>o</sub>	stative subject
SEQ	sequential
SF	short form of adjective
SFOC	subject focus
SFP	sentence final particle
SG, sg	singular
SH	subject honorific suffix
SING	singulative
SK	Sino-Korean word
SP	subject proclitic
SS	status suffix
SUB	subordinator
SUBJ	subject
TAM	tense, aspect, mode
TEL	telic aspect particle
TERM	terminative
TH	theme
THEM	thematic
TOG	collective
TOP	topic
TOP. NON. A/S	topical non-subject
TP	topic particle
V	verb
V	vowel
V <sub>intr</sub>	intransitive verb
V <sub>st</sub>	stative verb
V <sub>trans</sub>	transitive verb
VERS	versive
VERT	vertical
VFOC	verbal focus
VIS	visual

VP	verb phrase
XS	excessive agent
Y. SIB	younger sibling

# Adjective Classes in Typological Perspective

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This chapter is concerned with adjectives in the narrow sense—that is, descriptive adjectives such as ‘red’, ‘heavy’, and ‘loyal’—leaving aside other types of noun modifier, demonstratives, and interrogatives. I suggest that a distinct word class ‘adjectives’ can be recognized for every human language. In some languages, adjectives have similar grammatical properties to nouns, in some to verbs, in some to both nouns and verbs, and in some to neither. I suggest that there are always some grammatical criteria—sometimes rather subtle—for distinguishing the adjective class from other word classes.

In the present chapter, §1 discusses the three major word classes and their typical semantic content; §2 outlines basic clause types and core arguments, with a warning of the importance of using the term ‘predicate’ with a narrow meaning. After a mention of criteria for distinguishing between noun and verb, in §3, there is a profile of the adjective class, in §4, and then, in §5, comment on Eurocentric attitudes towards the label ‘adjective’. Subsequently, §6 deals with the four types of adjective—similar to verbs in their grammatical properties (with criteria for distinguishing between the classes), similar to nouns (again, with relevant distinguishing criteria), similar to both verbs and nouns, and different from both classes. In §7 there is a brief discussion of languages whose adjectives have restricted functional possibilities, and in §8 of languages with two adjective classes. A correlation between types of adjective class and head/dependent marking is explored in §9. Semantic overlap between the three major word classes, and how the overlaps differ between languages, are discussed in §10. The following chapters in the volume are introduced in §11. Finally, a set of conclusions is given in §12.

## 1. Word classes

The main function of a language is to communicate meaning from speaker to addressee. Basic concepts are encoded as words, which are related together within the grammar. Three word classes are, I maintain, implicit in the structure of each

human language: nouns, verbs, and adjectives. Each has (a) a prototypical conceptual basis; and (b) prototypical grammatical function(s).

The recognition of word classes in a language must be on the basis of internal grammatical criteria for that language. Certain types of criteria recur, but the exact justification for a class is particular to each language. For example, in Latin a noun inflects for number and case (and has an inherent gender, shown by the case/number allomorphs that it takes). In English there are no morphological processes which apply for all nouns (only some nouns take plural marking); here a defining criterion is syntactic—a noun may immediately follow an article and need not be followed by any other item (this is to distinguish nouns from adjectives).

A given concept may relate to different word classes in different languages. For example, the idea of ‘needing to eat’, is expressed

- (a) by the adjective *ɲamir* in Dyirbal;
- (b) by the noun *hunger* in English, and by the noun *faim* in French;
- (c) by the verb *ēsūrĭo* in Latin, and by the verb *-fimi-* in Jarawara.

(Note that if the basic form is a noun or a verb, there may be a commonly-used derived adjective, such as *hungry* in English and *ēsūrĭens* in Latin. French has a derived adjective with rather specialized meaning, *famélique*, ‘starving, famished’. However, there is no adjectival derivation from *-fimi-* in Jarawara.)

Throughout this chapter I am looking at the organization of underlying lexical roots into word classes. In every language there are some morphological processes deriving stems of one word class from roots of another class (for example, verb *lengthen* from noun *length* which in turn comes from adjective root *long* in English). In some languages an adjective class may have a limited number of monomorphemic forms, but can be extended almost indefinitely by derivations based on nouns and verbs. I am, for the most part, concerned just with morphologically simple roots, not with derived stems.

Further examples of a given concept being coded into varying word classes include:

- (a) kin terms such as ‘mother’ and ‘father’ are nouns in most languages but verbs (‘be mother of’ and ‘be father of’) in others (including the Yuman languages of southern California);
- (b) the number ‘two’ is an adjective in many languages but a verb in others (for example, *-fama-* in Jarawara);
- (c) the concept ‘beauty’ is a noun in some languages (including English) but a verb in others (for example *totoka* in Fijian).

It will be seen that a lexical root cannot be assigned to a word class on the basis of its meaning. If this were so, then ‘hunger/(be) hungry’, ‘(be) mother (of)’, ‘(be) two’, and ‘beauty/(be) beautiful’ would relate to the same class in every language, which they do not.

Word classes can be identified *between* languages (and assigned the same names) on two criteria—similarity of syntactic function and similarity of meaning. In terms of syntactic function, a noun may always function as head of a noun phrase that can be a predicate argument, and a verb can always be head of a predicate. In terms of semantic content, the noun class always includes words with concrete reference such as ‘dog’, ‘stone’, and ‘axe’, while the verb class always includes words referring to actions, such as ‘cut’, ‘talk’, and ‘give’. On this basis, the class whose members inflect for case and number (and each have a fixed gender) in Latin is identified with the class whose members follow an article and need not be followed by anything in English; they are both termed the noun class. The noun classes in Latin and in English do not have exactly the same semantic content, but they share a common semantic core; they do not have exactly the same syntactic function, but they share a common syntactic core.

There is further discussion of the prototypical and extensional syntactic functions of nouns, verbs, and adjectives in §§3–4. Before moving on to this, we can usefully discuss the typical semantic content of the three major word classes.

### 1.1. SEMANTIC CONTENT

The lexical roots in every language can be arranged in a number of semantic types. Certain types have prototypical association with a given word class, while others vary in their word class associations (see Dixon 1991a).

Semantic types with concrete reference are always linked to the noun class—these include HUMANS (e.g. ‘boy’), body and other PARTS (e.g. ‘eye’, ‘leg’), FLORA (e.g. ‘tree’, ‘leaf’), FAUNA (e.g. ‘rat’, ‘fly’), CELESTIAL (e.g. ‘sun’), ENVIRONMENT (e.g. ‘water’, ‘forest’), and ARTEFACTS (e.g. ‘gun’, ‘house’).

In English, the class of nouns also includes—among others—terms referring to mental states (e.g. ‘joy’, ‘ability’), physical states (e.g. ‘ache’), activities (e.g. ‘war’, ‘game’), and speech acts (e.g. ‘speech’, ‘answer’). However, in other languages some or all of these concepts are coded by verbs or adjectives.

Semantic types always associated with the verb class include MOTION (e.g. ‘run’, ‘take’, ‘throw’), REST (e.g. ‘sit’, ‘put’, ‘hold’), AFFECT (e.g. ‘hit’, ‘burn’, ‘build’), GIVING (e.g. ‘give’, ‘trade’), ATTENTION (e.g. ‘see’, ‘hear’), and SPEAKING (e.g. ‘tell’, ‘shout’, ‘ask’).

In English the class of verbs also includes—among others—items referring to weather (e.g. ‘rain’), liking (e.g. ‘love’, ‘prefer’, ‘hate’), annoying etc. (e.g. ‘annoy’, ‘amuse’, ‘inspire’), and comparing (e.g. ‘resemble’, ‘differ’). However, in other languages some or all of these concepts are coded through nouns or adjectives.

We are here particularly concerned with the semantic types typically associated with the word class adjective:

- (a) There are four core semantic types, which are typically associated with both large and small adjective classes.
  1. DIMENSION—‘big’, ‘small’, ‘long’, ‘tall’, ‘short’, ‘wide’, ‘deep’, etc.
  2. AGE—‘new’, ‘young’, ‘old’, etc.

3. VALUE—'good', 'bad', 'lovely', 'atrocious', 'perfect', 'proper(/real)', etc. (And also words such as 'odd', 'strange', 'curious', 'necessary', 'crucial', 'important', 'lucky'.)
  4. COLOUR—"black", 'white', 'red', etc.
- (b) A number of peripheral semantic types are typically associated with medium-sized and large adjective classes.
5. PHYSICAL PROPERTY—"hard", 'soft', 'heavy', 'wet', 'rough', 'strong', 'clean', 'hot', 'sour', etc. And a sub-class referring to corporeal properties, e.g. 'well', 'sick', 'tired', 'dead', 'absent'.
  6. HUMAN PROPENSITY—"jealous", 'happy', 'kind', 'clever', 'generous', 'cruel', 'proud', 'ashamed', 'eager', etc.
  7. SPEED—"fast", 'quick', 'slow', etc.

In 'Where have all the adjectives gone?' (1977a, revised 1982), I illustrated small adjective classes such as that in Igbo, which consists of an antonymic pair from each of the four core semantic types (Welmers and Welmers 1968, 1969; Welmers 1973):

DIMENSION	úkwu 'large'	ñtà 'small'
AGE	óhụrú 'new'	ócyè 'old'
VALUE	óma 'good'	ójọ́ọ́ 'bad'
COLOUR	ojii 'black, dark'	ọ́ca 'white, light'

A slightly larger class (say, 12–20 members) is likely to include more words from the four core types (for example, 'long', 'short', 'red') and also some physical property items (for example, 'raw, green, unripe', 'heavy', 'light', 'sharp', 'hot'). Only when an adjective class is much bigger (with at least a few score members) is it likely to include terms referring to human propensities (for example, 'happy', 'jealous', 'clever').

Not every small adjective class is as symmetrical as that in Igbo. Indeed, the main members of a semantic type may belong to different word classes. In Yoruba, for instance, there are three adjectives with a meaning similar to 'good' but only a verb 'be bad' (Madugu 1976). In Jarawara there is an adjective 'bad' but only a verb 'be good'. (Each of these languages has a small class of about fifteen adjectives.)

It is interesting to enquire how, in languages with just a small adjective class, the other typical adjectival concepts are coded. The following tendencies have been noted:

- (a) PHYSICAL PROPERTY terms, if not in the adjective class, are generally in the verb class;
- (b) HUMAN PROPENSITY terms, if not in the adjective class, may be in either the noun class or the verb class;
- (c) SPEED terms tend to be in the adjective class if PHYSICAL PROPERTY terms are in this class, and in the adverb class if PHYSICAL PROPERTY terms are in the verb class.

In languages with large adjective classes there may be differences of various kinds

between the core and peripheral types. For example, Blackwell (2000) studied how children acquire syntactic functions for adjectives from seven semantic types in English, and found that terms from the DIMENSION, AGE, VALUE, COLOUR, and SPEED types tend to be used first in modifier function, while those from the PHYSICAL PROPERTY and HUMAN PROPENSITY types tend to be used first in copula complement function.

Discussing the Austronesian language Tamambo, Jauncey (1997, 2000) shows how each of the semantic types 1–6 has slightly different values for ten grammatical parameters; for example, only DIMENSION terms have a morphologically marked plural, and only HUMAN PROPENSITY terms (and one VALUE term) can be nominalized. Dixon (1982: 15–34) provides a survey of the varying properties of semantic types 1–7 in English.

Some languages allow a given adjective to either precede or follow the head noun, with a difference in meaning. For example, in French *un curieux homme* is ‘a curious/strange man’ while *un homme curieux* is ‘a curious/inquisitive man’ (in English the adjective *curious* is ambiguous between the ‘strange’ and ‘inquisitive’ senses). See Jespersen (1924: 168–9) on English, and Waugh (1977: 182–3) on French.

(c) A number of other semantic types are associated with large adjective classes in some languages. These include:

8. DIFFICULTY—‘easy’, ‘difficult’, ‘tough’, ‘hard’, ‘simple’, etc.
9. SIMILARITY—‘like’, ‘unlike’, ‘similar’, ‘different(/strange)’, ‘other’, etc.
10. QUALIFICATION—‘definite’, ‘true’, ‘probable’, ‘possible’, ‘likely’, ‘usual’, ‘normal’, ‘common’, ‘correct’, ‘appropriate’, ‘sensible’, etc.
11. QUANTIFICATION—‘all(/whole)’, ‘many’, ‘some’, ‘few’, ‘only’, ‘enough’, etc.
12. POSITION—‘high’, ‘low’, ‘near’, ‘far/distant’, ‘right’, ‘left(/strange)’, ‘northern’, etc.
13. CARDINAL NUMBERS. (In some languages these constitute a separate word class.) And ‘first’, ‘last’ (together with other ordinal numbers).

## 2. Basic clause types and core arguments

There are two major clause types found in human languages, transitive clauses and intransitive clauses. In addition, many languages have a further clause type, copula clauses. The make-up of the three clause types is shown in Table 1.

There may also be verbless clauses, which simply include two NPs in apposition. Languages which lack a copula verb typically translate copula clauses from other languages with verbless clauses, e.g. ‘[John] [a doctor]’ for ‘[John] [is] [a doctor]’.

Now the nucleus of a transitive clause will prototypically have a transitive verb as head (in most languages the head can only be a transitive verb). Languages show more variation with respect to the predicate head in an intransitive clause. In some languages only an intransitive verb can fill this slot; in other languages the head of



TABLE 1. Basic clause types

Clause type	Nucleus	Core arguments
Transitive clause	Transitive predicate	Transitive subject (A) and transitive object (O)
Intransitive clause	Intransitive predicate	Intransitive subject (S)
Copula clause	Copula predicate (copula verb)	Copula subject (CS) and copula complement (CC)

an intransitive predicate may be a verb or an adjective or a noun or a pronoun or even an NP. For example, in Boumaa Fijian one can say (Dixon 1988):

- (1) [*e* [*tagane balavu*]<sub>HEAD</sub>]<sub>PREDICATE</sub> [*a tama-qu*]<sub>S</sub>  
 3sgS man tall ARTICLE father-1sg.POSSESSOR  
 ‘my father is a tall man’

(1) is an intransitive clause with *a tama-qu* as the S argument. The predicate head here is an NP consisting of noun *tagane* ‘man’ and adjective *balavu* ‘tall’. It is preceded within the predicate by the 3sg subject pronoun *e*, just as a verb in this slot would be. Although the idiomatic translation is ‘My father is a tall man’, in fact *tagane balavu* functions as predicate head (like a verb), literally: ‘My father tall-man-s’.

It is important to distinguish between an intransitive clause like (1)—where a non-verbal element functions as predicate head—and a copula clause—where the same element might function as a core argument in copula complement function. We can compare the two clause types in Tariana, a language from the Arawak family (data from Alexandra Aikhenvald; and see the fuller discussion in Chapter 4):

- (2) (a) *ñamu(-ne)*<sub>S</sub> *hanu-ite-pidana*<sub>INTRANSITIVE.PREDICATE</sub>  
 evil.spirit(-FOCUSED.A/s/cs) big-NCl:animate-REMOTE.PAST:REPORTED  
 ‘the evil spirit was said to be big’  
 (b) *ñamu(-ne)*<sub>CS</sub> *hanu-ite*<sub>CC</sub>  
 evil.spirit(-FOCUSED.A/s/cs) big-NCl:animate  
*di-dia-pidana*<sub>COPULA.PREDICATE</sub>  
 3sg.non.femCS-become-REMOTE.PAST:REPORTED  
 ‘the evil spirit was said to become big’

In (2a), the adjective *hanu* ‘big’ is head of the intransitive predicate, and takes a tense-evidentiality suffix (just as a verb would do in this slot). In (2b), *hanu* is the copula complement, an argument outside the predicate of the clause; the predicate is here copula verb *-dia-* ‘become’, and it is this which carries the tense-evidentiality marker, *-pidana*. (In all its occurrences here, *hanu* carries the animate noun class suffix, *-ite*.)

The possibilities for case marking on arguments in Tariana are:

A, S, CS	focus marker <i>-ne</i> (optional)	—
O, non-core arguments	—	topical non-subject marker <i>-nuku</i>
CC	—	—

That is, both S in the intransitive clause (2a) and copula subject (CS) in the copula clause (2b) may take suffix *-ne*, if that NP is in focus. The adjective *hanu* in (2b) is in copula complement (CC) function and may take neither suffix *-ne* nor suffix *-nuku*. Note that it is not possible to treat (2b) as a type of extended intransitive clause, with *namu* ‘evil spirit’ as S argument and *hanu* as an oblique argument; if this were a valid analysis then *hanu* should be able to take topical non-subject marker *-nuku*, which in fact it cannot do.

In Fijian, an NP functioning as head of an intransitive predicate can take all the modifiers available for a verb in this slot. In Tariana, a non-verb as head of an intransitive predicate takes tense-evidentiality, mood, aspect, and most other suffixes that would be available for a verb in the slot. Different types of clause nucleus have varying properties with respect to prefixes; in brief, pronominal prefixes are used with transitive and with active intransitive ( $S_a$ ) verbs and with the copula verb *-dia-* ‘become’, but not with stative intransitive ( $S_o$ ) verbs nor with non-verbs as head of an intransitive predicate.

### 2.1. THE TERM ‘PREDICATE’

The term ‘predicate’ was originally used, in Greek logic, for everything in a clause besides the subject. The prototypical use of ‘predicate’ in modern linguistics is for transitive or intransitive verb, plus modifiers, but not including any NP.<sup>1</sup> In the approach followed here, the CC is a core argument—similar to A, O, S, and CS—so that it would be unhelpful and misleading to refer to it as the predicate or as part of the predicate (as has sometimes been done). In view of this, when the term predicate is used in connection with a copula clause it must be taken just to refer to the copula verb.

Careful use of the term ‘predicate’ is particularly important when discussing the properties of adjectives. Compare (3) in English with (4) in Fijian.

- (3) [*my father*]<sub>CS</sub> [*is*]<sub>COPULA PREDICATE</sub> [*tall*]<sub>CC</sub>
- (4) [*e balavu*]<sub>INTRANSITIVE PREDICATE</sub> [*a tama-qu*]<sub>S</sub>  
3sgS tall ARTICLE father-1sg.POSSessor  
‘my father is tall’

<sup>1</sup> Members of the post-Bloomfieldian school and their successors (including Chomsky and his followers) like to employ binary divisions in linguistic analysis. A clause is said to consist of an NP and a ‘VP’, where the ‘VP’ may include an object NP (in an accusative language). The label ‘predicate’ is sometimes applied to the ‘VP’. This is a different use of ‘predicate’ from that employed here (which follows the majority practice of linguistics from outside this school).

People who talk of the copula complement being (all or part of) the predicate of a copula clause would say that (*is*) *tall* is the predicate of (3). And they should also say that (*e*) *balavu* is the predicate of (4). This obscures the fundamental difference between (3) and (4), a difference that will be vital to our discussion below of varieties of adjective classes. Example (4) is an intransitive clause with one core argument in S function (*a tama-qu* ‘my father’) and an intransitive predicate whose head is the adjective *balavu* ‘long, tall’. A range of modifiers could be included in this (as in any other) predicate, in addition to the bound subject pronoun, 3sg *e*. In contrast, (3) is a copula clause with two core arguments—the NP *my father* as copula subject, and the adjective *tall* as copula complement. The predicate in (3) is the copula verb, *be*, and this is marked for tense, combined with specification of number and person of the copula subject (3sg.CS:present form *is*).

Tariana is a language which combines the possibilities shown in (3) and in (4). If the label ‘predicate’ were used for both *is tall* in (3) and for *e balavu* in (4), then it should be used for both *hanu-ite-pidana* in (2a) and *hanu-ite* in (2b); this would totally obscure the critical distinction between *hanu-ite-pidana* functioning as intransitive predicate, in (2a), and *hanu-ite* functioning as copula complement, in (2b).

In summary, although when the term ‘predicate’ is used in its logical sense (the *Oxford English Dictionary*: ‘assert something about the subject of a proposition’) both *is tall* in (3) and *e balavu* in (4) are predicates; when the term is used in its most normal technical linguistic sense, these two elements are classified quite differently. In the majority linguistic usage of the term, a predicate does not include any NP (the O argument for an accusative language, or the A argument for an ergative language); it should not be taken to include a copula complement. Thus *balavu* ‘tall’ is predicate head in (4), but *tall* is copula complement (quite distinct from the predicate) in (3).

### 3. Distinguishing noun and verb

In most languages it is an easy matter to distinguish noun and verb classes, in terms of syntactic function and morphological possibilities. But in a few languages this can be a rather subtle matter.

A noun always has primary function as head of an NP that can be a core argument (in A, O, S, CS, or CC function) in a clause. In some languages a noun may also function as head of a phrase that functions as predicate in an intransitive clause. A verb always has primary function as head of a predicate; in some languages it may also fill a core argument slot. There are languages in which both of these extensions apply. For example, in Nootka (Wakashan family; Swadesh 1938:78) we find:

- (5) [*ʔi:h-ma:*]<sub>INTRANSITIVE PREDICATE</sub> [*qo:ʔas-ʔi*]<sub>S</sub>  
       be.large-3sg:INDICATIVE           man-SUBJECT.MARKER  
       ‘the man is large’

- (6) [qo:ʔs-ma:]<sub>INTRANSITIVE PREDICATE</sub> [ʔi:h-ʔi]<sub>S</sub>  
 man-3sg:INDICATIVE                      be.large-SUBJECT.MARKER  
 'the large one is a man'

In (5) we find the usual correspondence between word class and functional slot, with the noun 'man' being head of the NP in S function and the verb 'be large' being head of the intransitive predicate. In (6) these functions are reversed. Because of this, Swadesh insisted that 'normal words do not fall into classes like noun, verb, adjective, preposition, but all sorts of ideas find their expression in the same general type of word, which is predicative or non-predicative according to its paradigmatic ending.' However, when one reads a little further on in Swadesh's paper, criteria for distinguishing between word classes are clearly described. On pp. 98–9 he sets out seven sets of 'special reference stems' such that each lexeme selects just one set (each set includes a pronominal-like 'indirect reference stem', a 'relative stem', and an 'interrogative stem'). He then mentions that 'the seven sets of special reference stems suggest a semantic classification of lexemes, which also has significance in the internal syntax, since different implicit derivations and other syntactic peculiarities are limited to combinations of lexemes of given categories of meaning, some of which correspond to these'. Of the seven classes Swadesh recognizes, four are closed ones (Location, Time, Quantity, and Indication, i.e. demonstratives) while three are open (Entity, Action, and State). Of the three open classes, 'entity'—including 'a considerable number of stems referring to species of flora and fauna and supernatural beings, age and other classes of people and other beings, body parts, a group of classes of objects according to shape, and other entities'—could be aptly labelled 'noun'. 'Action'—expressing 'movement and various other activities'—appears to correspond to what is called 'verb' in other languages. And 'state'—expressing 'quality, condition, colour, size, position, mental state or attitude, conditions of the weather, and other notions'—is clearly to be identified as an adjective class.

In summary, although both noun and verb may function as predicate or as predicate argument, there are still clearly criteria for recognising them as separate clauses. (And one assumes, although Swadesh does not deal with this, that nouns occur more frequently as predicate arguments than as predicates, while for verbs the preference would be reversed.)

#### 4. The adjective class

I here put forward the idea that, just as all languages have distinguishable classes of noun and verb, so all languages have a distinguishable adjective class. However, the adjective class differs from noun and verb classes in varying ways in different languages, which can make it a more difficult class to recognize, and a more difficult class to put forward generalizations about.

First, as mentioned above, whereas noun and verb classes are almost always large and open, the adjective class shows considerable variation in size. Many



complement, see Bolinger 1967.) There are also languages in which the entire class of adjectives only has function (b); and there may well be others where it only has function (a). These cases are discussed in §7 below.

(c) Some—but by no means all—languages have a comparative construction. Adjectives may always function as the ‘parameter of comparison’ (and sometimes they are the only words which may function as the parameter). Illustration can again be provided from English, in (9), and from Fijian, in (10).

- (9) [Suva]<sub>S</sub> [is]<sub>COP.PREDICATE</sub> [more beautiful]<sub>CC</sub> [than Nandi]<sub>COMPARAND</sub>
- (10) [e totoà caè]<sub>INTR.PREDICATE</sub> [o Suva]<sub>S</sub> [mai Nandi]<sub>COMPARAND</sub>  
 3sgS beautiful MORE ART place FROM place  
 ‘Suva is more beautiful than Nandi’

In each language the comparative construction is an extension from the type (a) adjective function for the language. The adjective—in the CC in (9) and in the intransitive predicate in (10)—bears a mark of comparison; this is *more* in English and *caè* (which also has the meaning ‘high’) in Fijian. And an additional argument is added to the clause, the comparand; the function of the comparand NP is marked by *than* in English and by preposition *mai* (which also has the meaning ‘from’) in Fijian. (The comparand is marked in a variety of ways in individual languages.)

(d) In some languages adjectives may also modify verbs, either in plain form or via a derivational process. The two possibilities can be illustrated from colloquial American English—for example, *He speaks (real) bad*—and British English—*He speaks (really) badly*. There may also be more limited possibilities for adverbs to modify adjectives (for example, *openly hostile* in English).

There may, of course, be further syntactic patterns available to adjectives in individual languages. A comprehensive study of the syntactic possibilities open to adjectives in English will be found in Ferris (1993).

Adjectives vary widely in their grammatical properties when compared to those of nouns and verbs. Where an adjective can occur as intransitive predicate, it may take some or all of the morphological processes available to verbs in this slot (tense, aspect, mood, etc.). In some languages a modifying adjective within an NP will take some or all of the same morphological marking as nouns (number, case, etc.). There are a number of languages in which adjectives combine these possibilities, inflecting like nouns within an NP and like verbs when functioning as predicate. In a further set of languages, adjectives share no morphological properties with nouns or with verbs.

Just as in most languages it is an easy matter to give criteria for distinguishing nouns from verbs, so in many languages it is an easy matter to distinguish adjectives as a separate word class. I mentioned that there are just a few languages

in which, at first blush, nouns and verbs appear to function alike; however, in every instance, a careful and detailed examination of the grammar reveals a number of fairly subtle but absolutely robust criteria for distinguishing two word classes. In a rather larger number of languages, there appears, on superficial examination, to be no grammatical difference between adjective and verb, or none between adjective and noun. But, in every instance, when the situation is investigated in depth, it transpires that there are some—often rather subtle—criteria to distinguish adjective as a separate word class.

## 5. Attitudes towards adjectives

It has sometimes been suggested that having an adjective class is not a universal property of human languages. In an earlier study (Dixon 1977a: 20; 1982: 2), I opined that ‘some languages have no adjective class at all’. The present chapter—building on a further quarter-century of research—puts forward the hypothesis that an adjective class can be recognized for every language, although sometimes the criteria for distinguishing adjectives from nouns, or adjectives from verbs, are rather subtle.

Adjectives had been said to be absent from Totonac languages but, applying the principles outlined in this chapter, Levy (Chapter 6) provides a wealth of criteria for distinguishing adjectives as a separate class. In her Ph.D. dissertation on Semelai, Kruspe (1999) did not mention adjectives; applying the criteria from this chapter, she now (Chapter 12) recognizes adjectives as a well-defined sub-class of verbs. Some reputable scholars have stated that adjectives cannot be distinguished from verbs in Korean; the indisputable status of an adjective class in this language is demonstrated by Sohn, in Chapter 9. There had been a tradition of saying that Chinese has no adjective class; as mentioned below, clear and unequivocal criteria are now apparent for the recognition of ‘adjective’ as a major word class in Mandarin.

Both the ancient grammar of Sanskrit by Pāṇini and the early grammars of Greek and Latin—which began the western tradition—failed to make any distinction between noun and adjective. It was only at about 1300 CE, in the scholastic grammar of Thomas of Erfurt, that the criterion of gender was invoked—each noun has one inherent gender, whereas an adjective has no gender in itself but may show any of the genders, by agreement with the noun it relates to. On the basis of the European languages they knew, it became the accepted doctrine among linguists that adjectives are a class with similar morphology to nouns, differing from nouns in terms of gender possibilities. Indeed, it appears that Jespersen (1924: 72) considered this to be the only criterion. Since Finnish has no genders, he inferred that in this language adjectives could not be distinguished from nouns. There are, in fact, a fair number of other relevant criteria in Finnish—only nouns (not adjectives) take possessive suffixes, and only adjectives (not nouns) take comparative and superlative suffixes.

Australian languages are like the languages of Europe in that adjectives have very similar morphological possibilities to nouns. Some languages have noun classes (similar to genders) and this is accepted as a viable criterion. But for languages without this aid, it is often said that there is no separate class of adjectives (see, among others, Eades 1979 on Gumbaynggir). It is instructive to consider the implications of this position. If a language has a category of gender, then it will have a class of adjectives. If it loses gender, then presumably it loses adjectives as a separate word class. If it then redevelops gender marking, it will regain an adjective class. Such a scenario is surely unacceptable.

In a classic study, Alpher (1991: 22–6) investigates the basis for recognising a class of adjectives in Yir-Yoront, an Australian language which lacks noun classes/genders. There is no obvious clear-cut criterion to distinguish adjectives from nouns, the two types of word having virtually the same morphological and syntactic properties. Alpher is, however, able to suggest five fairly subtle properties in which nouns and adjectives differ. One he labels ‘grading’: ‘Both “nouns” and “adjectives” occur with postposed *morr* “real, actual, very”. With common nouns, *morr* has the sense “actual present-day”, as in *kay morr* “the present-day (steel) axe”, or “real and not imaginary”, as in *warrchuwrr morr* “a real woman (not one in a dream)”. With “adjectives” susceptible of grading, however, *morr* means “very”: *karntl morr* “very big”, *wil morr* “very bitter”. Such adjectives, moreover, can be quantified with adpositions like *mangl* “a little”, as in *mangl-karntl* “a little bit big”, *wil+mangl* “a little bit bitter”; common nouns lack this possibility.’

The modern discipline of linguistics has been centred on the study of European languages, and is generally undertaken by speakers of European languages. There has, as a consequence, arisen the idea that if a language has an adjective class, then it should be similar to the adjective class in European languages; that is, functioning directly as the modifier of a noun in an NP, acting as copula complement, and showing morphological categories similar to those of nouns (number, case, etc.), quite different from the categories applying to verbs (tense, aspect, mood, etc.).

This has undoubtedly played a role in the failure to recognize an adjective class for languages in which adjectives show a rather different profile, functioning as head of an intransitive predicate (rather than as copula complement), and having some of the same morphological properties as verbs. There is an oft-repeated tradition of saying that in Chinese ‘all adjectives are verbs’ (see, among many others, Hockett 1958: 223, Lyons 1968: 324–5, Li and Thompson 1981: 141, Schachter 1985: 18). This lacks insight. In an important study, Xu (1988) demonstrates a range of criteria for recognizing adjectives to be a separate word class in Chinese. For example, adjectives and verbs show different syntax when modifying a noun within an NP, have different aspectual possibilities when functioning as intransitive predicate, take different derivational possibilities. In addition, reduplication has different semantic implications for the two word classes; see (14–15) in §6.1.

Even when a linguist does provide criteria for distinguishing adjectives from verbs (in a language where adjectives can function as intransitive predicate), there



is often an unwillingness to use the label ‘adjectives’, simply because these adjectives are so different in grammatical properties from the familiar kind of adjective occurring in European languages. A term like ‘descriptive verb’ may be used instead (for example, Seki 1990, 2000 on Kamaurá, Tupí-Guaraní branch of Tupí family). The authors of Chapters 10–14 below do employ the term ‘adjective’ (although some did not use this term in earlier work on their language) but, continuing the tendency just noted, they are reluctant to recognize them as a major word class, preferring instead to treat adjectives as a sub-class of verbs. (This is discussed further in §11.)

Oceanic languages typically have an adjective class similar in grammatical properties to the verb class. Buse (1965), writing on Rarotongan, called them ‘statives’ and this label (or ‘stative verbs’) has become institutionalized in Oceanic linguistics (see, for example, Chapter 11 below).

In Chapter 3, Genetti and Hildebrandt provide an excellent discussion of the two adjective classes in Manange. They refer to them as ‘verb-like adjectives’ and ‘adjectives’. The ‘adjective’ class has properties in common with nouns and could well have been labelled ‘noun-like adjectives’; the simple label ‘adjectives’ may have been preferred because this class, in its noun-like properties, is similar to adjective classes in the familiar languages of Europe.

It should be noted that some instances of what I call an ‘adjective class’ are not accorded this label in the grammars from which I take the data. Nevertheless, they should each be labelled ‘adjective class’ according to the criteria used in this study—a word class distinct from noun and verb, including words from the prototypical adjective semantic types, and (a) functioning either as intransitive predicate or as copula complement; and/or (b) modifying a noun in an NP.

## 6. Criteria for recognizing an adjective class

Adjective classes can be categorized in terms of their grammatical properties. The primary division is between adjectives that can fill an intransitive predicate slot, as in (4), and those that fill a copula complement slot, as in (3):

- (I) Adjectives which can function as intransitive predicate. These take some or all of the morphological processes and/or syntactic modifiers which can apply to a verb when it functions as intransitive predicate. They can be called ‘verb-like adjectives’.
- (II) Adjectives which may fill the copula complement slot. They can be called ‘non-verb-like adjectives’.

Note that there are a few languages in which a plain, underived adjective can fill both intransitive predicate and copula complement slots. This was illustrated in (2a/b), for Tariana. Other examples are mentioned in §6.3, which deals with adjectives that share the grammatical properties of verbs and of nouns. And there are

some languages whose adjectives have neither of these functions, being confined to a modifying role within an NP—see §7.

The second parameter of grammatical variation is rather different. Members of very nearly all adjective classes—whether of type I or type II—may in some way modify a noun within an NP. In some languages this involves just apposition of adjective and noun, in others a relative clause (or similar) marker may be required. In a fair number of languages an adjective has the possibility of making up an entire NP, without any stated noun (although a head noun may be implicit, and ellipsed under certain discourse conditions). Adjectives can roughly be categorized into two further classes in respect of their morphological possibilities when they occur within an NP:

- (A) When it functions within an NP, an adjective may take some or all of the morphological processes that apply to a noun. They can be called ‘noun-like adjectives’.
- (B) In a language where nouns show a number of morphological processes, none of these apply to adjectives. They can be called ‘non-noun-like adjectives’.

In languages with an isolating profile, there may be no morphological processes applying to nouns, so that the (A/B) parameter is not relevant.

There is a degree of correlation between the parameters. We find:

- A large number of languages whose adjectives are (I) verb-like, and (B) non-noun-like.
- A large number whose adjectives are (II) non-verb-like, and (A) noun-like.
- Some languages whose adjectives are both (I) verb-like and (A) noun-like.
- Some languages whose adjectives are (II) non-verb-like and (B) non-noun-like.

We can now examine, in turn, languages of type (I) and of type (A). §6.1 deals with languages in which adjectives can fill the intransitive predicate slot and have similar properties to verbs; it surveys the criteria which may serve to distinguish adjectives from verbs in these languages. Then §6.2 examines languages in which adjectives have a similar morphological and syntactic profile to nouns, surveying criteria that can be found to distinguish the class of adjectives from the class of nouns. After this, §6.3 discusses languages whose adjectives combine verb-like and noun-like properties; and §6.4 looks at languages whose adjectives have grammatical properties different from those of nouns or verbs.

#### 6.1. DISTINGUISHING ‘VERB-LIKE’ ADJECTIVES FROM VERBS

Where both adjectives and verbs can fill the intransitive predicate slot, criteria for distinguishing the two word classes include: (1) different possibilities within the predicate slot; (2) different transitivity possibilities; (3) different possibilities as modifiers within an NP; (4) different possibilities in comparative constructions; (5) different possibilities for forming adverbs (that is, modifiers to verbs). We can discuss these one at a time.

6.1.1. *Different possibilities within the predicate slot*

In some languages exactly the same morphological processes and syntactic modifiers may apply to a verb and an adjective within a predicate. However, in many languages the possibilities vary.

Most typically, an adjective is far more restricted than a verb when it occurs as predicate head. For example, in the Iroquoian language Cherokee (Feeling 1975), a verb as predicate head allows three types of prefix and two varieties of suffix. In contrast, an adjective as predicate head allows only pronominal prefixes:

(11) Predicate structure in Cherokee

	verb				
	adjective		adjective		
±initial prefixes	+pronom- inal prefix	±reflexive prefix	+verb/ adjective root	±non-final suffixes	±final suffix
8 orders, including negative, 'again', 'since'				13 orders, including reversive, repetitive, completed, tense/aspect, interrogative	pre-incipient, future, infinitive, tense, etc.

Note that only those positions which are obligatory for verbs are found with adjectives.

Another language in which adjectives have more limited possibilities than verbs is Temiar (Aslian branch of Austroasiatic; Benjamin 1976: 184); only verbs (not adjectives) may take the modal affix *-m-* and form causatives.

In other languages, verbs allow some modifiers which adjectives lack, and adjectives permit some which verbs lack. For example:

- In Vietnamese (Nguyen 1987: 791), only adjectives can be preceded by *rất* 'very' and *khát* 'rather', and only verbs can occur with the exhortative particle *hãy*.
- In Chamorro (Austronesian; Topping 1973: 231), only verbs can take a modifier of manner, and only adjectives may take an intensifier.
- In Kamaiurá (Tupí-Guaraní branch of Tupí family; Seki 2000: 67), adjectives differ from verbs in that (a) verbs but not adjectives can occur in the circumstantial mode; (b) in indicative, exhortative, and imperative moods, adjectives take pronominal proclitics while verbs take pronominal prefixes; (c) the gerund is marked by *-ram* on a verb but by *-m* on an adjective.
- In Warekena (Aikhenvald 1998), verbs take a pronominal prefix whereas adjectives take a pronominal suffix, in each case relating to the S argument.
- In Korean (Chapter 9), adjectives and verbs show essentially the same categories, but have different allomorphs for indicative within predicate slot and for indicative within a relative clause.

Adjectives may have wider possibilities than verbs. For example, in Fijian the pre-head predicate modifier *rui* 'more than a usual amount' is allowed when the predicate head is an adjective, as in (12) with *levu* 'big', but not when it is a verb, as in (13) with *pu'u* 'be angry' (Dixon 1988: 95).

- (12) [e    *rui*    *levu*]<sub>INTRANSITIVE PREDICATE</sub>  
       3sgS LOTS big  
       'he/she is too big'

- (13) \*[e    *rui*    *pu'u*]<sub>INTRANSITIVE PREDICATE</sub>  
       3sgS LOTS be.angry  
       'he/she is too angry'

However, when a predicate with verb as head includes an adverbial modifier (which involves prefix *va'a-* added to an adjective), then it may also include modifier *rui*, as in:

- (13') [e    *rui*    *pu'u*    *va'a-levu*]<sub>INTRANSITIVE PREDICATE</sub>  
       3sgS LOTS be.angry ADVERBAL.DERIVATION-big  
       'he/she is very angry (more than is appropriate)'

In summary, *rui* may only be used in a predicate which includes an adjective. The adjective may either be predicate head, as in (12), or the nucleus of an adverbial modifier, as in *va'a-levu* 'greatly' (based on *levu* 'big') in (13').

Another recurrent criterion concerns reduplication possibilities. In Chinese (Xu 1988), a verb when reduplicated carries the meaning 'do a little bit', for example:

- (14) *dòng* 'to move'      *dòngdòng* 'to move a little'

In contrast, when an adjective is reduplicated, the semantic effect is 'intensification of the quality', as in:

- (15) *hóng* 'red'      *hónghóng* 'vividly red'

In Qiang (see Chapter 13), reduplication usually signifies reciprocity for verbs but either plurality or intensification or both for adjectives (depending on the formal nature of the reduplication). In Mupun (Chadic; Frajzyngier 1993: 63–73), both verbs and adjectives may reduplicate, which serves as a process of nominalization. But whereas a reduplicated verb just forms an abstract noun (e.g. *rán* 'write', *ránrán* 'writing'), when an adjective is reduplicated it adds a sense of intensity (e.g. *móol* 'thick', *mámóol* 'great thickness'). (And see the note on methodology concerning the semantics of reduplication, in §6.2.2.)

Adjectives may also differ from verbs in possibilities for derivation. In Qiang, for instance, nominalization by the definite marker is almost restricted to adjectives. In Mandarin Chinese (Xu 1988), different sets of derivational suffixes apply to verbs (e.g. agentive nominalizer *-jiǎ*) and to adjectives (e.g. verbalizer *-huà*).

6.1.2. *Different possibilities for transitivity*

In Fijian, almost every verb can be used either intransitively (then not bearing a suffix) or transitively (with a transitive suffix). For some verbs the intransitive subject (S) relates to the transitive subject (A), and for others S relates to the transitive object (O). For example (full details are in Dixon 1988: 200–19):

(16)	<i>Intransitive</i>	<i>Transitive</i>
type S = A	<i>laò</i> 'go'	<i>laò-va</i> 'go for'
	<i>dredre</i> 'laugh'	<i>dredre-va'ina</i> 'laugh at'
type S = O	<i>cori</i> 'be tied'	<i>cori-ta</i> 'tie'
	<i>rogo</i> 'be audible'	<i>rogo-ca</i> 'hear'

Unlike verbs, adjectives do not take a transitive suffix; that is, adjectives only occur in intransitive—not in transitive—predicates. (There are a few verbs which are only used intransitively, including *gaadee* 'stroll' and *bona* 'stink'. These are distinguished from adjectives by other tests, for example the co-occurrence with *rui* 'more than a usual amount', illustrated above.)

It is interesting to study the allocation of adjectival concepts into word classes in Fijian. Words from the DIMENSION, AGE, VALUE, COLOUR, PHYSICAL PROPERTY, and SPEED types are adjectives, but HUMAN PROPENSITY items are placed in the verb class. It is not hard to see why this should be so.

Most adjectives in English just describe a property of some thing (for example, 'big', 'new', 'heavy', 'sharp'). However, HUMAN PROPENSITY adjectives describe an attitude on the part of one participant towards someone or something else. When they function as copula complement, this second argument may be shown by an optional prepositional phrase; for example 'happy (about)', 'clever (at)', 'jealous (of)', 'afraid (of)', 'brave (at)', 'angry (at/about)'.

These ideas are coded in Fijian by verbs, each of which can be used intransitively (with no suffix) or transitively (with a suffix); they are all of type S = A. The O of the transitive verbs corresponds to the prepositional argument in English. For example:

(17)	<i>Intransitive</i>	<i>Transitive</i>
	<i>maarau</i> 'be happy'	<i>maarau-ta'ina</i> 'be happy about'
	<i>vu'u</i> 'be clever'	<i>vu'u-ta'ina</i> 'be clever at'
	<i>vuuvuu</i> 'be jealous'	<i>vuuvuu-ta'ina</i> 'be jealous of'
	<i>rere</i> 'be afraid'	<i>rere-va'ina</i> 'be afraid of'
	<i>dou</i> 'be brave'	<i>dou-va'ina</i> 'be brave at'

Now some verbs in Fijian may choose between two transitive suffixes, which bring different participants into the second core argument slot. For example:

(18)	<i>Intransitive</i>	<i>Transitive<sub>1</sub></i>	<i>Transitive<sub>2</sub></i>
	<i>dabe</i> 'sit'	<i>dabe-ca</i> 'sit on'	<i>dabe-va</i> 'sit (waiting) for'
	<i>vana</i> 'shoot'	<i>vana-a</i> 'shoot at'	<i>vana-ta'ina</i> 'shoot with (e.g. a gun)'

A few of the verbs relating to the HUMAN PROPENSITY semantic type can also make a choice of transitive suffix, effectively corresponding to a choice of preposition in English. For example:

- |      |                        |                                              |                                                                  |
|------|------------------------|----------------------------------------------|------------------------------------------------------------------|
| (19) | <i>Intransitive</i>    | <i>Transitive<sub>1</sub></i>                | <i>Transitive<sub>2</sub></i>                                    |
|      | <i>pu'u</i> 'be angry' | <i>pu'u-ca</i> 'be angry<br>at (e.g. child)' | <i>pu'u-ca'ina</i> 'be angry about'<br>(e.g. child's behaviour)' |

### 6.1.3. Different possibilities as modifier within an NP

There are a number of ways in which adjectives may differ from verbs in the modification of a head noun within an NP. The most straightforward difference is that only an adjective can directly modify a noun, not a verb. This appears in Kamaiurá (Seki 2000: 70, 117), in Tigak (Austronesian; Beaumont 1980: 85), and in Papantla Totonac (see Chapter 6).

In some languages with a verb-like adjective class, both verb and adjective can modify a noun through a process of nominalization, but there may be differences of detail. In Chinese, for example, a verb must take nominalizer *-de* when functioning as modifier within an NP, whereas for most adjectives *-de* is optional. (Xu 1988 states that only some HUMAN PROPENSITY adjectives, such as *yúchǔn* 'stupid' or *jízào* 'impatient', have to be followed by *-de*).

In some languages, adjectives and verbs modify a noun through a relative clause construction. In Mojave (Yuman; Schachter 1985: 19), a relativizing particle is obligatory with a verb, when modifying a noun, but optional with an adjective. In Èdo (Kwa group within Niger-Congo; Omoreuyi 1986), both adjective and verb require a relative marker when in modifying function, but there is phonological reduction of the relative marker only in the case of adjectives.

In some languages, a noun may modify a noun in two ways—either with no marker or within a relative clause—with a difference of meaning. Hagège (1974: 130) describes how in Tupuri (Adamawa-East, spoken in Chad), an NP consisting just of noun and adjective has an indefinite meaning, as in (20a), while an NP in which the adjective is in a relative clause has a definite meaning, as in (20b).

- |      |     |                  |     |                      |
|------|-----|------------------|-----|----------------------|
| (20) | (a) | <i>wi(l) klī</i> | (b) | <i>wi(l) mǎ: klī</i> |
|      |     | child little     |     | child REL little     |
|      |     | 'a little child' |     | 'the little child'   |

In Igbo there is a verb corresponding to each of the eight adjectives; for example adjective *ọjọ́ọ́* 'bad', verb *njọ́* 'be bad'. A noun can be modified either directly by an adjective or indirectly through a relative clause introduced by relative marker *dị* and including the corresponding verb. There is in each case a difference in meaning, the adjectival modification generally referring to a more-or-less permanent state and the verb-via-relative-clause modification referring to a more transient state (Welmers and Welmers 1968: 181–2). For example:

- (21) *óbi ójòq* 'hard-heartedness, meanness' as an inherent character trait  
(literally 'heart bad')
- (22) *úzq dĭ njq* 'road which is bad', which can, after all, be repaired

There may be other kinds of restriction on a verb in modifying function, which do not apply to an adjective. In Chemehuevi (Uto-Aztecan; Press 1979: 58), verbs must co-occur with a demonstrative when modifying a noun; adjectives need not. In *Tukang Besi* (Donohue 1999: 144, 303–7), adjectives can modify a noun directly but verbs require a subject focus marker. In *Mupun* (Frajzyngier 1993: 69), both adjectives and verbs may only modify a noun together with the relative clause marker *dē*; but whereas verbs require a subject to be stated within the relative clause (this is underlined in (23a)), adjectives do not, as in (23b).

- (23) (a) *n-dem ngwe [dē wu cii]*  
1sg-like man REL 3m refuse  
'I like a man who refuses'
- (b) *n-dem ngwe [dē cí]*  
1sg-like man REL different  
'I like a different man'

In some languages, both verb and adjective can be head of an NP, but with slightly different properties. Fijian has one type of complement clause which has the form of an NP (I term it a 'clausal NP'). The underlying predicate (which can be a noun or adjective) becomes head of the NP, while the underlying subject becomes a possessive element. Thus, the clause in (24a) corresponds to the NP in (24b).

- (24) (a) *e laò* (b) *a o-na laò*  
3sgS go ARTICLE CLASSIFIER-3sg go  
'he/she goes' 'his/her going'

Verb and adjective differ in the classifier that can occur in the possessive element (Dixon 1988: 138). When an adjective is head of a clausal NP there is a choice between classifier *o-* (possessor has some control over the quality) and *'e-* (an inherent quality, over which the possessor has no control). (25a) is an intransitive clause with an adjective as predicate head. Corresponding to this, there are two clausal NPs, shown in (25b) and (25c).

- (25) (a) *e kaukaua* 'he/she is powerful; he/she/it is strong'
- (b) *a o-na kaukaua* 'his/her (acquired) power'
- (c) *a 'e-na kaukaua* 'his/her/its (inherent) strength'

However, when a verb is head of a clausal NP, the possessor can only take classifier *o-*, as in (24b).

#### 6.1.4. *Different possibilities in comparative constructions*

Not all languages have a comparative construction (types of comparative construction were illustrated in (9–10) above). In some of the languages that do, the ‘parameter of comparison’ can only be an adjective, but in others there are wider possibilities. In Èdo, for example, both adjectives and verbs may occur in comparative constructions (Ọmọruyí 1986). However, in some languages only adjectives can be compared, and this furnishes a criterion for distinguishing between adjective and verb classes; such a property applies to Toba-Batak (Nababan 1981: 71–2), Korean, North-East Ambae, Qiang, and Lao (Chapters 9, 11, 13, and 14 below). In Semelai (Chapter 12), only the sub-class of DIMENSION adjectives have a morphological comparative (other forms enter into a periphrastic comparative construction, borrowed from Malay).

#### 6.1.5. *Different possibilities for forming adverbs*

In Fijian, for example, adverbs can be formed from adjectives (but generally not from verbs) by means of the prefix *va’a-*; for example, *va’a-levu* ‘greatly’ from *levu* ‘big’—as in (13’)—and *va’a-dodonu* ‘correctly’ from *dodonu* ‘correct’. In Japanese, too, it is mainly adjectives which may function as adverbs, this being one of the properties which links the two adjective classes into one macro-class.

There are other properties which recur. For example, adjectives typically behave in a special way within Serial Verb Constructions; this is illustrated—in Chapters 4, 11, 12, and 13—for Tariana, North-East Ambae, Semelai, and Qiang.

The discussion in this sub-section has been of languages where adjectives function as intransitive predicate, rather than as copula complement. Not all languages have a copula construction. One might expect a correlation: languages in which adjectives can be intransitive predicate might be thought likely to lack a copula construction, with languages for which adjectives cannot function as intransitive predicate being likely to have a copula construction. From examination of a range of languages, it appears that there is in fact *no* correlation. That is, whether or not a language has a copula construction is quite independent of whether or not adjectives can be intransitive predicates.

Languages with verb-like adjectives differ with respect to the possibilities for using an adjective in the copula complement slot. In Mupun (Frajzyngier 1993), a copula complement can only be an NP (e.g. ‘this man is the chief’), not an adjective. In Chinese (Xu 1988), an adjective can occur as copula complement only when in nominalized form, as in (26a).<sup>3</sup> This has a rather different meaning from a clause in which the adjective is intransitive predicate, as in (26b).

<sup>3</sup> The nominalizer can be omitted from a sentence like (26a) in marked circumstances, when it is in emphatic or contrastive function.



- (26) (a) [táng]<sub>COPULA.SUBJECT</sub> [shi]<sub>COPULA</sub> [tián-de]<sub>COPULA.COMPLEMENT</sub>  
 sugar is sweet-NOMINALIZER  
 ‘sugar is a sweet thing’  
 (b) [táng]<sub>s</sub> [tián]<sub>INTRANSITIVE.PREDICATE</sub>  
 sugar sweet  
 ‘sugar is sweet’

In some languages where adjectives may function both as head of an intransitive predicate and also as modifier in an NP, there is a definite preference for employing them in the former function. For example, a Korean will be more likely to say ‘Men are numerous’ than ‘There are many men’ (Ramstedt 1939: 35). And Kimball (1991: 484) reports that in the Muskogean language Koasati there is a preference for saying, literally ‘The willow is long-, green- and many-leafed’, rather than (as in English) ‘The willow has many long green leaves’.

(Interestingly, in languages where an adjective can function as copula complement or modifier in an NP, no preferences have been reported with respect to one of these syntactic possibilities.)

## 6.2. DISTINGUISHING ‘NOUN-LIKE’ ADJECTIVES FROM NOUNS

There are a number of kinds of criteria for distinguishing adjectives from nouns, where these share grammatical properties: (1) the internal syntax of NPs; (2) morphological possibilities; (3) the comparative construction; and (4) adverbial use. These will be discussed one at a time.

### 6.2.1. *The internal syntax of NPs*

The prototypical NP has a noun as head and one (or, sometimes, several) adjectives as modifiers. Where this scheme is closely adhered to there is no difficulty in distinguishing between nouns and adjectives; this applies in English, in Hua (Papuan region, Haiman 1980: 268–9), in Basque (Saltarelli 1988: 144), in Upper Necaxa Totonac (Beck 2000), and in Papantla Totonac (Chapter 6 below).

However, there are some languages in which a noun may also function as modifier. Generally, the possibilities for noun modifiers are rather limited. It may be that an NP can include no more than one noun modifier, but several adjective modifiers. And whereas every, or almost every, adjective is likely to function as modifier within an NP, only a limited set of nouns may have this function. For example, in Jarawara the only nouns used as modifiers are those referring to material (such as *jati* ‘stone’, *awa* ‘wood’) and sex (*fana* ‘woman, female’ and *maki* ‘man, male’); in Tariana just human nouns may function as modifier.

In some languages a noun can be modifier only under particular grammatical conditions. In Bilin (Cushitic; Palmer 1967: 206), for example, a modifying noun must be in genitive form. In Igbo, when a noun is modified by another noun or by a number, these form an ‘associative construction’ (with tone change); this does not

apply when a noun is modified by an adjective (Welmers and Welmers 1969).

The other variation on the prototypical pattern is for an adjective to make up a complete NP. In some languages this can be described as the adjective becoming head of the NP, but in most instances it is better treated as an NP whose head noun has been omitted (under certain discourse conditions), which consists just of a modifier. In languages with gender, the ellipsed noun is likely to determine the gender of the modifier adjective. The possibilities for ellipsis can depend on some characteristic of the head noun; for example, in Modern Standard Arabic, only a noun with human reference can be omitted.

Generally, when an adjective occurs without a noun in an NP, it may not receive any syntactic modification. That is, an NP may consist of a noun plus one or more adjectives; or it may just consist of an adjective; this applies, for example, in Amele (Papuan region; Roberts 1987:155).

A further criterion, in some languages, lies in the existence of a pre-modifier 'very', which can apply to adjectives but not to nouns. This applies in Buriat (Poppe 1960) and in Quechua (Cole 1982:99), among many other languages.

### 6.2.2. Morphological possibilities

One of the most useful criteria for distinguishing between nouns and adjectives is gender or noun classes. In Latin, for instance, each noun belongs to just one of the three genders, while an adjective can be in any gender, agreeing with the noun it is modifying. A similar criterion is given by Sokolov (1967: 43) for Avestan and by Fortune (1942: 55–6) for the Papuan language Arapesh; and see the discussion of Russian in Chapter 8.

However, this criterion is not always watertight. In Dyirbal a noun is generally accompanied by a noun marker, a determiner-like element which indicates location/visibility, agrees with the noun in case, and marks the noun class of the noun (this is not shown on the noun itself). Most nouns relate to just one noun class, while most adjectives can occur with a noun marker of any class. Compare (noting that in fact the words in an NP can occur in any order):

- |                                          |                                                         |
|------------------------------------------|---------------------------------------------------------|
| (27) (a) <i>bayi yara</i><br>'man'       | (28) (a) <i>bayi (yara) midi</i><br>'small (man)'       |
| (b) <i>balan yibi</i><br>'woman'         | (b) <i>balan (yibi) midi</i><br>'small (woman)'         |
| (c) <i>balam mirrany</i><br>'black bean' | (c) <i>balam (mirrany) midi</i><br>'small (black bean)' |
| (d) <i>bala diban</i><br>'stone'         | (d) <i>bala (diban) midi</i><br>'small (stone)'         |

The noun marker 'there' (shown by initial *ba-*), in absolutive case, has four forms, masculine *bayi*, feminine *balan*, edible *balam*, and neuter *bala* (see Dixon 1972 for full details). Now a head noun can be omitted from an NP (under discourse

conditions). Thus, while the noun *yara* 'man' can only occur with *bayi*, *yibi* 'woman' only with *balan*, etc., an adjective such as *midi* 'small' can occur with all four noun markers, as in (28a–d).

However, there is a handful of 'hybrid' nouns that can take either masculine or feminine markers; these include *bayi/balan jaja* 'male/female baby' and *bayi/balan bimbu* 'father's older brother/sister'. And while adjectives such as *midi* 'small' can modify any noun, there are adjectives which—by virtue of their meaning—may only modify a noun which has human reference; for example, *wugija* 'generous, always sharing things' and *jilbay* 'experienced/expert at some task'. There are thus a few nouns which can occur with either masculine or feminine noun marker, and a few adjectives which are restricted to masculine and feminine markers. That is, while noun class co-occurrence is a pretty good criterion for distinguishing nouns and adjectives in Dyrbal, it is not perfect. Other criteria need to be brought in to deal with words like *jaja*, *bimu*, *wugija*, and *jilbay*.

In some languages only some adjectives may take gender or noun class marking. This applies in Swahili, where the adjective class has two sub-classes. One sub-class consists of about fifty native roots which take the concordial prefix of the noun they modify; the other sub-class involves a score or so of borrowed adjectives (mostly from Arabic) which do not take the prefixes. However, the sub-classes are linked by all their members sharing other grammatical properties.

In Jarawara, some inalienably possessed nouns and some adjectives show a gender distinction. However, the rules for gender agreement within an NP are different for the two word classes. Following a non-singular 1st or 2nd person pronoun as head of an NP, plus a possessed noun, a further possessed noun will be in masculine form while an adjective shows feminine form—see (34–6) in Chapter 7.

The gender/noun class distinction spans morphology and syntax. A similar criterion is provided by classifiers; generally, an adjective may occur with a larger set of classifiers than may a noun (potentially, an adjective may occur with all classifiers, while a noun may be limited to one, or to just a few). (See Dixon 1977b: 122 on the Australian language Yidj.)

A survey of the literature shows a number of different kinds of morphological differences between nouns and adjectives. Only a noun may take possessive affixes, in Finnish and in Hungarian, and also in the Papuan language Alambak (Bruce 1984: 74 provides a most useful table of the various morphological differences between adjectives and the other word classes in Alambak).

Typically, adjectives will accept only a subset of the affixes available to nouns. Arnott (1970: 78–130) states that in Fula (Atlantic/Niger-Congo) an adjective takes all noun class suffixes but a noun will only take some, whereas nouns take all the remaining nominal suffixes, while adjectives just accept a selection of them (for example, singular *-wo* and plural *-be* are confined to nouns).

In Maasai (Tucker and Mpaayei 1955: 3–13), a noun—as head of an NP—inflects for gender and number, while an adjective—as modifier—inflects only for number. But if the head noun is omitted, so that the NP consists just of an adjective, then

that inflects for gender and number, like a noun. The principle appears to be that number marking goes on every word in an NP, but gender marking just onto one word (a head noun, if present, otherwise an adjective).

Another distinguishing feature is when a given grammatical form has different allomorphs when used with nouns and with adjectives. For example:

- In Awa Pit (Barbacoan family, Ecuador/Colombia; Curnow 1997: 91) the 'collective action' suffix has allomorph *-tuzpa* with a noun, and *-tuz* on an adjective which makes up a full NP.
- In Venda (Bantu; Poulos 1990: 121), both adjectives and nouns take noun class prefixes but with some differences of form; for example, class 15 is shown by *hu-* on an adjective but by *u-* on a noun.

In some languages a given suffix may be used on both noun and adjective, but with a difference of meaning. For the Australian language Bandjalang, Crowley (1978: 30) describes how the suffix *-bu* means 'still' with an adjective (for example *mirin-bu* 'still alive') but 'along' with a noun (for example *balun-bu* 'along the river').

Reduplication is another grammatical process which may have different semantic effect with nouns and with adjectives. In the Australian language Emmi (Ford 1998: 140), reduplication of a noun indicates plurality (for example, *perre* 'grub', *per-reperre* 'grubs') while reduplication of an adjective indicates intensity (for example, *duk* 'big', *dukduk* 'very big').

A note on methodology is in order here. It might be suggested that the semantic effect of reduplication is a consequence of the semantic nature of a lexeme, not of its grammatical word class. On this principle, lexemes referring to 'properties' would be marked for intensity, and not for plurality, whatever word class they belonged to. That this is untrue is shown by comparing the semantic effect of reduplicating nouns and adjectives in Emmi and in Dyirbal:

(29)	<i>Reduplication of noun</i>	<i>Reduplication of adjective</i>
Emmi	plural, e.g. <i>perreperre</i> 'grubs'	intensity, e.g. <i>dukduk</i> 'very big'
Dyirbal	plural, e.g. <i>jambunjambun</i> 'grubs'	plural, e.g. <i>bulganbulgan</i> 'many big (things)'

This shows that the semantic effect of reduplication does not here operate on the basis of the semantics of the lexeme involved, but rather upon its word class, with different languages having varying specifications for their word classes.

The placement of case marking seldom provides a criterion for distinguishing adjectives from nouns. Case indicates the function of an NP in its clause. Each language has its own rule for the assignment of case to the words within an NP—it may go onto every word, or just the last word, or just the first word, or just the head. Whether or not an adjective bears case will depend on these rules, and on the position of the adjective in the NP. For example, in Bilin, case goes onto the last word in an NP. If there is an adjective modifier (which follows the head noun), this will

take case; only if there is no modifier to a noun will case attach to the noun (Palmer 1967). However, in Buriat, case goes onto the head word. If an adjective functions as modifier, it takes no case affix; if an adjective makes up a whole NP, then it does take case (Poppe 1960: 76).

Note, though, that the case system for adjectives may differ in size from that for nouns. Nichols (1994: 95–9) states that in Ingush (North-east Caucasian) nouns may select from eight cases but adjectives just from two—nominative (corresponding to nominative on nouns) and oblique (corresponding to genitive, dative, ergative, instrumental, locative, comparative, and allative on nouns). Estonian is similar to Ingush in this feature.

### 6.2.3. *Comparative construction*

In some languages (for example, Russian and Papatla Totonac, in Chapters 6 and 8 below, and also Finnish and Hungarian) only an adjective can occur as the parameter of comparison in a comparative construction, and this serves to distinguish adjectives from nouns. However, in other languages nouns and adjectives share this property and it is thus not a relevant criterion; this applies for Portuguese, for Sanskrit (Bhat 1994: 181–2), and also for Dyirbal (Dixon 1972: 226–8).

### 6.2.4. *Use as adverbs*

In Tariana, in Mandarin Chinese, and in Buriat (Poppe 1960), only adjectives—not nouns—also have adverbial function.

## 6.3. ADJECTIVES GRAMMATICALLY SIMILAR TO BOTH VERBS AND NOUNS

The last two sections have discussed languages in which adjectives have similar grammatical possibilities to verbs, and languages in which they have similar possibilities to nouns. What is more natural than for a language to combine these features—for an adjective to inflect like a noun when occurring in an NP, and to inflect like a verb when functioning as predicate head? In fact, a rather small number of languages appear to be of this type. Three well-documented examples can be provided.

(1) In languages from the Berber sub-group of Afroasiatic, adjectives—like other lexemes—have triconsonantal roots, e.g. *m - l - l* ‘white’. An adjective will inflect for gender and number, like a noun, when in an NP and as copula complement. It will inflect for tense and for person and number of the subject, like a verb, when functioning as head of an intransitive predicate. (See, for example, Aspinion 1953, Sadiqi 1986.)

(2) In the Australian language Nunggubuyu (Heath 1984: 152), an adjective can function as modifier in an NP; it then takes a noun class prefix and case and number suffixes, like a noun. An adjective may also take an intransitive subject prefix, just like a verb; it must then be functioning as an intransitive predicate. But note that, as in many languages—see §6.1.1—an adjective has more limited mor-

phological possibilities than a verb in this slot; it can only take tense and aspect suffixes if the inchoative derivation suffix is first added. It is likely that in Nungubuyu adjectives are just beginning to take on grammatical properties similar to those of verbs; see §9 below.

(3) In Tariana, an adjective can modify a noun and then agrees with it in number and classifier. It may also function as predicate head and may then take tense/evidentiality, aspect, mood, and most other suffixes that are available for a verb. This was illustrated by (2a/b) in §2; see also Chapter 4 below.

There is an explanation for the rich syntactic possibilities available to adjectives in Tariana. Their functioning as intransitive predicate is an inherited property, shared with other Arawak languages. Their functioning as copula complement is a property which has been borrowed from East Tucanoan languages, as one aspect of the large-scale diffusion of grammatical patterns that characterizes the Vaupés linguistic area (to which Tariana and East Tucanoan languages belong). See Aikhenvald (2002: 153–74).

There are hints in the literature of further languages of this type, but insufficient information to check them out in detail. For instance, Swadesh (1946: 320–1) says of Chitimacha (an isolate, previously spoken in Louisiana): ‘very much like certain kinds of verbs is the adjective, part of whose inflection coincides with that of the verb, but which has two additional forms called the substantival singular and plural. Moreover, it is precisely the substantival forms which are the most commonly used.’

In other languages, adjectives may be most similar to one of nouns and verbs, but have some properties in common with the other. In Upper Necaxa Totonac, adjectives have grammatical properties similar to those of nouns. However, an adjective as copula complement may be modified by *tunká* ‘very’; nouns do not take *tunká*, but intransitive state verbs (e.g. ‘be ashamed’) do (Beck 2000: 233–4). In the Australian language Emmi (Ford 1998: 139–40), adjectives inflect like nouns but are negated, like verbs, by the particle *way* (nouns, in contrast, are negated by the negative copula *piya*).

#### 6.4. ADJECTIVES GRAMMATICALLY DIFFERENT FROM BOTH VERBS AND NOUNS

In a further set of languages, the morphological and syntactic properties of adjectives differ from those of verbs and of nouns. I will mention just three examples of this.

(1) English. Only nouns may take a plural suffix; only verbs may take tense–aspect suffixes; only adjectives may take comparative and superlative marking, shown either by affixes (*-er*, *-est*) or by pre-modifiers (*more*, *most*). An adjective cannot occur as head of an NP<sup>4</sup> (while a noun can), nor as predicate (while a verb can).

<sup>4</sup> There are a limited number of adjectives which are an exception to this statement, particularly COLOUR terms; for example, *I like a good full-bodied red* (sc. wine).

Only an adjective can occur alone as copula complement, as in *John is tall*; a noun requires an article or other determiner in this slot, as in *John is a doctor/my son*.

(2) Teribe (Chibchan family; Quesada 2000). Verbs take aspect, modality, and mood suffixes, and nouns take plural marking; none of these is available to adjectives. An adjective may modify a noun in an NP, may occur in a comparative construction, and may be complement in a verbless (copula-type) construction.

(3) Mam (Mayan family). Although adjectives (and also nouns) can function as intransitive predicate, they take none of the TAM suffixes available to verbs; adjectives share no significant properties with nouns. Nora England provides a full and insightful account in Chapter 5 below.

## 7. Languages with restricted functional possibilities for adjectives

As described in §3, in the great majority of languages adjectives have two canonical functions:

- (a) in a statement that something has a certain property, coded through the adjective functioning either as intransitive predicate or as copula complement;
- (b) as a specification that helps focus on the referent of the head noun in an NP, the adjective functioning as modifier to the head.

In a fair number of languages, adjectives can have one or both of two further properties:

- (c) as the parameter of comparison in a comparative construction;
- (d) as modifier to a verb, in adverbial function.

There are some languages whose adjectives do not have both (a) and (b) functions. They can be divided into three sets.

Set (1), adjectives which just function as modifier within an NP, and lack function (a). This applies to Malayalam (Dravidian; Asher and Kumari 1997: 339–55; Variar 1979: 24–36); to Hua (Papuan region; Haiman 1980: 268–9); to Yoruba (Kwa/Niger-Congo; Madugu 1976); and to Dagbani (Gur/Niger-Congo; Olawsky 1999 and p.c.). In Yoruba, for example, one simply cannot say ‘Olu is good’ or ‘Ibadan is large’; a copula complement must be an NP, including a head noun, as in ‘Olu is a good girl’, ‘Ibadan is a large city’ (Madugu 1976: 93).

Set (2), adjectives which just function as copula complement, and lack function (b). A number of languages from the northern branch of the Carib family are of this type, including Hixkaryana (Derbyshire 1979: 81, 1985: 10–15, 27–8) and Tiriyo (Meira 1999: 334–6). These languages have a word class whose members may:

- function as copula complement (like nouns, and unlike verbs);
- have adverbial function, as modifier to a verb.

They cannot directly modify a head noun in an NP but must first be nominalized (just as a verb must be).

It was remarked in §5 that, as a consequence of the Eurocentricism of much linguistic work, there is sometimes a reluctance to use the term 'adjective' for a class of words which does not have similar grammatical properties to nouns (as adjectives do in European languages). From this viewpoint, words which cannot function as modifier within an NP (except in nominalized form) may appear un-adjective-like. As a consequence, Derbyshire (1979, 1985) prefers not to use the label 'adjective' for the class of words just described, in Hixkaryana and other north Carib languages. However, Derbyshire's preferred label, 'adverbs', is scarcely appropriate; an adverb cannot normally occur as copula complement. This word class in Carib languages is certainly not a typical adjective class, since it does not have function (b), but it is no more untypical than those languages—in set (1)—whose adjectives only occur as nominal modifier and lack function (a).

The semantic content of the non-prototypical adjective classes in languages of sets (1) and (2) do accord with the scheme outlined in §1.1. Malayalam and Yoruba each have about fifteen members in their adjective classes, Hua has four, and Dagbani has about seventy. They are:

- Malayalam: four DIMENSION, three AGE, one VALUE, plus 'humble' and 'various', 'few', 'any', 'other', 'this particular'.
- Hua: two DIMENSION ('big', 'little'), two PHYSICAL PROPERTY ('raw, false', 'wild, not tame').
- Yoruba: two DIMENSION, two AGE, three VALUE, three PHYSICAL PROPERTY, five HUMAN PROPENSITY.
- Dagbani: five or more in each of DIMENSION, AGE, VALUE, COLOUR; about twenty in PHYSICAL PROPERTY, etc.

For set (2), about thirty adjectives are reported for Hixkaryana and about forty-four for Tiriyó. These include terms from DIMENSION, VALUE, PHYSICAL PROPERTY, HUMAN PROPENSITY, and SPEED (AGE terms are nouns while COLOUR are derived adjectives). But the adjective class in north Carib languages also includes terms for QUALIFICATION ('all') and NUMBER ('one', 'two') together with items relating to PLACE ('hither', 'thither', 'beyond', 'this side of') and TIME ('later', 'soon', 'now', 'yesterday').

It is perhaps not surprising that the Carib adjective class, which functions only as copula complement and as adverb, should include words of place and time which are typically coded as adverbs in other languages.

Set (3), adjectives which only function as intransitive predicates, and lack function (b). In some of the languages with verb-like adjectives that can function as intransitive predicate, both adjectives and verbs may modify a noun through a relative clause construction. As mentioned in §6.1.3, it is often the case that a relative clause marker is obligatory with a verb but optional with an adjective; adjectives could thus be said to have function (b), modifying a noun directly; these would



thus be prototypical adjective classes in terms of their syntactic functions.

Èdo might be a candidate for set (3), since a relative marker is required with adjectives as well as with verbs. However, as pointed out in §6.3, there is phonological reduction of the relative marker only in the case of adjectives.

## 8. Languages with two adjective classes

At the end of §5, the criteria for recognizing an adjective class were set out as: a word class distinct from noun and verb, including words from the prototypical adjective semantic types, and (a) functioning either as intransitive predicate or as copula complement; and/or (b) modifying a noun in an NP. It is possible for there to be two word classes which satisfy these criteria; that is, a language might have two adjective classes. I will mention three well-documented instances of this.

(1) Macushi (information from Abbott 1991 and p.c.) has an adjective<sub>1</sub> class similar to that described in §7 for the related north Carib languages Hixkaryana and Tiriyó. Unlike its relatives, Macushi has a second small class, adjective<sub>2</sub>, whose members may modify a noun in an NP (or make up a full NP, with the head noun ellipsed). They may not function as modifiers to the verb (that is, as adverbs), and can only be copula complement when the denominalizer *pe* is included. In summary:

	<i>Adjective<sub>1</sub> class</i>	<i>Adjective<sub>2</sub> class</i>
can modify noun	only with nominalizer	✓
can make up whole NP	—	✓
can be copula complement	✓	only with denominalizer
can function as adverb	✓	—

According to Abbott (1991: 88, 129–30), each class is rather small. The reported members are:

	<i>Adjective<sub>1</sub> class</i>	<i>Adjective<sub>2</sub> class</i>
(31) DIMENSION	'big', 'deep'	'long', 'fat'
VALUE		'good', 'bad'
PHYSICAL PROPERTY	'hard', 'well'	'hot', 'cold'
SPEED		'fast'
QUANTIFICATION	'all', 'few', 'many'	
NUMBER	'two'	
PLACE	'here', 'there'	
TIME	'today', 'yesterday', 'long ago', 'later', 'regularly', 'afternoon'	

It will be seen that two of the recurrent semantic types for adjective classes, DIMENSION and PHYSICAL PROPERTY, have members in both classes.

(2) Japanese has two adjective classes, each of which is quite large. Their grammatical properties can be summarized as follows (following Backhouse 1984 and Chapter 2 below; and Takeuchi 1999: 81–2).

- What are called inflected adjectives may function as intransitive predicates, like verbs. They take most of the inflections available to verbs, although with allomorph *-i* for present tense as against *-ru* on verbs. Adjectives differ from verbs in not taking imperative and hortative suffixes, and in not combining with auxiliaries to mark aspect, benefaction, etc. Like verbs, they may modify nouns.
- The class of uninflected adjectives is like nouns in not taking any inflections, and in functioning as copula complement. These adjectives cannot function as intransitive predicate (without a verbalizing suffix being added), and they may only modify a noun if the marker *na* or *no* is also included.

The properties just listed indicate the differences between the two adjective classes. They do, however, share important syntactic properties, for example, members of both classes may be modified by an intensifier, and they may also function as adverbs. Some of their major grammatical properties can be tabulated:

(32)	Inflected adjectives (verb-like)	Uninflected adjectives (noun-like)
can be intransitive predicate	✓	only with derivational suffix
can be complement of copula <i>da</i>	—	✓
can modify noun	✓	needs <i>na</i> or <i>no</i>
can be modified by intensifiers	✓	✓
can function as adverb	✓	✓
may accept verbalizing suffix <i>-sugiru</i> 'too'	✓	✓

Looking now at semantic types, AGE, COLOUR, and SPEED terms are all inflected adjectives. Most DIMENSION and PHYSICAL PROPERTY terms are also inflected adjectives, although some belong to the uninflected class, while VALUE terms are divided between the two classes. HUMAN PROPENSITY terms are predominantly in the uninflected class, although inflected items are not uncommon.

In terms of size and composition, the inflected adjective class has about 700 members (some lexically complex); all the lexically simple members are native roots. The uninflected adjective class has more than three times as many members, some native forms and some loans from Chinese and from European languages; new forms can be added to this class (but not to the inflected class). In Chapter 2, Backhouse provides a full and informed discussion of the two adjective classes in Japanese.

(3) Manange (Tibeto-Burman; see Chapter 3 below) also has two adjective classes. What Genetti and Hildebrandt call 'verb-like adjectives' (a class with about fifty-seven monomorphemic members) may function as intransitive predicate but lack most of the morphological processes available to verbs. Their 'adjectives' (a class with about thirty members, which could be referred to as 'noun-like adjectives') may occur as copula complement, like a noun, but cannot be NP head and have distinct phonotactics. The two adjective classes share properties; for example, both may directly modify a preceding noun in an NP.

The COLOUR, SPEED, and QUANTIFICATION semantic types consist only of (noun-like) adjectives, HUMAN PROPENSITY and DIFFICULTY involve only verb-like adjectives, while DIMENSION, AGE, VALUE, PHYSICAL PROPERTY, and POSITION include members from both classes. In Chapter 3, Genetti and Hildebrandt provide a detailed and instructive account of adjectives in Manange.

## 9. Correlations with other grammatical parameters

It is interesting to enquire whether there is any correlation between the type of adjective class found in a language and other grammatical parameters.

One suggestion is reported in Wetzter (1992, 1996) and Stassen (1997). These authors distinguish between two kinds of languages which they describe, colloquially, as having 'nouny adjectivals' and 'verby adjectivals'. The 'verby' type covers languages in which adjectival concepts are considered to be expressed by verbs, and also those with a separate class of adjectives which share grammatical properties with verbs; similarly, *mutatis mutandis*, for 'nouny adjectivals'. They suggest that languages with 'nouny adjectivals' tend to show a tense system, while languages with 'verby adjectivals' tend to lack such a system (where tense is defined as, minimally, a distinction between past and non-past). They offer an explanation for this. The referents of verbs are said to be time-varying, while those of adjectives are not. If adjectives are grouped together with nouns rather than with verbs, then verbs can show tense, but if adjectives are grouped with verbs, then there will be no tense specification for this combined class.

There appears to be a degree of statistical support for this generalization, although there are a considerable number of exceptions. A much more fine-grained study is needed, with greater attention to the varying grammatical properties of adjective classes in individual languages.

One recurrent pattern (not mentioned by Wetzter and Stassen) is that if a language has verbs derived from adjectives, then the adjective is preferred for describing a fairly permanent property and the verb for referring to a more transient state. This was illustrated for Igbo by (21–2) in §6.1.

I have observed a quite different correlation—between types of adjective class and mechanisms for marking the syntactic function of core arguments within a clause. Following Nichols (1986), we can recognize the following types of languages:

- H(ead-marking), where the syntactic functions of core constituents are shown mainly by obligatory pronominal marking in the predicate.
- D(ependent-marking), where the syntactic functions of core constituents are shown mainly by case marking and/or adpositions/particles associated with core NPs.
- Mixed H/D, where there is both pronominal marking within the predicate, and marking on core NPs.
- Neither H nor D; here syntactic function may basically be shown by the order of phrase constituents within a clause.

The primary types of adjective classes can be repeated from §6:

- (I) Adjectives can function as intransitive predicate; these are called 'verb-like'.
- (II) Adjectives can function as copula complement; these are called 'non-verb-like'.

This is a broad, general classification. It was mentioned in §6 that in a small number of languages adjectives can function both as intransitive predicate and as copula complement. We also mentioned a correlation (not a coincidence) between being 'non-verb-like' and being 'noun-like' (taking some or all of the grammatical processes that may apply to a noun).

Surveying the languages of the world, there is a striking quantitative correlation:<sup>5</sup>

- (33) Adjective classes of type II (non-verb-like) tend to be found in languages of type D (dependency-marking at clause level).  
Adjective classes of type I (verb-like) tend to be found in languages of type H (head-marking), and in languages with neither H nor D marking.

Tentative examples of this correlation include:

II and basically D:

- Most of the languages of Europe, north Africa, north and west Asia, and north India (Indo-European, Basque, Uralic, Turkic, North-east Caucasian, Afroasiatic, Burushaski).
- Most of the languages of Australia.
- Most of the languages of the Philippines.
- Some languages from North America (including Yokuts, Sahaptin, Sierra Miwok, Tarascan).
- Some languages from South America (including Quechua).

<sup>5</sup> Locker (1951), working in terms of a speculative scheme of historical development, appears to suggest a correlation which is almost the reverse of that reported here: 'in languages which do not mark the category of person on verbs, adjectivals form part of the verb class' (quote from Wetzer 1996: 272; and see Wetzer's discussion of Locker's ideas on pp. 63–8, 272–3).

I and basically H:

- Many of the languages of North America (including most languages in Na-déné, Algonquian-Ritwan, Salish, Siouan, Iroquoian, Muskogean, Tsimshian, Zuni).
- Some languages from South America (including the Arawak family)
- Most Austronesian languages (excluding those in the Philippines).
- Ainu.

I and neither H nor D

- Most languages from south-east and east Asia (including Sinitic, Tibeto-Burman, Tai-Kadai, and some Austroasiatic).

It should be emphasized that this is very much a first-run-through of the data. Detailed study of the adjective classes in individual languages is required. There may, indeed, be languages of more than one type within a single genetic or areal grouping. Surveying Nilo-Saharan languages, Dimmendaal (2000: 218–19) notes that—in accordance with (33)—‘adjectives tend to pattern with nouns in dependent-marking languages and with verbs in head-marking languages’.

There are a number of exceptions to the generalization in (33), some of these being of particular interest.

(1) It is clear that, at an earlier stage, Australian languages were entirely dependent marking; in keeping with this, adjective classes are almost all ‘non-verb-like’ and also ‘noun-like’. (In fact, fairly subtle criteria have to be applied, in most languages, to distinguish between adjectives and nouns; see the discussion of Alpher’s criteria in §5.)

In recent times, bound pronouns have evolved over a good deal of the continent. In most of the languages in which they occur, these are clitics attached to the verb or a verbal auxiliary, and they are not always obligatory. However, languages over a continuous area in the central north have developed obligatory pronominal prefixes to verbs, a clear head-marking strategy. As a consequence they have lost or are in the process of losing dependent marking from NPs (see Dixon 2002 for full details).

Interestingly, a couple of these head-marking languages appear to be assigning more verb-like properties to their adjective class. It was mentioned, in §6.3, that in Emmi adjectives are negated like verbs, differently from nouns. And that in Nunggubuyu an adjective may take subject pronominal prefixes, like an intransitive verb, showing that it is functioning as head of an intransitive predicate.

The shift of a language from a dependent-marking to a head-marking profile is well-attested. Bound pronouns develop from what were free forms, and are obligatorily included in each predicate, with the old dependent marking on NPs dropping out of use. It may be that the shift from a ‘non-verb-like’ to a ‘verb-like’ adjective class—in order to re-establish the correlation in (33)—tends to follow the shift from dependent to head marking, but operating at a slower pace.

(2) Japanese is a dependent-marking language; as discussed in §8, there are two adjective classes, one verb-like and one noun-like. This suggests a rather speculative historical scenario:

- **STAGE ONE.** Japanese lacked dependent marking. It probably also lacked head marking, showing syntactic function by the ordering of phrasal constituents within a clause. There was a single class of adjectives (the present inflected class), similar to verbs in their grammatical behaviour. Japanese thus conformed with the correlation in (33).
- **STAGE TWO.** The language developed dependent marking. In association with this, it developed a second class of adjectives (the present uninflected class), which are 'non-verb-like'.

The following points can be adduced to support this scenario:

- The marking of the function of NPs in a clause is by syntactic particles, rather than by case suffixes. This is a little surprising, since Japanese is a fairly synthetic language with verbs taking a variety of suffixes. It is consistent with dependent marking having been introduced rather recently. Indeed, Shibatani (1990: 333–57) states that although the topic-marking particle *wa* is present in the earliest records (from about the eighth century CE), the particles *ga*, marking subject, and *o*, marking object, developed fairly recently from other grammatical elements (the object marker evolving before the subject marker).
- The verb-like inflected adjective class appears to be archaic, being restricted to native lexemes; although large, it does not accept loans. It includes all AGE, COLOUR, and SPEED items, and most from the DIMENSION and PHYSICAL PROPERTY types (the types that are typically associated with an adjective class).
- The noun-like uninflected class is now bigger than the inflected class and is growing; it accepts all kinds of loans. This class includes some DIMENSION and PHYSICAL PROPERTY terms, and most of the HUMAN PROPENSITY adjectives.

This scenario is speculative but not implausible. It suggests that, as with the Australian languages Emmi and Nunggubuyu, once a language shifts its profile with respect to head and dependent marking, then there will be a tendency to reorientate the grammatical properties of adjectives in accordance with the correlation in (33). In Nunggubuyu, the adjective class has had its grammatical possibilities extended so that it may now accept subject pronominal prefixes, like an intransitive verb (it does not yet directly accept tense and other verbal suffixes; this would be the next step). In Japanese, a new adjective class has been established, which is steadily increasing in size.

Korean is a clear exception to the correlation in (33), being dependent-marking and having just one adjective class, which is 'verb-like'. The speculative scenario just suggested for Japanese could be extended to Korean—supposing that the language originally lacked both head and dependent marking, and had a class of 'verb-like'

adjectives, but then developed dependent markers. Syntactic function is, as in Japanese, shown by particles following an NP, and some of these are thought to have developed recently. (For example, Sohn 1999: 30 mentions that the subject particle *ka*—which is now a conditioned allomorph of the earlier subject marker *i*—first appeared in the literature in 1572 CE and may possibly have been a borrowing from the Japanese subject particle *ga*.)

I feel that extending the Japanese scenario to also apply to Korean may be transcending speculation in the direction of fantasy. Like other results in linguistic typology, (33) is a statistical correlation, not a hard-and-fast rule. There are exceptions to it. Besides Korean, these include Southern Paiute (Uto-Aztec; Sapir 1930–1), which is also dependent-marking and shows ‘verb-like’ adjectives. It is, of course, worthwhile according detailed examination to these and other exceptions, to see whether there is an explanation (along historical or other lines). But it is unlikely that every exception will be provided with an explanation, and it is an error to try forcibly to provide one. Some languages just do have a typologically unusual combination of properties in some area of the grammar.

## 10. Semantic overlapping between word classes

I mentioned in §1.1 that while each word class has a similar semantic core between languages, there are a number of non-core concepts whose word class membership varies between languages; for example ‘hunger/hungry/be hungry’ can be a noun, an adjective, or a verb.

As discussed at several places above, some languages have small adjective classes whose members are typically taken from the core adjectival types, DIMENSION, AGE, VALUE, and COLOUR; languages that have an adjective class with more than about ten members tend to include in it some PHYSICAL PROPERTY terms. However, most languages have a large, open adjective class; it is interesting to compare the semantic membership of these classes.

In §6.1.2, I outlined the membership of the open adjective class in Fijian—it includes all DIMENSION, AGE, COLOUR, PHYSICAL PROPERTY, and SPEED terms. But in Fijian HUMAN PROPENSITY terms are verbs. This is explainable in terms of the grammatical organization of Fijian; adjectives may function just as intransitive predicates, while verbs may be either intransitive or transitive. Coding HUMAN PROPENSITY terms as verbs allows them to take an object argument, corresponding to the optional prepositional phrase in English, as in *happy (about)*, *clever (at)*, *jealous (about)*.

During the remainder of this section, I want to focus on the adjective class in the Australian language Dyirbal, and compare it with English. The adjective class in Dyirbal is large and open, and it is like the noun class in its grammatical properties (very similar to European languages). The semantic contents of the adjective classes in Dyirbal and English are similar; that is, most adjectives in Dyirbal correspond to adjectives in English, and vice versa.

However, there are a number of small semantic fields for which Dyirbal has adjectives while English has verbs. Some of these are exemplified in (34).

(34)		Verb in English	Adjective in Dyirbal		Verb in English	Adjective in Dyirbal
(a)	<i>divide</i>	<i>nyarri</i>	'divided up'	(b)	<i>gather</i>	<i>balmбу</i> 'gathered together'
	<i>split</i>	<i>yagi</i>	'split'		<i>heap</i>	<i>gurruny</i> 'heaped up'
	<i>crack</i>	<i>gajala</i>	'cracked'		<i>muster</i>	<i>guwurr</i> 'mustered'
	<i>smash</i>	<i>munyi</i>	'smashed up'	(c)	<i>lean</i>	<i>yulgarra</i> 'leaning'
	<i>tear</i>	<i>gini</i>	'torn'	(d)	<i>marry</i>	<i>julbun</i> 'married'
	<i>fold</i>	<i>wujun</i>	'folded'			

It will be seen that the terms in (a) deal with related concepts, to do with changing the form of an object; those in (b) have to do with getting together several things. Note that, just as adjectives can be derived from verbs in English (*cracked*, *torn*, *leaning*, etc.), so can verbs be derived from adjectives in Dyirbal—adding *-bi-l* to form an intransitive and *-ma-l* to form a transitive stem (for example, *yagi-bi-l* 'be split', *balmбу-ma-l* 'gather together').

There are thus some differences in the ways in which languages divide up semantic space into word classes. Corresponding to adjectives *happy*, *clever*, and *jealous* in English, Fijian has verbs *maarau(-ta'ina)* 'be happy (about)', *vu'u(-ta'ina)* 'be clever (at)', and *vuuvuu(-ta'ina)* 'be jealous (of)'. Corresponding to verbs *divide* and *marry* in English, Dyirbal has adjectives *nyarri* 'divided up' and *julbun* 'married'.

It is now relevant to ask whether there is any semantic overlap between word classes in individual languages, and—if so—whether different languages show similar or different overlaps. That is, we can enquire whether a given concept may be coded (1) by both verb and noun; (2) by both adjective and noun; and (3) by both verb and adjective.

Looking at English, there are many instances of (1) and (2), but few of (3). Some examples of verb/noun and of adjective/noun overlap are given in (35).

(35)	Verb	Noun	Adjective	Noun
(a)	<i>hit</i>	<i>blow</i>	<i>big, small</i>	<i>size</i>
	<i>go</i>	<i>journey</i>	<i>new, young, old</i>	<i>age</i>
	<i>happen</i>	<i>event</i>	<i>fast, slow</i>	<i>speed</i>
(b)	<i>arrive</i>	<i>arrival</i>	<i>long, short</i>	<i>length</i>
	<i>think</i>	<i>thought</i>	<i>accurate</i>	<i>accuracy</i>
	<i>announce</i>	<i>announcement</i>	<i>happy</i>	<i>happiness</i>

The pairs in (a) are non-cognate between word classes. Those in (b) are some of the many examples of nouns derived from verbs and from adjectives (a different form of derivation appears in each example).



There are very few instances, in English, of verb and adjective with similar meanings (where the forms are not related through a productive derivation). One example consists of *fear* and *afraid*,<sup>6</sup> as in:

- (36) (a) I fear having to enter the lion's cage  
(b) I was afraid when I entered the lion's cage

The adjective *afraid* is generally used to refer to the feeling one gets when one is actually in contact with something scary, while the verb *fear* tends to be used for a general feeling in connection with something that might happen.

In fact, this particular verb/adjective overlap recurs in a number of languages. For instance, the Australian language Yidj has a transitive verb *yaryga-n* and an adjective *munu* with very similar meanings to *fear* and *afraid* in English (Dixon 1991b: 240, 272). However, not all languages have such an overlap. Describing the Oceanic language Mokilese, Harrison (1976: 150) mentions that there is just one lexeme, *mijik*, corresponding to both 'fear' and 'afraid' in English. (Following the Oceanic tradition—see §5—Harrison says that this belongs to the class of stative verbs; however, applying the criteria set forth in the present study, the label 'adjective' is appropriate.)

English thus has considerable semantic overlap between the verb and noun classes, and between the adjective and noun classes, but very little between verb and adjective classes. Turning now to Dyirbal, we find exactly the opposite situation. There is here no overlap at all between verb and noun classes, or between adjective and noun classes. Basically, Dyirbal does not have abstract nouns such as 'journey', 'event', 'thought', 'size', 'happiness', or 'colour'. One simply has to use the appropriate verb or adjective.

However, Dyirbal does have considerable semantic overlap between the classes of verb and adjective. A sample of these is set out in (37).

- |       |                             |                              |
|-------|-----------------------------|------------------------------|
| (37)  | Verb                        | Adjective                    |
| (i)   | <i>nyaju-l</i> 'cook'       | <i>nyamu</i> 'cooked'        |
| (ii)  | <i>dadi-l</i> 'cover'       | <i>ɲulguny</i> 'covered'     |
| (iii) | <i>gulba-l</i> 'block'      | <i>gumun</i> 'blocked'       |
| (iv)  | <i>wanda-l</i> 'hang'       | <i>burrgaligan</i> 'hanging' |
| (v)   | <i>banganda-y</i> 'be sick' | <i>wulmba</i> 'sick'         |

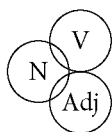
There is in fact a clear difference of meaning in each case, with the verb referring to an action, or getting into a state, or being in a state that varies with time, and the non-cognate adjective referring to either a state that is the result of an activity, or a state that is semi-permanent. There is a slightly different semantic contrast for each verb/adjective pair. Taking them one at a time:

<sup>6</sup> Interestingly, the best example I can find of semantic overlap between the verb and adjective class in English involves *afraid*, one of the set of adjectives that can only occur in copula complement function (not as a modifier).

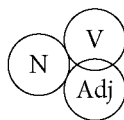
- (i) The transitive verb *nyaju-l* refers to the act of cooking; its participle *nyajuṇu* can describe something being cooked a bit or a lot, not enough or too much. In contrast, the non-cognate adjective *nyamu* means 'cooked to perfection, ready to eat'.
- (ii) The transitive verb *dadi-l* refers to any sort of act of covering; its participle *dadiṇu* can describe a blanket over just half a sleeping person. In contrast, the adjective *ṇulguny* means 'properly covered, covered all over'.
- (iii) The transitive verb *gulba-l* can refer to any kind of blocking; its participle *gulbaṇu* can be used to describe a temporary obstruction across a path. In contrast, the non-cognate adjective *gumun* refers to something permanently blocked; for example, a road that has been closed off for good, or a road that simply stops at a certain place, never having been constructed any further.
- (iv) The transitive verb *wanda-l* is used to describe hanging something up; the participle *wandaṇu* can be used of a basket or bucket which has been hung from a hook. The adjective *burrgaligan* refers to something hanging down; for example, long hair on a person or bark hanging off a tree (it can also be used to describe something that has been hung up).
- (v) The intransitive verb *banganda-y* is used to describe feeling sick or ill (or just weary); the participle *bangandaṇu* refers to someone who is under the weather at present, but it expected to get better. In contrast, the adjective *wulmba* refers to some one who is truly sick and is expected to die. (Death is believed to be caused by sorcery, so that using *wulmba* of a person is saying that a sorcerer has done something to them which will result in their death.)

The kind of overlap between these three major word classes in English and in Dyirbal can be shown diagrammatically (Fig. 1).

Type (a) English



Type (b) Dyirbal



It appears that most of the languages of Europe are basically of type (a), like English. It is interesting to enquire what other languages are of type (b), like Dyirbal. Data are hard to come by, since very few linguists provide a detailed description of the semantic characteristics of word classes, let alone investigate the possibility of semantic overlap between classes. There are just a few hints available. For Zuni (isolate, spoken in New Mexico), Newman (1968: 66) provides the following examples of overlapping between the verb class and what should probably be recognized as the adjective class:

- (38) *hemmo* 'to boil'      *woleya* 'to be boiled'  
      *ʔahha* 'to buy'      *ʔayyo* 'to be bought'  
      *šalu* 'to stretch'      *pilla* 'to be stretched'

In Chapter 9, Sohn offers some illuminating remarks on the semantic overlap between word classes in Korean. He shows that there is overlap between verb and adjective classes involving just native lexemes, whereas noun/verb and noun/adjective overlaps often involve one native and one loan item (the latter from the Sino-Korean stratum of vocabulary).

Overall, one would expect semantic overlap between word classes to be found most commonly in languages which maintain a strict correspondence between word class and functional slot. Dyirbal is of this type—a noun can only function as head of an NP (in predicate argument function) and a verb only as head of a predicate. A language with more fluid class-slot correspondences (such as Nootka, briefly discussed in §3 above) would be less likely to feature semantic overlap between its word classes.

## 11. The individual studies in this volume

The thirteen chapters which follow each provides a full and insightful characterization of the class of adjectives in a language which is of particular interest from this point of view. Chapters 2–3 describe languages which have two adjective classes, differing in some properties but sharing enough features for them each to be recognized as an adjective class. The adjective class in Chapter 4 shares properties with both nouns and verbs, while that in Chapter 5 is not particularly close to either nouns or verbs in its grammatical properties. Chapters 6–8 discuss adjective classes which are grammatically rather similar to nouns. Then, in Chapters 9–14, there are descriptions of adjective classes which have grammatical properties in common with verbs.

Anthony E. Backhouse, in 'Inflected and uninflected adjectives in Japanese' (Chapter 2) and Carol Genetti and Kristine Hildebrandt, in 'The two adjective classes in Manange' (Chapter 3), expand on the brief summaries provided in §8 above. Each language has a class of verb-like adjectives (called 'inflected adjectives' by Backhouse) and also a class of noun-like adjectives (called 'uninflected adjectives' by Backhouse, and just 'adjectives' by Genetti and Hildebrandt). For each language, the two classes can be grouped together as a bipartite adjective class on the basis of various shared properties. These authors provide fine-grained studies of the similarities and differences between grammatical properties of the two classes, and of how they divide up the adjectival semantic types between them.

'The adjective class in Tariana' by Alexandra Y. Aikhenvald (Chapter 4) describes how this Arawak language has a class with just twenty-nine monomorphemic members. Adjectives are like verbs in functioning as intransitive predicate (although with limited TAM possibilities) and like nouns in functioning as cop-

ula complement and as head of an NP. They are unlike nouns and verbs in being able directly to modify a noun. In Chapter 5, 'Adjectives in Mam', Nora C. England deals with a class which, like those in other Mayan languages, has about fifty monomorphemic members. All types of words may occur as intransitive predicate (although non-verbs have limited TAM possibilities). Properties of adjectives which distinguish them from nouns and from verbs include: taking certain derivational suffixes, forming a comparative, modifying a noun, being used adverbially, and functioning as complement of an existential predicate.

Previous writers have stated that adjectives cannot be distinguished from nouns in Totonac. Paulette Levy provides copious argumentation and exemplification—in 'Adjectives in Papantla Totonac' (Chapter 6)—as to why this is untrue. For example, only adjectives may modify a noun, and may enter into comparative constructions. There is here a smallish class of thirteen monomorphemic members, but—as in Manange, Tariana, and Mam—there are many derived members. Levy also includes a fascinating discussion of sound symbolism in adjectival forms. In 'The small adjective class in Jarawara' (Chapter 7), R. M. W. Dixon recognizes fourteen monomorphemic members, augmented by just a few derived forms. Adjectives are here very similar in their grammar to inalienably possessed nouns (which includes terms such as 'smell' and 'noise'). The criteria for differentiating adjectives are subtle: position with respect to an augment modifier within an NP (adjectives can precede, possessed nouns must follow), ability to function as copula complement without an accompanying free noun, and gender agreement following a first or second person non-singular pronoun. In most Indo-European languages which retain nominal inflectional morphology, adjectives have very similar grammatical properties to nouns. Greville G. Corbett, in 'The Russian adjective: a pervasive yet elusive category' (Chapter 8), demonstrates the unusual character of adjectives in Russian; many have both a long form, which is morphologically similar to nouns, and a short form, which shows similarities with verbs. Five criteria for canonical adjectives are proposed, but although Russian has a very large number of adjectives, relatively few of them meet all five criteria. Corbett presents a detailed study, including examination of adjectival occurrence in different genres of text.

Korean and Wolof are like Chinese in that it has often been suggested that adjectives are indistinguishable from verbs. In 'The adjective class in Korean' (Chapter 9), Ho-Min Sohn demonstrates manifold differences. A member of the (large and open) adjective class functions as intransitive predicate like a verb but may not occur with certain moods, has different marking for indicative, may not take certain conjunctive suffixes, and may take the intensifier *-ti*. The suffix *-élan/-ala* has imperative meaning with a verb, but exclamatory function with an adjective. In addition, adjectives can form adverbs, and can occur in comparative and superlative, among many other criterial differences. In contrast, Fiona Mc Laughlin shows, in 'Is there an adjective class in Wolof? (Atlantic family within Niger-Congo, Chapter 10), that there appear here to be just two criteria distinguishing adjectives

(of which there are several score underived forms) from verbs. When an adjective functions as intransitive predicate within a definite relative clause, the relative marker precedes the adjective and the definite marker follows; for a verb in the same functional slot, relative and definite markers are fused, and precede the verb. However, this property only applies for an adjective used alone; if a tense marker or an intensifier or a second argument is added to the adjective, then it behaves just as a verb. Secondly, if a noun is modified by both a relative clause involving an adjective and one involving a verb, that with the adjective always occurs closest to the noun.

In 'Adjectives in North-East Ambae' (Chapter 11), Catriona Hyslop describes a typical Austronesian language, in which adjectives (of which there are about 100 underived forms) pattern with verbs. Differences include: different functions of aspect-mood markers and of reduplication; only adjectives may be nominalized with *-gin*; and an NP marked by preposition *dene* indicates a comparative construction with an adjective but a 'from' relation with a verb. In Chapter 12, Nicole Kruspe discusses 'Adjectives in Semelai', from the Aslian branch of the Austroasiatic family. She identifies a class with about 300 members, including loans. There are two well-defined sub-classes: only eight DIMENSION terms may form a morphological comparative, and the eight COLOUR terms lack all but one of the derivational processes open to other adjectives. Adjectives as a whole lack certain derivations which are available for verbs; only adjectives occur in a periphrastic comparative construction, and in a resultative serialization construction.

Randy J. LaPolla and Chenglong Huang, in 'Adjectives in Qiang' (Chapter 13), show that this Tibeto-Burman language is unlike Manange in that it has a single class of adjectives (which is large and open) that may function as intransitive predicate. Differences from verbs include the semantic effect of reduplication, of the iterative aspect marker, and of the orientation prefixes. Only an adjective may function as an adverbial, directly modify a verb, and form a noun by addition of a definite marker. In 'Adjectives in Lao' (Chapter 14), N. J. Enfield shows that adjectives share basic properties with verbs, but also exhibit crucial differences: only adjectives may feature in comparative constructions, may take intensifiers *khanaat5* 'extent' and *teep5* 'rather', and may undergo a type of reduplication with the meaning 'is'. Both verbs and adjectives may be preceded by modifier *jaak5*; this indicates 'want' with verbs but may signify 'somewhat' with adjectives. Enfield has 'adjective' and 'state verb' as subdivisions of 'stative verb' which itself is a primary sub-class of 'verb'; but note that he mentions rather more points of difference between adjectives and stative verbs—and thus between adjectives and all other verbs—than points of similarity.

It was mentioned in §5 above that since, in the familiar languages of Europe, adjectives have similar grammatical properties to nouns, there is often a reluctance to recognize—as a bona fide word class—an adjective class when it has similar grammatical properties to verbs. This stance is continued by the authors of Chapters 10–14, who each maintain that adjectives are not a major word class in their

language, but instead a sub-class of verbs. They might well have come to the same conclusion had they been describing Korean—a language for which it has been suggested that adjectives belong to the class of verbs—for which there are a fair number of distinguishing marks, as indeed there are for the languages dealt with in Chapters 11–14 (although not for Wolof, in Chapter 10). If similar principles were applied, we would have to say that adjectives are a sub-class of nouns—rather than a distinct noun class—in Papantla Totonac, in Jarawara, and perhaps also in Russian. (And either that nouns are a sub-class of verbs or that verbs are a sub-class of nouns in Nootka, described in §3, since in that language nouns and verbs have very similar morphological and syntactic properties.)

Linguistics involves the detailed description and analysis of languages in terms of a general typological framework. Each of theory and description feeds the other. New results from language study go towards refining and amplifying the typological framework; and the framework should determine the way in which the description of an individual language is cast.

Consider the general theoretical implications of the stance taken by the authors of Chapters 10–14 (but abjured by the authors of other Chapters). In §6, I outline four general types of languages: adjectives may be grammatically similar to nouns, or to verbs, or to neither, or to both. Many languages have adjectives close in properties to verbs (these include Chinese, Vietnamese, and those covered in Chapters 9–14). If we treat adjectives as a sub-class of verbs, these languages would have no major word class Adjective. There are also many languages whose adjectives have similar properties to nouns (these include Latin, Spanish, Hungarian, Igbo, Quechua, Dyirbal, and those discussed in Chapters 6–8); for consistency, we would have to say that these languages too lack a major word class Adjective, with adjectives being analysed as a sub-class of nouns.

This leaves two small sets of languages. In §6.4 we mentioned those in which adjectives have quite different grammatical properties from both verbs and nouns—such as English, Teribe (from the Chibchan family), and Mam (in Chapter 5). Here one would not want to say that adjectives are a sub-class of nouns or of verbs. These few languages would have Adjective as a major word class; having such a class would then be a rather rare feature across the languages of the world.

Now consider the last class, discussed in §6.3, where adjectives show similar inflections to verbs when functioning as intransitive predicate, and similar inflections to nouns when functioning within an NP (exemplified by Berber languages, by the Australian language Nunggubuyu, and by Tariana, described in Chapter 4). On the principles followed by the authors of Chapters 10–14, adjectives must be regarded as a sub-class of verbs, since they share crucial properties with verbs, and also as a sub-class of nouns, since they share crucial properties with nouns. This is scarcely satisfactory. But if such an analysis were followed, there would again be just two major word classes, Noun and Verb, with no distinct adjective class (adjectives would be those items with double membership of noun and verb classes).

Even greater difficulties would arise for a language with two adjective classes, such as Japanese, in Chapter 2, or Manange, in Chapter 3. These authors recognize a bipartite adjective class, all of whose members share certain properties. There are two sub-classes, one with similar (but not identical) properties to verbs, and one with similar (but not identical) properties to nouns. On the sub-class-of-verbs and sub-class-of-nouns principle, one would not be able to recognize an overall adjective class for languages of this kind.

Enough has surely be said to show that if the grammar of a language is to contribute to general typological theory, then it must be cast in terms of the universal parameters thrown up by that typological theory, while still taking care to pay full attention to the distinctive properties of that language. The approach followed in this chapter (and by the authors of Chapters 2–9) presents a maximally effective and universal characterization of the universal major word class Adjective. Every language which has been examined features such a class, although the classes differ in their sizes and in their grammatical similarity (or lack of similarity) to the other major word classes, Noun and Verb. The typological framework employed enables quick comparison of meanings covered, and of recurrent morphological and syntactic properties.

In Chapter 15, 'Adjective classes: what can we conclude', John Hajek draws together some of the recurrent properties of adjective classes, as discussed in earlier chapters, also paying attention to the size of classes and correlations between grammatical properties of adjective classes and head vs. dependent marking at clause level. He pays particular attention to negation, comparatives, intensifiers, reduplication, and function within the noun phrase. Hajek also suggests the Eurocentric stance—of being reluctant to recognize 'adjectives' as a major word class when their grammatical properties are not closely similar to those of nouns—may be beginning to wane.

## 12. Conclusions

I suggest that the label 'adjective class' be used for a word class that:

- is grammatically distinct from noun class and verb class;
- includes words from some or all of the prototypical adjective semantic types—*DIMENSION*, *AGE*, *VALUE*, and *COLOUR*;
- and (a) functions either as intransitive predicate or as copula complement and/or (b) modifies a noun in an NP.

In some languages two separate adjective classes can be recognized. Note that although the prototypical adjective class combines functions (a) and (b), in some languages the class has only one of these functions.

A broad division can be made between adjectives which may function as head of an intransitive predicate ('verb-like adjectives') and those which may function as copula complement ('non-verb-like adjectives'); in just a few languages, adjec-

tives may have both functions. A separate parameter concerns whether, when an adjective occurs in an NP, it may take some or all of the morphological processes available to nouns; if it does it is 'noun-like', if not 'non-noun-like'. There is a correlation—but not a coincidence—between being 'non-verb-like' and being 'noun-like'. In some languages, adjective classes are both 'verb-like' and 'noun-like', and in some they are both 'non-verb-like' and 'non-noun-like'.

It can sometimes be a tricky matter finding criteria to distinguish 'verb-like' adjectives from verbs, or 'noun-like' adjectives from nouns. I believe that in every language which is studied in detail, such criteria can be found. Criteria are not always of the definitive 'yes-or-no' variety; as Alpher (1991) shows for the Australian language Yir-Yoront (see §5), a collection of statistical tendencies can combine to provide a satisfactory grammatical characterization of the adjective class (as opposed to noun and verb classes).

As in every other aspect of linguistic criteria, the parameters and classifications are not watertight. For example, the degree to which adjectives are 'verb-like' or 'noun-like' varies from language to language. And although for most lexemes in a language their grammatical class membership can be unambiguously assigned, there are always likely to be a few fuzzy areas between classes (Dixon 1988: 239–40 illustrates this for Fijian).

In §9 a tentative correlation was established: non-verb-like adjective classes tend to be found in languages with dependent-marking at clause level, with verb-like adjective classes being typically found in languages with head-marking or with neither dependent- nor head-marking. I suggested, with some supporting exemplification, that if a language shifts its head-/dependent-marking profile, then the orientation of its adjective class is likely slowly to change, to re-establish the correlation.

Finally, §10 looked briefly at the kinds of semantic overlap between the three major word classes. We saw that English has considerable verb/noun and adjective/noun but rather little verb/adjective overlap, while Dyirbal is almost exactly the reverse, with considerable verb/adjective but no verb/noun or adjective/noun semantic overlap.

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# Inflected and Uninflected Adjectives in Japanese

*Anthony E. Backhouse*

## 1. Introduction<sup>1</sup>

This chapter deals with adjectives in Japanese. Typologically, Japanese is a dependent-marking language; typical constituent order in the clause is predicate-final, and modifiers precede heads. Nouns function as the head of NPs commonly followed by case markers such as *ga* (NOM) and *o* (ACC), as modifier of nouns in NPs followed by the adnominal marker *no*, as complement of the copula *da*, and as complement of other copular verbs (such as *naru* ‘become’) followed by the marker *ni*.<sup>2</sup> Verbs function as the head of intransitive and transitive predicates, and directly precede NPs in modifying structures. Unlike nouns, verbs and the copula *da* are inflected, largely on an agglutinating pattern. Lexically, Japanese has clearly delineated strata. The Sino and foreign strata are the result of borrowing from classical Chinese and (chiefly) European languages respectively; Sino words are, at least diachronically, typically bimorphemic. In addition, mimetic items form a distinct stratum within the native vocabulary.

Japanese has several types of adjective-like words. What we shall refer to as inflected adjectives (also termed ‘*i* adjectives’: e.g. *nagai* ‘long’) occur as the head of intransitive predicates, directly as modifier of nouns in NPs, and as copula complement (in the relevant inflected form) of verbs such as *naru* ‘become’. Uninflected adjectives occur as complement of the copula *da*; as copula complement with the marker *ni* of *naru*, etc.; and as modifier of nouns in NPs followed by the adnominal marker *na* (for some items, also termed ‘*na* adjectives’, e.g. *rippa* ‘impressive, fine’), *no* (for others, termed ‘*no* adjectives’ in Backhouse (1984), e.g. *ippai* ‘full’), and either *na* or *no* (for yet others, e.g. *betu* ‘separate, different’).

Both inflected and uninflected groups are large. Nisio (1972: 11–12) finds 600–

<sup>1</sup> An earlier version of this chapter was presented at the International Workshop on Adjective Classes, Melbourne, 2002. I am grateful to participants, especially Sasha Aikhenvald and Bob Dixon, for helpful comments and suggestions.

<sup>2</sup> Modified Kunreishiki romanization is used for Japanese forms, with long vowels written double and the syllable-final nasal as *n*. This is also followed in citing examples in other romanization systems.

700 inflected adjectives listed in medium-sized monolingual dictionaries, and indicates that uninflected adjectives outnumber these by roughly 3:1 in lexical surveys. These figures include lexically complex items, but large numbers of lexically simple items are present in both cases. Simple inflected adjectives are closed to loans, but these are present in complex items: for example, the native colloquial suffix *-ppoi* ‘-ish, -y’ derives adjectives from native, Sino, and foreign bases, including proper names (cf. *bahhappoi kyoku*<sup>3</sup> ‘a Bach-y tune’). Uninflected adjectives include simple and complex items from all strata, including recent loans from English; the Sino denominal suffix *-teki* ‘-ic’ is notably productive.

Inflected adjectives in Japanese bear some resemblance to verbs insofar as they are inflected and function as head of predicates and directly as modifiers in NPs. Similarly, uninflected adjectives resemble nouns in that they are uninflected, function as copula complements in a similar way, and function as modifiers in NPs with an adnominal marker. Our purpose in this chapter is to examine the linguistic properties of these items more closely. In §2 we first consider the grammatical features of inflected adjectives, in particular vis-à-vis verbs; we then take up uninflected adjectives, focusing on their differences from nouns. A complicating factor in this area is the presence of multiple membership of various kinds; this issue is reviewed in §3. In §4 we examine the wider linguistic properties of both adjective types. Our overall conclusions in §5 are in line with those of Backhouse (1984), namely that these items may in general be clearly distinguished from verbs and nouns respectively, and that there are strong arguments for treating them as types of adjective in Japanese. Compared with our earlier treatment, this chapter draws upon a wider range of linguistic data, and takes into account more recent publications on this topic.

## 2. Grammatical properties of adjective types

### 2.1. INFLECTED ADJECTIVES

#### 2.1.1. *Inflection and grammatical derivation*

As inflected items, these adjectives morphologically resemble verbs. Their morphosyntactic properties are shown in the inflectional paradigm for the modern language in Table 1, with the verb paradigm given for comparison; forms are plain (vs. formal).

While the inflectional categories largely overlap with those of verbs (and imperative and hortative forms are also absent with non-volitional verbs), there are clear formal differences: in particular, the basic nonpast *-i* and conjunctive *-ku* endings are unique to inflected adjectives vs. (positive) verbs.<sup>4</sup> (Note that there is only one

<sup>3</sup> Attested examples, sometimes with minor adaptation, are used throughout. Unless otherwise indicated, the source for these is the Internet.

<sup>4</sup> Functions of the conjunctive (*-ku*) form of inflected adjectives include (a) non-finite (cosubordinate) predicate in formal styles (vs. *te*-conjunctive elsewhere); (b) copula complement with verbs

TABLE 1.

	Inflected adjective	Verb
Non-past	<i>naga-i</i> 'long'	<i>oki-ru</i> 'get up'
Conjunctive	<i>naga-ku</i>	<i>oki</i>
Past	<i>naga-katta</i>	<i>oki-ta</i>
Provisional	<i>naga-kereba</i>	<i>oki-reba</i>
<i>te</i> -conjunctive	<i>naga-kute</i>	<i>oki-te</i>
Conditional	<i>naga-kattara</i>	<i>oki-tara</i>
Representative	<i>naga-kattari</i>	<i>oki-tari</i>
Imperative	—	<i>oki-ro</i>
Hortative	—	<i>oki-yoo</i>

TABLE 2.

	Inflected adjective	Verb
Formal	<i>naga-i-desu</i>	<i>oki-masu</i>
Negative	<i>naga-ku na-i</i>	<i>oki-na-i</i>
Causative	<i>naga-ku suru</i>	<i>oki-sase-ru</i>
Passive/Adversative	—	<i>oki-rare-ru</i>
Potential	—	<i>oki-rare-ru/oki-re-ru</i>

irregular inflected adjective: the basic VALUE term *yoi* 'good, okay' has the less formal (and more frequent) nonpast alternant *ii*, with the suppletive stem *i-*.)

Comparative paradigms for basic grammatical derivations are given in Table 2 (all forms are non-past). While these categories are all morphologically derived for verbs, with the exception of formal they are rendered syntactically, or are absent, with inflected adjectives.

As Table 2 shows, the derived nonpast negative form of verbs resembles the nonpast form of inflected adjectives. The full (plain) inflectional paradigms for both are presented in Table 3. Although they have an additional alternant in the derived formal nonpast, negative forms of verbs are morphosyntactically very close to inflected adjectives (some verbs also lack negative imperative and *naide*-conjunctive forms), and many linguists (for example, Bloch 1946) have classified them as such.<sup>5</sup>

such as *naru* 'become'; (c) non-finite element in analytic negative and emphatic constructions. Other terms are used, including 'Adverbial' since adverbs have the same form. Unlike the above conjunctive functions, however, adverbs are not universally present (Martin 1975: 180) and, where they are, they are sometimes semantically unpredictable; they are treated as lexical derivatives here.

<sup>5</sup> As noted in Bloch (1946), inflected adjectives and negative verb forms differ phonologically in terms of accentual behaviour. Most clearly, in the plain non-past form, tonic adjectives are accented on the penult (cf *nagai*), tonic verbs on the antepenult (cf *okinai*).

TABLE 3.

	Inflected adjective	Verb (negative)
Non-past	<i>naga-i</i>	<i>oki-na-i</i> 'not get up'
Conjunctive	<i>naga-ku</i>	<i>oki-na-ku</i>
Past	<i>naga-katta</i>	<i>oki-na-katta</i>
Provisional	<i>naga-kereba</i>	<i>oki-na-kereba</i>
<i>te</i> -conjunctive	<i>naga-kute</i>	<i>oki-na-kute</i>
Conditional	<i>naga-kattara</i>	<i>oki-na-kattara</i>
Representative	<i>naga-kattari</i>	<i>oki-na-kattari</i>
Imperative	—	<i>oki-ru-na</i>
<i>zu(-ni)</i> -conjunctive	—	<i>oki-zu(-ni)</i>
<i>naide</i> -conjunctive	—	<i>oki-na-ide</i>
(Cf. also formal nonpast	<i>naga-i-desu</i>	<i>oki-na-i-desu/oki-mas-en)</i>

### 2.1.2. *Lexical derivation*

The main lexical derivational processes for inflected adjectives are set out and illustrated in Table 4, with relevant indications for verbs given for comparison. There are clear differences here. Adverb formation is widespread with adjectives but restricted with verbs. Both adjectives and verbs produce derived nouns, but through different primary processes: with adjectives, the most productive process is the formation of abstract nouns by suffixation of *-sa*, whereas verbs form nouns (both abstract and concrete) through conversion. While excessive verbs in *-sugiru* and adjectives of appearance in *-soo* are shared with verbs, verbs of external manifestation in *-garu* and graded adjectives in *-me* are restricted to adjectives.

### 2.1.3. *Syntax*

Here we review important syntactic properties of inflected adjectives, once more with comparative comments for verbs.

(a) Head of intransitive predicate, like (intransitive) verbs; i.e. inflected adjectives function predicatively without a copula:

- (1) *Usagi no mimi wa naga-i*  
 rabbit ADNOM ear TOP long-NONPAST  
 'Rabbits' ears are long'

(b) Where two arguments of an inflected adjective are present, one is marked by *ga* (NOM), the other by *ga* (NOM), *ni* (DAT, etc.), *to* (RECIP, etc.), *kara* (SOURCE); unlike with many positive and negative verbs, marking of a second argument with *o* (ACC) is found only rarely with, for example, *hosii* 'want (sth), (find) desirable', and marking with *ga* (NOM) is also found with such items. For example:



TABLE 4.

Process	Result	Inflected adjectives vs. verbs
Conversion (conjunctive)	Adverb: <i>nagaku</i> 'for a long time, etc.'	Widespread. Restricted with verbs.
Reduplication (stem)	Adverb: <i>naganaga</i> 'at great length'	Restricted. A few with verbs.
Suffixation (- <i>sa</i> )	Noun: <i>nagasa</i> 'length'	Productive. A few with negative verbs.
Suffixation (- <i>mi</i> )	Noun: <i>amami</i> 'sweetness' (< <i>amai</i> 'sweet')	More restricted than above. Not with verbs.
Conversion (stem/conjunctive)	Noun: <i>waru</i> 'rogue' (< <i>warui</i> 'bad')/ <i>tikaku</i> 'area nearby' (< <i>tikai</i> 'near')	Restricted. Widespread with positive verbs.
Suffixation (- <i>garu</i> )	Verb: <i>samugaru</i> 'show signs of feeling cold' (< <i>samui</i> 'feel cold')	Productive with adjectives denoting psychological states. Not with verbs.
Suffixation (- <i>sugiru</i> )	Verb: <i>nagasugiru</i> 'be too long'	Productive. Also with positive verbs, restricted with negative verbs.
Suffixation (- <i>soo</i> )	(Uninflected) adjective: <i>nagasoo</i> ( <i>na</i> ) 'long-looking'	Productive. Also with positive and negative verbs.
Suffixation (- <i>me</i> )	(Uninflected) adjective: <i>nagame</i> ( <i>no</i> ) 'on the long side'	Productive with gradable inflected adjectives. Not with verbs.

- (2) *uti no kodomo ga inu ga kowa-i* (to.iu.koto)  
 we ADNOM child NOM dog NOM feel.afraid-NONPAST (NR)  
 '(the fact that) our child is afraid of dogs'

- (3) *tanakasan ga suzukisan to sitasi-i* (to.iu.koto)  
 Tanaka NOM Suzuki RECIP on.close.terms-NONPAST (. . .)  
 '(the fact that) Tanaka is on close terms with Suzuki'

(c) Copula complement (in conjunctive form) of verbs such as *naru* 'become', unlike positive verbs (which require an adjectivalizer), but like negative verbs. This is a very common construction with adjectives.

- (4) *Natu ni nar-u niturete hi ga*  
 summer be:CONJ become-NONPAST as day NOM  
*naga-ku nar-u*  
 long-CONJ become-NONPAST  
 'The days grow longer as summer comes'

Compare this example with the negative verb in (5) and the positive verb in (6):

- (5) *deki-na-ku nar-u*  
 can.do-NEG-CONJ become-NONPAST  
 'become unable to do (it)'
- (6) *deki-ru yoo ni nar-u*  
 can.do-NONPAST ADJLZR be:CONJ become-NONPAST  
 'become able to do (it)'

(d) Modifier (in nonpast/past forms) directly preceding nouns in NPs, like verbs:

- (7) *naga-i ressyā*  
 long-NONPAST train  
 'long train'

(e) Unlike positive and negative verbs (except stative verbs), inflected adjectives do not combine with auxiliaries, which express aspect, directionality, benefaction, etc.

(f) The grammatical filler verb used in certain analytic constructions is *aru* (as a lexical verb, 'be located, exist') with inflected adjectives (and negative verbs) vs. *suru* ('do') with positive verbs. (Note that *aru* has an irregular negative, *nai*, in place of expected \**aranai*.) Thus *aru* appears in (8) and (9), *suru* (negative: *sina-i*) in (10):

- (8) *Naga-ku na-i* (Negative construction: inflected adjective)  
 long-CONJ NEG-NONPAST  
 '(It) is not long'
- (9) *Oki-na-ku mo na-i* (Emphatic negative construction:  
 get.up-NEG-CONJ even NEG-NONPAST negative verb)  
 '(They) don't not get up/(They) do get up'
- (10) *Oki mo sina-i* (Emphatic negative construction:  
 get.up:CONJ even NEG-NONPAST positive verb)  
 '(They) don't even get up'

Note that stative positive verbs also combine with *suru*:

- (11) *Ar-i mo sina-i* (Emphatic negative construction:  
 exist-CONJ also NEG-NONPAST positive (stative) verb (*aru*))  
 '(They) don't even exist/There aren't any, even'

(g) In the construction clause + *hoo ga ii* 'It's better to do/be clause', inflected adjectives and negative verbs in the clause normally occur in the nonpast form, unlike positive verbs (again including statives) which commonly occur in the past form (with no past time meaning):

- (12) *Haya-i hoo ga i-i* (Inflected adjective)  
early-NONPAST alternative NOM good-NONPAST  
'It had better be soon'
- (13) *Hayaku ika-na-i hoo ga i-i* (Negative verb)  
soon go-NEG-NONPAST alternative NOM good-NONPAST  
'(They) had better not go soon'
- (14) *Hayaku it-ta hoo ga i-i* (Positive verb)  
soon go-PAST alternative NOM good-NONPAST  
'(They) had better go soon'
- (15) *Asu wa kasa ga at-ta hoo*  
tomorrow TOP umbrella NOM exist-PAST alternative  
*ga i-i* (TV) (Positive stative verb)  
NOM good-NONPAST  
'Tomorrow it will be better to have an umbrella'

(h) In the constructions in (f) and (g), inflected adjectives fall together syntactically with negative verbs. By contrast, in the construction clause + *yooni* 'so that clause comes about/lest clause come about', the predicate of the clause is regularly filled by positive and negative verbs, rather than by inflected adjectives. Note that stative verbs (again, *aru* 'be located, exist') occur as in (18) (from Martin 1975: 998).

- (16) *Samu-ku nara-na-i yooni kiotuke-te kudasai*  
feel.cold-CONJ become-NEG-NONPAST so.that take.care-teCONJ please  
'Take care not to become cold'
- (17) *?Samu-ku na-i yooni kiotuke-te kudasai*  
feel.cold-CONJ NEG-NONPAST . . . . .  
'Take care not to be cold'
- (18) *Wasuremono ga na-i yooni gotyuuui kudasai*  
forgotten.things NOM exist.NEG-NONPAST . . . . .  
'Please make sure not to leave anything behind'

(i) Most inflected adjectives, but not all, are modified adverbially by graders such as *kiwamete* 'extremely', *hizyoo ni* 'very', *hikakuteki* 'comparatively', *yoru* 'more' (cf. Martin 1975: 143, 797–8), and by intensifiers such as *zitu ni* 'truly'. This property is shared with adverbs, but also with some verbs and some nouns (of relative place/time, etc.). Unlike *very* and other items in English, no graders are restricted to the modification of adjectives/adverbs in Japanese.

The above syntactic properties of inflected adjectives as compared with verbs are summarized in Table 5. While inflected adjectives differ from all verbs on only one of the parameters reviewed (occurrence with *yooni*), they differ from positive

TABLE 5.

Syntactic property	Inflected adjectives	Verbs
Head of predicate	Yes	Yes
Govern ACC NP	No	Transitives only
Copula complement of <i>naru</i>	Yes	Negatives only
Directly modify noun	Yes	Yes
Combine with AUX	No	Yes (except statives)
Combine with filler <i>aru</i>	Yes	Negatives only
Only nonpast with <i>hoo ga ii</i>	Yes	Negatives only
Occur with <i>yooni</i>	No	Yes
Modified by graders	Most	Some

verbs on several more; negative verbs occupy an intermediate position, with negative stative verbs standing particularly close to inflected adjectives.<sup>6</sup>

## 2.2. UNINFLECTED ADJECTIVES

### 2.2.1. Syntactic paradigm

These adjectives combine syntactically with the copula *da* and with adnominal markers. The central phrasal forms for *rippa* (*na*) ‘impressive, fine’ and *tada* (*no*) ‘free (of charge)’<sup>7</sup> in Table 6 are syntactic analogues of basic inflected forms given for *i* adjectives in §2.1.1.

TABLE 6.

	<i>rippa</i> ( <i>na</i> )	<i>tada</i> ( <i>no</i> )
Nonpast predicative (plain)	<i>rippa da</i>	<i>tada da</i>
Nonpast adnominal	<i>rippa na</i>	<i>tada no</i>
Past (plain)	<i>rippa datta</i>	<i>tada datta</i>
Conjunctive	<i>rippa ni</i>	<i>tada ni</i>
<i>te</i> -conjunctive	<i>rippa de</i>	<i>tada de</i>

<sup>6</sup> As mentioned in §2.1.1, linguists such as Bloch (1946) have classified negative verbs as inflected adjectives. While this view has not generally been adopted in Japan, the irregular negative counterpart of *aru* ‘be located, exist’, namely *nai*, is routinely classified in traditional grammar and lexicography as an independent inflected adjective, and on this basis it emerges from lexical surveys as one of the most frequent adjectives in the language. In addition to its morphological irregularity, together with the status of *aru* as a non-volitional, stative verb, a further likely influence in this classification is the orthography: *nai* and *aru* are traditionally written with different characters, in the case of *nai* with the character used for a negator in Chinese.

<sup>7</sup> Like Uehara (1998: 186), we follow Nisio et al. (1994) in indicating uninflected adjectives as combining with the adnominal marker *na* or with both *na* and *no*. While they provide a useful guide in this area, the indications in this dictionary are not without problems. In the first place, the inspection of texts inevitably yields counter-examples to the classifications given. Secondly, uninflected

TABLE 7

Process	Result	Uninflected adjectives vs. nouns
Suffixation ( <i>-sa</i> )	Noun: <i>rippasa</i> 'impressiveness'	Productive. Not with nouns.
Suffixation ( <i>-mi</i> )	Noun: <i>sinkenmi</i> 'earnestness' ( <i>&lt; sinken (na)</i> 'earnest')	Restricted. Rarely from nouns.
Suffixation ( <i>-garu</i> )	Verb: <i>zannengaru</i> 'show signs of finding regrettable' ( <i>&lt; zannen (na/no)</i> 'find regrettable')	Productive with adjectives denoting psychological states. Few from nouns (examples in Martin 1975: 360) with the meaning 'behave as if one is N'.
Suffixation ( <i>-sugiru</i> )	Verb: <i>kireisugiru</i> 'be too beauti- ful, clean' ( <i>&lt; kirei (na)</i> 'beauti- ful, clean')	Productive. Restricted with nouns.
Suffixation ( <i>-soo</i> )	(Uninflected) adjective: <i>zyoo- busoo (na)</i> 'sturdy-looking' ( <i>&lt; zyoo bu (na)</i> 'sturdy')	Productive. Not with nouns.

These forms are shared with nouns, except for the nonpast adnominal *na* for *rippa*, where nouns combine with *no* (like *tada*). The conjunctive combination occurs in copula complements with verbs such as *naru* 'become', the *te*-conjunctive combination as a cosubordinate predicate. Other combinations with provisional, conditional, and representative forms of the copula also occur; like inflected adjectives and non-volitional verbs, the copula lacks imperative and hortative forms.

### 2.2.2. *Lexical derivation*

In Table 7 we illustrate the main lexical derivational processes for uninflected adjectives, with comparative indications for nouns. These derivational processes are shared with inflected adjectives, and largely absent with nouns. (It is noticeable, however, that purely *no* uninflected adjectives participate minimally, if at all, in these processes. Morphological evidence distinguishing these items from nouns is thus generally lacking.) Uninflected adjectives do not undergo reduplication, unlike some inflected adjectives (yielding adverbs) and unlike some nouns (generally with collective meaning).

### 2.2.3. *Syntax*

Important syntactic properties of uninflected adjectives are illustrated more fully below, with comparative comments relating to nouns.

adjectives which combine only with *no*, rather than with both *na* and *no*, are treated there as nouns (the criteria for which are not stated) and receive no relevant indication; *no* adjectives, that is to say, are only distinguished from nouns insofar as the items concerned also combine with *na*. Our marking of items like *tada* thus reflects our own analysis.

(a) Copular complement of copula *da* (like nouns):

- (19) *Sisetu wa rippa da*  
 facilities TOP impressive be:NONPAST  
 'The facilities are impressive'

(b) Copular complement, combined with conjunctive marker *ni*, of verbs such as *naru* 'become'. This property is shared with nouns, but whereas nouns occur with the marker *to* in some formal styles, *to* is much less common with uninflected adjectives, and inadmissible with many.

- (20) *Dooro mo rippa ni (?to) nat-ta*  
 road also impressive be:CONJ become-PAST  
 'The roads have also become impressive'

(c) Modifier of nouns in NPs, combined with the adnominal marker *na* or *no*. Nouns as modifiers also combine with *no*, but not with *na*.

- (21) *rippa na setubi*  
 impressive ADNOM facilities  
 'impressive facilities'

- (22) *tada no keiziban*  
 free ADNOM bulletin.board  
 'a free bulletin board'

(d) Some uninflected adjectives (cf. Martin 1975: 180) function as adverbial phrases in combination with conjunctive *ni* or, less commonly, with *te*-conjunctive *de* (in the case of some *no* adjectives; cf. Wenck 1974: 98).<sup>8</sup> This is comparable to the conversion of adverbs from inflected adjectives, and is not general with nouns.

- (23) *sigoto o rippa ni yaritoge-ru*  
 work ACC impressive be:CONJ accomplish-NONPAST  
 'carry out a task splendidly'

<sup>8</sup> Some uninflected words occur adnominally marked by *no* and as copula complements of *da* but function adverbially without markers. The deverbal item *hazimete* 'for the first time' is an example:

- (i) (a) *hazimete neko o ka-u hito*  
 for.the.first.time cat ACC keep-NONPAST person  
 'people keeping a cat for the first time'  
 (b) *hazimete no hitoritabi*  
 for.the.first.time ADNOM journey.alone  
 'first trip alone'  
 (c) *Eiga e no ensyutu wa konkai ga hazimete da*  
 film ALL ADNOM appearance TOP this.time NOM for.the.first.time be:NONPAST  
 'This is the first time to appear in a film'

These words are classified by Martin as 'predicable adverbs' (1975: 179, 783), in contradistinction to 'adjectival nouns' and 'precopular nouns' (our *na* and *no* uninflected adjectives, respectively), and we follow him in excluding them directly from our treatment here. Most of these items do not occur as copula complement of verbs such as *naru* 'become' (Martin 1975: 792).

- (24) *hoomupeezi o tada de tukur-u*  
 home.page ACC free be:te CONJ make-NONPAST  
 'make a home page free-of-charge'

(e) Some, like inflected adjectives, occur modified adverbially by graders such as *kiwamete* 'extremely', *hizyoo ni* 'very', *hikakuteki* 'comparatively', *yori* 'more' (cf. Martin 1975: 143, 797–8) and intensifiers such as *zitu ni* 'truly', unlike nouns other than relational nouns of place/time, etc. (cf. Martin 1975: 792, 796, 823):

- (25) *hizyoo.ni rippa na tatemono*  
 very impressive ADNOM building  
 'a very impressive building'

(f) Unlike nouns, uninflected adjectives are not modified in adnominal patterns.

(g) Unlike nouns, uninflected adjectives do not occur as head of NPs, and are not followed by case markers *ga* (NOM), *o* (ACC), etc. Here we note two constructions with the verb *suru* which are useful in particular cases in distinguishing uninflected (especially *no*) adjectives from nouns: *NP<sub>1</sub> ga NP<sub>2</sub> ni suru* 'NP<sub>1</sub> decides on/chooses NP<sub>2</sub>' and *NP<sub>1</sub> ga NP<sub>2</sub> o NP<sub>3</sub>/AdjP ni suru* 'NP<sub>1</sub> makes NP<sub>2</sub> NP<sub>3</sub>/AdjP'. The first is illustrated in the following:

- (26) *watasi ga suteeki ni si-ta (to.iu.koto)*  
 I NOM steak DAT decide-PAST (NR)  
 '(the fact that) I decided on steak'

Here NP<sub>2</sub> is a noun phrase marked by the dative marker *ni*, and designates the target of the decision made by NP<sub>1</sub>.

- (27) *kaityoo ga otooto o syatyoo ni si-ta*  
 chairman NOM younger.brother ACC president be:CONJ make-PAST  
 (to.iu.koto)  
 (...)  
 '(the fact that) the chairman made his younger brother president'

- (28) *syoogakusei ga kooen o kirei ni si-ta*  
 primary.school.children NOM park ACC clean be:CONJ make-PAST  
 (to.iu.koto)  
 (...)  
 '(the fact that) the primary school children cleaned up the park'

The second construction, in (27) and (28), contains a copular complement filled by either a noun phrase (NP<sub>3</sub>) or an adjective phrase marked by conjunctive *ni*, indicating the resultant condition of NP<sub>2</sub>. Out of context, an elliptical utterance of the form *X ni suru* will in principle thus allow two interpretations if X is filled by an NP ('decide on X', 'make (someone/something) X') but only the latter if X is filled by an AdjP (i.e. 'make (someone/something) X'). Applying this test to the item *tada*

(*no*) 'free' indicates that it is an adjective:

- (29) *Tada ni si-te ne*  
 free be:CONJ make-*te*CONJ ILLOC  
 'Make (something) free, right?/\*Choose a free one, right?'

The alternative reading would require a structure such as the following, with (pro-nominal) *no* functioning as NP head:

- (30) *Tada no ni si-te ne*  
 free one DAT decide-*te*CONJ ILLOC  
 'Choose a free one, right?'

(h) NPs, but not AdjPs, may be coordinated with the marker *to*:

- (31) *ie to niwa*  
 house and garden  
 'houses and gardens'
- (32) *\*syooziki to rippa na ningen*  
 honest and impressive ADNOM person  
 'a fine, honest person'

(i) Where uninflected adjectives have two arguments, one is marked by *ga* (NOM), the other by *ga* (NOM), *ni* (DAT, etc.), *to* (RECIP, etc.), *de* (INST, etc.); as with inflected adjectives, marking of the second argument with *o* (ACC) is found only rarely with e.g. *suki* (*na/no*) 'like' and *kirai* (*na/no*) 'dislike', and marking with *ga* (NOM) is also found with these items (cf. Jarkey 1999). For example:

- (33) *honkonnyuukoku ga tyuugokunyuuukoku to betu*  
 entering.Hongkong NOM entering.China RECIP separate  
*da (to.iu.koto) (betu (na/no))*  
 be:NONPAST (NR)  
 '(the fact that) entering Hongkong is different from entering China'
- (34) *terasuseki ga itumo hito de ippai da*  
 outdoor.seats NOM always person INST full be:NONPAST  
*(to.iu.koto) (ippai (no))*  
 (...)  
 '(the fact that) the outdoor seats are always full of people'

While some basic properties are shared, uninflected adjectives and nouns clearly differ syntactically on a wide range of parameters.

### 2.3. SHARED PROPERTIES OF INFLECTED AND UNINFLECTED ADJECTIVES

Although inflected and uninflected adjectives by definition differ morphologically, this section has shown that these items share many other properties. In lexical derivation, all of the processes exhibited by uninflected (in particular, *na*) ad-



jectives are shared with inflected items, although the latter show a wider range. In addition, both types of adjective typically produce adverbs, one morphologically, one phrasally. Shared behaviour in syntax includes a comparable range of case marking of associated arguments, function as copula complement of verbs such as *naru* and as modifier of nouns in NPs, and modification by graders and intensifiers.

A commonly recognized grammatical sub-class of Japanese adjectives is that of subjective adjectives (cf. Nisio 1972: 21–42; Martin 1975: 359–65), which denote sensory or emotional states. Syntactically, these cannot be predicated directly (i.e. without modal modification) of third-person experiencers: a sentence such as \**Suzukisan wa samui* ‘Suzuki feels cold’, with the subjective adjective *samui* ‘feel cold’, is ungrammatical in Japanese. Derivationally, they produce verbs in *-garu* denoting external manifestation of the state concerned: *samugaru* ‘show signs of feeling cold’. Importantly, members of this class are found in adjectives of both morphological types: cf. inflected *samui* ‘feel cold’, *kowai* ‘feel afraid’, *hosii* ‘want (sth), (find) desirable’, and uninflected *iya (na)* ‘(find) unpleasant’, *zannen (na/no)* ‘(find) regrettable’, *okkuu (na/no)* ‘(find) bothersome’. The major types of Japanese adjectives proposed here are thus:

Inflected	Uninflected
	( <i>na</i> )    ( <i>no</i> )

Wider linguistic properties of both types are considered in §4.

#### 2.4. OTHER TYPES OF ADJECTIVE

Outside of the above types, *onazi* ‘same’ is unique; in general it resembles uninflected adjectives but it does not combine with adnominal markers and it also has an alternative inflected conjunctive form, as shown in Table 8.

TABLE 8

	<i>onazi</i>
Non-past predicative	<i>onazi da</i>
Non-past adnominal	<i>onazi</i>
Past	<i>onazi datta</i>
Conjunctive	<i>onazi ni/onaziku</i>
<i>te</i> -conjunctive	<i>onazi de</i>

There is a group of words which occur only in adnominal function, termed ‘adnouns’ by Martin (1975: 742–54). As well as demonstrative items of various types (*kono* ‘this’, *aru* ‘a certain’, etc.), they include what may be regarded as adnominal-only uninflected adjectives such as *roku (na)* ‘(no) good’, *zekkoo (no)* ‘ideal’ (Martin

1975: 824). There are also a limited number of literary Sino items which combine with an adnominal marker *taru* such as *doodoo (taru)* ‘imposing’; in predicative uses, they occur together with the verb *suru*.<sup>9</sup>

### 3. Multiple membership

Cases of overlapping membership are found between inflected and uninflected adjectives, between *na* and *no* adjectives within the uninflected type, and between uninflected adjectives and nouns. We review these in turn below.

#### 3.1. INFLECTED AND UNINFLECTED ADJECTIVES

Two types of overlap, both restricted, are found between these types. In the first place, three inflected adjectives, *ookii* ‘big’, *tiisai* ‘small’, and *okasii* ‘funny, strange’, have alternative uninflected forms (marked by *na*, not *no*) in adnominal function only: *ookii ie/ooki na ie* ‘big house’, etc. (Martin 1975: 747). These three items thus occur as inflected adjectives or as adnominal-only uninflected adjectives. *Ookii* and *tiisai* are clearly a basic DIMENSION pair. Both are phonologically unusual among simple inflected adjectives in having stems containing long syllables; *ookii* also has a stem ending in *i* (*ooki-*), a dispreferred vowel in this position as noted in §4.1.1 below. Both also behave unusually in word-formation in not appearing in compounds, their place being taken by the prefixes *oo-* and *ko-*, respectively (compare *nagai* ‘long’ + *ame* ‘rain’ > *naga-ame* ‘prolonged rain’ with *oo-ame* (\**ooki-ame*) ‘heavy rain’, *karui* ‘light’ + *isi* ‘stone’ > *karu-isi* ‘pumice’ with *ko-isi* (\**tiisa-isi*) ‘small stone, pebble’). Miyazima (1965: 99), based on a survey carried out by the National Language Research Institute, indicates that for all three items the uninflected adnominal forms occur more frequently.

Secondly, there are around a dozen items which belong fully to both inflected and uninflected types (cf. Martin 1975: 761): examples include *komaka (na)/komakai* ‘small, fine (of particles, etc.)’, *atataka (na)/ataakai* ‘warm’, *yawaraka (na)/yawarakai* ‘soft’, *sikaku (na/no)/sikakui* ‘square’, *massiro (na/no)/massiroi* ‘pure white’, *makkuro (na/no)/makkuroi* ‘jet black’, *manmaru (na/no)/manmarui* ‘perfectly round’, *hiyowa (na)/hiyowai* ‘weak, delicate’. (Note that some occur with *na*, others with both *na* and *no*.) All are complex, at least diachronically. The first three items contain the common native uninflected-adjective-forming elements *-ka* and *-raka*, and were presumably attracted later into the inflected type (cf. Backhouse 1984: 181; Uehara 1998: 236). Similarly, *sikaku* was the original Sino (bimorphic) form. For these items, the inflected alternants appear to be much more frequent (Miyazima 1965: 99). The last four examples are prefixed derivations from inflected adjectives.

<sup>9</sup> What were referred to in Backhouse (1984: 184) as ‘*sita* adjectives’ are here regarded as combinations involving forms of the verb *suru*.

3.2. UNINFLECTED *na* AND *no* ADJECTIVES

Uehara (1998: 186), using Nisio et al. (1994) as his lexicographic source, finds that out of 264 adjectives which occur with *na*, 113 (43 per cent) may also occur with *no*. Miyazima (1965: 99–100), based on the survey mentioned above, lists forty-two uninflected adjectives which occur with both *na* and *no*: common examples (with over ten occurrences in the survey, and omitting predicable adverbs) are *igai* ‘unexpected’ (*na* 13/*no* 2), *samazama* ‘various’ (10/8), *daizi* ‘important, valued’ (18/1), *-teki* ‘-ic’ (531/13), *dooyoo* ‘of the same kind, similar’ (2/10), *tokusyu* ‘special, specialized’ (12/2), *tokubetu* ‘special, exceptional’ (8/14), *tokuyuu* ‘unique, peculiar’ (2/11), *betu* ‘separate, different’ (7/32).

*Na/no* alternation thus appears to be relatively widespread, and several factors have been invoked in attempts to explain it. Martin (1975) suggests both stylistic and semantic factors, while noting many seemingly random cases where alternative forms are used in close proximity by the same speaker/writer and admitting that *na* and *no* adjectives ‘are not easy to keep apart’. In relation to style he states that *na* is sometimes replaced by the ‘somewhat stiffer’ *no*, especially in written Japanese and especially where both adjective and noun are Sino bimorphemic items which optionally combine into a compound noun (1975: 766). Elsewhere he suggests that *no* emphasizes quantitative description whereas *na* focuses on qualitative description, although again with unclear cases: ‘When the writer presents us with *samazama no zyoohoo* “all sorts of information”. . . he is taken to mean something like “(much) information of many kinds”; if he had written *samazama na zyoohoo* it would have been taken to mean “highly varied (pieces of) information”’ (1975: 824); ‘the semantic emphasis of (*na* adjectives) is on QUALITIES, while (the *no* adjective) points to QUANTITIES or STATES, though the distinction is not always clearcut’ (1975: 617, note 4).

Factors involved in the membership of *na* and *no* adjectives are considered more widely in §4.1.2. Meanwhile, we note here the more general fact that, in the broader scheme of the language, *na* and *no* constitute the two possibilities provided for the marking of adnominal modification by uninflected items.<sup>10</sup> Of these, in addition to following some of the present adjectives, *no* occurs following nouns and adverbs (cf. note 8); it also occurs following phrases consisting of NP + case particle (e.g. *tomodati kara no tegami* ‘a letter from a friend’) as well as structures ending in certain non-finite verb forms (as in *boodai na syakkin o kakete no keiei* ‘a business employing large sums of borrowed money’ (example from Martin 1975: 493)). *No* is to this extent a general marker of adnominal modification, whereas *na* serves specifically to mark this function with a subset of uninflected adjectives. To mark adjectives by *na*, as opposed to *no*, is thus to distinguish them clearly from the wider set of noun modifying expressions.

<sup>10</sup> Our concern here is with adnominal modification of lexical nouns. There are constructions with certain grammatical nouns which require marking with *na*; for details cf. Martin (1975: 617, 667).

## 3.3. UNINFLECTED ADJECTIVES AND NOUNS

Overlap is also found between uninflected adjectives and nouns. Uehara (1998: 215) finds that 151 (57 per cent) out of 264 items which combine with *na* or with both *na* and *no* also occur followed by case particles; in addition, as indicated earlier, Uehara does not consider adjectives which combine only with *no*, and these are noted by Martin as commonly belonging to at least one other class, including noun (1975: 822). Examples can be found in Martin (1975: 180–1, 822–5), and in Uehara (1998: 100–2).

While sizeable overlap clearly exists, many common uninflected adjectives have no noun counterparts. Furthermore, where nouns are found, they are often highly restricted in distribution. To give one illustration, inspection of texts indicates that the noun *taboo* (cf. *taboo (na/no)* ‘very busy’), given as an example in Uehara (1998: 101–2), occurs overwhelmingly in the phrase *taboo o kiwameru* ‘become extremely busy’ and a few other expressions including *gotaboo no naka* and the derivative *gotabooyuu* (both ‘while (you) are very busy’), *taboo ni tuki*, and *taboo ni yori* (both ‘due to pressure of work’). Nouns like these thus function to a greater or lesser degree as elements in larger lexicalized units. The deadjectival noun in *-sa* (*taboosa*) is also readily attested, and this too is by no means untypical for these cases. Elsewhere, some adjectives and nouns show unpredictable semantic differences: cf. noun *yooki* ‘weather conditions’ vs. adjective *yooki (na/no)* ‘jovial’; *genki* ‘energy’ vs. *genki (na)* ‘energetic’ but also ‘well, in good health’; *heiwa* ‘peace’ vs. *heiwa (na)* ‘peaceful’ but also ‘carefree, careless, inattentive’ (Uehara 1998: 122). How widespread such factors are must be determined by further detailed research, but the evidence suggests that a variety of relationships are found between adjectives and nouns involved in this type of multiple membership.

## 4. Wider linguistic features of adjective types

## 4.1. LEXICAL MAKE-UP

A variety of linguistic factors appear to be relevant to the membership of adjective types, and they are summarized here. Lexical semantic relations across types, and the distribution of adjectives across semantic domains, are illustrated specifically in §4.2.

4.1.1. *Inflected adjectives*

Inflected adjectives show strong phonological restrictions (Backhouse 1984: 179–180). All stems must end in *a*, *u*, *o*, or *i* (overwhelmingly in the inflected adjective-forming element *-si*); i.e. stem-final *e* and *ɳ* (the latter common in Sino items) are excluded, and stem-final *i* is dispreferred outside of *-si*. Lexically simple inflected adjectives are native, and (C)V syllables are preferred in these stems.

In relation to semantics, Nisio (1972: 160) notes that basic native inflected adjectives

tives are almost all gradable antonyms as opposed to complementaries. If gradability is assumed to be a core semantic feature of adjectives, this is an indication that central members of the class are well represented in this type.

#### 4.1.2. Uninflected adjectives

We comment here first on uninflected adjectives in general, and subsequently on *na*, *no*, and *na/no* items.

Uninflected adjectives are not bound by the above phonological restrictions, and they take in items from all lexical strata (cf. Martin 1975: 760–5, 826–9 for a summary of lexical sub-types found). Sino items are probably numerically predominant across all uninflected types; as with foreign items, many are excluded from the inflected type on phonological grounds.<sup>11</sup> This also applies to lexically simple native items such as *mizime* (*na*) ‘pitiful’ and *mare* (*na/no*) ‘rare’ with stems ending in *e*. Many native uninflected items are lexically complex (cf. Martin 1975: 760–1; Uehara 1998: 220–8), and some of these are likewise phonologically disfavoured: this applies, for example, to complex adjectives with a final verbal element, since verb stems in Japanese end in *i* or *e*.

At the same time, there are many native complex items which are phonologically unexceptionable but are nevertheless uninflected, which suggests that other factors play some role in membership of inflected vs. uninflected types. Items diachronically derived by affixation of *-ka/-yaka/-raka* (Martin 1975: 760; Backhouse 1984: 180–1) are a clear case, as are compound adjectives involving combinations of noun + inflected adjective which, as noted by Uehara (1998: 226–8), often (although by no means always) produce uninflected adjectives: thus *iro* ‘colour’ + *siroi* ‘white’ > *iroziri* (*na/no*) ‘fair(-skinned)’; *ki* ‘spirit’ + *mizikai* ‘short’ > *kimizika* (*na*) ‘impatient’. Clearly, both these cases suggest the influence of lexical morphology.

Within uninflected adjectives, many items occur only with *na* (57 per cent of Uehara’s sample mentioned in §3.2). Some (not considered in Uehara’s figures) occur only with *no*; these were said to be predominantly Sino in Backhouse (1984: 183), but they also include (generally lexically complex) native and mimetic items. Finally, as discussed in §3.2, a larger number than generally thought occur with both *na* and *no*.<sup>12</sup> Below we note and illustrate some correlations with linguistic factors which are of potential relevance here:

(a) Lexical stratum: Virtually all foreign items (which are mainly lexically simple) are *na* adjectives: examples include *uetto* ‘sentimental’, *dorai* ‘unsentimental, business-like’, *sinpuru* ‘simple’, *tahu* ‘tough’, *sumaato* ‘slim’, *tyaamingu* ‘charming’, *syuuru* ‘surreal’, *zyuusii* ‘succulent’. A rare exception appears to be *huru* (*no*) ‘full’, given in Uehara (1998: 113); in texts this item is also attested with *na*, but cf. Sino *ippai* (*no*) ‘full’.

<sup>11</sup> Note that *sikakui* ‘square’ (also *sikaku* (*na/no*)), a rare example of an inflected adjective with a purely Sino stem, is phonologically unexceptionable. (*Kawaii* ‘endearing, cute’ is native, not Sino, *pace* Backhouse (1984: 180) (cf. Uehara 1998: 212).)

<sup>12</sup> For example, *seisiki* ‘formal’, given as a *no* adjective in Backhouse (1984: 183), also occurs with *na*.

(b) Lexical morphology: All native adjectives with the formative elements *-ka/-yaka/-raka* combine with *na* (with overlap with inflected adjectives for a small number of items, as seen in §3.1). The large class of adjectives with the Sino suffix *-teki* also combine overwhelmingly with *na* in modern texts (cf. Uehara 1998: 99, note 3). By contrast, native adjectives formed with the suffix *-me* (*nagame* (*no*) 'on the long side', etc.) combine with *no*, and Martin (1975: 823) notes a group of *no* adjectives which are mostly derived from verbs or nouns: an example is *maemuki* (*no*) 'forward-looking'.

(c) Semantics: As mentioned in §3.2, Martin has suggested that some cases of *na/no* overlap involve semantic factors (*na* being qualitative, *no* quantitative or state-denoting). In support of this, note that mimetic adjectives (cf. Hamano 1998, ch. 2), which are derived from bound mimetic bases, typically by reduplication, commonly combine with *no*. Examples from Hamano (1998: 22–3) include *berobero* (*no*) 'dead drunk', *kusyakusya* (*no*) 'wrinkled', *gusyogusyo* (*no*) 'drenched', *gotigoti* (*no*) 'hard', *yoreyore* (*no*) 'shabby', *perapera* (*no*) 'fluent'; many of these denote states, and Hamano refers to 'stative conditions' (1998: 21) as a common semantic characteristic of mimetic adjectives. Uehara (1998: 108–15) has also considered semantic distinctions between *na* and *no* items more generally, concluding that gradability determines the occurrence of *na* over *no*. His comments include the important observation that items which denote extreme points on scales, including semantically superlative items, combine with *no* and not *na*: thus *saidai* (*no*) 'the biggest', *saizyoo* (*no*) 'the best', and *saitei* (*no*) 'the lowest'; *saitei* also occurs with *na*, but in the (gradable) meaning 'terrible', as in *Aitu tte saitei na yatu ne* 'He is a terrible guy, isn't he!' (Uehara 1998: 113–14). Several of the mimetic items above also appear to be semantically intensive and thus ungradable. As a further example, the Sino negative prefixes *hu-* 'un-', *bu-* 'un', *mu-* 'lacking', *hi-* 'non', *mi-* 'not yet' mainly attach to Sino bases and produce uninflected adjectives (variously *na*, *no*, or *na/no*) (details in Martin 1975: 763–5, 826–7); derivatives in *mi-*, in particular, commonly combine with *no* (e.g. *mikaiketu* (*no*) 'unsolved', *mikansei* (*no*) 'incomplete'), and are semantically ungradable. While these cases are suggestive, however, the correlation between non-gradability and occurrence with *no* is certainly not total: semantically intensive items such as *masiro* 'pure white' and *makkuro* 'jet black' occur with *na* as well as with *no*, and examples such as *kiwamete saisin no tyuu o haratte* (TV) 'paying extremely careful attention', where *saisin* (*no*) 'careful' co-occurs with a grader (*kiwamete* 'extremely'), are also readily attested. The native derivatives in *-me* mentioned above are gradable but also combine with *no*, suggesting that lexical morphology may play the stronger role here.

(d) Style: Finally, we have mentioned Martin's suggestion that occurrence with *na* or *no* may in some cases be influenced by stylistic factors, with *no* being more formal, especially with certain Sino items.

As indicated, several linguistic factors appear to influence membership both of inflected and uninflected adjectives, and of *na* and *no* adjectives within the latter type. Their precise nature, and the interaction between them, requires further detailed research.

#### 4.2. SEMANTICS

##### 4.2.1. Semantic relations

We comment here on lexical semantic relations, as a preliminary to the consideration of extralingual semantic types in §4.2.2.

Semantic relations of oppositeness, (near-) synonymy, and hyponymy hold widely across inflected and uninflected types: while such relations are not in themselves decisive for word classification, their substantial presence may be regarded as supportive. Several common examples are given in Backhouse (1984: 177) (cf. also Nisio 1972: 169, 175). Uehara (1998: 182) takes issue with the items *ii* 'good, okay'/'*dame* (*na/no*) 'no good' given as opposites there, suggesting that the inflected *ii* 'good'/'*warui* 'bad' is a 'better' antonym pair, but lexical semantic relations are in principle context-dependent (cf. Lyons 1963) and do not necessarily hold for the language as a whole. In the present case, while *ii* and *warui* often function as antonyms, *warui* has a more restricted range of use and there are many contexts where this relation does not hold: as indicated, in addition to 'good', *ii* has a (mainly predicative) meaning 'okay', and in general its opposite here is *dame* 'no good'. These occur very commonly, for example in the contrasting constructions illustrated by *Yatte mo ii* 'It's okay if (you) do (it)' and *Yatte wa dame da* 'It's no good if (you) do (it)' (where \**Yatte wa warui* does not occur) (cf. also Martin 1975: 184).<sup>13</sup> The general point is that the language in actual use makes ready use of adjectives of both types in expressing these semantic relations.

As a more detailed individual example of semantic relations for a basic item of general meaning, inflected *ookii* (adnominal alternant *ooki* (*na*)) 'big' has a native inflected colloquial synonym *dekai*, and a large number of hyponyms, all uninflected, including: *kyodai* (*na/no*) 'enormous (in size)', *bakudai* (*na/no*) 'enormous (amount, etc.)', *oogara* (*no*) 'big (of physique)', *daikibo* (*na*) 'large-scale (enterprise, etc.)', *oogakari* (*na/no*) 'large-scale (operation etc.)', *daidaiteki* (*na*) 'large-scale (treatment, etc.)', *oohaba* (*na/no*) 'big (change, etc.)', *saidai* (*no*) 'largest'. These hyponyms are all native or Sino, and clearly lexically complex (bound morphemes *oo-*, *-dai-* both 'big').

##### 4.2.2. Semantic types

Extralingual meaning is surveyed here in terms of the semantic types in Dixon in Chapter 1. The distribution of adjectives across these types is summarized in

<sup>13</sup> Similar comments apply to Uehara's remarks concerning inflected *umai/mazui* and uninflected *zyoouzu* (*na*)/*heta* (*na*) (both 'skilful/good (at)'/ 'unskilful') (1998: 182): actual usage often pairs *umai* and *heta* (*na*), as illustrated for example in *Zya, umai, heta wa kankai arimasen ka* 'Well doesn't it depend on whether you are skilful or clumsy' (attested example from Martin 1975: 757).

Table 9 (examples are inflected unless otherwise indicated); in addition to representative adjectives, prominent items which are non-adjectives are also mentioned where relevant.

TABLE 9.

Semantic type	Examples	Comments
DIMENSION	<i>ookii</i> 'big'/ <i>tiisai</i> 'small'; <i>hiroii</i> 'big'/ <i>semai</i> 'small' (in area); <i>hutoi</i> 'thick'/ <i>hosoi</i> 'thin' (of 1D objects)	Basic pairs all inflected. <i>Ookii/tiisai</i> have adnominal alternants <i>ooki (na)/tiisa (na)</i> .
AGE	<i>hurui</i> 'old'/ <i>atarasii</i> 'new'; <i>wakai</i> 'young'	Basic pair inflected. 'Old' (of humans, etc.) is a lexical N + V phrase.
VALUE	<i>ii-yoi</i> 'good, okay'/ <i>warui</i> 'bad'; <i>daizyobu (na)</i> 'okay'/ <i>dame (na/no)</i> 'no good'; <i>kekko (na)</i> 'good, okay'; <i>subarasii</i> 'wonderful'; <i>sugoi</i> 'amazing'; <i>hen (na)</i> 'strange'; <i>okasii</i> 'strange, funny'	Basic pair inflected, but many uninflected (mainly <i>na</i> , some <i>na/no</i> ). <i>Okasii</i> has adnominal alternant <i>okasi (na)</i> .
COLOUR	<i>siroi</i> 'white'; <i>kuroi</i> 'black'; <i>akai</i> 'red'; <i>aoi</i> 'blue, green'; <i>midori (no)</i> 'green'	Basic colour terms inflected. (Also nouns <i>siro</i> , <i>kuro</i> , <i>aka</i> , <i>ao</i> .) Some uninflected ( <i>no</i> ).
PHYSICAL PROPERTY	<i>atui</i> 'hot'/ <i>tumetai</i> 'cold'; <i>omoi</i> 'heavy'/ <i>karui</i> 'light'; <i>kirei (na)</i> 'beautiful, clean'/ <i>kitanai</i> 'dirty'; <i>ippai (no)</i> 'full'/ <i>kara (na/no)</i> 'empty'	Mainly inflected, but some uninflected ( <i>na</i> , <i>na/no</i> , <i>no</i> ). Also verbs, e.g. for 'wet/damp/dry', 'bald', 'tired', 'dead'.
HUMAN PROPENSITY	<i>umai</i> , <i>zyoosu (na)</i> 'skilful, good (at)'/ <i>heta (na)</i> 'unskilful'; <i>yasasii</i> 'gentle, kind'/ <i>kibisii</i> 'strict'; <i>samui</i> 'feel cold'/ <i>atui</i> 'feel hot'; <i>kowai</i> 'feel afraid'; <i>hosii</i> 'want (sth), (find) desirable'; <i>zannen (na/no)</i> '(find) regrettable'; <i>iya (na)</i> '(find) unpleasant'	Both inflected and uninflected ( <i>na</i> , <i>na/no</i> ). Also lexical N + Adj phrases. 'Hungry', 'thirsty' are lexical N + V phrases.
SPEED	<i>hayai</i> 'quick, early'/ <i>osoi</i> 'slow, late'	Basic pair inflected.
DIFFICULTY	<i>yasasii</i> , <i>kantan (na)</i> 'easy'/ <i>muzukashii</i> , <i>konnan (na/no)</i> 'difficult'	Basic pair inflected, with uninflected ( <i>na</i> , <i>na/no</i> ) near-synonyms.
SIMILARITY	<i>onazi</i> 'same'; <i>betu (na/no)</i> 'separate, different'; <i>hoka (no)</i> 'other' (adnominal only)	Hybrid and uninflected ( <i>na/no</i> , <i>no</i> ), no inflected. The usual opposite of <i>onazi</i> is a verb.



TABLE 9. (*cont.*)

Semantic type	Examples	Comments
QUALIFICATION	<i>tadasii</i> 'correct'; <i>tokubetu</i> ( <i>na/no</i> ) 'special, exceptional'; <i>ippan</i> ( <i>no</i> ) 'general, common'	Inflected and uninflected ( <i>na/no</i> , <i>no</i> ). Verbs and adverbs also found here.
QUANTIFICATION	<i>ooi</i> 'large (amount), many'; <i>sukunai</i> 'small (amount), few' (both predicative only)	Basic pair inflected. Few adjectives here; nouns, verbs also found.
POSITION	<i>takai</i> 'high'/ <i>hikui</i> 'low'; <i>tooi</i> 'far, distant'/ <i>tikai</i> 'near'	Basic pairs inflected. 'Left' and 'right' are nouns.
NUMBER		These are nouns composed of numeral + classifier: <i>ippon</i> 'one (1D object)', etc.

Overall, it is noticeable that purely *no* adjectives are few, and are apparently largely confined to COLOUR, PHYSICAL PROPERTY, and SIMILARITY terms. They are at best marginal members of Dixon's four core semantic types.

4.3. SUMMARY

The composition of the major adjective types, incorporating the main points reviewed in this section, is summarized in Table 10. The table separates inflected and uninflected adjectives, with the latter represented as comprising a continuum of *na* and *no* members; characteristic features of phonology, semantics, lexical stratum membership, and lexical morphology are set out under each type.

Across the table as a whole we may discern a cline of centrality decreasing from left to right. Inflected items incorporate the core of the adjective class, containing semantically central, non-derived, native members; they are generally gradable, and occur in all major semantic types. Next come *na* adjectives, which show some limited overlap with the inflected group (note that such overlap always involves *na* items, some with optional *no*); these tend to be gradable and occur in most semantic types, but they include many lexically complex members. Furthest from the core we find *no* adjectives (with some overlap with *na* items), which by definition enter into construction with a general adnominal marker; semantically they tend to be ungradable, some denote states, and they occur in few semantic types; these likewise include many complex items. There is a concomitant decline across the table in terms of participation in lexical derivational processes, considered in §2: in general, inflected items show the fullest participation; *na* items tend to be less productive and lack certain processes such as reduplication, while *no* items are largely, if not entirely, absent.<sup>14</sup>

<sup>14</sup> The lack of evidence from word-formation means that *no* adjectives must be distinguished from nouns purely on syntactic grounds (excluding, moreover, patterns of adnominal modification, where

TABLE 10.

Inflected		Uninflected	
		( <i>na</i> )	( <i>no</i> )
Phonology:			
Restricted		Unrestricted	
Semantics:			
Gradable		Mainly gradable?	Mainly ungradable?
All major semantic types		Most semantic types	Few semantic types
			Some states
Stratum/morphology:			
Simple items native		Native (mainly complex)	
		- <i>ka</i> /- <i>yaka</i> /- <i>raka</i>	- <i>me</i> (gradable)
			Mimetic (complex)
			Some states
			Many ungradable
		Sino (many complex)	
		Formal style	
		Foreign (mainly simple)	

## 5. Conclusions

Given a linguistic description, word classification requires a theoretical stance in terms of the selection and weighting of criteria. The following particular questions arise for Japanese: (a) Inflected adjectives and verbs (including negatives) are morphologically alike (all inflected) but show differences; are these differences sufficient for assignment to different word classes? (b) Similarly, uninflected *na* adjectives, *no* adjectives, and nouns are morphologically alike (all uninflected) but show differences; are these differences sufficient for the assignment of uninflected adjectives and nouns to different classes (and insufficient for the separation of *na* and *no* adjectives into different classes)? (c) Finally, inflected adjectives and uninflected *na* and *no* adjectives differ, above all in morphology, but also show similarities. Are the similarities sufficient for assignment to the same word class?

If inflection is the only criterion, the answer to this final question is clearly 'no'; other criteria will involve the weighting of finer aspects of morphosyntax and derivational behaviour.

Not surprisingly, different approaches have yielded different schemes for these items. Uehara (1998), in a cognitive grammar framework, takes inflection vs. non-inflection (associated in Japanese with bound vs. free roots) as the primary division

both combine with *no*). Given the added complication of multiple membership with nouns in some cases, it is perhaps not surprising that *no* adjectives have commonly not been clearly recognized.

in the language between Verbals (including verbs and *i* adjectives) and Nominals (nouns and *na* adjectives) (1998: 86–7), although he uses the term ‘adjective’ in his labels for both *i* and *na* items. Martin (in common with US structuralists starting with Bloch) uses occurrence before the copula as a major criterion, yielding nouns (including our uninflected adjectives) vs. verbs and *i* adjectives; this is a very broad criterion and leads to multiple sub-classification of nouns (into ‘pure nouns’, ‘adjectival nouns’, ‘precopular (or quasi-adjectival) nouns’, and ‘predicable adverbs’) on the basis of further criteria (1975: 178–9, 782–3).<sup>15</sup> Traditional Japanese grammar and lexicography recognizes two distinct word classes for *i* and *na* adjectives, with *no* adjectives generally being treated as nouns. Finally, linguists such as Suzuki (1972) have included all items considered here in a single word class, labelling them as type 1 (our ‘inflected’) and type 2 (our ‘uninflected’) adjectives.

To return to questions (a)–(c), the inflected items in (a) show clear differences in the shape of basic inflections, in lexical derivation, and in syntactic areas such as combination with auxiliaries and with filler verbs, although negative forms of verbs stand closer to inflected adjectives on several criteria. The uninflected items in (b) show high-level syntactic differences in such matters as the ability to head NPs and the nature of constructions whereby they are modified, and there can be little justification for regarding these all as nouns; derivational behaviour also differs widely. With regard to the items in (c), derivational processes are widely shared, as are many syntactic functions (supported by lexical semantics), with differences of detail largely reflecting morphological inflection vs. non-inflection. Amalgamation of inflected and uninflected types in the same word class may be seen as uncomfortable by some, but examples are by no means unusual. Thus, English is generally regarded as having inflected and uninflected adjectives (for grade), based at least partly on phonological and morphological factors, with cases of overlap (cf. Huddleston and Pullum 2002: 1582–4). Dixon’s (1982) survey of adjective classes across languages indicates several other cases: Rotuman has an open adjective class, of which twelve members inflect for number; seven out of forty adjectives in Acooli likewise inflect for number; in Swahili fifty adjectives take concordial prefixes of modified nouns, but twenty or so borrowed items (chiefly from Arabic) take no prefixes; Kiriwinian has a closed class of fifty or so adjectives, of which a dozen or so obligatorily take classificatory prefixes, a larger number exclude them, and around twenty optionally take the prefixes; finally, in Dyirbal, one adjective only (‘big’) inflects for number (1982: 5, 6, 37, 42–3, 45–6).

Dixon’s stance in Chapter 1 of this volume considers morphology and syntax, correlating with semantics, and assumes three major classes of simple items. On the basis of the data analysed here, we conclude that within this framework Japanese adjectives may justifiably be characterized as comprising a large inflected type (*i*) which is closed to borrowings in simple stems, and a major open uninflected

<sup>15</sup> Interestingly, Martin comments that his term ‘adjectival noun’ (i.e. our *na* adjective) is used for words with ‘special adjectival properties’ among ‘what looked like predicated nouns’, and that ‘some readers may prefer to think of (this) as “nominal adjective”’ (1975: 30).

type (*na*), with some restricted cross-membership; in addition, there is a more peripheral uninflected type (*no*), with a sizeable degree of overlap between these uninflected neighbours.

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# The Two Adjective Classes in Manange

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Manange is a Tibeto-Burman language, spoken in the Annapurna region of the Himalayas in Nepal.<sup>1</sup> Manange is a member of the Tamangic sub-family of Tibeto-Burman (also known as Gurungic, or TGTm), and is closely related to the other languages of that family.

Manange has two lexical classes of terms which code property concepts. One class is wholly distinct from both nouns and verbs. We will refer to this as the class of ‘simple adjectives’. The other class shares some inflectional properties with verbs, so we will refer to it as the class of ‘verb-like adjectives’. Verb-like adjectives do differ from verbs in important respects, and we will argue that they are a distinct lexical class, essentially a hybrid, having some verbal and some adjectival properties.

## 1. Typological overview

Typological descriptions of Tibeto-Burman languages often point out that there are two distinct structural profiles to be found in the family (Matisoff 1990: 113, 1991a: 485–6, and 1991b; LaPolla 2001: 234–6; see Masica 1976 for discussion of South Asia as a linguistic area). Languages in the ‘Sinosphere’ (roughly Southeast Asia) tend to be analytic, with little morphology, monosyllabic, or sesquisyllabic lexical structures, extensive compounding, complex tonal systems, and serial verb constructions.<sup>2</sup> Languages in the ‘Indosphere’ (roughly the Himalayas and South Asia) tend to be more agglutinative, with polysyllabic structures, extensive case and verb morphology, and detailed marking of interpropositional relationships. Manange (like the other Tamangic languages) is an interesting case to examine in this regard, as geographically it fits squarely in the ‘Indospheric’ Himalayas, but typologically it shares more features with the Sinospheric languages.

<sup>1</sup> Funds for this study were provided by the US National Science Foundation, grant BNS 9729005. We’d like to thank Ms Romi Gurung for her insightful comments into this aspect of her native language.

<sup>2</sup> Matisoff (1999) describes a sesquisyllable as a minor, unstressed syllable. The vowel of a sesquisyllable is typically reduced to schwa. Sesquisyllables typically occur between consonant clusters or as the vowel of grammatical prefixes in Tibeto-Burman languages of South-east Asia.

The basic typological features of Manange are summarized briefly below. The most extensive description of Manange may be found in Hildebrandt (2004); Hoshi (1984, 1986) is a more limited description.

### *Phonology*

- Roots are generally monosyllabic
- The basic syllable template is: (C)(C)V(C)
- There is a four-tone system; the domain of tone is the word<sup>3</sup>

### *Word order*

- The word order of basic constituents is generally AOV or SV, although OAV is also found

### *The Noun Phrase*

- NP structure: (DEM) (REL) N (ADJ) (NUM) = (CLITICS)
- Clitics indicate plurality, definiteness, and case
- No agreement in number, gender, case, honorific status, etc.

### *Verbs*

- The only prefix is the negative prefix *a-*
- Manange has a small set of verbal suffixes:
  - *-tsi* perfective
  - *-tsu* continuous aspect (must be followed by copula)
  - *-tso* obligation
  - *-tse* clause chaining
  - *-pa* nominalizer
  - *-pa-ri* purposive
  - *-pa-ni* sequential linker
- There is also a set of post-verbal particles
  - *imu, imi, a, ko, ro* post-verbal evidential (sentence-final)
  - *kyana* conditional

## **2. Basic description and semantic analysis of simple and verb-like adjective classes**

Manange has two distinct lexical classes of words which code property concepts. ‘Simple adjectives’ are similar to adjective classes in many Indo-European languages, as they are clearly distinct from both nouns and verbs and they do not occur with any derivational morphology in either attributive or predicative

<sup>3</sup> Tones are transcribed as follows: On monosyllabic words /1/ marks low level, /2/ high level, /3/ very high falling, and /4/ mid-low falling.

contexts. ‘Verb-like adjectives’ share morphological properties with verbs, but we will argue in §4 that they have sufficiently distinct syntactic behaviour to argue that they are a separate lexical class.

### 2.1. SIZE OF CLASSES

Simple adjectives and verb-like adjectives differ noticeably in class size. There are thirty simple adjectives that we know of. This class appears to be closed, although there are a few Nepali borrowings which fit into this class.<sup>4</sup> Verb-like adjectives, by contrast, are an open class, and productively incorporate new members. We list fifty-seven monomorphemic verb-like adjectives in the tables that follow, and we expect that there may be considerably more. In addition, one can productively form phrasal verb-like adjectives through the process of compounding.

### 2.2. PHRASAL VERB-LIKE ADJECTIVES

Verbs and verb-like adjectives may combine with other elements to productively form phrasal compounds which constitute members of this class. Most phrasal verb-like adjectives are composed of a noun which is followed by either a verb-like adjective or a verb. A partial list of phrasal verb-like adjectives is given in (1):

- |     |                |                                                   |
|-----|----------------|---------------------------------------------------|
| (1) | 2mwi 2katti    | ‘furry’ (fur + many)                              |
|     | 4hlo 1thyΛpΛ   | ‘brave’ (wind/spirit + big)                       |
|     | 1tī 1thyΛpΛ    | ‘brave, alternate form’ (heart + big)             |
|     | 1tī 1campΛ     | ‘cowardly/fearful/worrisome’ (heart + small)      |
|     | 3le 1lΛpΛ      | ‘easy’ (?? + do)                                  |
|     | 4kole 1khΛpΛ   | ‘difficult’ (slow + come)                         |
|     | 3tuk 1tΛpΛ     | ‘difficult, arduous’ (Nepali duk ‘pain’ + become) |
|     | 3ta 3runpΛ     | ‘far’ (what + long)                               |
|     | 1ara 1mrempΛ   | ‘drunk’ (alcohol + full)                          |
|     | 3mi 1thypΛ     | ‘famous’ (person + big)                           |
|     | 3sup 1thyΛpΛ   | ‘healthy, strong’ (body + big)                    |
|     | 2shitan 1khΛpΛ | ‘angry’ (anger + come)                            |
|     | 2chun 2njpΛ    | ‘charming’ (?? + laugh)                           |

Most commonly, phrasal adjectives are members of the HUMAN PROPENSITY or PHYSICAL PROPERTY classes, although *4kole 1khΛpΛ* ‘difficult’ and *3le 1lΛpΛ* ‘easy’ is a member of the class DIFFICULTY, and *3ta 3runpΛ* ‘far’ is a POSITION term.

### 2.3. REDUPLICATION

Only a small number of adjectives undergo reduplication, either whole or partial. Those we know of are given in (2).

<sup>4</sup> It is possible that as more and more speakers of the language become bilingual in Nepali, and the intensification of pressure due to contact increases, more Nepali adjectives will be incorporated into this lexical class.

- |     |                      |                           |
|-----|----------------------|---------------------------|
| (2) | 2nɿ 2nɿpɿ            | ‘noisy’                   |
|     | 2coŋpɿ ~ 2coŋpɿ      | ‘similar’                 |
|     | 3kye 3kyepɿ ~ 3kikyɛ | ‘sweet’ (pretty + pretty) |
|     | 4kole ~ 4koleʔle     | ‘slow’                    |
|     | 3kini ~ 3kinikini    | ‘fast’                    |

The first three forms are verb-like adjectives, while the others are simple adjectives. The word *3kikyɛ* ‘sweet’ is a simple adjective in its simplex form, but becomes a verb-like adjective *3kye 3kyepɿ* when reduplicated. This is the only adjective we know of that changes lexical class under reduplication. The form *2nɿ 2nɿpɿ* does not have a simplex alternate. Reduplication has the semantic effect of intensification, e.g. *3kinikini* ‘really fast’.

#### 2.4. SEMANTIC CATEGORIES

Most of the semantic categories of adjectives given in Dixon (1982, ch. 1) include members from both the simple and the verb-like adjective classes. A few, however, do not. For example, only simple adjectives convey COLOUR, SPEED, and QUANTIFICATION, while only verb-like adjectives convey DIFFICULTY and HUMAN PROPENSITY. Here we will examine each semantic category in turn.

##### 2.4.1. COLOUR

Only simple adjectives may be COLOUR terms. There are nine distinct members of this class, listed in (3):

- |     |                |                            |
|-----|----------------|----------------------------|
| (3) | ɪmlɛŋkya       | ‘black’                    |
|     | ɪolkya         | ‘red’                      |
|     | ɪpɪŋkya        | ‘blue’                     |
|     | ɪurkya         | ‘yellow’                   |
|     | ɪtɹkya         | ‘white’                    |
|     | 3caŋku         | ‘green’                    |
|     | 4myɛphra       | ‘grey’ (ash + powder)      |
|     | (alo) ɪsuntala | ‘orange’ (potato + orange) |
|     | 3mukpɿ         | ‘brown’ (mud)              |

Five of the colour terms share a common structure, being bisyllabic with the final syllable *-kya*, which may be an old colour classifier. In at least one other Tamangic language (Nar-Phu, Noonan 2003), cognates to three of these forms appear without the final *-kya*. The COLOUR category includes the member *ɪsuntala* ‘orange’, borrowed from Nepali. *Suntala* is a lexical adjective in Nepali, which, along with its semantic value, accounts for its unusual appearance in this generally closed class. The word for ‘brown’ is derived from a noun meaning ‘mud/earth,’ and the word for ‘grey’ is derived from the (compound) word for ‘ash.’ In both cases, it is the colour of these substances that lends meaning to the colour terms.



2.4.2. *SPEED*

Another semantic category which has only simple adjective members is *SPEED*. There are only two simple adjectives in this category: *3kini* 'fast' and *4kole* 'slow'. As was mentioned in §2.2, these two adjectives may undergo either partial or whole reduplication.

2.4.3. *QUANTIFICATION*

The final semantic class exclusively marked by simple adjectives is *QUANTIFICATION*. There is only one member of this class, *2katti*, which is borrowed from Nepali. It functions as an interrogative pronoun meaning 'how many/how much', and, as in Nepali, it may also be used adjectively to mean 'very many/much', or 'too many/much', as in the following example taken from a Manange narrative:

- (4) *3ya 2katti imo imu,*  
yak too.many COP EVID  
'there were too many yaks'<sup>5</sup>

In addition to functioning as an adjective, this morpheme also serves as an intensifier (as in Nepali).

2.4.4. *AGE*

There is only one simple adjective which conveys *AGE*, but there are five verb-like adjectives in this category:

- |                              |                             |
|------------------------------|-----------------------------|
| (5) <i>Simple adjectives</i> | <i>Verb-like adjectives</i> |
| 4khyokro 'old' (animates)    | 1sē 'young'                 |
|                              | 1cā 'new/small'             |
|                              | 3taŋ~3taŋ 'ancient'         |
|                              | 1ŋī 'old' (inanimates)      |
|                              | 2sruŋ 'brief/short'         |

The simple adjective *4khyokro* forms an antonymic pair with the verb-like adjective *1sē* 'young'. The simple adjective is unusual in that it may also function as a noun meaning 'old man'. It is one of a small handful of simple adjectives which have nominal counterparts (see §2.3.1 for additional discussion).

2.4.5. *DIMENSION*

The adjectives which indicate *DIMENSION* are listed in (6):

- |                              |                             |
|------------------------------|-----------------------------|
| (6) <i>Simple adjectives</i> | <i>Verb-like adjectives</i> |
| 3kathe 'thin (animate)'      | 2mre 'fat animates'         |
| 3tsok 'vertically straight'  | 1thya 'big'                 |

<sup>5</sup> Examples extracted from connected speech are transcribed in intonation units à la DuBois et al. '1993'. Examples from elicitation are not in intonation units.

1cã	‘small’
3ruŋ	‘long’
2sruŋ	‘wide/fluffy’
2thuŋ	‘wide/thick/solid’
2phra	‘thin/fine/strand-like or particulate’

There are only two simple adjective in the DIMENSION class. One is *3kathe* (another pronunciation is *3kaŋthe*) ‘thin’, used of animates. Its antonym *2mre* ‘fat’ is a verb-like adjective. The other simple adjective is *3tsok* ‘vertically straight’. The remaining six verb-like adjectives of dimension mostly form antonymic pairs. The verb-like adjective *1cã* is in an antonymic relationship with both *1thya* ‘big’, and *3ruŋ* ‘long’, as it can refer both generally to dimension to mean ‘small’ and to length in particular, hence ‘short’. It is not clear that *2phra* ‘fine’ and *2thuŋ* ‘wide’ are true antonyms, as *2phra* has the dual meaning of ‘strand-like’, as in hair or noodles, and ‘particulate-sized’, as in flour or powder.

#### 2.4.6. POSITION

There are only four POSITION adjectives in Manange that we know of. They form antonymic pairs: *3naŋ* ‘low’ is a simple adjective, and *2no* ‘high’ is a verb-like adjective. The verb-like adjective meaning ‘near/close’ is *4ŋe*, which contrasts with the phrasal adjective *3ta 3ruŋ* ‘far’.

#### 2.4.7. VALUE

The VALUE adjectives are listed in (7):

(7) Simple adjectives	Verb-like adjectives
2sitari ‘free/no charge’	2kü ‘expensive’
3ŋoto ‘true/honest’	2khe ‘cheap’

Other than *2sitari* ‘free’, the only simple adjective which conveys VALUE is *3ŋoto* ‘true’. When modifying humans, the same adjective means ‘honest’, a HUMAN PROPENSITY concept. Thus this adjective is amenable to classification in more than one semantic category, depending on the features of the modified noun. Other examples are discussed in §2.5.

#### 2.4.8. PHYSICAL PROPERTY

There are a large number of PHYSICAL PROPERTY terms in both the simple and verb-like adjective classes. They are listed in (8):

(8) Simple adjectives	Verb-like adjectives
4pholton ‘round’	2na ‘ill’
2plisur ‘square’	1thu ‘gravely ill’
2kurkur ‘crooked’	1nye ‘decayed’
1seedha ‘straight’	4khyan ‘weak’
3naŋ ‘full’	3nun ‘broken/busted/destroyed’

<i>Simple adjectives</i>		<i>Verb-like adjectives</i>	
1thaŋ	'flat'	4sha	'cracked/broken'
1thē	'empty'	2tsaŋ	'clean, transparent'
2mona	'dark'	2atsaŋ	'dirty'
1kharkya	'dry'	2cher	'sharp'
2khuŋ	'hollow'	2a-cher	'dull'
2shilki	'bald'	3kyoŋ	'hard'
3ye	'steep'	3cē	'soft'
		3ŋye	'melodious'
		4sol	'clear, bright, sparkling'
		4khor	'bent'
		2mī	'ripe'
		2kyuŋ	'sour'
		1kī~kī	'bitter'
		2tsha	'spicy'
		3pla	'cold liquids'
		2khaŋ	'cold climate'
		1le	'warm/hot liquids'
		4tshe	'hot climate'
		2coŋ~cocoŋ	'same, similar'

When one looks closely at the membership in each of the classes, one can find interesting differences between them. A major sub-class of PHYSICAL PROPERTY is SHAPE, and all shape terms in Manange are simple adjectives, e.g. *4pholtoŋ* 'round' and *2kurkur* 'crooked'. There are no verb-like adjectives with shape meanings. Instead, the majority of verb-like adjectives in the PHYSICAL PROPERTY class indicate SENSORY PERCEPTIONS, such as temperatures, flavours, hardness, sharpness, and the like. There is also a sub-class of terms indicating ILLNESS or DECAY, including *2na* 'ill', *1thu* 'gravely ill', 'decayed', and possibly *4khyar* 'weak', *3nuŋ* 'broken, busted', and *4sha* 'cracked, broken'. A number of these verb-like adjectives are in antonymic pairs, including two formed by the negative prefix: *2tsaŋ* ~ *2atsaŋ* 'clean~dirty', and *2cher*~*2a-cher* 'sharp~dull'. It should also be noted that the word for 'straight' is borrowed from Nepali.

#### 2.4.9. DIFFICULTY

DIFFICULTY is one of only two semantic categories which have no simple adjective members. The only monomorphemic member of this class is the verb-like adjective *pol* 'simple'. The term 'difficult' is phrasal, *4kole 1kha*, composed of the simple adjective 'slow' and the verb 'come'.

#### 2.4.10. HUMAN PROPENSITY

The other semantic class whose members are exclusively verb-like adjectives is HUMAN PROPENSITY. These are listed in (9):

(9) *Verb-like adjectives*

1kyo	'sad/mournful'	3taŋ	'happy'
3sa	'good/tasty/wholesome'	3a-sa	'evil, bad'
2kye	'pretty/nice'	2a-kye	'unpleasant, ugly'
1tshaŋ	'lazy'	1a-tshaŋ	'busy, enterprising'
3tu	'poor'	4phlo	'rich'
2pyaŋ	'clever'	2a-pyaŋ	'stupid'
3myo	'crazy'		
1chuŋ	'charming'		
2che	'intimate'		

In this category there are six antonymic pairs. Four of these pairs are differentiated by the presence of the negative prefix *a-*, for example *2kye* 'pretty/pleasant' vs. *2a-kye* 'ugly, unpleasant'. There are a few other antonymic pairs formed in this manner in other semantic classes, but this does not appear to be a productive process. While all verb-like adjectives may take the negative prefix in predicative contexts (see below), only a small handful can carry the prefix into the noun phrase in attributive contexts: *3mi 3a-sa-pa 1kha imo* 'a bad person comes'. We take this as an indication that these forms have lexicalized into independent adjectives.

It should be noted, however, that the negative prefix is not found in predicative environments. There the antonymic relationship is marked through a negated phrasal structure, as in this example:

- (10) *4thi=ri 4sol-pa 1a-re imo imu*  
 house=LOC bright-NR NEG-COP COP EVID  
 'It is dim in the house/not bright in the house.'

2.4.11. *Other*

We only found one adjective which we found difficult to classify in any of the categories listed by Dixon (1982, ch. 1). This is *4tho* 'shared, communal', a verb-like adjective.

### 3. Phonological, morphological, and syntactic properties of simple adjectives

## 3.1. PHONOLOGICAL PROPERTIES

As mentioned briefly in the typological overview above, most lexical items in Manange have a simple phonotactic structure of C(C)V(C). Onset consonants may be either unvoiced obstruents or sonorants. The second consonant in the onset is restricted to the small set of sonorant consonants: /ŋ, l, r, y/. The coda position is even more restricted to final /ŋ, l, r/, with /r/ and /l/ occurring infrequently. Disyllabic monomorphemic roots are infrequent in Manange, and many di- and trisyllabic words are the result of lexicalization of old compounds. The word-medial consonants of disyllabic stems are restricted: aspirated stops and coronals are rare in this

position (a handful of nouns do have medial coronals, such as *2tʰa* ‘toilet’, *2puci* ‘knee’, and *1karti* ‘knife’, but word-medial coronals and aspirated obstruents are not found in Manange verbs or verb-like adjectives). Simple adjectives often do not conform to this template. The majority of simple adjectives are polysyllabic, e.g. *2sitari* ‘free’, and word-medial coronal consonants are common in these forms, e.g. *3yoto* ‘true’, *4pholtoŋ* ‘round’, and *2plisur* ‘square’; medial aspirated stops are also found, e.g. *3kathe* ‘thin’. Thus simple adjectives have fewer constraints on their phonotactic structure than do nouns, verbs, and verb-like adjectives.

### 3.2. MORPHOLOGICAL PROPERTIES

Simple adjectives do not inflect with either derivational or inflectional morphology. They may be hosts to clitics, as may any NP-final elements:

- (11) *myukyu 4khyokro=ko=tse 1ale=ri 3pyu-tsi*  
 dog old=DEF=ERG boy=LOC chase=PERF  
 ‘The old dog chased the boy.’
- (12) *3boʔal 1thē=tse 2thi 1ya 1mi*  
 bottle empty=PL fall go EVID:PERF  
 ‘The empty bottles fell.’

There are no derivational affixes to be found on adjectives, such as comparatives, superlatives, or intensifiers, as these functions are all conveyed with periphrastic structures (discussed below). Neither is there any morphology that converts simple adjectives into adverbs or any other lexical class. The simple adjectives *4kole* ‘slow’ and *3kini* ‘quick’ may be used adverbially, but require no derivational morphology to do so:

- (13) *3kini 1ya-ro*  
 quick go-IMPER  
 ‘Go quickly.’ (he said)

As neither nouns nor simple adjectives take any inflectional or derivational morphology, there is no morphological behaviour that differentiates these two classes. Simple adjectives are morphologically distinct from the classes of verbs and verb-like adjectives, as they are never affixed with verbal morphology, such as the negative *a-*, the nominalizer *-pa*, the clause chainer *-tse*, or the perfective *-tsi*.

### 3.3. SYNTACTIC PROPERTIES OF SIMPLE ADJECTIVES

Simple adjectives function both attributively, occurring within a noun phrase (discussed in §3.3.1), and also occur as copular complements (§3.3.2).

#### 3.3.1. Attributive functions

Simple adjectives with attributive function obligatorily follow a noun. Unlike nouns, simple adjectives may not be heads of noun phrases. Thus, in examples (14–15),

the nouns *4khye* ‘road’, *2mi* ‘person’ are obligatory, and may not be unexpressed.

- (14) *4khye 1tarkya=ri*,  
road white=LOC  
*1ηΛ 3por 1ya mo*,  
1sg take go COP  
‘I take (the prayer scarf) on the white road (to heaven).’
- (15) *1u 2mi 3kathe=ko 1sha 1tsa 1mi*  
DIST.DEM person thin=DEF meat eat EVID  
‘That thin guy ate the meat.’

Verbs may also modify nouns within a noun phrase. However, these almost always precede the noun within a relative clause. To form a relative clause, the verb is suffixed by the nominalizer *-pa* and the NP coreferential to the head noun is unexpressed, as in the following examples:

- (16) *3ηwo-pa 1sha 1tsa-tsi*  
fry-NR meat eat-PERF  
‘I ate the fried meat.’
- (17) *3kaη=ri 1tu-pa 3ya=tse=tse*,  
mountain=LOC stay-NR yak=ERG=PL  
*1khi 1mlaη.cha 1mi*  
3sg curse EVID  
‘The yaks who stayed in the mountains, they cursed (their friends).’

Thus verbs are syntactically distinct from simple adjectives in that they only modify a noun when they are in a pre-nominal relative clause. Note that this is true even of so-called ‘light’ relative clauses, which consist solely of a verb, as in *3ηwo* ‘fry’ in (16) above.<sup>6</sup>

### 3.3.2. Copula complements

Simple adjectives may occur in the copula complement slot, and are obligatorily followed by the copula *imo*. Thus the sentence given in (18a) has the structure

<sup>6</sup> One younger speaker, however, did allow for some post-nominal modification by verbs during elicitation. In most cases there was a semantic distinction. The pre-nominal ordering referred more explicitly to the event denoted by the verb, as in the phrase *2khol-pa 2kyu=ko*, which means ‘boiled water that was just boiled and is still very hot’. The post-nominal ordering refers to a resultant state, as in the phrase *2kyu 2khol-pa=ko*, which means ‘the boiled water, which has since cooled and is now safe to drink’. In such cases, the pre-nominal ordering appears to be the true relative clause, while the post-nominal ordering appears to be the use of a verb as an attributive adjective. We have found no examples of the post-nominal type in connected speech. It is unclear whether other speakers have the same pattern. We feel that the generalization between pre-nominal ordering constituting relative clauses and post-nominal ordering constituting adjectival attribution still holds. For this speaker, and possibly others, some non-stative verbs appear to function as verb-like adjectives as well. This deserves further exploration.

represented in (18b), where CS indicates ‘copula subject’ and CC indicates ‘copula complement’:

- (18) (a) *4pholpa 3taŋ=ko 1thē imo imu*  
 frog pot=DEF empty COP EVID  
 ‘The frog pot was empty.’  
 (b) [*4pholpa 3taŋ=ko*]CS [*1thē*]CC [*imo imu*]PRED

This structure is syntactically identical to that of ascriptive constructions, where the copula complement slot is filled by a noun, as in (19) and (20):

- (19) [*2tso=ko*]CS [*2mi*]CC [*1mo*]COP  
 PROX=DEF eye COP  
 ‘It is an eye.’  
 (20) [*2shij 3yalka*]CC [*1a-hin imi*]PRED,  
 wood branch NEG-COP EVID,  
 [*4shew=ko 3sru*]CC [*1hin imi*]PRED,  
 deer=DEF horn COP EVID  
 ‘It was not a branch, but it was a deer horn.’

Both the ascriptive and the adjective constructions have the structure: CS CC COP, where CC is a copula complement (see Dixon, Ch. 1).

To convey entrance into a state, both adjectives and nouns appear as complements of the copula *1ta* ‘become’, rather than as complements of the copula *imo*. Such sentences with *1ta* are structurally identical to those with the copula *imo*, including as arguments a copula subject and a copula complement. Examples with *1ta* are given in (21–22):

- (21) With adjective  
 [*1khi*]CS [*3kathe*]CC [*1ta-pa*]PRED  
 3sg thin become-NR  
 ‘He is (still) becoming thin.’  
 (22) With noun  
 [*2kyu 2tso=ko*]CS [*2thi*]CC [*1ta-tsi*]PRED  
 water PROX=DEF lake become-PERF  
 ‘This water became a lake.’

To negate a copular clause with *imo*, whether the complement slot is filled by a simple adjective or a noun, the suppletive negative copula *1a-re* is used in place of (or in conjunction with) *imo*:

- (23) With adjective  
*1u 1nyukyu=ko 1mlenky 1a-re (1mo)*  
 DIST.DEM dog=DEF black NEG-COP COP  
 ‘That dog is not black.’

- (24) With noun

*iu 3tore 1a-re 1mo*

DIST.DEM graveyard NEG-COP COP

'It (that piece of land) wasn't a graveyard (at the time of the avalanche).'

To negate examples with *1ta* 'become', the negative morpheme prefixes to the verb:

- (25) With adjective

*2muntse=ri 4thĩ=ko 2mona 1a-ta-tsi*

night=LOC house=DEF dark NEG-become-PERF

'At night, the house did not become dark.'

- (26) With noun

*iu 3tore 1a-ta-tsi*

DIST.DEM graveyard NEG-become-PERF

'It did not become a graveyard.' (Elicited, based on example (24))

It is possible to omit the copula in constructions with both nominal and adjectival copula complements:

- (27)
- 2tso=ko 2mi*

PROX=DEF eye

'This is an eye.'

- (28)
- 4thĩ=ko 3caŋku*

house=DEF green

'The house is green.'

These verbless clauses occur more frequently in elicited contexts than in connected speech, which may be in part due to the way new information is presented, or the way that given information is modified in Manange narratives. Actually, the only examples we have from connected speech use colour terms. An example is given in (29), which is a description by a Manange woman of Nar (a Nepal ethnic group) clothing:

- (29)
- 2phi=ko 1piŋkya, 3naŋ=ko=ri 1olkya,*

top=DEF blue, inside=DEF=LOC red,

'The top of (it was) blue, the inside part (was) red.'

There are some interesting questions as to the structure of such examples which lack a final copula. Beginning with the ascriptive examples such as (27–28), Dixon (Ch. 1) suggests that these can be analysed as two NPs in apposition. However, one wishes the analysis to reflect the symmetry of structure in Manange between the ascriptive and predicative adjective cases. One possible structural analysis of examples such as (28–29), those which consist of an NP and a simple adjective only, would be to assume that in the absence of the copula, the adjective takes on the role of the intransitive predicate, and the structure simplifies from a clause with



two core arguments (CS, CC) preceding a copula, to one with only one core argument (S), as represented in (30):

- (30) [2phi=ko]<sub>S</sub> [1piŋkya]<sub>INTRANSITIVE PREDICATE</sub>  
 top=DEF blue  
 ‘The top of (it was) blue.’

The problem with this approach is that the adjective does not take on any characteristics of predicates. Not only does the simple adjective lack verbal morphology, it also cannot be followed by evidentials.

- (31) \**ɪu 1piŋkya ɪmi*  
 3sg blue EVID.PERF  
 ‘It was blue (I think).’

Alternatively, one can analyse the structure simply as lacking a predicate, and consisting of a copula subject and a copula complement:

- (32) [2phi=ko]<sub>CS</sub> [1piŋkya]<sub>CC</sub>  
 top=DEF blue

This structure does not result in any structural or functional ambiguity. Consider the fact that the only position for a simple adjective outside of a noun phrase is the copula complement slot. Thus when a speaker produces a noun phrase followed by a simple adjective, he or she is invoking the copular structure, signalling to the hearer to assign the simple adjective to the copula complement. Once this is done, the copula, being empty semantically, provides no additional information that is needed to understand either the structure or the meaning of the clause. If the speaker needs to convey additional information in the predicate, such as evidentiality, negation, modality, or perfectivity, then the copula must be present as the ‘magnet’ for these categories. This is why the verb *ɪɬa* ‘become’, which also participates in structures with copula complements, cannot be unexpressed; it conveys the additional aspectual information of entrance into a state.

If we accept that adjectives may maintain their copula complement status even in the absence of the copula, then the same argument may be made for nouns. That is, rather than assuming that the sentence *ɪŋa ɪamtsi* ‘I am a doctor/healer’ consists of two NPs in apposition, we can maintain the symmetry between the ascriptive and the predicative adjective structures if we analyse the NPs as filling two separate syntactic slots, the first being the copula subject, and the second the copula complement. This analysis also has an ancillary benefit of allowing us to then restrict the notion of apposition so that it holds only between two adjacent, coreferential NPs that have the same syntactic status in a clause (both are either A, S, O, CS, or CC).

### 3.3.3. Causation strategies

Manange has three causation strategies: morphological, bi-clausal, and lexical.

Adjectives and nouns participate in only bi-clausal causation, while verbs and verb-like adjectives participate in all three strategies.<sup>7</sup>

In morphological causatives, a verb or verb-like adjective compounds with the verb *ila* 'do' to increase the valency of the clause, creating an agentive 'causer' and a dative/locative-marked 'causee':

- (33) Verb in morphological causative  
*1ale=ko=tse 1nani=ri 3kra 1la 1mi*  
 boy=DEF=ERG child=LOC cry do EVID  
 'The boy made the child cry.'
- (34) Verb-like adjective in morphological causative  
*1ηa=tse 2kyu=ko 3pla 1la-tsi*  
 1sg=ERG water=DEF cold do-PERF  
 'I chilled the water/made it cold.'

As is described in more detail in §4, while verb-like adjectives participate to a limited extent in morphological causatives, simple adjectives do not compound directly with *ila* 'do' to form a causative clause. Therefore, an example such as (35) below is unacceptable to Manange speakers:

- (35) \**1ηa=tse 2shosho=ko 1olkya 1la-tsi*  
 1sg=ERG paper=DEF red do-PERF  
 'I made the paper red/reddened the paper.'

Rather, an acceptable way of conveying the causing of paper to become red is done through a bi-clausal causative. In this strategy, the agent/causer is ergative-marked, and is followed by *ila* 'do' which takes the clause-chaining suffix *-tse*. The caused action is expressed in a second clause, as in:

- (36) *1ηa=tse 1la-tse 2shosho 1olkya 1ta 1mi*  
 1sg=ERG do-CH paper red become EVID  
 'I made the paper red/reddened the paper.'

Like simple adjectives, nouns do not occur in morphological causatives. Therefore the way to say a sentence like 'I made him (become) a doctor' would be expressed in a sentence like 'I taught him to be a doctor,' or in a bi-clausal structure like:

- (37) *1ηa=tse 1la-tse 1khi 1amtsi 1ta 1mi*  
 1sg=ERG do-CH 3sg doctor become EVID  
 'I made him become a doctor (through my doing/influence).'

<sup>7</sup> The word *ikharkya* 'dry' is the one simple adjective that can appear in a morphological causative, e.g. *ikharkya 1la-tsi* 'to dry something'. Since drying of food and clothing are common Manange activities, this form is probably used with more frequency than others, so allows the simpler morphological causative.

3.4. COMPARISON OF SIMPLE ADJECTIVES WITH OTHER LEXICAL CLASSES

This description of the simple adjective class has mentioned a number of properties that distinguish this class from the classes of nouns and verbs. These facts are summarized in Table 1.

Although nouns and simple adjectives share syntactic behaviours, in that both may occur in copula complement slots, we see from this table that the two classes differ in their phonotactic realizations, in their ability to function as heads of NPs, and in their ability to form compounds with *ila* ‘do’. The most striking difference between simple adjectives and verbs is, of course, the inability of simple adjectives to take verbal inflections or to compound with *ila* ‘do’ in morphological causatives. In addition, they differ in their phonotactic properties, and in their position within NPs.

Simple adjectives also differ from verb-like adjectives in a number of ways. These will be discussed in detail in §4.4 below.

TABLE 1. Comparison of properties of simple adjectives, nouns, verbs

Property	Simple adjectives	Nouns	Verbs
Phonotactic constraints (§3.1)	None	Many	Many
Affixation (§3.2)	None	None	Some
Head of NP (§3.3.1)	No	Yes	No
Post-nominal in NP (§3.3.1)	Yes	—	No
Occur as copula complement (§3.3.2)	Yes	Yes	No
Morphological Causation (§3.3.3)	No	No	Yes

**4. Phonological, morphological, and syntactic properties of verb-like adjectives**

There is clear evidence that verb-like adjectives are a distinct lexical class from the classes of nouns and simple adjectives. The mere fact that they may be inflected with a limited range of verbal suffixes is sufficient to establish this fact, although other behaviour that differentiates these classes also exists. However, since verb-like adjectives share many morphological properties with verbs, it is not immediately obvious that verb-like adjectives are not simply a sub-class of verbs, as opposed to being a distinct lexical class. Throughout our description, we will consider whether the ways in which verb-like adjectives are distinct from verbs can be attributed to their different semantic properties. We will argue that while some of the independent behaviour of verb-like adjectives may be due to semantics, there is still sufficient morphosyntactic evidence to consider verb-like adjectives to be a distinct lexical class from verbs.

## 4.1. PHONOLOGICAL PROPERTIES

Verb-like adjectives evidence the same phonological behaviour of the lexical classes of nouns and verbs. They are largely monosyllabic. They also conform to the CCVC syllable template, and the constraints on which elements may occupy C-slots. In addition, verb-like adjectives are found in all four tone categories.

## 4.2. MORPHOLOGICAL PROPERTIES

When functioning in attributive contexts, verb-like adjectives may take the full range of noun-phrase enclitics, providing they are the last element in the NP. This is predicted behaviour with clitics. Since verbs never occur as the last element in the NP they are never cliticized.

Verb-like adjectives inflect with some, but not all, of the morphology associated with verbs. Verb-like adjectives occur in most environments with the nominalizer *-pa*. They also may inflect with the perfective *-tsi*, e.g. *2khaŋ-tsi* ‘was cold’. And they may inflect with the clause-chaining suffix *-tse* in a variety of structures, as in the following example:

- (38) *2khaŋ-tse ɪla-tse ɪten*,  
 cold-CH do-CH then,  
*2khaŋ-tse 2khaŋ-tse 4a-thya-pa ɪla-tse*  
 cold-CH cold-CH NEG-bear-NR do-CH  
 ‘Because of being cold, being very cold (the buffalo) couldn’t bear it . . .’

Verb-like adjectives also inflect with the purposive suffix which follows the nominalizer, e.g. *4phlo-pa-ri* ‘in order to be rich’. They may also be followed by the conditional particle, e.g. *4phlo kyana* ‘if s/he is rich’.

Verb-like adjectives are also similar to verbs in that they may compound with *ɪla* ‘do’ to form a morphological causative. This was illustrated in example (34) above.

By contrast, simple adjectives, because they are not verb-like, do not participate in these structures. In all cases, they must precede *ɪmo* ‘be’ or *ɪta* ‘become’, which then take the verbal morphology.

Verb-like adjectives do not take all of the inflectional possibilities that true verbs take. For example, they do not occur with *-tso*, a modal suffix indicating speaker commitment to bring about a state of affairs. The fact that this suffix does not occur on verb-like adjectives may be attributable to the fact that most property concepts are not controllable, hence a speaker may not easily commit to taking on that property.

Verb-like adjectives also do not occur with the adverbial subordinating suffix *-ni*. This morpheme, which suffixes to a nominalized verb stem, indicates an interpropositional relationship of sequentiality. If the first verb denotes an event, then it must be completed before the onset of the event of the second clause:

- (39) *4pholpa 3yaŋ-pa-ni,*  
 frog get-NR-SEQ  
*1kxim 4ŋi 4pholpa=ko 1pu 1kha-tsi,*  
 3pl two frog=DEF bring come-PERF  
 'After *having gotten the frog*, the two of them brought the frog (home).'

If the first verb is stative, then it is required that the state be attained before the onset of the second event or state. If the first state is indicated by a verb-like adjective, it is necessary to bring into the construction the verb *ita* 'become' which explicitly denotes completed entrance into the state, thus meeting the semantic conditions necessary for the *-ni* subordinator:

- (40) *3parta 2kyu=ko ile ita-pa-ni, 2te 2laŋ-tse,*  
 pot water=DEF warm become-NR-SEQ take lift/pluck-CH  
 'After the water pot *becomes warm/warms*, I take it off.'

In example (40) one cannot replace *ile ita-pa-ni* with *ile-pa-ni*, because the verb *ita* 'become' provides essential information about the completion of the warming. We can see then that verbs and verb-like adjectives differ with respect to this suffix.

#### 4.3. SYNTACTIC PROPERTIES OF VERB-LIKE ADJECTIVES

Verb-like adjectives function attributively (discussed in §4.3.1) and predicatively (discussed in §4.3.2). In predicative contexts they sometimes occur as the intransitive predicate, and they sometimes occur as copula complement. Unlike verbs, verb-like adjectives may not occur in verbal complements (§4.3.3).

##### 4.3.1. Attributive functions

Verb-like adjectives may occur in attributive contexts within the noun-phrase. The majority of verb-like adjectives in this position are suffixed by the nominalizer *-pa*.<sup>8</sup> When modifying a noun within an NP, attributive verb-like adjectives always follow the noun:

- (41) *2kyu 1thya-pa=ri 1thē ita-tsi,*  
 water big-NR=LOC throw become-PERF  
 '(The ashes) were thrown in big water (like a river).'

This behaviour is distinct from that of other verbs, which generally function attributively in pre-nominal relative clauses (see examples 16–17 above).<sup>9</sup> Verb-like adjectives do not occur pre-nominally. Thus there is a significant difference in the

<sup>8</sup> There are four verb-like adjectives that may drop the nominalizer in both attributive and predicative contexts (consultants consider the forms with the nominalizer to be 'better' grammatically, but the forms which lack the nominalizer are more frequent in both elicited and connected speech). These are: *2na* 'sick', *3sa* 'tasty', *ile* 'warm', and *3pla* 'cold'. All four words are common, frequently used words in Manange. The lack of the nominalizer gives these forms the appearance of simple adjectives, and we can speculate that these words might be in the process of shifting lexical class.

<sup>9</sup> See note 5 for discussion of interesting ordering patterns in the speech of a younger speaker.

behaviour of these two lexical classes with regards to word order. This difference is not a trait which one can attribute strictly to the semantics of the verb-like adjectives. Essentially, verb-like adjectives occupy the same noun-phrase position as simple adjectives, which we may refer to more generally as the position for adjectives in the noun phrase.

#### 4.3.2. Predicative functions

The syntactic structures in which verb-like adjectives serve predicative functions differ depending on the aspectual properties of the clause, at times they serve as copula complements and at times as intransitive verbs. As background, and to facilitate comparison, we will begin by describing the inflection of non-adjectival verbs in different tense/aspect/mood (TAM) categories.

Perfective aspect of non-adjectival verbs is conveyed either by means of the suffix *-tsi* or by the particle *imi* (*iro*), depending on evidentiality:

- (42) *2tsu imayi=ko ita-tsi*,  
 PROX buffalo=DEF become-PERF  
 ‘(These yaks) have become buffalo.’
- (43) *3boʃal 3naŋ=ri, itshaŋ imi ro*.  
 bottle inside=LOC put EVID REP  
 ‘(They) put (their frog) inside of a bottle.’

In imperfective clauses, the verb is inflected with the suffix *-tse* (or the allomorph *-tsa*) and followed by the copula *imo*:

- (44) *imakyu=ro 3tsar=ti 3yu-tse imo ten*  
 down=LOC down=LOC descend-CONT COP then  
 ‘(Then some of the yaks) were descending down.’

It is clear that in these constructions the verb and copula together form a single intransitive predicate, and that the structure is not one of a copula with a complement. Evidence for this is that the *imo* is obligatory, and *3yu-tse* has no independent meaning or syntactic function. In addition, when this structure is negated, the negative morpheme prefixes to the lexical verb, and may not attach to the copula, e.g. *3ya 3a-yu-tse imo* ‘the yaks did not descend’. Thus the copula has no status as an independent verb in this construction.

To indicate events in future tense, the verb is inflected with *-pa*, which in this context marks irrealis:

- (45) *3no-pa=ri itʃu-pa 3ya=ko ten*.  
 tall-NR=LOC stay-NR yak=DEF then  
*ikha ki ia-kha-pa*,  
 come or NEG-come-NR  
 ‘The yaks who stayed in the tall place (said), “will they come or not come?” ...’

The copula *imo* cannot occur in this construction, and the inflected verb *ikhΛ-pΛ* constitutes the predicate.

When we contrast the behaviour of verb-like adjectives in these contexts, we find that verb-like adjectives behave like verbs in the perfective, but that their behaviour differs from verbs in the imperfective and irrealis. In perfective contexts, verb-like adjectives either inflect with *-tsi* (or are followed by the evidential *imi* (*ro*)). In both cases the verb-like adjective is functioning as the intransitive predicate of the clause:

- (46) [*1khi*]s [*1thyΛ-tsi*]PRED  
           3sg      big-PERF  
           ‘He was big.’

Although verbs and verb-like adjectives show similar morphosyntactic behaviour in the perfective aspect, they differ in the imperfective. Verb-like adjectives do not inflect with *-tse*. Instead, they are suffixed by *-pΛ* and occur as complements of the copula *imo*.<sup>10</sup> The syntactic structure here is identical to that found with predicative simple adjectives:

- (47) [*3mi      imile=ko*]CS [*2peʔ 2srurŋ-pΛ*]CC [*imo*]PRED  
           person life=DEF      very short-NR      COP  
           ‘Man’s life/human life is very short.’

One negates this structure by prefixing the negative morpheme to the copula, resulting in the suppletive negative form *ia-re* (*imo*), e.g. *imile-ko 2srurŋ-pΛ ia-re* (*imo*) ‘life is not short’. The ability of the copula to negate is evidence that it is an independent verb and constitutes the predicate. This stands in contrast to the imperfective construction found with non-adjectival verbs, where negation must prefix to the lexical verb.

A second piece of evidence that this construction entails a copula with its complement is that, as with simple adjectives in predicative contexts, the copula may be omitted from this structure:

- (48) [*4thi    3naŋ=ri*]s [*4sol-pΛ*]CC (*imo*)  
           house inside=LOC bright-NR (COP)  
           ‘The house is bright.’
- (49) [*1ŋΛ*]s [*3taŋ-pΛ*]CC (*imo*)  
           1sg    happy-NR (COP)  
           ‘I am happy.’

Once again, this structure is distinct from that found with non-adjectival imperfective verbs, where the verb inflects with *-tse*, and the copula is obligatory.

<sup>10</sup> The five exceptional verb-like adjectives discussed in note 7 may occur without *-pΛ* in this position, e.g. *1ŋΛ 2na imo* ‘I am sick’.

To indicate future tense with verb-like adjectives, the verb *ita* ‘become’ is used, inflected with the irrealis *-pa*. The verb-like adjective is inflected with *-pa* and takes the position of copula complement:

- (50) [1kyẽ=ko]CS [3sa-pa]CC [1ta-pa]PRED  
 rice=DEF tasty-NR become-NR  
 ‘The rice will be tasty.’

It is not possible to indicate future/irrealis by simply inflecting the verb-like adjective with *-pa*, as one does with simple verbs, as this would result in an imperfective interpretation, as in (48) above.

Table 2 summarizes the syntactic and morphological differences between verb-like adjectives and non-adjectival verbs in predicative contexts. We can see that while verbs function consistently in intransitive predicates and differ primarily in their inflection, verb-like adjectives only function as intransitive predicates in perfective contexts. In imperfective and irrealis contexts, verb-like adjectives parallel simple adjectives in that they function as copula complements, followed either by the optional copula in imperfective contexts, or by the inflected verb *ita* ‘become’ in irrealis contexts.

TABLE 2. Properties of verbs, verb-like adjectives, and simple adjectives in non-attributive contexts

	Verbs	Verb-like adjectives (V.ADJ)	Simple adjectives
Perfective	[V-tsi] <sub>PRED</sub> [V EVID] <sub>pred</sub>	[V.ADJ-tsi] <sub>PRED</sub> [V.ADJ EVID] <sub>PRED</sub>	ADJ [1mo 1mu] <sub>PRED</sub>
Imperfective	[V-tse mo] <sub>INTR PRED</sub>	[V.ADJ-pa]CC ([1mo] <sub>PRED</sub> )	ADJ [1mo 1mu] <sub>PRED</sub>
Irrealis	[V-pa] <sub>INTR PRED</sub>	[V.ADJ-pa]CC [1ta-pa] <sub>PRED</sub>	ADJ [1ta-pa] <sub>PRED</sub>

#### 4.3.3. Complementation

Another difference between verb-like adjectives and true verbs is the inability of verb-like adjectives to occur in complement clauses with complement-taking predicates such as desideratives, deontics, and abilitatives. In desiderative constructions, for example, true verbs are nominalized and function as complements of the verb *3saŋ* ‘desire’:

- (51) 1ŋa 4kwhe 1prim-pa 3saŋ 1kha 1mo  
 1sg song hit-NR desire come COP  
 ‘I want to sing.’

Unlike verbs, verb-like adjectives may not be directly suffixed with *-pa* and precede *3saŋ* ‘desire’ in this type of complement structure:



- (52) Verb-like adjective  
*\*ɪŋɬ ɔphlo-pɬ ʒsaŋ ɪkɬɬ ɪmo*  
 1sg rich-NR desire come COP  
 'I want to be rich.'

Rather, verb-like adjectives must precede the copulas *ɪmo* or *ɪtɬ* to express the desire to be or to become a particular attribute:<sup>11</sup>

- (53) *ɪŋɬ ɔphlo-pɬ ɪmo-pɬ ʒsaŋ ɪkɬɬ ɪmo*  
 1sg rich-NR COP-NR desire come COP  
 'I want to be rich.'

It is interesting to note that while verb-like adjectives are excluded from forming complements, it is possible for them to participate in adverbial clauses, such as the conditional and the purposive. There is no clear semantic explanation for this distinction; one must attribute it to the fact that verb-like adjectives form a distinct lexical class, and that the syntactic behaviour of this class parallels that of simple adjectives.

#### 4.4. COMPARISON OF VERB-LIKE ADJECTIVES WITH OTHER LEXICAL CLASSES

It is clear that one can differentiate verb-like adjectives from nouns by a large number of properties (e.g. inflection, ability to head an NP, modification) and there is no question that verb-like adjectives are not nouns. It is very interesting, however, to compare verb-like adjectives with simple adjectives and verbs. Table 3 lists a number of relevant properties for the three classes.<sup>12</sup> We see that verb-like adjectives are similar to verbs and distinct from simple adjectives in both their phonotactic and their morphological properties. As discussed above, the failure of verb-like adjectives to take some of the verbal inflections may be attributed to their stativity, and hence may be a result of their semantic properties and not strictly due to a lexical class distinction. Verb-like adjectives also share with verbs the ability to stand as intransitive predicates, but only in the perfective. This is the only syntactic similarity between the two classes.

Verb-like adjectives share the majority of their syntactic behaviour with simple adjectives. Verb-like and simple adjectives occupy the same position in the NP and occur as copula complements in predicative constructions. They are also both barred from serving as complements of verbs. The only difference in syntactic behaviour between the two classes is in the perfective aspect, where verb-

<sup>11</sup> Not surprisingly the same is true of simple adjectives, which also require use of a copula to form a complement.

<sup>12</sup> As noted by Dixon in Chapter 1 of this volume, two other criteria which commonly differentiate adjectives from other lexical classes are comparative constructions and intensifiers. In Manange, comparative constructions can be used with adjectival, verbal, or nominal standards of comparison. Intensifiers may modify verbs, both adjective classes, and nouns, with a similar semantic interpretation of intensification. Thus neither of these criteria are relevant for differentiating adjective classes from other lexical classes.

TABLE 3. Comparison of verb-like adjectives, simple adjectives, and verbs

Property	Simple adjectives	Verb-like adjectives	Verbs
Conform to phonotactic constraints (§4.1)	No	Yes	Yes
Morphological causatives (§3.3.3)	No	Yes	Yes
Take verbal inflections (§4.2 and §4.3.2)	No	Some	Yes
Intransitive predicate in perfective (§4.3.2)	No	Yes	Yes
Intrans. pred. in imperfective and irrealis (§4.3.2)	No	No	Yes
Post-nominal in NP (§4.3.1)	Yes	Yes	No
Occur in complement structures (§4.3.3)	No	No	Yes
May occur as copula complement (§4.3.2)	Yes	Yes	No
May occur with adverbial subordinating suffix <i>-ni</i> (§4.2)	No	No	Yes

like adjectives take finite verbal inflections and constitute intransitive predicates. Otherwise, verb-like adjectives are syntactically identical to simple adjectives. The verb-like adjective class thus appears to be a mixed class, with verbal phonology and morphology, and primarily adjectival syntax.

### 5. Conclusions: verb-like adjectives or adjective-like verbs?

This study has contrasted the semantic, phonological, morphological, and syntactic behaviour of two distinct lexical classes. We have demonstrated that Manange has one class of simple adjectives that is clearly distinct lexically from verbs, nouns, and verb-like adjectives. More interesting, we have described in detail a second lexical class that behaves phonologically and morphologically like verbs, and syntactically like adjectives. It is possible to make a decision to emphasize one set of criteria over another. We could say that syntactic criteria are definitional for the adjective lexical class, which would require us to conclude that Manange has two classes of adjectives. Alternatively, we could take the phonological and/or morphological criteria as definitional, and thereby conclude that verb-like adjectives in Manange are simply a sub-class of verbs with distinct syntactic and semantic properties. A more descriptively accurate approach, however, and one which thus elucidates the true nature of the lexical category, is to refer to it as ‘hybrid’, with properties of both verbs and adjectives.

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# The Adjective Class in Tariana

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## 1. Preliminaries

Tariana is an endangered North Arawak language spoken in the linguistic area of the Vaupés river basin.<sup>1</sup> This area is known for its institutionalized multilingualism based on the language group exogamy operating between speakers of Tariana and of languages belonging to the East Tucanoan sub-group (including Tucano, Piratapuya, Wanano, and Desano). Multilingualism is maintained through a strong inhibition against ‘language mixing’ viewed in terms of using lexical or grammatical morphemes from another language. A long-term interaction between East Tucanoan languages and Tariana has resulted in a rampant diffusion of grammatical and semantic patterns (though not so much of forms) and calquing of categories. Comparison of Tariana with other Arawak languages (especially with the closely related Baniwa of Içana/Kurripako and Piapoco) helps distinguish patterns inherited from the proto-language from those acquired through areal diffusion. A combination of genetically inherited features, areally acquired properties, and independent innovations accounts for the complexity of Tariana grammar.

Tariana is polysynthetic, agglutinating with some fusion. It combines head-marking morphology with elements of dependent-marking. Head-marking properties of the language are inherited from the proto-language, while dependent-marking properties have been acquired by areal diffusion from East Tucanoan languages (see the detailed discussion in Aikhenvald 2002c). For instance, unlike

<sup>1</sup> Tariana is currently spoken by about 100 people in two villages, Santa Rosa (also known as Juquirá-ponta, lit. ‘Point of Salt’) and Periquitos, on the upper Vaupés river. The two dialects are mutually intelligible (the difference is comparable to that between British English and American English; or Portuguese as spoken in Portugal and as spoken in Brazil). I have been working on Tariana since 1991, with over 90% of the speakers of Santa Rosa dialect, and with 70% of those from Periquitos. My corpus contains over 200 stories (about 1,500 pages), and also conversations and wordlists. A detailed grammatical description is Aikhenvald (2003); Aikhenvald (2002b) is a dictionary. I owe a considerable debt to all my teachers of the Tariana language: the Brito family of Santa Rosa and the Muniz family of Periquitos, and to my teachers of Baniwa and Warekena. Special thanks go to R. M. W. Dixon for insightful comments, and to Elias and Lenita Coelho de Assis for invaluable support in the fieldwork situation. I am grateful to Tania Strahan and Adam Bowles for editorial assistance. The financial assistance from the Wenner Gren Foundation for Anthropological Research is gratefully acknowledged.

in most other Arawak languages, grammatical relations in Tariana are marked by cases, on a nominative–accusative basis, calquing an East Tucanoan pattern. Tariana has productive verb serialization (shared with its Arawak relatives) and limited verb compounding (resulting from areal diffusion). There is a large system of classifiers, and obligatory classifier agreement in a noun phrase. Constituent order depends on discourse; word order within some constituents is fixed, and within others depends on what is in focus.

The open classes in Tariana are nouns and verbs. Underived adjectives form a smallish closed class of about twenty-nine items. Derived adjectives are an open class. Adjectives share some features with nouns and some with stative verbs; they also have properties of their own. In §2, I discuss grammatical categories and the syntactic functions of verbs and of nouns. Then, in §3, I discuss semantic, morphological, and syntactic properties of adjectives, and also the ways in which adjectival concepts are expressed in Tariana. Semantic overlap and semantic relationships between adjectives and other word classes are discussed in §4. A summary and a historical perspective on Tariana adjectives are given in §5.

## 2. Properties of verbs and nouns

In this section, I consider the structure of a simple verb (§2.1), grammatical relations and verb types (§2.2), and the structure of a noun and the organization of a noun phrase (§2.3). Nouns and verbs are contrasted in §2.4.

### 2.1. VERB STRUCTURE

Tariana distinguishes simple predicates and serial verb constructions. Every verbal root is either ambitransitive of A=S<sub>a</sub> type (prefixed) or intransitive of type S<sub>o</sub> or of type S<sub>io</sub> (both prefixless). Person prefixes are used with transitive and active intransitive verbs—see (1) and (2).

- (1) *kawhi*            *nu-ira-ka-sita*  
 manioc.flour 1sgA-drink-REC.P.VIS-ALREADY  
 ‘I have already drunk manioc flour (mixed with water)’
- (2) *nu-a*    *nu-pita-de*  
 1sgS<sub>a</sub>-go 1sgS<sub>a</sub>-wash-FUT.CERT  
 ‘I will go and wash myself’

No person markers occur on prefixless stative verbs, in agreement with the general active-stative profile inherited from Proto-Arawak; an example is at (3).

- (3) *harame-pu-mahka*            *nuha*  
 be.scared-AUG-REC.P.NONVIS I(S<sub>o</sub>)  
 ‘I got very scared’

Prefixes mark possessors on inalienably possessed nouns, e.g. *nu-kapi* (1sg-hand)

TABLE 1. Person, gender, and number prefixes and corresponding free pronouns in Tariana

	A/S <sub>a</sub>	Possessor	Free pronoun		A/S <sub>a</sub> ; Possessor	Free pronoun
1sg		<i>nu-</i>	<i>nuha</i>	1pl	<i>wa-</i>	<i>waha</i>
2sg		<i>pi-</i>	<i>piha</i>	2pl	<i>i-</i>	<i>ihya</i>
3sgnf		<i>di-</i>	<i>diha</i>	3pl	<i>na-</i>	<i>naha</i>
3sgf		<i>du-</i>	<i>duha</i>			
Impersonal		<i>pa-</i>	<i>paha</i>			
Indefinite	—	<i>i-</i>	—			

‘my hand’, *nu-we-ri* (1sg-younger.sibling-MASC.sg) ‘my younger brother’. This property is shared with the majority of Arawak languages (see Aikhenvald 1999d).

Cross-referencing prefixes used with verbs and with nouns in Tariana are given in Table 1. All the forms are the same, except for indefinite person. This marker occurs with inalienably possessed nouns in possessive constructions with an overt possessor, e.g. *ʃiāri i-kapi* (man INDEF-hand) ‘man’s hand’. With verbs, this marker occurs only in archaic fixed expressions.

The structure of a verbal word is given in Fig. 1; this diagram also contains a list of grammatical meanings which may be expressed in a verb.

Simple predicates have one prefix position and up to nine suffix positions. A minimal verbal word consists of positions 1, 2, and 3. Position 1 has to be filled for transitive and intransitive active verbs (see (1)–(2)). Stative verbs do not take prefixes; neither do they occur with *aktionsart* enclitics (slot 17). Other positions have to be filled only if the corresponding meaning needs to be expressed.<sup>2</sup>

## 2.2. GRAMMATICAL RELATIONS AND VERB TYPES

Grammatical relations in Tariana are marked with personal prefixes, on an active–stative basis—see (1)–(3). Unlike in most other Arawak languages, there is also a case system, of a nominative–accusative type. A focused subject is marked with the enclitic *-ne/-nhe*; and a topical non-subject with the enclitic *-nuku*. This is shown in (4)–(6).

- (4) *di-a-pidana*                      *di-pita*                      *ñamu-ne*  
 3sgnf-go-REM.P.REP 3sgnf-wash evil.spirit-FOC.A/s  
 ‘The evil spirit (not anyone else) went to bathe’
- (5) *kawhi-nuku*                      *nu-ira-de*                      *nuha*  
 manioc.flour-TOP.NON.A/s 1sg-drink-FUT.CERT I  
 ‘I will drink the manioc flour (we were talking about)’

<sup>2</sup> Not all enclitics can co-occur; for instance, imperative does not co-occur with evidentiality and tense (full details are found in Aikhenvald 1999b, 2002a, and 2003). Variable ordering is allowed for position 19; this has a pragmatic effect.

Personal pronouns form their non-subject case with the suffix *-na*—see (6).

- (6) *nu-na di-harameta-pu-mhana ñamu-ne*  
1sg-OBJ 3sgnf-be.scared:CAUS-AUG-REM.P.NONVIS evil.spirit-FOC.A/s  
‘The evil spirit (was the one who) really scared me’

Table 2 contains a summary of grammatical relations and their marking with the core cases.

Prefix	1. Cross-referencing prefixes (A/S <sub>a</sub> ) (3 persons in singular and in plural), or negative <i>ma-</i> , or relative <i>ka-</i> 2. ROOT
Suffixes	3. Thematic syllable 4. Causative <i>-ita</i> 5. Negative <i>-(ka)de</i> 6. Reciprocal (rarely: reflexive) <i>-kaka</i> 7. <i>-ina</i> ‘almost, a little bit’ 8. Topic-advancing <i>-ni</i> , or passive <i>-kana</i> , or purposive non-visual <i>-hyu</i> , or visual <i>-karu</i> 9. Verbal classifiers 10. Benefactive <i>-pena</i> 11. Relativizers or nominalizers: <i>-ri</i> , <i>-mi</i> ‘object and locative nominalization’; <i>-nipe</i> ‘action nominalization’; <i>-kani</i> ‘agent nominalization’ 12. Intentional <i>=kasu</i> ‘be about to’ 13. Mood (several imperatives, declarative, frustrative, conditional, apprehensive, interrogative fused with evidentiality and tense) 14. Aspect ‘zone’ I 14a. Habitual prescribed <i>=hyuna</i> ‘what you do and what you ought to do’ 14b. Customary <i>=kape</i> 14c. Habitual repetitive <i>=nipe</i> 14d. Anterior <i>=nhi</i> 15. Evidentiality and tense, e.g. <i>=mhana</i> ‘nonvisual-remote.past’ 16. Epistemic <i>=da</i> ‘doubt’, <i>=pada</i> ‘isn’t it true that’ 17. <i>Aktionsart</i> (manner or extent of associated action, e.g. ‘split open’, ‘step on and feel pain’, ‘wag one’s tail’, ‘away’) 18. Degree (augmentative <i>=pu</i> (also meaning ‘indeed’), diminutive ( <i>=tiki/tuki</i> ), approximative ( <i>=iha/=whya</i> ‘more or less’), excessive ( <i>-ma</i> ‘too much’)) 19. Aspect ‘zone’ II 19a. Prolonged, ongoing <i>=daka</i> ‘yet, still’ 19b. Perfective <i>=sita</i> ‘already accomplished’ 19c. Repetitive <i>=pita</i> ‘once again’ 19d. Completive <i>=niki</i> ‘totally, completely’ 20. Switch-reference and clause-chaining markers 21. Emphatic enclitics <i>=a/=ya</i> , <i>=wani</i> ; evidence <i>=sō</i> ‘isn’t it so?’

FIGURE 1. Verb structure in Tariana

TABLE 2. Grammatical relations and core cases in Tariana

Grammatical function	Discourse status	Nouns	Pronouns
Subject (A/S)	non-focused		-Ø
	focused		-ne/-nhe
Non-subject (NonA/S)	non-topical	-Ø	-na
	topical		-nuku

There are two oblique cases: the instrumental *-ne* (*-ine* with personal pronouns) and the locative *-se*. All the case markers appear once per noun phrase; they go onto its last constituent.

A small sub-class of stative verbs referring to physical states such as ‘be sleepy’, ‘be hungry’, ‘be thirsty’ mark their only argument with the non-subject case, as shown in (7). These verbs are termed  $S_{io}$  (Aikhenvald 2001).

- (7) *unina-mha*                      *nu-na*  
       be.thirsty-PRES.NONVIS 1SG-OBJ(= $S_{io}$ )  
       ‘I am thirsty’ (lit. ‘thirsty to-me’)

The two classes of stative verbs,  $S_{io}$  and  $S_o$ , differ from active intransitive verbs and between each other, in a number of ways. No stative verb can be used in a positive command—with the exception of the detrimental imperative, as in *harame-tupe* (be.scared-IMPER.DETR) ‘may you be scared (to your detriment)’. All  $S_o$  verbs can occur in prohibitive constructions, as in *mhāida karu* (PROH be.afraid) ‘don’t be afraid’, while  $S_{io}$  verbs cannot. A serial verb construction cannot consist just of stative ( $S_o$ ) verbs; it can consist just of  $S_{io}$  verbs.  $S_{io}$  verbs do not occur with apprehensive or intentional moods, while  $S_o$  verbs do. And we will see in §3.2 how some adjectival roots can function as  $S_o$  and  $S_{io}$  verbs.

### 2.3. NOUN STRUCTURE

The structure of a nominal word and the kinds of meanings expressed are given in Fig. 2. Not all nouns can have all positions filled (e.g. 1 is only for inalienably possessed prefixed nouns and 3 is only for nouns with a human referent). A minimal nominal word can consist just of a root, or of prefix-plus-root, if it is inalienably possessed. Other markers are used if the sort of meaning they denote needs to be expressed. For instance, plural marking is obligatory just with human referents.

Tariana has a large number of classifiers. Somewhat different sets are used with numerals one to four, with demonstratives, in possessive constructions (to categorize the possessed noun), with verbs, and as derivational suffixes on nouns. Noun class markers appear on modifiers, including all adjectives, interrogatives, and a few other closed class items (see Aikhenvald 2000b, and ch. 5 of Aikhenvald 2003).

Classifiers categorize the referent in terms of animacy, humanness, shape, form, and a number of other properties. They serve to disambiguate polysemous nouns



and focus on varying properties of a referent. For instance, *heku*, without a classifier, means ‘wood’ in general. With a classifier, *heku-da* (wood-CLASSIFIER:ROUND.OBJECT) refers to the fruit of a tree, and *heku-na* (wood-CLASSIFIER:VERTICAL) refers to a ‘tree’. Similarly, *de:ri* means ‘banana’ in general, while *de:ri-pa* (banana-CLASSIFIER:LARGISH.LONG) means ‘banana fruit’, *de:ri-pi* (banana-CLASSIFIER:LONG.THIN) means ‘banana palm’, and *de:ri-tfi* (banana-CLASSIFIER:BUNCH) means ‘bunch of bananas’.

A noun can occur with various classifiers depending on which property is focused on. Classifiers are not semantically redundant. For instance, if ‘road’ is seen as just a path, it requires the classifier *-puna* ‘CL.ROAD’, e.g. *hinipu hanu-puna* (road big-CL.ROAD) ‘a big road’. When the same noun refers to a waterway, *-pua* ‘CL.RIVER’ is used, e.g. *hinipu hanu-pua* ‘a big road by a river’ (seen just as a river, nothing else). If a road is seen as curved, it is referred to as *hinipu hanu-kha* (road big-CL.CRV) ‘a big (curved) road’; and if one wants to stress that a road covers a big open space, the classifier *-ipa* (CL.LARGE.OPEN.SPACE) is used, as in *hinipu hanipa* ‘a big road’ (which covers a large area). This is reminiscent of how classifiers are used in numerous South-east Asian languages (see Aikhenvald 2000a: 265–7 and discussion there).

A selection of classifiers and noun class markers is given in Table 3. Noun class markers with human and general animate reference, and those referring to sub-

Prefix	1. Possessive prefix (5 persons in singular, 3 in plural), or negative <i>ma-</i> , or relative <i>ka-</i>
	2. ROOT
Suffixes	{ 3. Gender-sensitive derivational suffix 4. Classifier as a derivational suffix (may be more than one) 5. Plural marker
Enclitics	{ 6. Pejorative = <i>yana</i> (plus plural suffix <i>-pe</i> ) 7. Approximative = <i>iha</i> ‘more or less’ 8. Diminutive = <i>tuki</i> or = <i>tiki</i> (or diminutive plural = <i>tupe</i> ); augmentative = <i>pasi</i> (plus plural suffix <i>-pe</i> ) 9. Tense (past singular masculine = <i>miki-ri</i> , fem. = <i>miki-ru</i> , pl. = <i>miki</i> ; future = <i>pena</i> ) 10. Extralocality and restrictivity ( = <i>wya</i> ‘the one left out; extralocal; participant in a place distinct from where the speech act is’; = <i>mia</i> ‘only’).
Suffix	11. Oblique <i>-se</i> ‘locative’
	{ 12. Oblique case = <i>ne</i> ‘comitative-instrumental’ 13. Contrastive = <i>se</i>
Enclitics	{ 14. Coordinative = <i>misini</i> , = <i>sini</i> ‘also’ 15. Focused A/S = <i>ne</i> 16. Topical Non-Subject = <i>nuku</i>

FIGURE 2. Noun structure in Tariana

TABLE 3. Selection of classifiers and noun class markers in Tariana

	Noun class marker on adjectives and other modifiers		
Semantics	Singular	Plural	Other classifier contexts
General animate; human ('man', 'dog', 'snake', 'clothing')	<i>-ita</i> , as in (8)	<i>-peni</i> , as in (9)	<i>-ita</i> , as in(10)
Substances ('water', 'sweat')	<i>-peri</i>		used only on nouns as a derivational suffix; not used in other contexts
Natural phenomena, places	<i>-wani</i>		
Round objects	<i>-da</i>		
Curved objects	<i>-kha</i>		
Long vertical objects	<i>-na</i>		
Largish and long objects	<i>-pa</i>		
Leaf-like objects	<i>-phe</i>		

stances and natural phenomena, are distinct from classifiers which occur in other morphosyntactic contexts. All other classifiers have the same form in all contexts.

The different forms of the general animate noun class and of corresponding classifiers are illustrated below: (8) illustrates animate singular; (9) illustrates animate plural; and (10) illustrates the corresponding classifier used with a numeral.

- (8) *nu-kesi-ni*      *ma:ʔite*  
 1sg-relative-SING bad:NCL.ANIM  
 'my nasty relative'

- (9) *nu-kesi-pe*      *ma:ʔi-peni*  
 1sg-relative-PL bad-PL.ANIM  
 'my nasty relatives'

- (10) *paita*      *nu-kesi-ni*  
 one:CL.ANIM 1sg-relative-SING  
 'my one relative'

A shape-based classifier, such as *-na* 'long vertical' in (11), has the same form in every environment. The head noun is in parentheses since it is likely to be omitted if recoverable from the context.

- (11) *pa:-na*      *hanu-na*      (*heku-na*)  
 one-CL.VERT big-CL.VERT wood-CL.VERT  
 'one big (tree)'

Position 4 in Fig. 2 can be filled more than once. Several classifiers can be ‘stacked’ as derivational suffixes in one noun, as in *heku-na-phe* (wood-CL.VERT-CL.LEAF.LIKE) ‘one leaf of a tree’, *kara-ka-why-puna* (REL:fly-THEM-CL.CANOE-CL.ROAD) ‘airstrip; road of a flying canoe’, and *pana-phe-dapana* (leaf-CL.LEAF.LIKE-CL.HAB) ‘house made of leaves’.

Some positions in the noun structure cannot be filled simultaneously, e.g. a noun cannot be marked for oblique case and for the focused subject case at the same time.<sup>3</sup> The choice of a plural marker depends on the semantic group a noun belongs to. Nouns with inanimate and human feminine referents form their plural with *-pe*, as in *haiku-na* (tree-CL.VERT), *haiku-na-pe* (tree-CL.VERT-PL) ‘trees’. Kinship nouns and some human nouns have irregular plurals, e.g. *i:naru* ‘woman’, *i:na* ‘women’, *ʃiāri* ‘man’, *āʃa* ‘men’. Nouns containing the singulative *-ni* form their plural by subtracting *-ni* and adding *-pe*, as in (8) and (9).

Plural can also be marked recursively, that is, more than once, since enclitics in positions 6, 8, and 9 require an additional number marker each (also see Aikhenvald 2002a). In the following example, brackets show clitics which require a separate number marking: *nu-daki-ru-má-pe*=[*yanà-pe*]=[*tùpe*]=[*miki*](1sg-grandchild-FEMININE.DERIVATIONAL.MARKER-CL.FEMININE-PL=[PEJ-PL]=[DIM:PL]=[NOM.PAST:PL]) ‘the little bad dead granddaughters’ (each enclitic takes a secondary stress). In addition, kinship nouns, personal names, and nouns with human and animate referents have special vocative forms (often semi-suppletive).

A noun phrase in Tariana consists of the head plus one or more modifiers. An adjective, a noun phrase (when used as a modifier), or a member of one of the closed class modifiers (demonstratives, specifier articles, quantifiers, etc.) all agree with the head in noun class, and in number (if the head has an animate referent). Agreement is the main criterion for heads in Tariana. (Some nouns, with generic reference, can modify other nouns but do not require agreement, e.g. *taria nawiki* (Tariana people) ‘the Tariana people’.)

Some modifiers always precede the head in a noun phrase (these include specifier articles and demonstratives). Others—including all adjectives, numerals, and most quantifiers—can precede or follow the head, depending on the definiteness and specificity of the head noun. Modifiers tend to be placed before a noun which is either definite, specific, or going to be topical, and after an indefinite, non-specific, or otherwise inconsequential noun. In normal speech, the nominal head is frequently omitted if recoverable from the context.

## 2.4. SYNTACTIC FUNCTIONS OF NOUNS AND VERBS

Nouns and verbs differ in their structure, and in the set of grammatical categories they show. Even if the same markers are employed, as is the case with pronominal prefixes, their meanings are different: with nouns, prefixes indicate the possessor,

<sup>3</sup> Positions 15 and 16 can be filled simultaneously, marking two syntactic functions: see Aikhenvald (1999b).

TABLE 4. Word classes and functional slots in Tariana

	Verb	Noun
Head of intransitive predicate	yes: A=S <sub>a</sub> , S <sub>a</sub> , S <sub>o</sub> , S <sub>io</sub>	yes: restricted categories
Head of transitive predicate	yes (some)	no*
Head of NP	no*	yes
Modifier in NP	no*	no*
Modifier of a verb	no	no
Copula complement	no	yes

\* means that certain morphological or syntactic processes have to be applied for a member of the given word class to appear in this function.

while with verbs, they mark the A/S<sub>a</sub> argument. No verbal category is marked recursively—in contrast to the recursive marking of nominal plural. The category of ‘degree’ (diminutive, augmentative, and approximative) is shared by nouns and by verbs; however, it is marked in different ways for these categories. The nominal augmentative morpheme *-pasi* is not used with verbs; *=pu* is used instead. The approximative enclitic *=iha* is used with both nouns and verbs. However, with verbs it is in free variation with *=whya* (attested in the speech of older people), while nouns uniformly use just *=iha*.

The relationship between the two open word classes and functional slots in Tariana is summarized in Table 4. A verb of any class can be head of an intransitive predicate (bearing in mind that just about every transitive verb in Tariana can be used intransitively; details and discussion can be found in Aikhenvald 1999a).

A noun can be the head of an intransitive predicate; it can then combine with a restricted set of morphological categories. A noun in the predicate slot cannot take *aktionsart* enclitics (slot 17 in Fig. 1); neither can it take intentional or apprehensive moods, or be used in a positive or negative command. A noun in the predicate slot is illustrated in (12).

- (12) *nuha-sini tʃiāri-naka*  
 I-TOO man-PRES.VIS  
 ‘I am also a man’ (said the turtle)

Nouns, but not verbs, can be used as copula complements, as shown in (13).

- (13) *yalana-pidana na-dia-niki*  
 non.Indian-REM.P.REP 3pl-become-COMPL  
 ‘They became non-Indians’

Only a verb can be the head of a transitive predicate. To be used as such, some nouns can be verbalized with the suffix *-ita* ‘causative and nominalizer’, e.g. *-ipitana* ‘name’, *-ipitaneta* ‘bestow a name; name’. Only a noun can be head of a noun phrase. A verb has to be nominalized with one of the suffixes listed in position 11 of Fig. 1.

To be used as a modifier in a noun phrase, a noun has to be transformed into a derived adjective, with a noun class marker, e.g. *ʃfinu* (dog) *awakadite* (jungle: NCL.ANIM) ‘dog belonging to the jungle; a jungle dog’ (that is, a wolf). Only a noun with a generic human referent (e.g. ‘people’, ‘man’, ‘woman’) can be used as modifier within a noun phrase (see §2.1).

To be used as a modifier, a verb has to be relativized, using the prefix *ka-* (or its negative counterpart *ma-*), e.g. *ʃfinu* (dog) *kawhi* (manioc.flour) *ka-ira* (REL-drink) ‘a manioc-flour drinking dog; a dog who drinks manioc flour (mixed with water)’. A prefixless verb (which does not take the relativizer *ka-*) can be made into a modifier just by attaching a noun class marker, e.g. *u:ni hui-peri* (water be.tasty-CL.COLL) ‘tasty drink’.

### 3. Adjectives and their properties

Adjectives in Tariana share a number of features with nouns, and a number of features with stative verbs; they also have a few features of their own. Any adjective can be used without a nominal head in a noun phrase, e.g. *inaru ma:ʃfite* ‘bad woman’, or *ma:ʃfite* ‘bad one’. Some bound morphemes are used with nouns and with adjectives, but they have different functions. We first discuss the semantic groups of underived adjectives in §3.1. Morphological properties of adjectives are considered in §3.2, and their syntactic functions are discussed in §3.3.

#### 3.1. SEMANTIC GROUPS OF ADJECTIVES

Adjectives in Tariana can be underived or derived. Underived adjectives form a smallish, closed class of twenty-nine items, discussed below (following the semantic groups outlined in Chapter 1). The Tariana adjectives are given below with the most frequently used noun class marker: for most adjectives this is *-ite* ‘generic animate’; for some it is *-da* ‘round object’ or *-peri* ‘collective; uncountable referent’.

A. DIMENSION: *hanuite* ‘big’; *maleda* ‘thick, large’; *tsüite* ‘small’; *maduite* ‘short’; *medewite* ‘thin’.

Three of these adjectives are morphologically irregular, each in a different way. The adjective stem *hanu-* cannot be used in a plural; the stem *male-* is used instead. (The form *hanu-pe* (big-pl) is a quantifier meaning ‘many’.) That is, *episi-kha hanu-kha* (iron-CL.CRV big-NCL.CRV) ‘a long iron rope’ in the singular corresponds to *episi-kha-pe male-kha-pe* (iron-CL.CRV-PL.INAN big-NCL.CRV-PL.INAN) ‘long iron ropes’ in the plural. This is the only instance of fully suppletive plural marking in Tariana. (Suppletive marking of adjectival plurals is cross-linguistically rare; in Scandinavian languages it involves the adjective ‘little, small’)

The animate form of *male-* in the plural has an additional complexity: *male-* cannot take the animate adjectival plural marker *-peni* unless it also takes the general animate classifier *-ita*. As a result, the plural of *ʃfiāri hanu-ite* (man big-NCL.ANIM) ‘a big man’ is *āʃa maleta-peni* (man:PL large:CL.ANIM-PL.ANIM) ‘big men’. The stem

TABLE 5. 'Big' and 'large' in the plural and in the singular

	Big	Large, thick
Singular	<i>hanu</i> -plus noun class marker	<i>male</i> - plus noun class marker
Plural	<i>male</i> - plus noun class marker plus -plural marker	

*male*- can be used in the singular, with the meaning 'thick, large'. It is restricted to inanimate referents, e.g. *sapatu malepa* (shoe large:NCL.LARGE.OPEN.SPACE) 'large shoe'. The meanings 'big' and 'large' are expressed with two different adjectival stems in the singular and neutralized in the plural—this is shown in Table 5.

The adjective 'small', *tsüite*, is irregular in the way it marks animate plurals: the animate adjectival plural marker cannot attach directly to the stem *tsü*-; it has to be preceded by the general animate classifier *-ita*. The plural of *ʃiāri tsü-ite* (man small-NCL.ANIM) 'a small man' is *āʃa tsü-ita-peni* (man:PL small-CL.ANIM-PL.ANIM) 'small men'. This is reminiscent of how the animate plural is formed on *male*- 'big, large'. (This irregularity is also found with the interrogative *kui*- when used as a modifier, e.g. *kuita-peni* (which:CL.ANIM-PL.ANIM) 'which ones?'). All other adjectives attach the animate adjectival pluralizer to the root, e.g. *ʃiāri walite* (man young:NCL.ANIM) 'a young man' vs. *āʃa wali-peni* (man:PL young-PL.ANIM) 'young men'; and *ʃiāri ma:ʃite* (man bad:NCL.ANIM) 'a bad man' vs. *āʃa ma:ʃi-peni* (man:PL bad-PL.ANIM) 'bad men'.

Two other dimension adjectives are synchronically monomorphemic, but historically derived. The adjective *makite* 'whole, extended' is derived from the root *maka*- which is not used on its own (its function in the modern language is that of a 'dummy' root used to form lexical items by attaching classifiers, e.g. *maka-dawa* (something-CL.ROOM) 'a room; something room-like'; *maka-nai* (something-CL.LAKE) 'a lake; something lake-like'). The adjective *wi:te* 'long; far away' has a cognate root in the stative verbs *wya-ka* 'be far away' (*-ka* is a semi-fossilized thematic marker) (also see §4).

B. AGE: *walite* 'new, young'; *emite* 'young, unripe'; *upite* 'old, worn out' (inanimate referents only).

The term *walite* 'new, young' is unusual in that it can be nominalized with the idiosyncratic suffixes *-ki-ri* (masculine), *-ki-ru* (feminine), to yield *wali-ki-ri* 'young man' and *wali-ki-ru* 'young woman'. The term *emite* is also used in the meaning of 'inexperienced' (that is, relating to human propensity); when used headlessly, it means 'young one; child'.

The term *upite* is used with inanimate referents only, e.g. *yarumakasi upite* (clothing old:NCL.ANIM) 'old clothing', *ha-phe upi-phe* (this-CL.LEAF.LIKE old-CL.LEAF.LIKE) 'this old (book)'. This root also occurs in two adverbs: *upi-tha* (old-FR) 'in the old days' and *upi-mia* (old-only) 'the same place; the same way', and in two nouns: *uphedo* (underlying form: *upi-ha-do*) (old/late-parent-FEM) 'widow' and *upheniri*

(underlying form: *upi-ha-niri*) (old/late-parent-MASC) 'widower'. (Its Baniwa cognate root *u:pi* is an adverb.) The noun *pedaria* (a variant: *pedare*) is used with human referents to mean 'old; adult' (it also means 'ripe', with reference to fruit which falls on the ground when ready to consume).

C. VALUE: *ma:fite* (underlying form: *ma:fi-ite*) 'bad, adverse'; *mafji:te*, *mafjia-ite* 'proper, good'.

These terms have different combinatorial possibilities. The adjective 'bad' can be verbalized with the thematic suffix *-ka* yielding an intransitive copula verb *-mafjika* 'turn into something else'. (The semantics of this verb has to do with the pervasive association of 'otherness' and 'adversity' in Tariana language and culture.) The adjective *mafja* means primarily 'proper, appropriate' and can be extended to mean 'good'. The value adjectives can also be used both as  $S_o$  verbs and as  $S_{io}$  verbs. When used as  $S_o$  verbs (see §3.2), they can form compounds with other stative ( $S_o$ ) verbs (see §3.2).

D. COLOUR: *ewite* 'yellow'; *harite* 'white; light; transparent'; *hiporite* 'green, blue; un-ripe'; *irite* 'red, orange, very dark yellow; ripe'; *kadite* 'black'; *hamarite* 'purple, bluish violet'.

The basic colour adjectives in Tariana present an apparent anomaly, in terms of the hierarchy of colour terms in human languages. According to Berlin and Kay (1969), if a language distinguishes colours such as purple, it ought also to have distinct terms for 'blue' and 'green'. Tariana appears to go against this universal statement: there is just one term covering both 'blue' and 'green', and a separate term for 'bluish purple'. This 'anomaly' is, however, absent from Baniwa of Içana, a language spoken outside the multilingual linguistic area of the Vaupés: Baniwa uses *hipore*—a cognate to the Tariana root *hipore*—as in *hiporite*—in the meaning of 'green', and *amura*—a cognate of Tariana *hamarē*—as in *hamarite*—in the meaning of 'blue'. We can recall that Tariana has been drastically restructured under the influence of East Tucanoan languages. In these languages, there is just one term for 'green' and 'blue': Tucano *ya'sâ*, Desano *yahsari*, Wanano *jaʔ'sa*, and no special term for 'purple', as expected. It seems very likely that the extension of the erstwhile term for 'green', *hipore*-, to cover 'blue' in Tariana is due to language contact, and so is the extension of the erstwhile 'blue' to 'purple' and to 'violet'.

An additional colour adjective, *kesorite* 'muddy, dirty, brownish', appears to be derived from an unknown root *\*-isole* with a prefix *ka*- 'relativizer'. Another adjective, *kapunite* 'striped', is highly unusual in that it appears to be derived from a combination of the prefix *ka*- 'relativizer' with the classifier *-puna* 'road; stripe'.

E. PHYSICAL PROPERTIES: *hamia-peri* 'heavy'; *hedi-peri* 'thick' (e.g. manioc mash); *hipisi-peri* 'bitter'; *heteni-peri* 'bitter and tart'; *kama:-peri* 'sour'; *piwa-peri* 'salty'; *pumeni-peri* 'sweet'; *tara-peri* 'hard'. These adjectives have no morphological irregularities.

F. OTHER. One further adjective does not appear to belong to any of the semantic groups outlined in Chapter 1: *keninite* ‘loved (by women)’ (consisting of the relative-attributive *ka-* plus synchronically unattested root *\*-inina* plus *-ite* NCL.ANIM) and its negative counterpart *meninite* ‘not loved (by women)’ (with the prefix *ma-* which is the counterpart of *ka-*). Semantically, it describes a kind of inherent physical property. This adjective occurs only with the animate noun class marker, and is used to refer to a man who is lucky enough to get a woman, e.g. *ʃiāri i:na keninite* (man woman:PL REL.?:NCL.ANIM) ‘a man loved by women; a man who can get a wife’. In actual texts, the negative counterpart *meninite* is much more frequent than the positive one; numerous Tariana stories relate the misfortunes of a man who cannot get himself a wife, e.g. *wali-kiri i:na meninite* (young-NR:MASC.SG WOMAN:PL NEG.REL.?:NCL.ANIM) ‘a man not loved by women; a man who cannot get a wife.’<sup>4</sup> Table 6 is a survey, for Tariana, of the semantic types typically associated with the adjective class.

Tariana has no lexemes referring to form, such as round, hollow, or curved. The corresponding meanings are expressed with classifiers which combine reference to shape, form, and sometimes dimension, e.g. *kanari hanu-kwema* (mirror big-CL.FLAT.ROUND) ‘big, round mirror’.

The age term *pedaria*, *pedare* ‘old; adult (human referents only); ripe’ is a noun. Etymologically, it consists of the root *pe* ‘old, belonging to old times’ (also in Tariana *upi*, Baniwa *u:pi*, Piapoco *pe*; cognate with *upi-* in *upite*) plus the generic noun class marker *-dari* (lost from Tariana; cognate with Baniwa *-dari* ‘NCL.ANIMATE’).

The physical property terms *ka-weni* (REL-?) ‘expensive’ and *ma-weni* (NEG-?) ‘cheap’ are relativized forms of a root otherwise absent from the language; this root is likely to be a borrowing from Portuguese *vend-* as in *vender* ‘sell’ (see Aikhenvald 2002c).

Some concepts to do with HUMAN PROPENSITY are expressed through serial verb constructions, e.g. *ka-yena kema* (REL-pass REL:stand) ‘arrogant’; *ka-kalite kapala* (REL-tell REL-put) ‘complainer; prone to boasting’; idiosyncratic collocations involving a verb and an adjective, e.g. *kada-li ka-ka* (black-NR REL-see) ‘envious’; or an adjectivized noun phrase, e.g. *di-kerya-nipe hanupite* (3sgnf-be.jealous-NR much:NCL.ANIM) ‘jealous; the one whose jealousy is plentiful’. The concept of ‘able, knowledgeable’ is expressed with a relativized form of the verb *-yeka* ‘be able to, know how to do things’.

Of the three *S*<sub>10</sub> verbs expressing DIFFICULTY, only the verb *mahyuna* can be occasionally used as a modifier,<sup>5</sup> e.g. *mahyuna-peri* (be.difficult-CL.COLLECT) ‘difficult (referring to a set of something)’, while the other two verbs are not employed this way.

<sup>4</sup> The verbal root *\*inina* was used only once by José Manoel Brito, one of the oldest speakers of the language, in the story about the Tariana ancestors, *i:na menina-de-kana-ka diha* (woman:PL NEG:be.loved?-NEG-PASS/IMPERS-SUB he) ‘since he was not loved by women’. No other Tariana speaker appears to know this root let alone use it.

<sup>5</sup> Etymologically, *mahyuna* probably consists of *ma-* ‘negative’ plus *-a* ‘go, say’ plus *-hyuna* ‘habitual’; while *manhina* probably consists of *ma-* ‘negative’ plus *-anhi* ‘feel, know by feeling’ plus *-na* ‘remote past visual’; and *kanhina* is the positive counterpart of *manhina* with the relative-attributive prefix *ka-*.



SIMILARITY is expressed with the postposition *kayu*; a postpositional noun phrase can be transformed into a modifier—see the discussion of *ʃfinu kayu-peni* ‘the ones who are like dogs’ in §3.3. An alternative to this is the use of the stative verb *hiku* ‘be/look like, appear’ as a modifier, e.g. *nawiki ʃfinu hiku-ite* (person dog be.like-NCL.ANIM) ‘a person who looks like a dog’.

Terms for ‘right’ and ‘left’ are compounds, each with a different structure. The term for ‘left’ is a nominalization of the verb ‘carry’, *pa-sole-kema* (IMPCR-carry-THEM:CL.SIDE), lit. ‘side for carrying’, while the term for ‘right’ is a nominalization

TABLE 6. Coding of adjectival concepts in Tariana

Semantic category	Adjective	Stative verbs	Nouns	Other
DIMENSION	7	<i>kadua</i> ‘be thin’, <i>phanida</i> ‘be thick, broad’, <i>khēsa</i> ‘be wide’, <i>mhēsa</i> ‘be narrow’, <i>khewaka</i> ‘be deep’, <i>wyaka</i> ‘be far’, <i>yenu</i> ‘be tall, high’, etc.	—	—
AGE	3	—	<i>pedaria</i> , <i>pedare</i> ‘old, adult (of humans); ripe’	—
VALUE	2	—	—	from an adverb <i>mēda</i> ‘in vain’; <i>mēdite</i> ‘useless’
COLOUR	7–8	—	—	—
PHYSICAL PROPERTY	8	<i>heleme</i> ‘be soft (e.g. banana, avocado, mud), <i>kai</i> ‘be spicy, hot; be sore’, <i>hiwiri</i> ‘be cool’, <i>sakamu</i> ‘be lukewarm’, <i>hamu</i> ‘be hot’, <i>hape</i> ‘be cold’, <i>haliapiri</i> ‘be ripe (e.g. a garden)’, etc.	—	<i>ka-weni</i> (REL-?) ‘expensive’; <i>ma-weni</i> ‘cheap’
HUMAN PROPENSITY	—	<i>inasua</i> ‘be lazy’, <i>harame</i> ‘be scared’, <i>khesarakana</i> ‘be naughty’, <i>kapemani</i> ‘be ashamed’, <i>kawaliku-peda</i> ‘be sorry, upset’, etc.	—	—

of a stative verb 'be straight', *mayakani-kema* (be.straight-THEM:CL.SIDE) 'right', lit. 'straight side' (this is a calque of Tucano *diakihí* 'straight, right').

CARDINAL NUMERALS are a special word class (numerals one to three are underived, while number 'four' is a deverbal nominalization). There are no ordinal numbers. The lexeme 'first' is an active ( $S_a$ ) verb *-ipeya*; to be used as a modifier it has to be relativized (*ka-peya* (REL-be.first) 'first (one)'). The lexeme 'last' is a

SPEED	—	<i>kenani</i> 'be quick, adept at something', <i>menani</i> 'be slow', <i>sewi</i> 'be quick (at moving)'	—	—
DIFFICULTY	—	<i>mahyuna</i> (Santa Rosa and Periquitos) 'be difficult', <i>manhina</i> 'be difficult' (Periquitos), <i>kanhina</i> 'be easy, be possible'	—	—
SIMILARITY	—	<i>hiku</i> 'be/look like, appear' as a modifier	—	postpositional phrase with <i>kayu</i> 'like'
QUALIFICATION	—	<i>pawali</i> 'be true, correct', <i>mayakani</i> 'be right, straight', <i>pa:me</i> 'be just right (with respect to measure)', <i>pathida</i> 'be equal', etc.	—	manner adverbs, e.g. <i>hapea</i> 'be true', <i>ka:pu</i> 'be in vain', and <i>pa:pe</i> 'be probable'
QUANTIFICATION	—	—	—	quantifiers are a closed class: <i>hanu-pe</i> (big-PL) 'many'; <i>hanipa</i> (big:CL.LARGE.OPEN.SPACE) 'much; a lot', <i>mhāida</i> 'little, few'
POSITION	—	<i>yenu</i> 'be high', <i>wyaka</i> 'be far', etc.	—	postpositions, e.g. <i>dalipa</i> 'near', <i>yeda</i> 'downstream', and serial verb constructions involving motion verbs (Aikhenvald 1999c)
NUMBERS	—	—	—	special word class
OTHER	2	—	—	—

stative verb *whyume* which can be turned into a modifier with the help of a noun class marker, e.g. *whyumite* (be.last:NCL.ANIM) ‘last (one)’.

3.2. MORPHOLOGICAL PROPERTIES OF ADJECTIVES

3.2.1. *Morphological properties of adjectives compared with nouns*

All adjectives in Tariana share a number of morphological properties with nouns. The morphological properties of all adjectives compared to nouns are summarized in Table 7. This shows that adjectives have certain superficial similarities with nouns; however, there are considerable differences. Below, we discuss them one by one.

A. *Number as agreement category*

Similarly to nouns, adjectives distinguish singular and plural. In contrast to nouns, number with adjectives is an agreement category which depends on the number choice made for the noun.

B. *Number marking*

The choice of a number morpheme for an adjective is mostly regular: *-pe* for human feminine and inanimate referents, and *-peni* for animate referents; number marking with nouns can be irregular—see §2.1. We have seen that just some dimension adjectives have idiosyncratic plurals: the adjective ‘big’ has a fully suppletive plural, and the adjective ‘small’ attaches the plural marker to an additional classifier rather than to the root. This is not found with nouns.

TABLE 7. Morphological properties of adjectives compared to nouns

Property	Adjective	Noun
1. Number as agreement category	Yes	No
2. Number marking	Marking different from that on nouns	Marking different from that on adjectives
3. Co-occurrence with noun classes or classifiers	Noun class agreement marking	Classifiers as derivational morphemes
4. Several noun class or classifier morphemes in one word	Stacking of several noun class markers in one adjective signals inflectional complexity: agreement with different embedded heads	Stacking of several classifiers in one noun signals derivational complexity
5. Diminutive marker	sg = <i>tiki</i> ; plural = <i>tupe</i>	sg = <i>tiki</i> or = <i>tuki</i> ; pl = <i>tupe</i>
6. Approximative marker	all adjectives: <i>-iha</i> ; some adjectives: <i>-/=iha</i> (cf. Table 9)	= <i>iha</i>

## C. Co-occurrence with noun classes or classifiers

We have seen above that every noun is associated with one or more classifiers. One or more classifiers may appear on the noun as derivational affixes (see §2.1 above). In a noun phrase, adjectives and other modifiers agree with the head noun in noun class (agreement is marked with a noun class marker). The differences between noun class markers and classifiers were shown in Table 3. Agreement in noun class with a human referent is illustrated in (8); (14) shows noun class agreement with an inanimate referent. Here, the same morpheme appears on the noun itself, as a derivational marker, and on the adjective, to mark agreement.

- (14) *heku-na*        *mafa-na*  
 wood-CL.VERT proper/good-CL.VERT  
 'a right, appropriate or good tree'

If a derived adjective, or a noun phrase, is used as a modifier to a noun, a noun class marker is attached to the last word of the noun phrase to mark agreement with the head noun. In (15), the clause containing the stative verb *kewi* (ATTR:flower) 'have flowers, be in flower' modifies the noun 'curved vine'; the noun class marker *-kha* at the end of the clause marks agreement with the head, 'curved vine':

- (15) *da:pi-kha* [*hane-se kewi*]-*kha*  
 vine-CL.CRV there-LOC ATTR:flower-CL.CRV  
 'a curved vine which is flowering there'

## D. Several noun class or classifier morphemes in one word

Adjectives in Tariana can be inflectionally complex. Agreement can be marked more than once in a noun phrase containing several 'heads' embedded one within the other. If the last noun of a modifying noun phrase already contains a noun class marker to agree with its own head, then the noun class marker which marks agreement with the head of the embedding noun phrase will simply follow it. In (16), the modifier within the modifying noun phrase, 'flowering' in 'flowering like a curved vine', contains the noun class agreement marker *-kha* 'CL.CRV'. This modifier also takes the noun class agreement marker *-na* 'CL.VERTICAL', to agree with the head of the embedding noun phrase, *heku-na* (tree-CL.VERTICAL) 'tree'. The modifying noun phrase is in square brackets. An arrow indicates the direction of agreement.

- (16) *heku-na*        [*da:pi-kha*    *kayu kewi-kha*]-*na*  
 tree-CL.VERT [vine-CL.CRV like ATTR:flower-CL.CRV]-CL.VERT  
 'a tree flowering like a curved vine'
- 

This 'stacking' of noun class agreement markers most often involves only two 'levels', as in (16). More complicated structures, such as (17), are rare. In (17), the noun phrase of (16) is the modifier to the head, 'leaf', and it takes the appropriate noun class agreement marker *-phe* 'CL.LEAF.LIKE'. Agreement in noun class is marked

twice in (16), and three times in (17). In each case, agreement is with different ‘heads’: with the head of embedded noun phrase(s), and with the head of the ‘embedding’ noun phrase of a higher level.

- (17) *pana-phe* [heku-na [da:pi-kha kayu kewi-kha]-na]-phe  
 leaf-CL.LEAF.LIKE [tree-CL.VERT [vine-CL.CRV like ATTR:flower-CL.CRV  
 -CL.VERT]-CL.LEAF.LIKE  
 ‘a leaf of a tree flowering like a curved vine’

In contrast to adjectives and other modifiers, nouns can only be derivationally but not inflectionally complex (see §2.3 for some examples of several classifiers as derivational affixes in one noun).

#### E. Diminutive marker

Similarly to nouns and verbs, adjectives can take diminutive and approximative markers. But the morphological marking differs. The two allomorphs of the diminutive enclitic, =*tiki* and =*tuki* (slot 18 in Fig. 1 and slot 8 in Fig. 2), are in free variation for nouns and for verbs. The nominal enclitic has a semisuppletive plural, =*tupe*, while the verbal enclitic does not have a plural, e.g. *inaru-tuki*, *inaru-tiki* (woman-DIM) ‘little woman’, plural *i:na=tupe* (woman:PL=DIM.PL) ‘little women’; *nu-tutu-tuki-na*, *nu-tutu-tiki-na* (1sg-tie-DIM-REM.P.VIS) ‘I tied it a little bit’. In contrast, adjectives can occur only with the singular =*tiki*, plural =*tupe*, e.g. *tsū-ite-tiki* (small-NCL.ANIM-DIM), ?*tsū-ite-tuki* ‘teeny-weeny (one)’; plural *tsū-ita-peni-tupe* (small-CL.ANIM-PL.ANIM-DIM.PL) ‘teeny-weeny (ones)’.

#### F. Approximative marker

The approximative marker *iha* is an enclitic with nouns, e.g. *inaru=iha=tiki* (woman=APPR=DIM) ‘a little one who is almost a woman’, and with verbs, as in *ne-ma:kade=iha=mha=niki* (NEG-NEG:GO-NEG=APPR=PRES.NON.VIS=COMPL) ‘it is just about not coming out’. The approximative marker behaves differently depending on the semantic group of adjectives.<sup>6</sup> Some adjectives combine with a suffix *-iha* or an enclitic =*iha* with a meaning difference, while others do not.

##### (a) Adjectives which combine with the approximative suffix *-iha* and with the enclitic =*iha*.

All underived adjectives of dimension, colour adjectives, one adjective referring to age (*wali*- ‘new’), and one from the physical properties group (*hipisi*- ‘bitter’) combine with *-iha* as a suffix, and as an enclitic. When the approximative morpheme is a suffix, no comparison is implied, as in (18)—this simply refers to a more or less big animal.

<sup>6</sup> Baniwa of Içana, an Arawak language closely related to Tariana, has just the approximative suffix *-ih(a)* used mostly with colour adjectives.

- (18) *ifiri hanúhite*  
 game big:APPR:NCL.ANIM  
 'a biggish animal'

In (18), *-iha* is a typical suffix: it does not get a secondary stress, boundary fusion processes apply (underlying *hanu:iha:ite* becomes *hanuhite*), and *iha* is followed by the animate noun class marker, *-ite*.

When the approximative morpheme surfaces as an enclitic, it implies comparison with some other object. An example is under (19). Here, the approximative *=iha* behaves as a typical enclitic: it follows the agreement marker on the adjective, acquires a secondary stress, and vowel fusion processes do not apply.

- (19) *ifiri hanú-ite-ihà*  
 game big-NCL.ANIM-APPR  
 'a biggish animal' (bigger than another one)

To explain the difference between dimension adjective plus classifier *=iha* and adjective plus *iha* plus classifier, José Luis Brito drew the illustration in Fig. 4, showing three circles: one big, one small, and one 'smallish' relative to the big one:

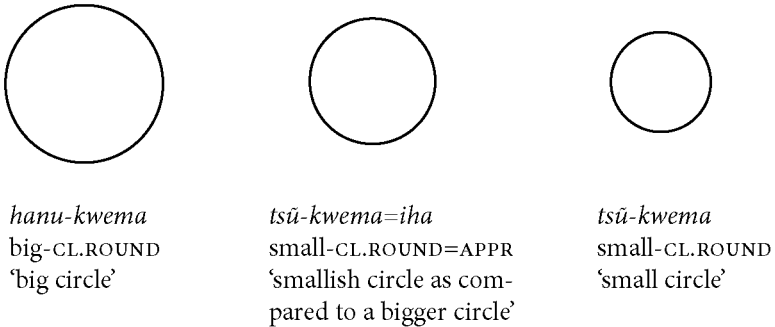


Figure 3.

Then he drew another small circle on a separate sheet of paper and indicated that it could be called *tsû-iha-kwema* 'a smallish or not so big (round) one'. The suffix *-iha* indicates that the circle is not being compared to anything else.

The form *iha* is used in a similar way with underived colour adjectives (under E in §3.1). To describe a shade of colour blacker than another one on a drawing made during the literacy workshop conducted among the Tariana in 2000, (20) was used; the approximative marker is an enclitic.

- (20) *kadite=iha*  
 black:NCL.ANIM=APPR  
 'one that is blacker (than another one)'

And (21), with *-iha* as a suffix, was used to refer to a blackish animal not compared to anything else.

- (21) *kadihite*  
 (kada-iha-ite—underlying form)  
 black-APPR-NCL.ANIM  
 ‘a blackish one’

As just mentioned, the enclitic *=iha* implies a comparison; the other comparative structure in Tariana which involves the verb *-yena* ‘exceed’ is discussed by Hajek (Chapter 15). Neither of these allow the inclusion of an overt parameter of comparison. That is, dimension and colour adjectives are somewhat similar to adjectives in Papantla Totonac (Chapter 6) in that they can take part in a construction with comparative meaning.

(b) *Adjectives which combine just with the approximative suffix -iha.*

Adjectives of all the other semantic groups take just the approximative suffix, e.g. *piwa-iha-peri* (salty-APPR-CL.COLL) ‘not very salty, salty-ish’. And the two historically derived colour terms mentioned at the end of E in §3.1, *kesolite* ‘brown’ and *ka-punite* ‘striped’, can only occur with the suffix *-iha* (cf. *kesolehite* (brown:APPR:NCL.ANIM) ‘brownish’).

Why are *walite* ‘new’ (from the ‘age’ group) and *hipisite* ‘bitter’ (from the physical properties group) the only adjectives in their semantic groups to allow variable behaviour for the approximative *-iha*? The likely reason lies in the semantics of these adjectives, and of other members of their groups. ‘New’, or ‘young’, is viewed as a changeable or gradable property; something may be more or less young or new. In contrast, *upite* ‘old, worn out’ is viewed as a terminal and unchangeable state of affairs which does not imply any degree. Along similar lines, my Tariana consultants stated that all the terms for tastes and physical properties, except for *hipisite*, describe time-stable properties. Along similar lines, the Tariana verbs which refer to an inherently unchangeable state cannot form a morphological causative, and thus, no morphological causative can be formed on verbs describing physical properties such as *hamu* ‘hot’, *hape* ‘cold’, or *kasitana* ‘annoyed’. Stative verbs which denote such concepts as ‘cool’ and ‘lukewarm’ describe inherently changeable states, and can form morphological causatives; that is, they belong to a different system from ‘cold’ and ‘hot’. See Aikhenvald (2000c).

Adjectives do not have any other nominal grammatical categories. An underived adjective cannot be head of a possessive noun phrase (see §3.3); and it cannot take possessive prefixes.

### 3.2.2. *Morphological properties of adjectives compared with verbs*

The adjectival roots of groups A, B, D, and F (§3.1) never occur on their own: they always have to take a noun class marker. Unlike these semantic types, the roots of underived adjectives of value and of physical property can occur on their own, as

stative verbs. They do not then take any noun class marker, as in (22) and (23). Adjectives used as stative verbs are underlined in the following examples.

- (22) maffa-nha                      phia  
good-INTER.PRES.VIS you  
'Are you fine?' (a greeting)
- (23) yawiwari                      hipisi-ka-naka                      nuha  
type.of.jaguar be.bitter-DECL-PRES.VIS I  
'(Being) Yawiwari (mythical jaguar), I am bitter' (so don't bite me) (from the Origin myth)

These adjectival roots can be used as components of adverbial serial verbs, as in (24) and (25).

- (24) maffa                      pi-ni  
be.proper 2sg-do  
'Be careful, obey the rules, behave properly'
- (25) ma:ffi-pu nu-rena-mha                      nuha  
bad-AUG 1sg-feel(physically)-PRES.NONVIS I  
'I feel physically bad, I am in a bad way'

These constructions can be analysed as manner serial verbs, where the stative verb (which contains the same root as the adjective) modifies the main verb. This is shown in (26): here the adjectival root *hamia* 'be heavy' is used as a stative verb.

- (26) diha nawiki-ne                      hamia-kha                      di-ruku                      di-a-pidana  
ART man-FOC.A/S be.heavy-AWAY 3sgnf-go.down 3sgnf-go-REM.P.REP  
'The man went down heavily (as a heavy object) (into a trap pre-arranged by the beetle)'

Adjectival roots denoting value and physical properties can thus be considered a sub-type of stative verbs. However, they take less verbal morphology than stative verbs of other kinds. Properties for which they differ from other stative verbs are summarized in Table 8; these, and additional properties are discussed below.

#### A-B. Combining with habitual-impersonal -kana and with causative -ita

Stative verbs without a corresponding adjectival root can combine with the marker -kana (see Aikhenvald 2000c) 'habitual-impersonal', e.g. *leka-kana* (break-HAB/

TABLE 8. Some morphological properties of adjectives compared to stative verbs

Property	Adjective	Stative verb
1. Combines with habitual-impersonal -kana	No	Yes
2. Combines with causative -ita	No	Yes (some)
3. Used in prohibitive constructions	No	Yes



IMPERS) ‘be breakable’. Most of them can form a morphological causative marked with *-ita*, e.g. *makara* ‘be dry’, *-makareta* ‘make dry, dry (something)’. Stative verbs with adjectival roots do not combine with either of these morphemes (e.g. *?\*hamiakana*, *?\*-hamieta?*). This is somewhat similar to Qiang (Chapter 13) and to numerous other languages mentioned in §6.1 of Chapter 1 in that adjectives have fewer derivational possibilities than verbs.

### C. Use in prohibitive constructions

Unlike other stative verbs, stative verbs with adjectival roots cannot be used in prohibitive constructions, e.g. *mhāida leka* (PROH break) ‘do not break’, but not *\*mhāida matfa* ‘do not be good’.

### D. Additional properties

The two value adjectives have additional properties. Unlike other adjectives or stative verbs, they can also function as  $S_{10}$  verbs. When used this way, they describe the physical condition of a participant, as in (27). The only argument of the  $S_{10}$  verb is marked with the object case (note that it requires a different subject switch-reference marker on a preceding subordinate clause—see Aikhenvald 2001). Here, the subordinate clause takes the non-subject topical case marker since it is topical.

- (27) *nu-inu-kayami-nuku*                      *nu-na*                      *matfa-mhade*  
 1sg-kill-AFTER:DS-TOP.NON.SUBJECT 1sg-OBJ= $S_{10}$  be.proper/good-FUT  
 ‘After I kill (my prey), it will be good for me (I will be in a good way)’  
 (from a shamanic song)

While in (27) *matfa* is a  $S_{10}$  verb—which is shown by the object marker *-na* on its only argument—in (28) it is used as an  $S_0$  verb. Here, it describes participant’s property:

- (28) *matfa-mhade*                      *diha*  
 be.proper/good-FUT he/it( $S_0$ )  
 ‘He/it will be fine’

When used as  $S_{10}$  verbs, the value adjectives can form just two (of the eight) kinds of imperatives: the detrimental imperative, as in (29), and the imperative by proxy, as in (30). They cannot occur in prohibitive constructions.

- (29) *ma:ɬi-tupe*                      *di-na*                      *di-pa-tupe*  
 be.bad-IMPER.DETR 3sgnf-OBJ 3sgnf-rot-IMPER.DETR  
 ‘Let him be in a bad way (to his detriment), may he rot (to his detriment)’
- (30) *matfa-pida*                      *na-na*  
 be.proper/good-IMPER.BY.PROXY 3pl-OBJ  
 ‘Let them be good (on someone else’s order)’ (also used in the meaning:  
 ‘say hello to them on my behalf; say hi to them from me’)

The value adjectives *maʔa* ‘proper, good’ and, to a lesser extent, *ma:ʔi* ‘bad, adverse’ can form compounds with other stative verbs (see Aikhenvald 1999c). No enclitics or suffixes can go between the parts of the compound verb; the sequence [value adjective root] plus stative verb behaves as a single root; the compound verb has a single stress. Examples are *maʔa-makara* (be.proper-be dry) ‘be really dry’ (cf. English ‘good and dry’), *maʔa-hui* (be.proper-be.tasty) ‘be really tasty’, *maʔa-nhesiri* (be.proper-like) ‘really like’, *maʔa-kesani* (be.proper-smell) ‘have a good smell’, *ma:ʔi-kesani* (be.bad-smell) ‘have a bad smell’, and *maʔa-hape* (be.proper-be.cold) ‘be really cold’, as in (31).

- (31) *maʔa-hape-ri*                      *dihmeta-pidana*      *diha nawiki*  
 be.proper/good-be.cold-NR 3sgnf:feel-REM.P.REP ART man  
 ‘The man felt really cold’

The adjectival root *ma:ʔi* ‘bad, adverse’ appears in two idiosyncratic derivational structures (not attested for any other word in the language): *ma:ʔi-masiki* (be.bad-?) ‘be naughty, misbehave’ and *ma:ʔi-mariki* (be.bad-?) ‘be lame, crippled’.

### 3.2.3. Additional morphological properties of adjectives

Besides the properties mentioned in §3.1 above, adjectives in some semantic groups display additional idiosyncrasies. The size adjectives *hanu-* ‘big’ and *tsū-* ‘small’ are unusual in yet another way. If a size adjective contains the clitic =*iha* ‘approximative’ and comparison is implied, the approximative follows the agreement marker on an adjective, as in *ifiri hanu-ite=iha* (game big-NCL.ANIM=APPR) ‘a biggish animal’ (bigger relatively to another one). When used as a modifier, such an adjective may take another noun class marker, to agree with the same head, as shown in (32). The underlying form for *hanuitehite* is *hanu-ite-iha-ite* (big-NCL.ANIM-APPR-NCL.ANIM).

- (32) *nhua paita*                      *ifiri hanu-itehite*  
 I      one:CL.ANIM game big-NCL.ANIM:APPR:NCL.ANIM  
*nu-inu-ka*                      *diha hema-ka*  
 1sg-kill-REC.P.VIS he      tapir-REC.P.VIS  
 ‘I have killed an even bigger animal (than that), he is a tapir’ (said the man, boasting)

Various types of edible flying ants are enumerated in (33); ‘black ants’ are bigger compared with the rest, and so *iha* is an enclitic. The agreement with the head is marked twice.

- (33) *na naka kasiteru*                      *pisi kada-dali*  
 3pl:go 3pl:arrive leaf.cutting.ant ant black-AFFIX  
*hanu-itehite*  
 big-NCL.ANIM:APPR:NCL.ANIM  
 ‘Leaf-cutting ants, small ants, black ants who are even bigger are going to come.’

This ‘double noun class agreement’ is attested only with the singular animate noun class.

Underived adjectives of some semantic groups do have specific derivational suffixes. We mentioned under B in §3.1 that the adjective ‘new, young’ can be nominalized with the derivational affixes *-ki-ri* ‘masculine’, *-ki-ru* ‘feminine’ not found anywhere else in the language. Underived adjectives which refer to primary colours take a derivational affix *-whare* ‘not quite the shade of colour; COLOUR-ish’, e.g. *ewa-whare* ‘yellow-ish’, *hare-whare* ‘whit-ish’. The adjective ‘bad, adverse’ combines with the verbalizer *-ka* not used with any other adjective. Unlike nouns, adjectives cannot be verbalized with the causativizing-verbalizing suffix *-ita*.

The properties of the different semantic groups of underived adjectives are summarized in Table 9.

Semantic types of adjectives show different morphosyntactic behaviour in other languages discussed in this volume. Dimension adjectives in Semelai have a number of unusual morphological properties (Kruspe, Chapter 12). Along similar lines, different semantic groups of adjectives in Papantla Totonac display slightly different properties; one salient feature of dimension adjectives being the way in which they form plural (Levy, Chapter 6).

### 3.3. SYNTACTIC FUNCTIONS OF ADJECTIVES

The relationship between the two open word classes and functional slots in Tariana was summarized in Table 4. Table 10 extends this to also include adjectives.

Similarly to nouns, any adjective can be the head of an intransitive predicate, as illustrated in (34). Any adjective can be used as a head of an NP, as shown in (35), a continuation of (34) in the text.

TABLE 9. Morphological properties of semantic groups of underived adjectives

Property	Semantic group
1. Irregular plural forms	Dimension: ‘big’, ‘large’, ‘small’
2. Specific derivational suffix	Colour
3. Specific nominalizer	Age: young
4. Used as S <sub>o</sub> verbs	Value; physical property
5. Used as verbal modifiers	Value; physical property
6. Used as S <sub>o</sub> and as S <sub>io</sub> verbs	Value
7. Used in verbal compounding with stative verbs	Value: ‘proper, good’, ‘bad, adverse’
8. Specific verbalizer	Value: ‘bad, adverse’
9. Used with the suffix <i>-iha</i> and the clitic <i>=iha</i> ‘approximative’ with a meaning difference	Dimension; colour; age (‘new’); physical property (‘bitter’)
10. Marking agreement with the same head twice	Dimension: ‘big’ and ‘small’

TABLE 10. Syntactic properties of adjectives compared with nouns and verbs

	Verb	Adjective	Noun
Head of intransitive predicate	Yes: A=S <sub>a</sub> ; S <sub>a</sub> , S <sub>o</sub> , S <sub>io</sub>	Yes: restricted categories	
Head of transitive predicate	Yes (some)	No	No*
Head of NP	No*	Yes	
Modifier in NP	No*	Yes	No*
Modifier of a verb	No	Yes: some	No
Copula complement	No	Yes	

\* means that certain morphological or syntactic processes have to be applied for a member of the given word class to appear in this function.

- (34) *inari ma:fite-pu-na*  
 mucura.rat bad:NCL.ANIM-AUG-REM.P.VIS  
 ‘The mucura rat was nasty (he bit me)’

- (35) *diha ma:fite-nuku nhupa-na . . .*  
 ART bad:NCL.ANIM-TOP.NON.SUBJECT 1sg:grab-REM.P.VIS  
 ‘I grabbed the bad one . . .’

Similarly to nouns, adjectives can be used as copula complements:

- (36) *diha ma:fite-pu di-dia-pidana*  
 he bad:NCL.ANIM-AUG 3sgnf-become-REM.P.REP  
 ‘He became bad’

A member of any word class, a noun phrase, or a clause can be employed as a modifier. To be used this way, it has to take a noun class marker. These derived modifiers have all the properties of the derived adjectives listed in Table 7 (except that they cannot take the approximative morpheme at all). For instance, if a noun phrase is used as a modifier of a noun, a noun class marker is attached to the last word of the noun phrase to mark agreement with the head noun, as in (15) above. An example of a possessive construction employed as a modifier, with a noun class suffix marking agreement with the head, is in (37).

- (37) *heku-na [wesi i-tape]-na*  
 chestnut.tree-CL.VERT [flu INDEF-medicine]-NCL.VERT  
 ‘tree which is a medicine against flu’

Other examples of noun phrases or even clauses used as modifiers (‘adjectivized’ with a noun class suffix as an agreement marker) include *f̣āri wesi hanupite* (man [mucus much]:NCL.ANIM) ‘a man who has much mucus’ (or ‘a man with a runny nose’), *f̣āri ka-kama-hanupite* (man [REL-drink much]-NCL.ANIM) ‘a much-drinking man, a drunkard’, *nawiki [finu kayu]-peni* (person [dog like]-PL.ANIM) ‘people

(who are) like dogs' (used to describe those who marry people from the same language group as themselves). Any such modifier can be used as a head of a noun phrase; for instance, *wesi hanupite* (mucus much:NCL.ANIM) is typically used to refer to a person with a running nose, and *ka-kama hanupite* (REL-drink much:NCL.ANIM) to refer to a drunkard. The expression *ʃinu kayu-peni* 'the ones who are like dogs' is a conventionalized way of referring to those who break the Vaupés marriage customs.

#### 4. Semantic overlap

Tariana shows hardly any semantic overlap between adjectives and other word classes. The only clear case of a semantic overlap between an adjective and a stative verb involves the dimension adjective *wi:te* 'long, far' and the verb *wyaka* 'be far' (the two are cognate). An adjective derived from the verb *wyaka*, *wyakite* 'long, far' is almost synonymous with *wi:te*. However, in texts, *wi:te* is more frequently used in the meaning of 'long', as in *ʃiāri di-ʃima wi:te* (man 3sgnf-hair long:NCL.ANIM) 'man with long hair', while *wyakite* usually means 'far', as in *ʃiāri wyakite* (man far:NCL.ANIM) 'a man from far away'. The adjective *keninite* '(a man) loved by women' (see F in §3.1) can be replaced with a stative verb *huisi* 'be good at hunting', as in *ʃiāri ina: huisite* (man woman:PL be.good.at.hunting:NCL.ANIM) 'man lucky at getting women'. Its negative counterpart, *meninite* '(a man) not loved by women', can be replaced with a stative verb *husa* 'be bad at hunting', as in *ʃiāri ina: husaite* (man woman:PL be.bad.at.hunting:NCL.ANIM) 'man unlucky at getting women'. In most other cases, even synonyms tend to belong to the same word class. For instance, both *karu* 'be afraid, fear' and *harame* 'be scared' are stative verbs. So are *kenani* 'be quick, adept at something' and *sewi* 'be quick (speed of motion)'.

An additional point concerns the semantic relationship between adjectives and stative verbs which cover comparable semantic fields. DIMENSION and VALUE adjectives have more generic semantics than stative verbs. For instance, something can be characterized as *hanu-* 'big'. This characterization would subsume other, more specific, properties which could be expressed with a stative verb if necessary, such as *phanida* 'thick', *khēsa* 'wide', or *yenu* 'tall'. Along similar lines, *ma:ʃi* means 'bad' in general. By using a stative verb, one can further specify the ways in which a person, or an object, is bad—a person could be bad at hunting (*husaite*), or lazy (*inasuite*), or arrogant (*kayena kema*). One can apply *maʃfa* 'proper, good' to someone, and then specify, again with a stative verb, whether the person is *huisite* 'good at hunting', *wayerite* 'smart at doing things; a good handyman', or *maʃfa-puwhi* (proper/good-be.happy) 'really happy'; to describe an even-tempered person easy to get on with, one would use the compound *maʃfa ka-kale* (proper/good ATTR-heart, lit. good-hearted). In a comparable way, a similarity construction can disambiguate the reference of COLOUR adjectives. We have seen above that *hiporite* refers to both 'green' and 'blue'. When Tariana speakers needed to make the distinction between these two shades of colour in clothing, they used *hiporite kanapiri*

*kayute* (green/blue:NCL.ANIM grass like:NCL.ANIM) ‘blue/green like grass’ to refer to ‘green’, and *hiporite enukwa kayute* (green/blue:NCL.ANIM sky like:NCL.ANIM) ‘blue/green like sky’, to refer to ‘blue’. Different shades of ‘reddish, blond, dark yellow, orange’, all covered by *irite*, can be disambiguated by a whole array of comparisons with the relevant objects. This fairly general semantics of various adjectives allows a speaker considerable freedom of choice—one may remain vague, limiting oneself to the members of a closed class; or one may choose to be more elaborate, resorting to semantically more detailed descriptions and using a member of an open class.

## 5. Summary

The adjective class in Tariana has twenty-nine members, seven in the DIMENSION semantic type, three in AGE type, two in VALUE, eight in COLOUR, and eight in PHYSICAL PROPERTY. An additional group comprises the adjective ‘loved (by women)’ and its negative counterpart; this does not appear to belong to any of the semantic groups in Chapter 1. Similarly to nouns, all adjectives can occur as heads of noun phrases and as copula complements. Adjectives can be used as modifiers in noun phrases; while nouns and verbs have to be adjectivized to be used this way. All the adjectives of the DIMENSION, AGE, and COLOUR semantic types are non-verb-like (they cannot be head of an intransitive predicate without having a noun class agreement marker). In contrast, adjectives of VALUE and PHYSICAL PROPERTY types can function as heads of intransitive predicates as bare roots, and thus are similar to stative verbs. However, they have fewer morphological possibilities than stative verbs. All adjectives have certain superficial similarities with nouns. The choice of number and noun class for an adjective depends on that made for a noun; and their marking is quite distinct. Adjectives are inflectionally complex—they can agree with several different ‘heads’ of embedding and of embedded noun phrases. Such inflectional complexity of adjectives is very different from how one, derivationally complex, noun can occur with several classifiers. Nouns and adjectives make different choices of the diminutive morpheme, and of the approximative morpheme. In addition, different semantic groups of adjectives have distinct, somewhat idiosyncratic, grammatical properties (summarized in Table 8).

We conclude that adjectives in Tariana form an independent grammatical class, distinct from nouns and from verbs. Tariana has two distinct sub-groups of adjectives, one of which is non-verb-like and the other one very similar (but not identical) to stative verbs. Modern Tariana combines elements of head-marking, inherited from Proto Arawak, with dependent-marking acquired through areal diffusion from unrelated East Tucanoan languages. In the vast majority of Arawak languages, adjectives are verb-like (see Aikhenvald 1998, on Warekena; Aikhenvald and Green 1998, on Palikur; and a general discussion in Aikhenvald 1999d). We hypothesize that the noun-like properties of the Tariana adjectives may be the consequence of the spread of areally diffused dependent-marking properties in the language.

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## Adjectives in Mam

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Mam is the third largest Mayan language, spoken by over 600,000 people in the north-west highlands of Guatemala, as well as by several small communities in Mexico and by refugees or immigrants in the United States, Canada, and Mexico. It belongs to the Mamean branch of the eastern division of the Mayan language family. All of the data presented here are from San Ildefonso Ixtahuacán, Huehuetenango.

Mam, like other Mayan languages, has clearly differentiated major word classes that include nouns, transitive verbs, intransitive verbs, adjectives, positionals, and adverbs and other particles. Adjective roots are in general a small class in Mayan, estimated by Terrence Kaufman to include around fifty items, both historically and in contemporary languages (personal communication). Counting adjective roots is a problem in Mam, as I will show later, but the number of roots corresponds to Kaufman's estimate. Many of the meanings expressed by adjectives in European languages, especially those having to do with PHYSICAL PROPERTIES, are expressed by positionals in Mayan languages, therefore it is important to contrast adjectives with positionals as well as with nouns and verbs. Adjective roots specify colours, stages of development, flavours, and other inherent properties of nouns, such as hard, soft, heavy, etc. (Kaufman 1990: 68). Adjective stems can be derived through a wide variety of morphological processes from nouns, verbs, and positionals.

### 1. General grammatical characteristics of Mam

Mam is head-marking. It inflectionally marks the categories of tense/aspect/mood and the person and number of subjects and objects on verbs, the person and number of subjects on non-verbal predicates, the person and number of possessors on possessed nouns, and the person and number of complements on relational nouns. Relational nouns are an always-possessed class of nouns that function like prepositions and show agreement with their complements through the possessive prefix. They mark all nominal functions except subjects and direct object, all locative NPs, comparative adjective constructions, reflexives, pronominalized possessives, and purpose and reason subordinate clauses. Most inflections are prefixes or



proclitics, except several status suffixes on verbs and the person/number marking on non-verbal predicates, which are enclitics in this context only. There are two different sets of person/number markers (usually called Set A and Set B by Mayanists). The Set A or ergative markers indicate possessors of nouns, subjects of transitive verbs (A function), and complements of relational nouns; while the Set B or absolutive markers indicate objects of transitive verbs (O function), subjects of intransitive verbs (S function), and subjects of non-verbal predicates.

Mam is both morphologically and syntactically an ergative language, and under conditions which trigger split ergativity it marks all verbal arguments (transitive and intransitive subjects, transitive objects) with the Set A or ergative markers. Two rules that show ergative syntax are that only absolutive direct arguments can be contrastively emphasized and only absolutive arguments trigger the deletion of a same subject in a subordinate clause (England 1983).

Derivation of stems from roots is morphologically marked. Adjectives and positionals, which have no characteristic inflection unless they function as the heads of non-verbal predicates, have characteristic derivations that clearly define roots (and stems, in the case of adjectives) as belonging to that class and no other. All derivational affixes except *aj-*, which derives agentives from nouns and terms for inhabitants from toponyms, and *ch-/s-/x-/xh-*, which derives all sorts of lexemes from stems of many different classes with slight (or no) changes in meaning, are suffixes.

Verbs function as the heads of verbal predicates. Verbs are unequivocally transitive or intransitive, as are the respective predicates in which they function. Valence-changing voices include both the antipassive, with several different functions (absolutive, agent focus, and incorporative), and passive, with five different forms, several of which are lexical as well as syntactic. Nouns function as the heads of NPs, which in turn function as direct arguments of verbs (subjects and objects), the complements of adjuncts (relational noun phrases), or the heads of stative non-verbal predicates. The heads of stative non-verbal predicates can also be adjectives, positionals, demonstratives, or numbers. Non-verbal predicates are stative, locative, or existential. They are not inflected for tense/aspect/mood, unlike verbs. They may, however, take the (im)perfect marker *-taq*. The locative/existential predicates can take adjectives as complements.

The lexical expansion of nominal arguments is optional. All NPs are cross-referenced on the verb, non-verbal predicate, or relational noun, and independent pronouns are used for contrastive emphasis. Some dialects of Mam, including Ixtahuacán, have a fairly well developed noun classifier system for human nouns (and one classifier for non-humans). Classifiers are used pronominally in non-emphatic contexts to further specify a deleted noun, but are in no context obligatory.

Mam has relatively fixed VAO/VS constituent order. Intransitive subjects and transitive objects can precede the verb for focus (contrastive emphasis), and both transitive and intransitive subjects can precede the verb for a restricted kind of topic-changing emphasis; other than these two contexts order is always VAO/VS.

The head noun in a noun phrase is preceded (in this order) by demonstratives, numbers (with or without a measure word) or the indefinite article or optional plural marking, and adjectives. It is followed (in this order) by possessor nouns (with number/person of the possessor marked on the head noun), emphatic demonstratives, relational noun phrases that directly modify the noun, and relative clauses. Some dialects or speakers of Mam move adjectives directly after the noun if there are other modifiers, especially the indefinite article or a number, preceding the noun. Others do not.

## 2. The grammar of adjectives

Adjectives form a distinct class from nouns, verbs, and positionals. They can function as the head of a stative non-verbal predicate, the complement of an existential non-verbal predicate, or can directly modify a noun within an NP. The class includes underived words that relate to DIMENSION, VALUE, COLOUR, PHYSICAL PROPERTIES, QUANTIFICATION, and POSITION. While the class of adjective roots is fairly small, there are large numbers of derived adjectives, principally from nouns, positionals, transitive verbs, and intransitive verbs. In addition, Mam accepts borrowed adjectives, principally from Spanish. A summary of the grammatical characteristics of adjectives and a comparison of these with nouns, positionals, and verbs can be found in Table 1, following §2.2.

### 2.1. MORPHOLOGY

Adjectives take inflection for the number/person of a subject when they function as the heads of non-verbal predicates, a characteristic they share with both nouns and positionals:<sup>1</sup>

- |                 |                                                        |                                                                   |
|-----------------|--------------------------------------------------------|-------------------------------------------------------------------|
| (1) adjective:  | <i>ky'aaj-Ø</i><br>lazy-B3sg<br>'he/she is lazy'       | <i>ky'aaj-qo'-ya</i><br>lazy-B1p-1pl EXCL<br>'we are lazy'        |
| (2) noun:       | <i>xjaal-Ø</i><br>person-B3sg<br>'he/she is a person'  | <i>xjaal-qo'-ya</i><br>person-B1pl-1pl EXCL<br>'we are people'    |
| (3) positional: | <i>wa'l-Ø</i><br>standing-B3sg<br>'he/she is standing' | <i>wa'l-qo'-ya</i><br>standing-B1pl-1pl EXCL<br>'we are standing' |

The only other inflection that non-verbal predicates can take is the (im)perfect marker *-taq*, which they share with verbs:

<sup>1</sup> Symbols in the practical orthography for Mam are like phonetic symbols, except that *ch* = a voiceless alveopalatal affricate, *j* = a voiceless uvular fricative, *ky* = a voiceless palatal stop, *tx* = a voiceless retroflex affricate, *tz* = a voiceless alveolar affricate, *x* = a voiceless retroflex fricative, *xh* = a voiceless alveopalatal fricative, ' = glottal stop, *VV* = long vowel, *C'* = glottalized consonant.

- (4) adjective: *Q'an-Ø-taq chulal*.  
 ripe-B3sg-IMP sapodilla  
 'The sapodilla was ripe.'
- (5) verb: *Oo-taq Ø-b'aj waa'-n*.  
 PAST-PERF B3sg-DIR eat-AP  
 'He/she had eaten.'

Nouns can be inflected for the number/person of a possessor, a characteristic they do not share with adjectives. Numbers are a sub-class of nouns, on the basis of inflectional morphology, because the ordinal numbers are formed from the cardinal numbers by adding the third person singular set A possessive prefix, as well as a suffix that is specific to ordinal numbers:

- (6) kab' 'two' t-kaab'-an 'second'  
 A3sg-two-ORD  
 oox 'three' t-oox-an 'third'

Verbs are inflected for tense/aspect/mood through a series of proclitics and status suffixes. The suffixes further distinguish between transitive and intransitive verbs. None of these inflectional affixes can be used on adjectives, even predicate adjectives. Positionals take no inflection whatever, except when they are the heads of non-verbal predicates.

There are two derivational affixes that define adjectives as a class. With very few exceptions, adjectives, whether root or derived, take both of these suffixes. One, *-al ~ -iil*, forms an abstract noun (usually possessed) from an adjective, while the other, *-ax ~ -iix*, forms an intransitive verb ('becomes the quality indicated by the adjective') verb.<sup>2</sup> Examples:

- |                |                   |                      |
|----------------|-------------------|----------------------|
| (7) adjective: | abstract noun:    | versive:             |
| saq            | t-saq-al          | ma Ø-saq-ax          |
| 'white'        | 'whiteness'       | 'it became white'    |
|                | A3sg-white-ABST N | ASP B3sg-white-VERS  |
| xititiin       | t-xititiinal      | ma xititiinax        |
| 'crumbly'      | 'crumbliness'     | 'it became crumbly'  |
| jiiqan         | tjiqaniil         | ma jiqaniix          |
| 'straight'     | 'straightness'    | 'it became straight' |
| ch'ikych'aj    | tch'ikych'ajiil   | ma ch'ikych'ajiix    |
| 'rough'        | 'roughness'       | 'it became rough'    |

While most abstract nouns are obligatorily possessed, as above, some are not. Furthermore, abstract nouns can be derived from a few nouns as well as from almost

<sup>2</sup> In both morphemes the allomorph with the short vowel occurs after stressed vowels in the previous syllable, while the allomorph with the long vowel occurs after an unstressed vowel in the previous syllable. There are also a few irregular instances of *-il*.

all adjectives. Finally, there are several examples of the double application of the abstract noun suffix, realized as *-liil* or *-laal*. Examples:

- |     |        |             |          |                                                       |
|-----|--------|-------------|----------|-------------------------------------------------------|
| (8) | nim    | 'many' (a)  | nimaal   | 'great, important'                                    |
|     | b'ee   | 'road' (n)  | tb'eeyal | 'guide, line, part in hair, road to a specific point' |
|     | jb'aal | 'rain' (n)  | jb'aalil | 'rainy season'                                        |
|     | q'ijj  | 'sun' (n)   | q'ijliil | 'dog days (dry spell in the rainy season)'            |
|     | -iib'  | 'reflexive' | tib'laal | 'form, appearance'                                    |

Nouns have no characteristic derivations that apply to the whole class. While they share the abstract noun derivation that adjectives take, it is quite restricted in application to noun roots or stems. Verbs take a great many derivations, including participials (both transitive and intransitive), an instrumental (for all verbs), and for transitive verbs only, a syntactic passive and the antipassive. These derivations apply to verbs only. Positionals are a bound root class that is defined by its most characteristic derivational morphology. From these roots a positional adjective, an intransitive verb, and a transitive verb are derived through morphemes that are restricted to the positional root class.

Other derivations that adjectives take include:

*-saa*: causative. Derives transitive verbs from a few adjectives or intransitive roots. Examples:

- |     |        |           |          |            |
|-----|--------|-----------|----------|------------|
| (9) | nim    | 'a lot'   | -nimsaa  | 'make big' |
|     | tx'e'l | 'toasted' | -tx'elsa | 'toast'    |

*-ab'iil*:<sup>3</sup> abstract noun. This is similar to the *-al* suffix, and productive. Some adjectives take both; some take only one. Examples:

- |      |      |         |            |                    |
|------|------|---------|------------|--------------------|
| (10) | la'j | 'lying' | tlajab'iil | 'lies, falsehoods' |
|      | look | 'crazy' | tlokab'iil | 'craziness'        |

*-le'n*:<sup>4</sup> abstract noun. This suffix derives nouns from a variety of other roots and stems to indicate a state specified by the root or stem. Example:

- |      |      |            |         |             |
|------|------|------------|---------|-------------|
| (11) | tijj | 'big, old' | tijle'n | 'old age'   |
|      | sik  | 'tired'    | sikle'n | 'tiredness' |

*-b'ji'b'il*:<sup>5</sup> nominalizer. This is a fused form of the adjective derivational suffix *-b'aajal* and something else (perhaps *-i'b'il* or *-i'b'*, but neither is convincingly a single morpheme). Examples:

- |      |             |           |               |                  |
|------|-------------|-----------|---------------|------------------|
| (12) | kib'b'aajal | 'visible' | kib'ji'b'il   | 'ease of seeing' |
|      | b'eeyb'il   | 'poor'    | b'eyb'ji'b'il | 'poverty'        |

<sup>3</sup> This suffix shortens preceding long vowels.

<sup>4</sup> Preceding long vowels are shortened.

<sup>5</sup> Preceding long vowels are shortened.

Adjectives are derived from transitive and intransitive verbs, nouns, positionals, and other adjectives. Derivations include:

*-n*:<sup>6</sup> transitive participle.

- |      |         |         |          |           |
|------|---------|---------|----------|-----------|
| (13) | -iiq'   | 'carry' | iiq'an   | 'carried' |
|      | -jaq    | 'open'  | jaqo'n   | 'opened'  |
|      | -tx'eem | 'cut'   | tx'eeman | 'cut'     |

*-na*: intransitive participle.

- |      |       |         |        |          |
|------|-------|---------|--------|----------|
| (14) | -tooq | 'break' | toqna  | 'broken' |
|      | -kyim | 'die'   | kyimna | 'dead'   |

*-l* ~ *-ch*: positional adjective. This form is only used predicatively, never attributively.

- |      |        |              |        |              |
|------|--------|--------------|--------|--------------|
| (15) | tutz'- | 'seated'     | tutz'l | 'seated'     |
|      | koxh-  | 'lying down' | koxhl  | 'lying down' |
|      | mol-   | 'crouched'   | molch  | 'crouched'   |

*-b'aajal*:<sup>7</sup> derives adjectives from transitive verbs and positionals with the meaning 'easily doable'.

- |      |              |          |               |                      |
|------|--------------|----------|---------------|----------------------|
| (16) | -b'iinch (v) | 'do'     | b'inchb'aajal | 'doable, easy to do' |
|      | tutz- (p)    | 'seated' | tutz'b'aajal  | 'easy to seat'       |

*-v<sub>1</sub>C<sub>2</sub>V<sub>1</sub>V<sub>1</sub>n*:<sup>8</sup> derives adjectives from transitive verbs with the meaning '(easily) able to be done'.

- |      |       |         |          |                 |
|------|-------|---------|----------|-----------------|
| (17) | -tooq | 'break' | toqoqoon | 'breakable'     |
|      | -mool | 'burn'  | mololoon | 'easily wilted' |

*-an*: derives adjectives from nouns.

- |      |         |           |           |                 |
|------|---------|-----------|-----------|-----------------|
| (18) | xaq     | 'stone'   | xaqan     | 'made of stone' |
|      | tz'iis  | 'garbage' | tz'iisan  | 'clean'         |
|      | tx'otx' | 'earth'   | tx'otx'an | 'earthen'       |

*-'*: derives adjectives from positional roots.

- |      |       |                         |       |          |
|------|-------|-------------------------|-------|----------|
| (19) | chil- | 'standing, thin person' | chi'l | 'skinny' |
|      | qich- | 'scraped'               | qich  | 'rough'  |

*-V-* (vowel length): derives adjectives from positional roots.

<sup>6</sup> This suffix follows a stem formative vowel. When the root is CVC, the suffix is *-n*. When the stem has a long vowel or glottal stop, the glottal stop in the suffix is attracted to the stem-vowel. However, a stem final non-sonorant consonant blocks the movement of the glottal stop to the stem vowel, and it is deleted. <sup>7</sup> Preceding long vowels are shortened. <sup>8</sup> It shortens a preceding long vowel.

- (20) joch'- 'sitting, idle'      jooch' 'lazy'  
 mok'- 'crouched'      mook' 'curved'

-*C<sub>1</sub>aj*: nonproductively derives adjectives from roots of several classes.

- (21) lin- (p) 'laid out'      linlaj 'laid out'  
 wak- (p) 'thrown, clod of earth'      wakwaj 'clumped up, earth'  
 meeq' (n) 'temperature'      meq'maj 'hot'  
 poq' (n) 'yellow flower'      spoq'paj 'yellowy white'  
 ?      chapchaj 'tasteless'  
 ?      kankaj 'rare'

Three other derivations modify adjectives by attenuating, emphasizing, or intensifying their meanings:

-*ka*: attenuates the meanings of adjectives and nouns.

- (22) spiiky'an 'clear'      spiiky'anka 'somewhat clear'  
 chib'aj (n) 'meat'      noqax chib'ajka 'meat that's so-so'

-*maj*: added to transitive participles to add emphasis.<sup>9</sup> It can only be used with attributive or stative participles, and not with participles in an adverbial function.

- (23) tx'ee'man 'cut'      tx'ee'manmaj 'cut'  
 aq'na'n 'worked'      aq'na'nmaj 'worked'

-*xax*: an intensifier that is used with adjectives, adverbs, verbs, and nouns.

- (24) naach 'ugly'      naachxax 'very ugly'  
 cheeb'a (adv) 'slow'      cheeb'axax 'very slow'  
 aq'naan (v) 'he worked'      aq'naanax 'he worked a lot'  
 k'um (n) 'squash'      k'umxax 'pure squash, really squash, all squash'

There are a large number of adjectives that are clearly derived because they include a suffix, but for which no other underived related form now exists. The most common suffixes that are encountered with these derived adjectives are: -*an*, -*na*, -*naj*, -*C<sub>1</sub>aj*, -*C<sub>1</sub>j*, -*V<sub>1</sub>C<sub>2</sub>V<sub>1</sub>V<sub>1</sub>n*. All of these have already been discussed except -*naj*, which is a nonproductive participle suffix, and -*C<sub>1</sub>j*, which is an allomorph of -*C<sub>1</sub>aj*.<sup>10</sup> Examples:

- (25) jaapan 'exact'  
 kuuman 'smooth'  
 k'amna 'discoloured'

<sup>9</sup> It has never been entirely clear to me what this sort of emphasis really does. However, speakers describe the difference in meaning as one of emphasis, and use added loudness on the corresponding word in translation into Spanish.

<sup>10</sup> It occurs after a long vowel or vowel + glottal stop. Interestingly, none of the adjectives that I have with this form of the suffix have roots that are attested in other underived forms.

kok'na	'fine-grained'
chmalnaj	'humid'
tòqnaj	'soaked'
xulxaj	'tasteless'
txub'txaj	'contented, tranquil'
le'lj	'fordable (of a river)'
qloolj	'dark'
saasj	'light (weight)'
yutzutzuun	'afraid of punishment'
t'uququun	'easily used up; easily rots'

In addition, adjectives, like all other major classes of words, can be derived from other adjectives through the addition of one of the prefixes *ch-*, *s-*, *x-*, *xh-*. These prefixes freely derive new lexemes, at times with changes in meaning, but often with no apparent change. Examples:

- (26) b'aj ~ sb'aj 'fat'  
 jitz' ~ chjitz' ~ xhjitz' 'small, of grains'  
 leq ~ xleq ~ xhleq 'short'  
 q'an 'ripe' ~ xhq'an 'yellow'  
 k'aa 'bitter' ~ xk'aa 'stingy, self-centred'

In addition to the adjectives that are obviously derived because they include one of the aforementioned suffixes, even if their roots are unattested in underived form, there are a large number of adjectives that appear to be derived, both in terms of their meanings and their forms, but whose status is less clear. In general these adjectives have a long vowel or a vowel followed by a glottal stop, and in a few cases are disyllabic. The problem of analysis arises because glottal stop or vowel lengthening are processes that derive adjectives from positionals, but adjectives can also have roots with long vowels or vowels followed by glottal stops. While most roots in Mam are monosyllabic, and transitive and positional roots are always CVC, these restrictions do not apply to noun, adjective, or intransitive roots.

Thus, while *piim* 'thick' is undoubtedly an adjective root, and has been reconstructed as such (Kaufman and Norman 1984), *chuus* 'smoking constantly' is more likely to be a derived form, at least on the basis of meaning. Similarly, *cha'x* 'blue, green' is cognate with Protomaya \**ra'x* (Kaufman 1974) and therefore most likely a root, while *ji'j* 'thick, of bean soup or something similar' is less likely to be an underived root. All disyllabic forms are suspect, but some, such as *meeb'ù* 'poor', are roots. This has been reconstructed as \**me'b'aa*, a noun/adjective root for 'orphan/widow(er)' and 'poor' (Kaufman and Norman 1984).

Lacking reconstructions for most of the suspect forms in Mam, and without clear evidence of cognates in other Mayan languages that might solve the problem of deciding on their status, we are left with a fairly large number of adjectives of ambiguous status. Discounting also the noun/adjective or positional/adjective

roots where the basic meaning seems to be more like the noun or positional, we are left with approximately fifty adjective roots.

## 2.2. SYNTAX

Most adjectives can function as either the head of a stative (non-verbal predicate), the complement of an existential predicate, or can directly modify a noun. Some adjectives, in particular the positional adjectives and adjectives derived with  $-V_1C_2V_1V_1n$ , only function as the heads of statives. The head of a stative precedes its subject and is marked with Set B (absolutive) affixes to agree with the subject:

- (27) *Matijj-Ø-ta nimaal xaq.*  
 head subject  
 big-B3sg-3sg EMPH great rock  
 ‘The rock is big.’
- (28) *Wa’l-qa xjaal.*  
 head subject  
 standing-B3pl person  
 ‘The people are standing.’ (positional adjective)
- (29) *Sikynaj qiina.*  
 head  
 tired B1sg  
 ‘I am tired.’

When a positional adjective or an adjective in  $-V_1C_2V_1V_1n$  is the head of a stative with adverbial functions, it triggers split ergativity on an aspectless verb in the following clause (which in Mam involves marking all of the direct arguments with Set A (ergative) affixes):

- (30) *B’onkl-Ø t-kub’ tx’yaan t-witz tx’otx’.*  
 stative verb subject locative  
 placed:fat.thing-B3sg A3sg-go.down dog A3sg-RN:on ground  
 ‘The dog is on the ground as a fat thing is placed.’ (The fat dog is on the ground.)
- (31) *Malalaan-Ø-tzan t-xi’ tzee’*  
 stative verb subject  
 swelling-B3sg-well A3sg-go tree  
 ‘Swelling went the tree.’ (The tree swelled up.)

Existential predicates are formed on a base of (a)t- with suffixed Set B person markers. These can take an adjectival complement:

- (32) *Puur kyee’yex yiin t-oo’.*  
 very excellent ATT EXIST-B1pl  
 ‘We are quite well.’



- (33) *jatuma t-Ø-a' qloolj*  
 where EXIST-B3sg-DISP dark  
 'where it is dark'

Attributive adjectives usually precede the noun they modify:

- (34) *saq weexj* 'white pants' (\**weexj saq*, at least with this meaning)  
 white pants
- (35) *kyaq q'ankyooq* 'red lightning' (\**q'ankyooq kyaq*, with this meaning)  
 red lightning

If there is an indefinite article or number before the noun, some speakers will postpose the adjective to the noun:

- (36) *juun t-wiixh saq* 'a cat of his/his cat' (\**juun saq t-wiixh*)  
 (37) *tkaab'an tx'yaan jawan* 'the second fierce dog' (\**tkab'an jawan tx'yaan*)

Others, however, do not move the adjective to follow the noun:

- (38) *jun a'laj chulal* 'a green sapodilla' (\**jun chulal a'laj*, with this meaning)

When an adjective follows a noun, it is possible to interpret it as a relative clause modifying the noun. For some speakers, this is the only available interpretation, with or without a number or indefinite article. For others, however, moving the attributive adjective to follow a noun in an NP with a number or indefinite article does not involve relativization. Even for those who do postpose the adjective to the noun, the adjectives *matijj* 'big, important', *nim* 'many', *ni* 'small', and *tal* 'small' can precede the noun no matter what else there is in the NP. The adjective *nimaal* 'great, important' always precedes the noun.

- (39) *kab' matijj xjaal* 'two important people'  
 (40) *kab' xjaal matijj* 'two important people'

Nouns can also modify other nouns, but only in the context of: (i) a possessive noun phrase, in which the first noun is possessed by the second noun and the first noun takes Set A markers that agree with the person and number of the possessor, or (ii) a measure word, which quantifies a mass noun so that it can be counted, specifies a part to be counted, or specifies some physical characteristic of the noun that is being counted. Such measures are always preceded by a number or quantifier. They precede nouns. Examples:

- (41) Possessive NPs:  
*t-kamb' meeb'a* 'the orphan's prize'  
 A3sg-prize orphan  
*ky-witz xjaal* 'the people's heads'  
 A3pl-hear person

- (42) Measures:  
 kab' jatz' waa'j 'two bites of tortilla'  
 kyaaj tx'anaj tchi' 'her four pieces of meat'

The only elements that can intervene between an adjective and the noun it modifies are the clausal enclitic *-tzan* 'well, then' and the plural marker *qa*:

- (43) *B'isan nim-tzan q'iij o Ø-teen-ta xjaal.*  
 well many-well day PAST B3sg-be.in.a.place-3sg EMPH person  
 'Well, the person was there for many days.'
- (44) *Qapa jaka tz'-etz q'o-'n ch'iin qa q-pwaq.*  
 maybe AFFIRM B3sg-DIR give-ss a.little PL A1pl-money  
 'Maybe they can give us a little money.'

Adjectives can be conjoined with the conjunctions *b'ix* 'and' or *mo* 'or' (also used to conjoin other types of words, phrases, and clauses), although conjoined adjectives are quite rare. The conjunction cannot be deleted:

- (45) *nuch b'ix sib' tx'yaan*  
 small and grey dog  
 'small grey dog' (\**nuch sib' tx'yaan*)

Adjectives that follow a noun can also be conjoined:

- (46) *Pero aa aj k'alb'il matij t-witz b'ix matij t-qan.*  
 but DEM DEM carrying.cloth big A3sg-face and big A3sg-leg  
 'But it is the big and long carrying cloth.'

Three adjectives can be used in a stative predicate, with a conjunction only between the last two:

- (47) *Matij-Ø, yooxh b'ix kyee'yex.*  
 big-B3sg red and beautiful  
 'It is big, red, and beautiful.'

Conjoined predicate adjectives need not be together:

- (48) *Matij-Ø jun jaatza, b'ix cha'x.*  
 big-B3sg one matasano and green  
 'The matasano (plant in rue family) was big, and green.'

A way to conjoin two predicate adjectives without using a conjunction is to repeat the noun:

- (49) *Tzqiiij-Ø ajlaaj poolan-Ø ajlaaj.*  
 dry-B3sg reed mounded.up-B3sg reed  
 'The reed was dry and mounded up.'

The only adjectives that can be used with another adjective without a conjunction are *ni* 'small' and *nimaal* 'great, important'. When used like this, they are a diminutive and intensifier, respectively:

- (50) *jun ni nuxh yiin*  
 one DIM small ATT  
 'one that is a little small'
- (51) *Luu-qa nimaal tal t'iiw.*  
 DEM-PL INTENS small eagle  
 'The small eagles were there.'

QUANTIFIERS, like NUMBERS, can precede other adjectives with no conjunction:

- (52) *t-uj juu'n nimaq tnom*  
 A3sg-RN:in each big town  
 'in each town'
- (53) *Nn-Ø-eel ch'iin ni q-chikyèel ky-u'n-jal*  
 PROG-B3sg-go.out a.little small A1pl-blood A3pl-RN:by-CLAS:non-human  
 'They take a little of our blood.'

They can also take the distributive morpheme *-chaq*, like NUMBERS:

- (54) *ch'iin-chaq nimaq t-b'aan-al b'ix ch'iin-chaq nimaq*  
 a.little-DIST big A3sg-good-ABST N and a.little-DIST big  
*t-naach-al*  
 A3sg-bad-ABST N  
 'to each a little good and a little bad'

Adjectives can also be modified by other attenuators and intensifiers, especially the attenuator *yiin* and the borrowed (from Spanish) *puura* 'very' and *weena* 'very'. *Yiin* and *weena* are used after the adjective, while *puura* precedes it:

- (55) *juun ni nuxh yiin b'ix juun matij yiin*  
 one DIM small ATT and one big ATT  
 'one somewhat small one and one somewhat big one'
- (56) *jun nimaal lab'aj matij weena*  
 one INTENS snake big very  
 'a very big snake'
- (57) *Jun qlo'n-Ø pere puura k'ook'j.*  
 one fruit-B3sg but very delicious  
 'It's a fruit that's very delicious.'

*Puura* can be used in combination with one of the other intensifiers:

- (58) *Ya saabe puur kyiw-Ø weena.*  
 now you.know very hard-B3sg very  
 ‘It’s very hard.’

- (59) *Puur kyee’yex yiin t-oo’*  
 very excellent ATT EXIST-B1pl  
 ‘We are quite well.’

*Yiin* and *weena* can also be used adverbially:

- (60) *Maa’tzan Ø-poon yiin.*  
 recent-well B3sg-arrive.there a.little  
 ‘It arrived a little.’
- (61) *T-jon-aal-x xaar n-Ø-loqa-n weena.*  
 A3sg-one-ABST N-only jug PROG-B3sg-boil-AP a.lot  
 ‘His jug was boiling a lot all by itself.’

Adjectives can be used anaphorically without a noun in the NP. In the following sentence the two adjectives in the second clause refer back to the cave entrance, without repeating the noun.

- (62) *O q-il-a at-Ø kab’ t-zi t-ooky’*  
 PAST A1pl-see-1pl EXCL EXIST-B3sg two A3sg-entrance A3sg-hole  
*t-jaa-jal,*  
 A3sg-house-CLAS  
 ‘We saw that there were two cave entrances,  
*juun ni nuxh yiin b’ix juun matiiy yiin.*  
 one DIM small ATT and one big ATT  
 one somewhat small and one somewhat big.’

The following example shows that an adjective can be the only element in an NP, where it has a pronominal function.

- (63) *Kuxi’ n-Ø-jaaw nimaal.*  
 every.moment PROG-B3sg-go.up great  
 ‘At every moment it was bursting (referring to a previously mentioned hose).’

Adjectives are negated as statives, with the negative particle that negates any stative or noun, *miyaa’*. It precedes the adjective. All other types of constituents are negated by other particles. Locative and existential predicates take *mi’aal* or *miti’/nti’*, and verbs are negated with *miti’/nti’* or *mii’n*.

- (64) (a) *matiiy-Ø* ‘it’s big’ (b) *miyaa’ matiiy-Ø* ‘it’s not big’  
 big-B3sg NEG big-B3sg

The comparative of adjectives is formed with the relational noun *-witz*. The adjective is introduced in a non-verbal predicate whose subject is the noun being compared. The noun to which it is compared is the complement of the relational noun. Examples:

- (65) *B'ala kyja' meeb'a-x t-oo' ky-witz nemaas nasyoon*  
 maybe like.that poor-still EXIST-B1pl A3pl-RN:COMP the.rest nation  
 'Maybe because of that we are poorer than the rest of the nations.'
- (66) *nim-Ø-x t-qan Xwan t-witz Luuch*  
 big-B3sg-still A3sg-foot Juan A3sg-RN:COMP Pedro  
 'Juan is taller than Pedro.'

Adjectives can be followed by relational nouns that introduce another argument that specifies where the adjective applies. These arguments are always locative. Examples:

- (67) *Jatuma nn-Ø-etz ky-ii-'n qa-j libro sb'akbiaj*  
 where PROG-B3sg-DIR A3pl-bring/take-ss PL-DEM book moldy  
*ky-i'j?*  
 A3pl-RN:on  
 'Where did they take these mouldy books from?' (specifies that the mould is on the surface)
- (68) *Poreeso Ø-kyaj qò'n-kye xo'j ky-i'j kyaq b'ix q'anwoowj*  
 that's.why B3sg-DIR give-3pl coyote A3pl-RN:on red and brown  
*t-xe t-xhkyin*  
 A3sg-RN:under A3sg-ear  
 'That's why the coyotes are red and brown under their ears.'

A number of adjectives can be used adverbially with no change in form. These include at least adjectives that indicate VALUE, DIMENSION, and PHYSICAL PROPERTIES, and definitely do not include COLOURS. If used in initial position, they require either split ergativity on an aspectless verb, or dependent forms of the aspect markers on the verb. Examples:

- (69) *B'a'n t-b'ii-n-x.*  
 good A3sg-hear-AP-still  
 'It still sounds good.'
- (70) *Nim x-Ø-b'aj w-aq'na-'n-a.*  
 many RECENT DEP-B3sg-DIR A1sg-work-ss-1sg  
 'I worked a lot.'
- (71) *Galaan Ø-Ø-tzaaj jun nimaal cheenq' weena,*  
 handsome PAST DEP-B3sg-come one great bean (plant) very  
*kyee'yex Ø-Ø-tzaaj.*  
 beautiful PAST DEP-B3sg-come  
 'The beans developed very well, very beautifully.'

They can also occur after the verb:

- (72) *N-ch-ee-tz-tzan* *pju'n*.  
 PROG-B3pl-go.out-DIR-well untied  
 'They went out free.'
- (73) *X-Ø-kyakaj-tzan* *n-kano-'n-a* *b'a'n*.  
 RECENT DEP-B3sg-DIR-well A2sg-learn-ss-1sg well  
 'I learned well.'

TABLE 1. Summary of properties of nouns, adjectives, positionals, and verbs

	Nouns	Adjectives	Positionals	Verbs
Inflect for person/number of subject in monovalent predicate (intransitive verb (V) or non-verbal predicate (N, A, P)) (§2.1)	✓	✓	✓	✓
May take imperfect marker <i>-taq</i> (§2.1)	✓	✓	✓	✓
May be inflected for person/number of possessor (§2.1)	✓	—	—	—
Take tense/aspect/mood inflections (§2.1)	—	—	—	✓
Take abstract noun derivational suffix <i>-al</i> ~ <i>-iil</i> (§2.1)	some	✓	—	—
Take versive derivational suffix <i>-ax</i> ~ <i>-iix</i> (§2.1)	—	✓	—	—
Take <i>-saa</i> causative suffix (§2.1)	—	some	—	some
Take abstract noun derivational suffixes <i>-ab'iil</i> , <i>-le'n</i> (§2.1)	—	✓	—	—
Take the attenuator <i>-ka</i> (§2.1)	✓	✓	—	—
Take the intensifier <i>-xax</i> (§2.1)	✓	✓	✓	✓
Can be the complement of an existential predicate (§2.2)	—	✓	—	—
May directly modify a noun (§2.2)	measures	✓	—	—
Can be conjoined with <i>b'ix</i> or <i>mo</i> (§2.2)	✓	✓	✓	✓
Can take the distributive <i>-chaq</i> (§2.2)	numbers	✓	—	—
Can be modified by intensifier <i>weena</i> or attenuator <i>yiin</i> (§2.2)	—	✓	—	✓
Negated with <i>miyaa'</i> (§2.2)	✓	✓	—	—
Form comparative with relational noun <i>-witz</i> (§2.2)	—	✓	—	—
Can be used adverbially (§2.2)	—	some	✓	—

At least one adverb, *ojtxa* ‘a long time ago’, can function like an attributive adjective (it lacks any of the characteristic derivations of adjectives, however):

- (74) *aa-jun kastiiwa o tz-iky’ ky-i’j ojtxa xjaal*  
 DEM-one punishment PAST B3sg-pass A3pl-RN:PATIENT old person  
 ‘Several punishments happened to the old people.’

### 3. Semantics

#### 3.1. ROOTS

Mam has under fifty adjective roots that fall into the following semantic classes: DIMENSION, COLOUR, PHYSICAL PROPERTY, QUANTIFICATION, POSITION, and VALUE. The following list gives all of the root adjectives in the sample, and a selection of other adjectives that are probably not roots, although their sources are not clear:

#### DIMENSION

##### *Roots*

matijj/ma’/tijj	‘big’
nee’	‘small’
nii	‘small’
nuch/nuxh	‘small’
tal	‘small’
(ch)mitz’	‘small’
kok’	‘small, short (distance)’
piim	‘thick’

##### *Non-roots*

chlaak’	‘thin’
xhk’a’l	‘thin’

#### COLOUR

##### *Roots*

cha’x	‘blue’
kyaq	‘red’
q’aq	‘black’
saq	‘white’
yooxh	‘red’

##### *Non-roots*

xhk’a’l	‘thin’
(xh)nu’l	‘very white’
sq’oo’n	‘very white’
sk’o’j	‘grey’
swi’ky	‘grey’
xko’j	‘brown’

#### PHYSICAL PROPERTY

##### *Roots*

aal	‘heavy’
che’w	‘cold’
chi’	‘sweet’
chiixh	‘dirty’
ch’ul	‘watery, juicy’

##### *Non-roots*

ak’naj	‘wet’
--------	-------

k'aa	'bitter'
kyiw	'hard'
meen	'mute'
q'iinan	'rich'
t'eb'	'thick (liquid)'
tx'am	'sour'
tzatz	'thick (liquid)'
tzqijj	'dry'
tzu'w	'stinking'
tz'iil	'dirty'
ch'ak	'muddy'
meeb'a	'poor'
yaab'	'sick'
q'an	'ripe'
cha'x	'raw'
kyaq	'hot'
saq	'clean'

## QUANTIFIERS

*Roots*

nim	'many'
ch'iin	'few'

## POSITION

*Roots*

neqaa'	'near'
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## AGE

*Non-roots*

aak'aj	'new'
tx'aaqan	'old'

## VALUE

*Roots*

naach	'bad, ugly'
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*Non-roots*

b'a'n	'good'
kyee'yex	'beautiful'

## HUMAN PROPENSITY

*Non-roots*

(s)la'j	'lying'
liiq'	'gluttonous'
si's	'flirtatious'
sook	'funny'



HUMAN PROPENSITY (*cont.*)*Non-roots*

tx'u'j	'fierce'
xmeletz	'inconsistent'
xpo'w	'stubborn'

Many words for DIMENSIONS are positionals, for instance: *tukl* 'lying there, something short', *palch* 'placed, long thing'. Another way to form dimensional adjectives is with the roots *nee* 'small', *matijj* 'big', or *nim* 'many (big)'. When combined with body parts or relational nouns, they are extended to mean small or big in a certain dimension. For instance, from *tqan* 'leg, foot' there is *nee* 'tqan' 'short', *matijj tqan* 'long', and *nim tqan* 'long', and from *twitz* 'face' there is *nee* 'twitz' 'narrow' and *nim twitz* 'wide'.

Mayan languages in general have five basic COLOUR terms. Mam has added another term for red, *yooxh*, and has shifted the original term for yellow, *q'an*, to mean 'ripe', while a derived term, *xhq'an*, is used for the colour. It is fairly common to extend the use of nouns that refer to objects of particularly noteworthy colours to the colour itself, as in *xheq* 'a blue mushroom' for 'blue', *chel* 'parakeet' for 'green', or *spoq* 'dandruff' for 'grey'.

Non-adjective QUANTIFIERS include 'all', *tkyaqiiil*, which is an always-possessed noun, and the words for 'only', *noq* and *o'kx*, which are adverbs with no derived forms. The NUMBERS 'one', *jun*, and 'two', *kab*, are used for the indefinites 'a/an' and 'some', respectively, and a derivation from the number 'one', *juu'n*, indicates 'each'.

Other classes of words that have something to do with POSITION are the relational nouns, directionals, and positionals. One of the main functions of relational nouns is to introduce locative NPs, encoding meanings such as 'in, on, between, beside, above, beneath', etc. The directionals are grammaticalized forms of intransitive verbs of motion that are inserted into the verbal complex to indicate the direction of movement. They are also used as the base to form cardinal directions, either as a participial form (with *-na*) or as an abstract noun form modifying the noun *q'iiij sun*. The directions are:

(75)	okna	'east'	< ok	'in'
	elna	'west'	< el	'out'
	kub'na	'south'	< kub'	'down'
	jawna	'north, above'	< jaw	'up'
	telex q'iiij	'west'	< el	'out, xi' 'away', q'iiij 'sun'
	tkub'al q'iiij	'south'	< kub'	'down', q'iiij 'sun'
	tjawal q'iiij	'north'	< jaw	'up', q'iiij 'sun'
	tjawatz q'iiij	'east'	< jaw	'up', tzan 'toward', q'iiij 'sun'

Positionals encode a combination of semantic notions, including position (far, standing, sitting, lying down, crouching, leaning, hanging, etc.) and physical characteristics (round, spherical, fat, thin, long, lightweight, cylindrical, uneven, etc.)

Some may refer to position alone, or to physical characteristics alone, and a few refer to neither (quiet, alone, accustomed). In addition to the fact that the main derivation from positionals is the positional predicate adjective, a great many regular adjectives (attributive or predicate) are also derived from positionals. They refer to the physical characteristics described by the root.

Most words for human AGE are nouns or the related noun classifiers that are quite specific with regard to *age*. Because noun classifiers are used pronominally, there are then ways to indicate the age of a person with or without using the specific nominal lexeme. Common nouns for developmental stages with their related classifiers and related adjectives, if any, are:

(76) Noun:	Classifier:	Related adjective:
nu'xh 'baby'	nu'xh	nuxh 'small'
xhlaaq' 'child'	xhlaaq'	
q'aa 'young man'	q'a	
txiin 'young woman'	txin	
q'apooj 'young woman'	—	q'apooj 'young, of a woman'
— 'man'	ma	matiij 'big, old'
xu'j 'woman'	xu'j	
swe'j 'old man'	swe'j	
yaab'aj 'grandmother'	xhya' 'old woman'	
xiinaq 'man'	xnuq 'old man, respect'	
xu'j 'woman'	xuj 'old woman, respect'	

Spanish borrowings provide additional VALUE terms, such as *boniit* 'pretty' or *galaan/walaan* 'handsome'.

Terms for SPEED are adverbs with no derivations. They include *joraat* 'quickly' (possibly a borrowing from Spanish *un rato* 'a moment'), *cheebà* 'slowly', *bàaka* 'little by little', and *e'lakyim* 'as quickly as possible'. The PHYSICAL PROPERTY adjective *kyiw* 'hard' is extended to mean 'difficult' as well. I know of no other DIFFICULTY terms, nor of adjectives for SIMILARITY or QUALIFICATION. There is a particle, *aax*, for 'the same' and a derivation of the number one, *juntl*, for 'other/another'.

### 3.2. DERIVATIONS

The most important source for derived adjectives is positionals. Of over 600 adjectives in the sample (not including positional adjectives or participles), 150 are surely derivations from positionals, and another 100 or so are probably derivations from positionals. In addition, there are the derived positional adjectives, the predicate adjective form of each of the over 250 positional roots. Verbs provide the next most important source of derived adjectives, with the participles of transitive verbs (over 250) and intransitive verbs (about fifty) constituting the most numerous category of adjectives derived from verbs. Approximately fifty adjectives in the sample are derived from verbs through other processes, and some of the unknown derivations probably also come from verbs. Nouns and adjectives are the sources

for other derived adjectives (about forty and twenty, respectively, plus other possibilities from unknown sources).

The positionals provide a great many adjectives in the DIMENSION or PHYSICAL PROPERTY classes. The specificity and variety of the meanings is a source of considerable lexical richness. Some examples are:

(77) DIMENSION:

Adjective:	Positional:
(xh)liix 'thin'	lixl 'standing, thin person'
po'x 'big rear'	poxl 'position of rear upwards'
(x)tz'uub 'reduced, opening'	tz'ub'l 'be placed, with narrow opening'

(78) PHYSICAL PROPERTY:

Adjective:	Positional:
(ch)jeetz' 'lame'	jetz'l 'be lame'
(x)kačh 'popped: popcorn, grains'	kachl 'placed on four feet'
mooj 'double, thread'	mojl 'be together; married'

The positional adjectives are semantically different from other adjectives derived from positionals, in that they retain the idea of being in a position, as well as the ideas of DIMENSION or PHYSICAL PROPERTY, while the adjectives only retain the DIMENSION or PHYSICAL PROPERTY characteristics.

The majority of the adjectives derived from verbs, in addition to the participles, are those that indicate that something is doable, or easily doable. These adjectives are quite similar in meaning to English adjectives in *-able*. Examples:

Adjective:	Verb:
ch'olooloon 'easy to peel'	-ch'ool 'peel; undress'
luukan 'easy to dig'	-luk 'dig'

Adjectives derived from other adjectives and nouns express some shift in meaning, or application of the meaning more specifically or analogously. There are also a number of adjectives that indicate that something is made of the noun from which the adjective is derived. Examples:

Adjective:	Source adjective or noun:
k'akj 'bitter, burnt food'	k'aa 'bitter' (a)
chi'aan 'tasteless'	chi' 'sweet' (a)
b'eechaj 'budded'	b'ech 'flower' (n)
ch'imān 'straw roof'	ch'im 'straw' (n)
tx'otx'an 'wattle and daub house'	tx'otx' 'earth' (n)

Finally, there are also a number of compound adjectives. Besides a miscellanea of unrelated and unpredictable compounds, several of them are formed from a colour and some other root of unknown source:

- (81) kyaqky'ekj 'strong, potent'  
 kyaqmaqmaj 'stuttering'  
 kyaqtz'umtz'aj 'hard, of wood'  
 kyaqtzeky'tzaj 'hard, of earth'  
 kyaqtziintzan 'hard, strong'  
 saqtz'utz'ub 'somewhat humid, like wood, clothes'

There are also the compounds formed with words for 'big' or 'small' and body parts or relational nouns to indicate additional dimensions:

- (82) nee' tqan 'short'  
 nee' t-xee' 'shallow'  
 nim twitz 'wide'  
 matij tqan 'long'

Another source for adjectives is borrowed words. The majority of these come from Spanish. Common borrowed adjectives include *galaan/walaan* 'handsome', *boniit* 'nice, pretty', *konteent* 'contented, happy', *look* 'crazy', *toont* 'silly, stupid', *kabaal* 'exact', and *lijeer* 'smart'. A fair proportion of these adjectives have to do with HUMAN PROPENSITY and VALUE, perhaps because these are classes that are somewhat under-represented in Mam. The borrowed adjectives are very frequently used words in Spanish, in any case.

#### 4. Conclusions

Although adjectives share a few characteristics with nouns, verbs, or positionals, they are a separate class. Adjectives can be the heads of stative predicates, like nouns. One of their principal derivations, the abstract noun, can also be applied to noun roots, but rarely. Although adjectives occur without nouns in an NP, when they do so they are anaphors. Adjectives can be modified by an attenuator and an intensifier that also function adverbially to modify verbs. When they function as the heads of statives, they can take the (im)perfective marker *-taq*, as can verbs. The positional adjective functions as the head of a stative, as do adjectives.

However, adjectives are clearly distinct from all of these classes in a number of ways. First of all, they take special derivation which, with the exception of the few nouns that also take the abstract noun derivation, is unique to the class. Second, they do not take the characteristic derivations of positionals or verbs, nor do they take possessive (Set A) markers or tense/aspect/mood inflections. Nouns cannot modify other nouns directly, except for measures which must be accompanied by numbers, or possessors which are cross-referenced on the noun with Set A markers, but adjectives do modify nouns directly. Positional adjectives can only be used predicatively, while true adjectives can be used both predicatively and attributively. Verbs are heads of verbal predicates, while adjectives are heads of stative predicates and complements of existential predicates.

In addition to these characteristics that clearly distinguish adjectives from other classes of words, it should be noted in conclusion that while there are a fairly small number of adjective roots in Mam, there are a very large number of derived adjectives. Positionals, in particular, but also nouns and verbs and even adjectives, serve as the sources for adjective derivation. The adjective roots are represented fairly well among terms for DIMENSION, COLOUR, and PHYSICAL PROPERTY, less well among QUANTIFIERS, POSITION, AGE, VALUE, or HUMAN PROPENSITY, and not at all among terms for SPEED, DIFFICULTY, SIMILARITY, or QUALIFICATION. NUMBERS are a separate class, and QUANTIFIERS should probably be grouped with NUMBERS rather than adjectives. All semantic classes of adjectives are augmented through derivation.

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## Adjectives in Papantla Totonac<sup>1</sup>

*Paulette Levy*

Papantla Totonac (PT) is spoken by about 80,000 speakers in the region around the town of Papantla, in the Mexican state of Veracruz. PT belongs to the Totonac-Tepehua family of languages, systematic reconstruction of which has not been undertaken.<sup>2</sup> It is provisionally agreed that there are at least four varieties of Totonac (Northern, Sierra, and Misantla, in addition to Papantla). One of the features in which they differ is in the degree of syntactization of adjectives.

Research on the topic of adjectives in Totonac started as a reaction to the claim in the literature, both for a Sierra variety (Coatepec Totonac) and for Misantla Totonac, that words expressing property concepts cannot be formally distinguished from nouns.

The words which, by virtue of their meanings, have been called adjectives in Spanish, are in Totonac in no way formally distinguished from nouns. They may take the possessive affixes and the plural suffixes just as all other nouns. (McQuown [1940] 1990: §18)

MacKay (1999) makes the same claim:

In Misantla Totonac, it is possible to distinguish adjectives from nouns semantically, but adjectives cannot be defined as being formally distinct from nouns. (MacKay 1999: 345–6)

<sup>1</sup> I gratefully acknowledge the contribution to this chapter of the discussion during the International Workshop on Adjective Classes, held in Melbourne, 12–17 August 2002, especially the invaluable input of the organizers, Bob Dixon and Sasha Aikhenvald, and the commentaries of Felix Ameka, Grev Corbett, and Nick Evans. I presented the material at the Linguistics Department of the University of Sydney, and I appreciate the input from Mark Donohue, Bill Foley, and Nick Riemer. Thanks too to David Beck, Susana Cuevas, Verónica Vázquez, Roberto Zavala, and especially to Janet Randall for her invaluable editing, English and otherwise. All errors and infelicities are mine. My foremost thanks go to the speakers of PT who have shared the mysteries of their language with me, the Gómez family: Lito, Mingo, Martha, Evarista. I am especially grateful to my beloved teacher, Natalio García: *paxkat kačini!* The same to M. K., G. S., J. A., and A. L., who wanted to remain anonymous. The transcription is a version of the practical orthography where *x* = /x/, *ch* = /tʃ/, *c* = /c/, *lh* = /l/, *tl* = /ɬ/, *j* = /h/, *V* = laryngealized vowel, *V* = long vowel; stress is graphically marked only when it occurs in a syllable different from the penult, unless change of stress to the penult is the only surface trait of derivation, in which case it is graphically marked.

<sup>2</sup> With the exception of a very preliminary phonological reconstruction by Arana-Osnaya (1953), and a dialectological survey by García-Rojas (1978), plus SIL intelligibility tests (Egland 1983).

MacKay adds that the heads of an NP (a) are the only category that can be inflected for possession and (b) can be satisfied by a word expressing a property concept, inflected for possession, as its sole element (see ex. (7), below).

In Levy (1992), following Dixon's (1982) suggestion to identify adjectives by first identifying concepts that semantically express properties, I showed that, for PT, adjectives could be defined on morphosyntactic grounds. Beck (1999, 2000), reacting too to the possibility of a language that conflated adjectives with nouns, very elegantly demonstrated their distinctiveness from nouns in a Northern variety, Upper Necaxa Totonac (UNT). In this chapter I not only show that adjectives are a part of speech morphosyntactically distinct from nouns in PT, but also that adjectives can be distinguished, albeit with more subtle diagnostics, both in Coatepec and in Misantra. The family furnishes an interesting case in the syntactization of a lexical class, and provides support for Dixon's suggestion (Chapter 1 of this volume) that adjectives may be found in many languages in which they did not seem to be a separate part of speech if the proper techniques are employed.

## 1. The language

PT is a polysynthetic language, with agglutinative morphology. It is head-marking at the level of phrases and clause structure. The only clause-level relationship marked on the dependent is a general locative proclitic in the locative phrase. The language is nominative-accusative, with two series of dependent pronouns, subject and non-subject. Non-subject cross-references Patient/Theme of a transitive verb, Beneficiary/Recipient of a ditransitive verb, or the Object introduced by one of several applicatives. PT has a number of applicative affixes that introduce semantic relationships which have no alternative expression as external prepositional phrases. While the basic, underlying constituent order is Verb-initial, there are pragmatically determined variations. So we find XVS, XVO, and XVOA, with A often fronted for various pragmatic functions.

Within the NP, the order of elements is quite fixed: NP' = (DEM) (QUANT) (*xa*-) (ADJ) (POSS-) [ $N_{\text{head}}$  (NP)]. Possessive inflection is prefixed only to the head of the NP. The specifier *xa*- and possessive inflection are mutually exclusive on the same noun.

Nouns and verbs differ both syntactically and morphologically. Nouns are heads of NPs that function as Subject, Primary Object, Secondary Object, and Copula Complements (CC). Nominal inflections are Possession and Number. Verbs take TAM inflection. Formally (both inflectionally and in terms of derivative morphology), verbs are stative (with two sub-classes, stance verbs and positionals) and active. There are no labile verbs; a change in valency is always formally marked.

## 2. Syntax

Adjectives in PT can be distinguished from verbs with two criteria: (a) they do not take TAM inflection, and (b) they cannot be heads of a predicate without derivation. Adjectives can be distinguished from nouns both by syntactic and inflectional criteria, as we will show below. Table 1 is a guideline to all the diagnostics.

### 2.1. WITHIN THE NP

#### 2.1.1.

Adjectives can modify a noun in an NP directly, without derivation or further syntactic apparatus. Examples (1)–(4) show different morphological and semantic types of adjectives as modifiers in both Subject and Object NPs.

- (1) *kakima:xi'* [*aqtúm palha' chiwix*]<sub>NP</sub>  
*ka-kin-ma:xi:-ʔ*                      *aq-tum*                      *palha' chiwix*  
 IMPER-1OBJ-give.it-2SUBJ NUMCL:general-one hard stone  
 'Give me one hard stone.'
- (2) *Milh* [*cha:-túm aqsqalala qa'wasa*]<sub>NP</sub>  
*min-l*                      *cha:ʔ-tum*                      *aqsqalala qa'wasa*  
 come-CPL NUMCL:human-one intelligent boy  
 'An intelligent young man came.'
- (3) *ni: kakiwani* [*li:laqapúca kwento*]<sub>NP</sub>  
*ni: ka-kin-wan-ni-ʔ*                      *li:-laqapucá-ʔ*                      *kwento*  
 NEG IMPER-1OBJ-say.it-BEN.2SUBJ INST-sad.(V<sub>intr</sub>)-ADJR story  
 'Don't tell me a sad story!'
- (4) *kama:qi:nu'* [*chi't-wa milhaqa:ʔt*]<sub>NP</sub>  
*ka-ma:-qi:nu:-ʔ*                      *chi't-wa*                      *min-lhaqa:ʔt*  
 IMPER-CAUS-on.the.side(V.st)-2SUBJ wring.it.out-ADJR 2POSS-clothes  
 'Take away your wet clothes!'

#### 2.1.2.

Adjectives cannot be the heads of NPs without further apparatus. (5) is, therefore, ungrammatical.

- (5) \**kakima:xi'* [(*aqtúm palha'*)]<sub>NP</sub>  
*ka-kin-ma:xi:-ʔ*                      (*aq-tum*)                      *palha'*  
 IMPER-1OBJ-give.it-2SUBJ NUMCL:general-one hard  
 \*'Give me (a) hard (one).'

#### 2.1.3.

Nouns can be inflected for possession, adjectives cannot, as shown in (6).



TABLE 1. Diagnostics that distinguish between adjectives, nouns, and verbs

	Nouns	Adjectives	Verbs
Head of Predicate* (§2)	no	no	yes
TAM * (§2)	no	no	yes
Attributive modifier of N* (§2.1.1)	no	yes	no
Attributive modifier of N with <i>xa-</i> (§2.1.5)	yes	yes	no
Head of NP* (§2.1.2)	yes	no	no
Null-headed NP with <i>xa-</i> (§2.15)	no	yes	no
Inflection for possession (§2.1.3)	yes	no	no
Pluralization with <i>-N</i> / <i>-n V:n</i> / <i>-ni:tni</i> , etc. (§2.1.4)	yes	Semantic class of DIMENSION; Semantic class of AGE and SOCIAL STATUS of animate nouns	no
Distributive <i>lak-/laq-</i> (§2.1.4)	Semantic class of AGE for animate nouns	all	Derived V: V < V V < ADJ
Copula Complements* (§2.2)	yes	yes	no
Compl. of semi-copula <i>tasi:</i> ‘looks’ (§2.3)	Deverbative N of result with <i>xa-</i> basic N: no	yes	no
Instensifier and other ADV (§2.2)	no	yes	yes
Secondary predication* (§2.3)	Deverbative N of result with <i>xa-</i> basic N: no	yes	no
Comparative of inequality with <i>katu:ní</i> (§2.4)	no	yes	no
Comparative of equality with adverb <i>la:</i> ‘like’ (§2.4)	yes	With nominalization	no
Superlative (§2.4)	no	<i>xa</i> -ADJ	no

\*No extra structural apparatus needed

- (6) kin-pa'xni 'my pig'  
 kin-pa'xni-ká'n 'our pig(s)'  
 \*ki-sa'qsi' 'my sweet (one)'

Contrast the Misantra Totonac examples in (7), from MacKay (1999: 345), where adjectives can be inflected for possession and may be the only element of an NP (underlining of the inflected adjective that appears as the sole element of the NP is mine, PL).

- (7) /kit ik-la'qa'n-la(lh) ix-qa't/  
 I 1SUBJ-see.X-PF 3POSS-big  
 'I saw her/his big one (dog).'  
 /ix-ci't lhtata/  
 3POSS-black sleep  
 'Her/his black one (dog) sleeps.'

#### 2.1.4.

Nouns take plural suffixes; adjectives employ the distributive prefix. Nouns are transnumeral or, in terms of Corbett (2000: 13), the system is one of general number which opposes general/singular vs. plural. Plural marking is not a universal category for nouns (it follows roughly the Animacy Hierarchy; for details, see Levy 1992: 282), and is not an obligatory agreement category within the NP. The details of agreement in number of Subjects, Objects, and CCs at sentence level are complex; plural usage in discourse has not been described for any of the Totonac-Tepehua languages.<sup>3</sup> Nevertheless, that adjectives, as CCs, are distinct from nouns with respect to plurality vs. distributivity marking should be taken as a rule of the grammar—they can in principle carry the distinction.

As shown in (8), nouns in PT mark their plural with various suffixes, which all share the presence of a nasal -N (-N, i.e. /-n/ after vowel, /-ni/ after consonant; -nV: n, -ni:tni, etc). Adjectives entail plurality with a DISTRIBUTIVE prefix *lak-/laq-*.

- (8) *Nominal*
- |               |               |                    |                                |
|---------------|---------------|--------------------|--------------------------------|
| kam           | 'son'         | kam-á:n            | 'sons'                         |
|               |               | kam-a:ná:n         | 'sons'                         |
| cha':lhka:tná | 'worker'      | cha':lhka:tna-ní:n | 'workers'                      |
| ta':tatlá     | 'sick.person' | ta':tatla-ní:n     | 'sick.persons'                 |
| pa'xni        | 'pig'         | pa'xni'-n          | 'pigs'                         |
| chichí        | 'dog'         | chichi-ní':n       | 'dogs'                         |
| lhaqa':t      | 'clothes, sg' | lhaqa':t-ni        | 'clothes, pl'                  |
| chiki'        | 'house'       | ka':chiki'-:n      | 'village, Papantla'            |
|               |               |                    | (ka':- LOC)                    |
|               |               | ka':chiki'-ní:n    | 'houses (Sp. <i>caserío</i> )' |

<sup>3</sup> Except very sketchily in Levy (2001), and in some scattered comments in MacKay (1999) and Watters (1988).

pa:xtú:n	'side'	pa:xtu:[n ]-n i:tni	'sides'
<i>Adjectival</i>			
palha'	'hard'	laq-palh'a	'hard, DIST'
cu'cu'qu	'red'	laq-cu'cuqu	'red, DIST'
ta'nkswa	'straight'	lak-ta'nkswa	'straight, DIST'

The DISTRIBUTIVE *lak-/laq-* also derives verbs that express that the action is undertaken with a greater intensity, in several places, repeatedly, distributed over several participants, as shown in (9). In Tlachichilco Tepehua (Watters 1988: 288), *lak-* is the regular inflection for plurality of Object in the verb complex.

- (9) lhka: 'she measures it, he picks it up'      lak-lhka: 'she plans it'  
 saka 'he picks it up'      lak-saka 'she selects it'  
 taxtú 'she goes out'      lak-taxtú 'he stands out'  
 munú 'he sprinkles it'      laq-munú 'she soaks it'  
 stawá 'she weaves it'      laq-stawá 'he darns it'

*lak-* DIST is also present in deadjectival verbs. The verb in (10) is an inchoative intransitive derived from the adjective *xku'ta* 'sour'. The plurality of the one participant is indicated by subject agreement in (10a), while (10b) marks both plurality of the participant and distributivity of the property. This co-occurrence is one of the indications that plurality of entities and distributivity are not semantically identical (see Corbett 2000: 114–17). All deadjectival verbs allow the presence of *lak-*, while this is not the case with all basic intransitive or transitive verbs. Both (10a) and (10b) translate with plural subjects, but in (10a) the plurality is marked only in the third person plural pronoun on the verb, while in (10b) it is double-marked: both by a third person plural subject prefix, and by the distributive prefix on the verb. (10b) seems to emphasize the plurality of process, which has, as a possible consequence, the plurality of entities to which the process happened.

- (10) (a) *taxku'taní:t mincháw*  
*ta-xku'ta-n-ni:t*      *min-chaw*  
 3pl-sour(ADJ)-INCH-PF 2POSS-tortilla  
 'Your tortillas have soured.'  
 (b) *talakxku'taní:t mincháw*  
*ta-lak-xku'ta-n-ni:t*      *min-chaw*  
 3pl-DIST-sour(ADJ)-INCH-PF 2POSS-tortilla  
 'Your tortillas have soured.'

In this trait, adjectives pattern with verbs rather than with nouns. Notice in (10), as is often the case, distributive morphemes co-occur with plural marking (Corbett 2000: 114), here, with morphemes denoting plurality of person in the verb complex. (In the domain of property concepts, distributive and plural marking co-occur in the class of DIMENSION adjectives (see §3.4) and with terms for stages-in-life (see §3.5).)

## 2.1.5.

While adjectives can modify a noun directly, nouns cannot be attributive modifiers to other nouns directly. To attributively modify another noun, a noun must take the Specifier *xa-*, as shown in (11a). The examples in (11b) without the presence of *xa-* are ungrammatical.

- (11) (a) *xa-lu:wa kuxi'*  
 DET-worm corn  
 'corn worm' (i.e. a type of worm)
- xa-tukuwi:ní pa:xkwa*  
 DET-day Easter  
 'the day of Easter'
- xa-maya:k mi-xa'nat*  
 DET-liana 2POSS-vanilla  
 'the liana used to tie the vanilla vine with'
- xa-li:wa kuyu*  
 DET-meat armadillo  
 'armadillo meat'
- (b) *\*lu:wa kuxi'*
- \*tukuwi:ní pa:xkwa*
- \*maya:k mixa'nat*
- \*li:wa kuyu*

## 2.1.6.

Adjectives marked with the specifier *xa-*, in NPs with an overt nominal head as in (12), are (b) restrictive as opposed to (a) qualifying. Adjectives by themselves cannot be the only overt lexical element in an NP; they need to co-occur with *xa-*, as shown by the ungrammaticality of (12d);<sup>4</sup> and when they cooccur with *xa-*, they have a restrictive reading as shown in (12c). In (12c), *xa-* has a specifying function, entailing that the speaker presupposes that the set to which the null head belongs—the flowers—is identifiable by the speaker.

- (12) (a) *klakaski'n smukuku xa:nat*  
*k-lakaski'n-a: smukuku xa:nat*  
 1-want.it-ICPL yellow flower  
 'I want yellow flowers.'
- (b) *klakaski'n xasmukuku xa:nat*  
*k-lakaski'n-a: xa-smukuku xa:nat*  
 1-want.it-ICPL  $\overline{xa}$ -yellow flower  
 'I want, of the flowers, the yellow ones.'
- (c) *klakaski'n [xa-smukuku]<sub>NP</sub>*  
*k-lakaski'n-a: xa-smukuku*  
 1-want.it-ICPL  $\overline{xa}$ -yellow  
 'I want the yellow ones.'
- (d) *\*k-lakaski'n smukuku*

<sup>4</sup> I analyse (12c) as a null-head NP, i.e. [*xa-smukuku P*]<sub>NP</sub> (see Levy 2002b for argumentation).

Given that in (11), the specifier *xa-* licenses a noun as an attribute of another noun, in (12b), it triggers the restrictive reading of an adjective, a more revealing gloss for the phrases containing *xa-* in (11) and (12b) might be ‘of the X, the one that Y’: for (11), ‘of the meats, the one of the armadillo’, for (12b), ‘of the flowers, the yellow ones.’<sup>5</sup> These specifying constructions furnish the clearest diagnostics to separate nouns from adjectives in those Totonac languages where nouns and adjectives are more sharply (i.e. more syntactically) distinguished. So one hypothesis is that the development of a specifying construction, which shares with adjectives as attributes the function of restricting reference, is one factor that led to the grammaticization of adjectives as a more clearly defined part of speech in PT.

## 2.2. COPULA COMPLEMENTS

Both NPs and adjectives can be Copula Complements (CC). The copula, in both cases, is zero in the present, *wan* (‘become’) in all other Tense/Aspects. The unmarked order is CC + Copula + Copula Subject, whether the subject is pronominal or an NP. The examples in (13) show both NPs and adjectives as CCs, with pronominal and NP subject in the present, i.e. with zero copula.

- |      |     |                                                                                                              |      |                                                                            |
|------|-----|--------------------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------|
| (13) | (a) | <i>ixkám wix</i><br><i>ix-kam wix</i><br>3POSS-son you<br>‘You are his son.’                                 | (a’) | <i>tli’waqi wix</i><br>strong you<br>‘You are strong.’                     |
|      | (b) | <i>ixkám namá: cuqa’wasa</i><br><i>ix-kam namá: cuqa’wasa</i><br>3POSS-son DEM boy<br>‘That boy is his son.’ | (b’) | <i>tli’waqi namá: cuqa’wasa</i><br>strong DEM boy<br>‘That boy is strong.’ |

(14) is from text. It shows what on the surface might appear as an NP (i.e. *xa-conejo* DET-rabbit, ‘the rabbit’), but must be analysed as a zero copula sentence without overt subject, because it is the complement of a relative pronoun, a context that demands a sentence and disallows either an NP or an adjective. The parallel headless relative with an overt copula that follows it strengthens the argument. Analogous sentences with adjective CC can be constructed and are readily accepted by native speakers.

- (14) *ni: ma:qaxaqxi:ya’!* [*ti: [xa-conejo]*]<sub>S</sub> *ni:lá [elefante nawán]*<sub>S</sub>  
*ni: ma:qaxaqxi:-ya:-?* *ti: xa-conejo*  
 NEG understand.it-ICPL-2 REL.hum DET-rabbit  
*ni:-la elefante na-wan-a:*  
 NEG-possible elephant FUT-COP-ICPL

<sup>5</sup> In some constructions with *xa-* the set is stated explicitly. In others, it is presupposed as recoverable. In Levy (2002a) I analyse it as a semidefinitivizer, one which does not entail unique identifiability of an entity, but whose use rather implies that the speaker presupposes that the addressee will uniquely identify the set out of which a certain entity is selected.

'You don't understand! It is not possible that whoever is a rabbit will be an elephant!' (CO3: 10)<sup>6</sup>

(15) shows CCs with overt copula, (15a) as NPs, (15b) as adjectives. Notice that if the plural occurs explicitly, the different pluralization technique distinguishes between the two sorts of CCs, but notice also that pluralization is optional.

- (15) (a) *kinata':kamá:n*,  
*kin-na-ta':-kam-á:n*  
 1POSS-KIN:pl-COM-son-pl  
*aqsquyuná'(ni:n) ixtawani:t*  
*aq-squyu-nan-î-(ni:n) ix-ta-wan-ni:t*  
 head-smoke-INDEF.OBJ-NR-pl PST-3pl-COP-PF  
 'My brothers, they were traditional doctors.'
- (b) *kinata':kamá:n, (laq)sqalala ixtawani:t*  
*kin-na-ta':-kam-á:n (laq)-sqalala ix-ta-wan-ni:t*  
 1POSS-KIN:pl-COM-son-pl DIST-intelligent PST-3pl-COP-PF  
 'My brothers, they were intelligent.'

Another diagnostic to distinguish copula clauses with nominal and adjectival complements is the co-occurrence of adjectives, but not nouns, with certain adverbials (see Levy 1992: 284, where I showed different patterning of nominal and adjectival CCs with *yaj* 'not anymore'). The best diagnostic, though, because it is cross-linguistically more prevalent (see Dixon, Chapter 1, this volume), is furnished by Beck (2000: 233–4). Adjectives, but not nouns, co-occur with the intensifier 'very'. So (16a) is grammatical, while (16b) is not. But as Beck clearly points out, the intensifier co-occurs also with verbs, crucially with intransitives (16c). So in and of itself, it is a good diagnostic for separating nouns from adjectives, but not adjectives from verbs.

- (16) (a) *Snu:n caka:t namá: ix-kám*  
 very playful DEM 3POSS-son  
 'That son of his is very playful.'
- (b) \**snu:n ma:qalhtawaqi:ná? Juan*  
 very teacher Juan  
 \*'Juan is very teacher'

<sup>6</sup> Beck (2000: 226) finds that for UNT, a bare noun cannot be a complement of a headless relative clause, presumably because they are not interpretable as copular sentences. It would be interesting to see whether a copular sentence with overt copula and an NP CC is possible in that frame, as the complement of a headless relative clause, since for UNT this environment is the only one in which copula sentences with nominal complement and copula sentences with adjectival complement do not pattern alike. I suspect that the difference in the copula sentences with nominal CC in the two languages may be due to the different extent of the use of *xa-* in the two varieties. In PT it is very frequent and it has developed quite a range of syntactic, semantic, and pragmatic functions (Levy 2002a). So structures like (14) do occur in text. However, according to Beck (p.c.), in UNT *xa-* is far less frequent in text than in PT, and I suspect that there might be also differences in the number and kinds of constructions that require it. If these differences in the copula and specifier are linked, this supports the idea that the use of the specifier is tied to the grammaticization of the adjective category.

- (c) *snu:n klaqama:xanalh*  
*snu:n k-laqa-ma:xa-nan-lh*  
 very 1-face-ashame-INDEF.OBJ-CPL  
 ‘I was very ashamed.’

## 2.3. ADJECTIVES AS DEPICTIVE SECONDARY PREDICATES

‘Adverbialization’ of adjectives is not a word formation—i.e. derivation—process, but rather a syntactic one. Adjectives, when pre-verbal—more precisely, when initial at core-level—have a function as depictive secondary predicates (Schultze-Berndt and Nicholas Himmelmann 2004, Aissen 2001). Basic nouns do not appear in this slot.

(17a) shows an adjective in modifier position within an NP. The same adjective, in its descriptive form or in its specifying form, functions as secondary predicate, in (17b) and (17c), respectively, with restrictions depending on the semantic class of the main verb. (17d), from text, shows that the position is pre-verbal and not sentence-initial.

- (17) (a) *ka:xtlawáya [lhkaka tawá]<sub>NP</sub>*  
*ka:x-tlawá-ya:-ʔ lhkaka ta-wa:-ʔ*  
 prepare-make-ICPL-2 spicy INGR-eat.it-NR  
 ‘You prepare spicy food.’
- (b) *lhkaka kka:xtlawáyá:w kintawahká’n*  
*lhkaka k-ka:x-tlawá-ya:-w kin-tawah-ká’n*  
 spicy 1EXCL-prepare-make-ICPL-1pl 1POSS-food-POSS:pl  
 ‘We prepare our food spicy.’
- (c) *xalhkaka kka:xtlawáyá:w kintawahká’n*  
*xa-lhkaka k-ka:x-tlawá-ya:-w kin-tawah-ká’n*  
 DET-spicy 1EXCL-prepare-make-ICPL-1pl 1POSS-food-POSS:pl  
 ‘We prepare our food of the spicy type.’
- (d) *[klakaskí’n [lanka’ ixkintlawá’]<sub>S</sub>]<sub>S</sub>*  
*k-lakaskí’n-a: lanka’ ix-kin-tlawá-lh-ʔ*  
 1-want.it-ICPL big PST-1OBJ-make-CPL-2  
 ‘I want you to make me big.’

In contrast, basic nouns do not appear in this frame. Certain deverbal nouns of result do appear as secondary predicates but only if they are specified by *xa-* (see Levy 2002b for details).

All adjectives appear preceding the verb *tasí’*: ‘looks like’ (loosely ‘seem’)—to such an extent that one is tempted to consider it a semicopula—as in (18a). Nouns cannot appear in this position, as (18b) shows.

- (18) (a) *skulujwa tasí’: namá: qa’wasa*  
*skulujwa ta-sí’-ya: namá: qa’wasa*  
 nimble INGR-visible(*V<sub>st</sub>*)-ICPL that boy  
 ‘That boy looks/seems nimble.’

- (b) \**ma:qalhtawaqi:ná tasí'*: Juan  
*ma:-qalhtawaqa-i:-nan-l'* *ta-si'-ya:* Juan  
 CAUS-recite/read-CAUS-INDEF.OBJ-NR INGR-visible(V<sub>st</sub>)-ICPL Juan  
 'Juan looks like a teacher.'

#### 2.4. COMPARATIVE AND SUPERLATIVE

Comparatives and superlatives are done by periphrastic means. Comparative constructions of inequality employ an adverb borrowed from Spanish, *más* 'more', that introduces the basis of comparison, and a native item, *katu:ni* 'with regard to, in comparison to' that introduces the compared term (19).

- (19) *xla ma:s lanka' katu:ní* *akit*  
 he more big with.respect.to I  
 'S/he is bigger than me.'

Comparisons of equality use the comparative adverb *la*: 'like, as', linking two nominals, so they require the nominalization of the adjectives that yields abstract names of quality, (20).

- (20) *xla ixli:kcuná la: minqa'wasa.*  
*xla ix-li:-akcu-ná?* *la: Bmin-qa'wasa*  
 s/he 3POSS-INST-small-NR like 2POSS-boy  
 'S/he is as tall as your son.' (Lit. 'She, her size is like your son.')

The superlative construction also uses the Spanish *más* 'more', but the adjective that is the basis of comparison is obligatorily specified with *xa-*, as in (22). Here it is very clear that *xa-* presupposes a set, and it selects one element out of it, the referent that has the quality of tallness to its highest degree.

- (21) [. . .] La Torre Latinoamericana, *ni:mama:s xa-ta:lhma:nnak México.*  
 REL more XA-tall LOC Mexico  
 [. . .] La Torre Latinoamericana, which is the tallest [building] in Mexico

### 3. Word formation and semantic classes

Observing property concepts based on morphological and semantic grounds also lends support to a category of Adjective in PT.

#### 3.1. MONOMORPHEMIC ITEMS

As in several other languages described in this volume (Tariana, Chapter 4; Manange, Chapter 3) and elsewhere (for Ewe, see Ameka 1991; for several African languages, see Dixon 1982), monomorphemic items constitute a smallish set, thirteen members, ordered by semantic types as in (22).



- (22) DIMENSION  
 lanka' 'big, tall'  
 lhma:n 'long'

## PHYSICAL PROPERTY

- palha' 'hard'  
 chi'chi 'hot'  
 ci'ci 'warm'  
 xku'ta 'sour'  
 sa'qsi' 'sweet'  
 lhkaka 'spicy'  
 xu':n 'bitter'

## AGE

- sa:sti' 'new'

## VALUE

- la:n 'pretty'  
 tla:n 'good'  
 qama 'tasty'

Notice that sound symbolism, a feature of the domain, is present in the items for 'hot' and 'warm'. I take up the issue below in §3.3, both because it shows that, typologically, in the domain of adjectives there tend to be phonosemantic processes (see Chapter 1 by Dixon; Ameka 1991, for Ewe; Chapter 3 on Manange; Chapter 13 on Qiang; Chapter 14 on Lao; Chapter 10 on Wolof; plus Chapter 15, the overview by Hajek), and, more importantly, because it provides another argument for adjectives in Totonacan.

## 3.2. ADJECTIVE-SHAPE ADJECTIVES

Mere inspection of terms that are syntactically adjectives reveals certain recurrent patterns which suggest derived forms, although frequently the putative base does not appear in the lexicon, synchronically (see Levy 1992 for details). Three processes are apparent: reduplication of the last syllable of the putative base, and two suffixes, which harmonize both vocally and consonantly with the base: *-(n)k/qVα* ('), and *-lVα*. These processes are not productive synchronically. In (23), (24), and (25) are examples of the morphological processes, grouped by semantic classes.

- (23) COLOUR

- (a) Reduplicated last syllable
- |         |                                                      |
|---------|------------------------------------------------------|
| snapapa | 'white'                                              |
| saqaqa  | 'whitish' (pastel colour which shows a lot of white) |
| smukuku | 'yellow'                                             |
| lmukuku | 'yellow, orange'                                     |
| pi'nini | 'red'                                                |

spi'nini	'light red, pink' (pi'n = hot pepper, chile)
smalala	'dark, brown' (people's skin)
lhmalala	'dark, brown' (people's skin)
(b) With the suffix -(n)k/qVα (')	
stalanka', staranka'	'clear, transparent, clean, white'
sta'lanqa', sta'ranqa'	'pale, discoloured, white'
ci'ca'qa	'black'
smumuqu	'light, blond' (people)
chu'chu'qu	'red, dark red'
cu'cu'qu	'red'
spu'pu'qu	'greyish blue'
lhpu'pu'qu	'ashen, between dark blue and grey'
sapuku'	'pale'
lhapuqu'	'pale, anaemic, discoloured'

Others colour terms are related clearly to a natural process, *staqa* 'green, unripe', *xtakni* 'green', (maybe < *staka* 'grow?'), or derived from the colour of an object, *la:xixi:wa* 'orange' < *la:xix* 'orange, n'. All 'basic' colours are morphologically complex, either inherently reduplicated or formed with a harmonic suffix.

(24) PHYSICAL PROPERTY

- (a) Reduplicated last syllable
- |                                 |                                        |
|---------------------------------|----------------------------------------|
| stu'lulu                        | 'plump and thick'                      |
| (stu'lú V <sub>tr</sub>         | 's/he makes little balls')             |
| lhtu'lulu                       | 'plump and thick, more than the above' |
| qa'wiwi                         | 'cold, icy'                            |
| sqa'wiwi                        | 'cool'                                 |
| sti'lili                        | 'circular'                             |
| (sti'li, sti'ri V <sub>tr</sub> | 's/he borders it')                     |
- (b) With the suffix -(n)k/qVα (')
- |                          |                                    |
|--------------------------|------------------------------------|
| pa'cha'qa                | 'soft, mashed, like mud'           |
| (pa'chá' V <sub>tr</sub> | 's/he mashes it, s/he crushes it') |
| smat'anka'               | 'finely ground'                    |
| (smatá' V <sub>tr</sub>  | 's/he grinds it')                  |
| sti'liki', sti'riki'     | 'round, circular, oval'            |
- (c) With the suffix -lVα
- |                         |                                               |
|-------------------------|-----------------------------------------------|
| lhnanqala, lhnanqala    | 'so long that it drags (like a bride's gown)' |
| (lhnanqa                | 'tendons')                                    |
| lhqutili                | 'crooked'                                     |
| xquti'li                | 'twisted'                                     |
| (xquti' V <sub>tr</sub> | 's/he twists it')                             |
| qajqa'la                | 'thin, lean'                                  |
| ska'jka'la              | 'very thin, skinny'                           |
| lhka'jka'la             | 'rigid, stiff'                                |

The items for 'circular' and for 'round, oval' show that originally the suffixes had different shades of meaning (see Levy 2002b for discussion). Items expressing HUMAN PROPENSITY are basically verbs and deverbative items (see §3.6). In my database, only a few are 'adjective-shaped.' I list them in (25).

- (25) HUMAN PROPENSITY
- (a) Reduplicated last syllable
    - aqsqalala 'intelligent'
    - ka'mama 'courageous'
  - (b) With the suffix  $-(n)k/qV\alpha$  (?)
    - lhmunqa 'glutton'
    - tli'waqa 'strong, wilful'

Monomorphemic adjectives and 'adjective-shaped' ones are the core of the adjectival category not only by morphological criteria, but also because they behave alike with respect to all the diagnostics. AGE, DIMENSION, and HUMAN PROPENSITY all have peculiarities that distinguish them from the best exemplars of the class.

### 3.3. SOUND SYMBOLISM

The careful reader must by now have realized that many adjectival concepts in (24)–(26) have variants in which certain sound variations correlate with differences in meaning related to intensity. Sound symbolism, in three series, fricatives, /s, x, lh/, affricates /c, ch, tl/, and velars /k, g/, is a pervasive but frozen process in the whole family (see Bishop 1984, Levy 1987: 115–30). For the varieties where it is claimed that nouns and adjectives are indistinguishable syntactically, the natural hypothesis is that sound-symbolically related items denoting entities will differ semantically as to size, while sound-symbolically related items denoting properties will differ semantically in the dimension of intensity, since property concepts are inherently gradable. This prediction holds, as the examples in (26) show.

- (26) (a) Some PT nouns related by sound symbolism
- |        |                           |
|--------|---------------------------|
| suku'  | 'small hole, perforation' |
| lhuku' | 'hole'                    |
| lhuqu' | 'cave'                    |
- (b) Coatepec (McQuown 1990)
- |                   |                        |
|-------------------|------------------------|
| makstululúlh (n.) | 'a small ball'         |
| maklhutululh (n.) | 'a large ball' (p. 67) |
| smulút (n.)       | 'small arch'           |
| xmulút (n.)       | 'large arch' (p. 67)   |
| cacuqu            | 'reddish, pale red'    |
| chachuqu          | 'dark red' (p. 67)     |
| smukuku           | 'light yellow'         |
| lmukuku           | 'dark yellow' (p. 128) |
| qawiwi?           | 'cold'                 |
| sqawiwi?          | 'cool' (p. 127)        |

- (c) Misantla (MacKay 1999)<sup>7</sup>  
 /hun-puu-suku'k/ 'there is a small hole'  
 /hun-puu-xuku'k/ 'there is a medium hole'  
 /hun-puu-lhuku'k/ 'there is a big hole' (p. 113)  
 /cukú'nku'/ 'cool'  
 /chuku'nku'/ 'cold' (p. 37)

Further evidence for the morphological and semantic differentiation of property concepts in the whole Totonacan family is that the Misantla Totonac intensifier *ciit* co-occurs with verbs and property concepts only, and not with prototypical nominal denotations (MacKay, p.c.). Furthermore, when one examines pluralization techniques in both Misantla and Coatepec, property concepts are pluralized with *lak-/laq-* (MacKay 1999: 353–4, with a few exceptions, like the word for 'maize'; McQuown 1990: 108). As McQuown incisively notes while discussing plurality techniques:

El prefijo /lak-/ [ . . . ] (¿tal vez, de preferencia, con aquellas bases nominales más comúnmente empleadas como atributivas?) . . .

[The prefix /lak-/ [ . . . ] (maybe preferentially with those nominal bases more often employed attributively?) trans. PL] (McQuown [1940] 1990: 108)

This difference lends support to Dixon's (Chapter 1 of this volume) claim that the diagnostics might be rather subtle in some languages, but a careful analysis might uncover an adjective class for many languages for which there were claims that they had no adjective classes at all. The differences among the Totonacan languages are not about whether property concepts exist as an adjective class or not, but rather in their degree of syntactization.

### 3.4. DIMENSION ADJECTIVES

Adjectives expressing DIMENSION form a very large class in PT because the three basic DIMENSION terms, two of them independent monomorphemic items: *lanka* 'big', *lhma:n* 'long', and the third, a bound root, *-cu*: 'small', combine productively with Part morphemes—a class comprising about ninety items—to create a very large set of more specific terms by composition. A small selection is given in (27).

- (27) *lanka* 'big'  
       *ti:-lanka* 'wide (something in a continuous line, like a road)'  
       *paq-lanka* 'wide, as a board'  
       *pu:-lanka* 'wide, from the inside'  
       *tu:-lanka* 'thick, as a book, a board'  
       *cha':-lanka* 'thick, a cylindrical object' (e.g. a log, leg)  
       *paj-lanka* 'broad (the space between two parallel things)'

<sup>7</sup> MacKay states: 'This process is not nearly as productive as that described by Bishop and Levy. [ . . . ] Furthermore, the variation does not always coincide with a corresponding change in meaning' (1999: 113). Nevertheless, observe that when there is change in meaning, the prediction holds: 'size' for entity denotations, 'intensity' for property concepts (and verbs).

pa:-lanka'	'big, as a bundle, package; bulky'
kilh-lanka'	'big in the opening'
qi:-lanka'	'fat, stout'
-cú:	'small'
ak-cú:	'small, short'
pu:lak-cú:	'small in the inside'
qi:-cú:	'thin (person)'
tu:-cú:	'low, a place where one walks; thin as a board or a book'
kilhtu:-cú:	'narrow, from border to border'
qalhtu:-cú:	'low, like a wall, table'
ti:-cú:	'narrow and long, like a road'
pa:-cú:	'small, of a bundle'
paj-cú:	'narrow (the space between two parallel things)'
laka-cú:	'close, a small space'
lhma:n	'long'
ta:-lhmá:n	'tall, high'
cha':-lhmá:n	'long and round'
pu:-lhmá:n	'deep'
qalhpu:-lhmá:n	'with a broad border, like a ravine, a well'
kilhtu:pu:-lhmá:n	'deep, like a container'
lakapu:-lhmá:n,	
laqapu:-lhmá:n	'steep'

Besides the size of the class and the productivity of the formation of items in this domain, DIMENSION adjectives are deviant with regard to the adjectives we have seen thus far. Like Dimension Adjectives in Tariana (see Chapter 4, this volume), they show irregularity in their pluralization. They are also deviant, with respect to the best exemplars of the adjective class, in the way they derive their inchoative verbs (see §4.1.3).

DIMENSION adjectives are pluralized either with the DISTRIBUTIVE *lak-/laq-*, (the adjectival technique) or with an *-N* plural (the nominal technique), but are very frequently pluralized with both, as shown in (28).

- (28) lanka' 'big' lanká'-n  
lak-lanka'  
lak-lanká'-n  
qi:cú: 'thin' qi:cu-ntí:n  
laq-qi:cú:  
laq-qi:cu-ntí:n  
lhma:n 'long' lhma: [n]-nitni  
laq-lhmá:n  
laqlhma:nitni

Each of the three basic DIMENSION adjectives employs a different nominal plural suffix and, when attested for other varieties, the suffixes are cognate (e.g. Misantra Totonac *kii'k-sun-ta'n* 'small, young, pl'; MacKay 1999: 359), so if one interprets this as a retention, the nominal plural marking on DIMENSION adjectives must be very old. I do not have yet an explanation for double marking in this semantic domain, but the Totonacan irregularities are an important piece of data for the prehistory of the area (see footnote 8).

### 3.5. AGE CONCEPTS

Both *sa:sti* 'new' and *aqlhchú* 'old (thing)', adjectives for inanimates, are clearly in the adjectival category. Not so the lexical items for stages in life, which are bicategorical: they function both as nouns and as adjectives. Stage-in-life concepts for animates that function as adjectives are shown in (29).

- (29) *qu:lú* 'old (man)'  
*cha:t* 'old (woman)'  
*qa'wasa* 'young (boy-male)'  
*cu'má:t* 'young (girl-female)'

Stage-in-life terms behave like nouns in that they can be heads of NPs modified by adjectives, (30), while stacking of adjectives is practically impossible (Levy 1992, Beck 2000). They take possessive inflection (31), but unless something clearly contradicts this interpretation from context, the preferred reading under such circumstances is a kinship relationship.

- (30) *kká:ksilhi* [*cha':tu'tu lanka' laqqu:lun*]<sub>NP</sub> *nak tijya*  
*k-ka:-akxil-lhi* [*cha':-tu'tu lanka' laq-qu:lu-n*]<sub>NP</sub> *nak tijya*  
 1-OBJ:pl-saw.it-CPL NUMCL:hum-three big DIST-old.man-pl LOC road  
 'I saw three big men on the road.'

- (31) *milh kinqu:lú/kincha:t/kinqa'wasa/kincu'má:t*  
*min-lh kin-qu:lú/kin-cha:t/kin-qa'wasa/kin-cu'ma:t*  
 come-CPL 1POSS-old.man/1POSS-old.woman/1POSS-boy/1POSS-girl  
 'My husband/wife/son/daughter came.'

Stage-in-life terms behave like adjectives in their ability to modify attributively within an NP, without further structural apparatus, with several specialized functions: indication of the sex and stage-in-life cycle of animals, the creation of more specific denotations for types of stages in the social status of humans, as shown in (32). Or else, they are used as address forms equivalent to 'Mr' or 'Mrs' in English, but with a connotation of respect, as in (33). Frequently, the form for 'mister' is *qu:ru-ci:n*, the suffix being an honorific borrowed from Nahuatl.

- (32) *tantúm qu:lu pa'xni*  
*tan-tum qu:lu pa'xni*  
 NUMCL:animal-one male pig  
 'A male pig.'
- lakcu'maján chichi'ní:n*  
*lak-cu'maj-án chichi'-ní:n*  
 DIST-young.female-pl dog-pl  
 'Little female dogs, before they have a litter.'
- lakcha:tí:n lakcu'maján*  
*lak-cha:t-í:n lak-cu'maj-án*  
 DIST-old.women-pl DIST-girl-pl  
 'Old maids.'
- (33) *qu:ru uxpi'*  
 old.man crocodile  
 'Mr crocodile.' (address form, from text)
- cha:t waka:x*  
 old.woman cow  
 'Mrs cow.' (address form, from text)

The terms for 'young' and 'old' can appear in the secondary predication structural position in a sentence without further structural measures, as in (34), but not the other terms for stage-in-life/kind of human being, as shown in (35), which have to use the construction with the comparative adverb *la*: 'like, as'. Both terms take intensifiers, as in (36). The rest do not. These last two features show clearly that the terms for 'young' and 'old' are not two nouns in apposition, but are true adjectives.

- (34) *qa'wasa chilh Pedro nak ka':chiki':n*  
*qa'wasa chin-lh Pedro nak ka':chiki':n*  
 young arrive.here:1/3-CPL Pedro LOC Papantla  
 'Pedro arrived young to Papantla.'
- Pedro qu:lú alh nak ka':chiki':n*  
*Pedro qu:lú an-lh nak ka':chiki':n*  
 Pedro old.man go:1/3-CPL LOC Papantla  
 'Pedro left Papantla when he was old.'
- (35) *J. yah chiwi:nán la: cu:sqa'ta'*,  
*J. yah chiwi:nán-a: la: cu:-sqa'ta'*,  
 J already.not s/he.talks-1CPL like little-baby
- J chiwi:nán=a' la: chi'xkú*  
*J chiwi:nán-a:=a' la: chi'xkú*  
 J. s/he.talks-1CPL=already like man  
 'John doesn't talk like a child anymore, he already talks like a man.'

\**chi'xkú chiwi:nán Juan*

\**xachi'xkú chiwi:nán Juan*

- (36) *snu:n qu:lutá' kimpapa*  
*snu:n qu:lu=tá' kin-papa*  
 very old=already 1POSS-grandfather  
 'My grandfather is already very old.'

*snu:n qa'wasajkú kinta':kam*  
*snu:n qa'wasaj=kú kin-ta':-kam*  
 very young=still 1POSS-COM-son  
 'My brother is still very young.'

As with the DIMENSION adjectives, all the words for stages-in-life show double marking for the plural, employing both the adjectival technique (*lak-/laq-*) and the nominal one (all sorts of -N suffixes), as can be seen in (37). In this case, though, there are no variations employing only the DISTRIBUTIVE. It is either the nominal form or, more frequently, both.

- (37) Plural forms of nouns that denote 'man', woman, plus stage-in-life terms:

qa'wasa	'boy'	laq-qa'wasá-n
chi'xkú	'man'	chi'xkuw-í':n
		lak-chi'xkuw-í':n
sqa'ta'	'baby'	sqa'ta':-n
		laq-sqa'ta':-n
qu:lú	'old.man'	laq-qu:lu-n
puska:t	'woman'	lak-puska:t-í:n
cu'má:t	'young.girl'	lak-cu'maj-án
cha:t	'old.woman'	lak-chaj-án

Co-occurrence of DISTRIBUTIVE and nominal plural marking is well attested typologically for nouns (Corbett 2000: 114). The distribution of the co-occurrence does not follow the constraints expected from the Animacy Hierarchy, which is one of the criteria that Corbett adduces for not considering distributives as a basic number value, along with singular, plural, dual, etc. As we have seen, this co-occurrence in PT happens both with nouns in the upper part of the hierarchy, and also with DIMENSION adjectives. This double marking on nouns high in the Animacy Hierarchy and on adjectives seems to be an areal trait.<sup>8</sup>

<sup>8</sup> Kimball (1990: 198) describes the same phenomenon for Eastern Huasteca Nahuatl, the variety of Nahuatl spoken in exactly the same geographical area as the Totonac-Tepehua languages. The adjectives he discusses are DIMENSION adjectives, and he considers that 'the marking of animacy in plural formation [i.e. the nominal technique] has spread to adjectives' (Kimball 1990: 198). If Totonacan shows idiosyncratic irregularities in the nominal pluralization of DIMENSION terms in all of its varieties (§3.4), and the Nahuatl of the area does not, the direction of diffusion must be from the former to the latter.



Beck (2000: 237) suggests, for UNT, that the terms for ‘young’ and ‘old’ were originally adjectives that have been recategorized as nouns, and that the nominal plural is the innovation. Although the details differ, PT has different evidence pointing in the same direction (for discussion, see Levy 2002b). If the direction of recategorization is the one hypothesized both by Beck and myself, there is yet another piece of evidence for adjectives in proto-Totonacan.

### 3.6. HUMAN PROPENSITY

A few HUMAN PROPENSITY adjectives that are clearly morphologically adjectives were shown in (25). These can combine with body-part morphemes to yield more specific traits, for instance *caka:t* ‘playful, mischievous’, *kilh-caka:t* (*kilh-* ‘mouth’) ‘witty; argumentative; rude with words’. But they are few, the semantic type filled out by borrowings from Spanish, e.g. *to:nto* < Sp. *tonto* ‘fool’, integrated as *ak-to:nto* head-fool, and *plojo* < Sp. *flojo* ‘lazy’.

Human deformities, adjectives in Spanish or English, are either nouns or deverbative nouns in PT, including *tantú:putu* ‘one-legged’, *maqáputu* ‘one-armed’, *qatá:pa* ‘deaf person’. Adjectives always precede their heads, so the NP *cuqáwasa laqáci*: (young.boy blind) means really ‘young (male) blind.person’, not ‘a blind youngster’.

In contrast, HUMAN PROPENSITY concepts having to do with feelings, emotions, perceptions, appraisals (‘happy’, ‘disgusting’, ‘attractive’, etc.) are basically verbs. As stated by Dixon (Chapter 1 of this volume) for Fijian, these adjectives ‘describe an attitude on the part of one participant towards someone or something else’. So ideas such as *jealous of me*, *envious of his house*, *proud of making a lot of money*, that would be expressed by means of complex adjectival phrases in English or Spanish, are expressed as different types of verbal complements.

Most HUMAN PROPENSITY concepts are expressed by what are formally deverbative nouns derived from verbs of emotions and sensations, augmented by the instrumental applicative *li:-* producing nouns meaning ‘that causes the emotion expressed by V’, as in (38). Morphologically they are recognized as nouns because the suffixal part involves either suffixes or processes that are present in all other kinds of deverbal nouns. Consider, for instance, the suffix *-t* (compare: *li:laqáti:t* ‘likable, nice’ < *laqatí*: ‘s/he likes it’ with *taskújut* ‘task’ < *skuja* ‘work’), or the process of truncation of verbal bases with /w, y/ in the last syllable (compare *li:pa:xáw* ‘that gives joy, happy’ < *pa:xawá* ‘s/he is happy’ with *tasiw* ‘rope’ < *siwí*: ‘s/he spins X’).

- (38) *li:ma:xaná* ‘that causes shame, shameful’ (*ma:xaná*  $V_{\text{intr}}$  ‘s/he is ashamed’)  
*li:laqapúca* ‘that makes you sad, unhappy’ (*laqapucá*  $V_{\text{intr}}$  ‘s/he is sad’)  
*li:laqáti:t* ‘likeable, nice’ (*laqatí*: ‘s/he likes it’)  
*li:xkájnit* ‘revolting’ (*xkajní* ‘it revolts him’)  
*li:pa:xáw* ‘that gives joy, happy’ (*pa:xawá*  $V_{\text{intr}}$  ‘s/he is happy’)  
*li:cíy* ‘funny’ (*cíyán* ‘s/he laughs’)

- liaqatú'y      'untrustworthy, dangerous' (liaqatú'yún 's/he worries about something')  
 ta-lí:pa:w      'trustworthy, important' (li:pa:wán 's/he trusts him')

Nevertheless, in spite of their clear nominal morphology, the items in (38) behave syntactically like adjectives, as shown by some of the most important adjectival diagnostics. In (39), they modify the head of an NP directly, i.e. without the intervention of *xa-*, and they accept the intensifier *snu:n* 'very' within the NP. In (40), they occupy the pre-verbal slot as depictive secondary predicates.

- (39) *kiwanilh [aqtúm snu:n li:laqapúca cuento]<sub>NP</sub>*  
*kin-wan-ni-lh      aq-tum      snu:n*  
 1OBJ-say.it-BEN-CPL NUMCL.general-one very  
*li:-laqapucá-ʔ      cuento*  
 INST-be.sad(V<sub>intr</sub>)-NR story  
 'He told me a very sad story.'

- (40) *wa:q ta:nqú':lh, li:laqapúca ktamáqxtaqli*  
*wa:q ta-an-qu':-lh*  
 all 3pl-go-TERM-CPL  
*li:-laqapucá-ʔ      k-ta-maqxtaq-li*  
 INST-be.sad(V<sub>intr</sub>)-NR 1-INGR-leave.it-CPL  
 'They all went off, I was left sad.'

All verbs offer the possibility of deriving nouns of instrument, e.g. *li:tampá:chi* 'belt' < *tampa:chi* 's/he girds up'. But the syntactic behaviour of the formally deverbal nouns of instrument in (38) as adjectives rather than nouns is a consequence of the semantic class of the verbs. Formal evidence is furnished by inchoativization and causativization processes, discussed in §4.1.

The other semantic types associated with large adjective classes in some languages are not adjectives in Totonac.<sup>9</sup>

### 3.7. REGULAR DERIVATION WITH -*wa* 'THAT HAS THE PROPERTY OF THE BASE TO SOME EXTENT'

The suffix *-wa* 'that has the property of the base to some extent' (similar to English '-ish') is quite productive, unlike the first three morphological processes described at the beginning of this section, and co-occurs with bases of the four main lexical categories, nouns, adjectives, verbs, and adverbs, as shown in (41).

- (41) (a) Denominal:  
           *chi'xit-wa*      'hairy'      *chi'xit*      'hair'  
           *chu'chut-wa*      'watery'      *chu'chut*      'water'  
           *lhtuku'ni:-wa*      'thorny'      *lhtukú:n*      'thorns'

<sup>9</sup> SPEED, DIFFICULTY, SIMILARITY, and QUANTIFICATION notions are expressed by adverbs. POSITION is expressed either by adverbs, stative verbs, or verbs formed by an adverb plus a light verb.

- (b) Deverbal
- |             |                      |                          |                      |
|-------------|----------------------|--------------------------|----------------------|
| cha'la:-wa  | 'greasy'             | cha'lá V <sub>intr</sub> | 'it secretes grease' |
| chi't-wa    | 'damp'               | chi'ta V <sub>tr</sub>   | 's/he squeezes it'   |
| chu'ntaj-wa | 'that can be bent'   | chu'ntá V <sub>tr</sub>  | 's/he bends it'      |
| pa'qlh-wa   | 'breakable, fragile' | pa'qlha V <sub>tr</sub>  | 's/he breaks it'     |
- (c) Deadverbial
- |            |           |             |             |
|------------|-----------|-------------|-------------|
| lu:t-wa    | 'viscous' | lu:t ADV    | 'hanging'   |
| lhpiqaq-wa | 'nervous' | lhpiqaq ADV | 'nervously' |
- (d) Deadjectival
- |              |                  |                                               |          |
|--------------|------------------|-----------------------------------------------|----------|
| smukukuj-wa  | 'yellowish'      | smukuku ADJ                                   | 'yellow' |
| palha':-wa   | 'hardish'        | palha' ADJ                                    | 'hard'   |
| lhkakaj-wa   | 'spicyish'       | lhkaka ADJ                                    | 'spicy'  |
| akchi:naj-wa | 'with wavy hair' | (Sp. <i>chino</i> 'curly', <i>aq-</i> 'head') |          |

### 3.8. SIZE OF THE CLASS

I have identified only about thirteen monomorphemic adjectives. However, counting the items that have 'adjectival shape' would raise the number to about fifty. But since DIMENSION adjectives are quite productively composed, since many adjectives of other semantic types enter in composition with body parts to yield more specific meanings, since there is a productive '-ish' derivation and, moreover, the class accepts loans from Spanish, one should consider the class an open class, in principle.

However, a sense in which PT can be considered an 'adjective poor' language is in the absolute poverty of the Adjectival Phrase. It can consist of only one adjective at a time plus an intensifier. There is no stacking of adjectives and no adjectives take complements. Moreover, stylistically, whenever something can be expressed with a verb it is preferred over either a nominal or adjectival CC.

## 4. Deadjectival derivations

### 4.1. VERB FORMATION: INCHOATIVE INTRANSITIVES AND CAUSATIVE TRANSITIVES

#### 4.1.1. Inchoative intransitive verbs

The semantics of PT also gives evidence for the category 'adjective'. This is seen in the processes for forming inchoative intransitive verbs. In PT there are no labile verbs, so any changes in valency have to be formally marked. While the prefix *ta-* is used both to form active intransitive verbs from stative verbs, as in (42), and intransitives from transitives in the anticausative derivation, as in (43), a different morpheme, the suffix *-n*, is used to form intransitives from forms that we are calling adjectives, as in (44).

- (42)
- |      |                                         |         |                  |
|------|-----------------------------------------|---------|------------------|
| wi:  | 'sit, exist, V <sub>st</sub> '          | ta-wilá | 's/he sits'      |
| ma:  | 'lie, V <sub>st</sub> '                 | 'ta-ma: | 's/he lies down' |
| -nu: | 'inside, horizontal, V <sub>st</sub> '  | ta-nú:  | 's/he enters'    |
| -xtu | 'outside, horizontal, V <sub>st</sub> ' | ta-xtú  | 's/he exits'     |

- (43) *kpaqlhni:t mi-xa:lu*  
*k-paqlh-ni:tan min-xa:lu*  
 1-break(V<sub>trans</sub>)-PF 2POSS-cup  
 'I have broken your cup.'

*tapaqlhni:t mixa:lu*  
*ta-paqlh-ni:tan min-xa:lu*  
 INGR-break-PF 2POSS-cup  
 'Your cup broke.'

- |      |                   |                      |                      |                                 |
|------|-------------------|----------------------|----------------------|---------------------------------|
| (44) | <i>palha'</i>     | 'hard'               | <i>palhá'-n</i>      | 'S hardens'                     |
|      | <i>sqalala</i>    | 'intelligent, savvy' | <i>sqalalá'-n</i>    | 'S becomes savvy'               |
|      | <i>sa:sti'</i>    | 'new'                | <i>sa:stí'-n</i>     | 'S regenerates, gets renovated' |
|      |                   |                      | <i>maq-sa:stí'-n</i> |                                 |
|      |                   |                      | (maq- 'body')        | 'S has her first menses'        |
|      | <i>sta'ranqa'</i> | 'white'              | <i>sta'ranqá'-n</i>  | 'S whitens'                     |

The suffix *-n* forms intransitive verbs whose overt Subjects are underlying undergoers; these verbs have an inchoative reading: the only participant, semantically an undergoer, enters into a process that culminates with it having the property denoted by the base, e.g. *palha'ni:t qi:la* (harden-PF porridge), 'the porridge hardened, became hard'. Crucially, no Agent is either present or implied. In contrast, *ta-*, with stative bases, forms intransitive verbs which can be considered semantically middles, because their subject is both semantically an Agent and a Patient, e.g. *tanu:-lh Juan* (enter-CPL John), 'John entered', as in (42). And in (43), *ta-* backgrounds Agent. It is the resource to derive an intransitive verb from a transitive one, with the peculiarity that the only syntactical participant left, the Subject, is semantically an undergoer. The verb, nevertheless, entails that the change of state did not come about spontaneously, did not happen by some sort of inner causation, but that there was an external cause that brought about the change of state. In certain terminologies (Haspelmath 1993, Dixon and Aikhenvald 2000, *inter alia*), this is called the anticausative alternation: the transitive verb is unmarked, its intransitive counterpart has only one syntactic participant that is syntactically a Subject, but semantically an undergoer, and the change in the alternation is marked on the intransitive counterpart of the pair.<sup>10</sup> The prefix *ta-* is multifunctional and a full discussion of its behaviour is beyond the scope of this chapter, but in all its functions, it signals in the semantic structure one of the implicatures of Proto-Agent, in Dowty's (1991) terminology (see Levy forthcoming, for details).

<sup>10</sup> Dixon and Aikhenvald (2000: 8) point out that while the passive signals that the '(derived S) came into certain state because of the involvement of an agent [...] in contrast, the anticausative implies that it came into the state spontaneously'. This is certainly the most frequent case typologically. PT makes a different distinction. It codes spontaneous or internal causation with *-n*, and external force with *ta-*, which is involved whenever the event is construed as having a potential Agent, even if the actual derivation backgrounds it. PT has no demoting passive.

The non-agentive suffix *-n* is also used to derive inchoative intransitive verbs from nouns, for events that happen to the undergoer without the intervention of an outside force, like the growth of hair or the appearance of pimples, as shown in (45a, b). This is further evidence of the ‘spontaneous’ nature of the events denoted by intransitive verbs built in this pattern.

- (45) (a) *maqchi'xinqú'lh minqa'wasa*  
*maq-chi'xi-n-qu':-lh min-qa'wasa*  
 body-hair-INCH-TERM-CPL 2POSS-boy  
 ‘Your boy has grown hair all over his body.’  
 (b) *klakaci'ci'lh*  
*k-laka-ci'ci'-n-lh*  
 1-face-pimple-INCH-CPL  
 ‘I got “bepimpled” on my face.’

#### 4.1.2. Causative transitive verbs

Another type of evidence for the underlying semantics of the adjective category in PT comes from transitive verb formation. The set of intransitive verbs for emotion and appraisal, such as ‘get angry’, ‘be happy’, ‘be attractive’, which are the bases for HUMAN PROPENSITY adjectives and, like them, signal a simple change of inner state with no agentive outside force, form transitives in a different way than intransitives of most other semantic types of verbs. Instead of using any of the varieties of the transitivizer *ma:-* ~ *i:* ~ *ma:-* . . . *-i:*, *-V*, *-ni* (by far the most prevalent processes of transitivity/causativization), they employ the causativizer *maqa-*, as shown in (46).

- (46) *pa:xawá* ‘P is happy’    *maqa-paxawá* ‘A does something that causes P to become happy’  
*si:ci'* ‘P is angry’    *maqa-si:ci'* ‘A does something that causes P to become angry’  
*li:puwán* ‘P. worries’    *maqali:puwán* ‘A does something that cause P to worry’

The prefix *maqa-*, which we might call an ‘indirect causative’ marker (however, see Dixon 2000: 70, and Shibatani 2002: 11–14 on the need for further study of the much abused term of ‘indirect causation’), forms the causative of verbs of change of DIMENSION for animates. These include other deadjectival inchoative verbs (derived in *-n*), as shown in (47a, b), as well as other basic intransitives like ‘grow’, as illustrated by (47c). As in the verbs in (46), the intransitives that express change of DIMENSION for animates in (47) are conceptualized as happening without outside force and the Causer only does something that triggers the natural process. Observe the same semantic contrast in the two different ways of forming verbs for ‘getting old’, (48), not in the same semantic class as change of DIMENSION for animates, but change of AGE for animates.

- (47) (a) qu'n (adj) 'fat, flabby'  
           qu'n 'P gets fat'  
           maqa-qu'n 'A does something, and as a result P gets fat'  
       (b) qajqa'la (adj) 'slim'  
           qajqa'lá-n 'P slims down, loses weight'  
           maqa-qajqa'la 'Something, an illness for instance, makes P lose weight'  
       (c) staka 'P grows'  
           maqa-staka 'A does something that causes P to grow'
- (48) qu:lú 'old, male human'  
       qu:lún 'P gets old (as a natural process)'  
       maqa-qu:lú 'Something causes P to get old not naturally  
                   (i.e. an unexpected illness, etc.)'

And recall from §3.6, HUMAN PROPENSITY adjectives like *li:pa:xáw*, 'that gives joy, happiness', exemplified in (38), although morphologically derived as nouns, pattern syntactically not with nouns but with adjectives. This might be explained by the fact that they share with adjectives this same semantic feature: they are processes that are conceptualized as happening to an undergoer without the intervention of an agentive outside force.

#### 4.1.3. A second class of intransitive verbs

DIMENSION adjectives formed on the three bases meaning 'big', 'small', and 'long', §3.4 above, and VALUE adjectives, (22) above, do not form inchoative intransitives with the regular suffix *-n*. Instead, the deadjectival inchoatives show the suffix *-í-*, a marker of transitivity, and the prefix *ta-*, a detransitivizer, as shown in (49).

- (49) akcú 'small'      ta-[akcuw-í:] 'S becomes small, shrinks'  
       qama 'tasty'     ta-[qam-í:] 'S becomes tasty'

The derivation suggests that these intransitives are construed as representing events that are externally caused, and one might hypothesize that since the presence of *ta-* signals that although a causing entity cannot be syntactically expressed, some of the implicatures of Protoagent remain still present in the underlying semantics of the verb. This is consistent with the fact that the underlying participant in most of the verbs of change of DIMENSION formed on these three roots is prototypically inanimate, and change of dimension for an inanimate always entails an external force. However, there are intransitive verbs, formed in this pattern, whose only participant S is semantically animate: *ta-lanka'-i:-lh cuqa'wasa* (INGR-big-TR-CPL little boy) 'The little boy turned big'. This point needs further study; my consultants do not accept *\*lanká'-n* big-INCH 'enlarge', but the form is present in Aschmann's (1973) dictionary. Remember that DIMENSION adjectives also take the nominal plural, besides the DISTRIBUTIVE, so there is clearly something special going on with this class that needs further study.

To sum up, we have seen two types of semantic evidence for an adjective category in PT. The first came from inchoative intransitive verb formation, the second from causative transitive verb formation. For both, the verbs, like their adjective bases, are construed as spontaneous events, properties that occur without external Agent causers. Table 2 summarizes the morphological types and inchoativization and causativization processes. It also points out the special peculiarities of some of the semantic types.

#### 4.2. ABSTRACT NOUNS OF QUALITY

Questions about the extent to which an entity has a certain property are formed by nominalizing the adjective, (50).

- (50) *nikulá xli:sa:sti milaqa':t?*  
*nikulá ix-li:-sa:sti min-lhaqa':t*  
 how 3POSS-INST-new 2POSS-clothes  
 'How new are your clothes?'

The nominalization derives abstract nouns that name the qualities and it takes the form of the prefix *li:-* plus the adjective, as shown in (51). It is a totally productive process that yields abstract nouns of surprising specificity (e.g. *ixli:qalhalnaka* 'the quality of being large, circular, and flat'). Of course, these nouns are not used exclusively for extent questions they are regular nouns used to express the name of the quality in other contexts (such as the comparatives of equality we saw in §2.4). The process even applies to HUMAN PROPENSITY adjectives already derived from a verb with *li:-*, as in *li:-[li:ka'kní:t]* 'attractiveness', literally 'its worth of causing one to stare at it'.

- |      |                          |                      |                    |                                           |
|------|--------------------------|----------------------|--------------------|-------------------------------------------|
| (51) | Abstract noun            |                      | Adjective          |                                           |
|      | <i>ixli:lanka'</i>       | 'bigness'            | <i>lanka'</i>      | 'big'                                     |
|      | <i>ixli:lhma:n</i>       | 'length'             | <i>lhma:n</i>      | 'long'                                    |
|      | <i>ixli:ta:lhma:n</i>    | 'height'             | <i>ta:lhma:n</i>   | 'high'                                    |
|      | <i>ixli:smalala</i>      | 'dark-skinnedness'   | <i>smalala</i>     | 'dark, brown'                             |
|      | <i>ixli:qama</i>         | 'tastiness'          | <i>qama</i>        | 'tasty'                                   |
|      | <i>ixli:sti'riki'</i>    | 'circularity'        | <i>sti'riki'</i>   | 'circular'                                |
|      | <i>ixli:sqalala</i>      | 'intelligence'       | <i>sqalala</i>     | 'intelligent'                             |
|      | <i>ixlh:tli'waqa</i>     | 'strength'           | <i>tli'waqa</i>    | 'strong'                                  |
|      | <i>ixli:pixtli'waqa</i>  | 'strong-voiced-ness' | <i>pixtli'waqa</i> | 'strong in voice'                         |
|      | <i>ixli:lhtuku'ni:wa</i> | 'thorniness'         | <i>lhtuk'un</i>    | 'thorn' > <i>lhtuku'ni:wa</i><br>'thorny' |

#### 4.3. STRUCTURE OF THE LEXICON

There is one area of semantic overlap and it is that temperature as a physical property of objects is expressed though adjectives such as *chíchi* 'hot', *qa'wiwi* 'cold' while temperature in the sense of weather is expressed by verbs. The expression

TABLE 2. Morphological types and best exemplars (both morphologically and syntactically regular) vs. classes with peculiarities

Semantic type	Word formation: morphological types						All vs. some diagnostics	
	Mono-morphemic	Adjective-shape	Sound symbolism	PART-adjective	- <i>wa</i> ‘-ish’	Deverbative ‘Noun’	BEST Exx	Special characteristics
PHYSICAL PROPERTY	yes	yes	yes	yes	yes	—	yes	—
COLOUR	—	yes	yes	a few	yes	—	yes	—
DIMENSION	yes	—	—	extensively	yes	—	no	N and Adj Plural INCH implying A
AGE	yes	—	—	—	yes	—	yes	N/Adj recategorization N and Adj Plural Indirect CAUS
VALUE	yes	—	—	—	—	—	no	INCH implying A
HUMAN PROPENSITY	—	a few	—	a few	yes	yes	no	Morphologically N, syntactically and semantically ADJ Indirect CAUS



of weather conditions constitutes an extremely rich semantic field, all of its items being verbs and their derivations. (52) gives the items for 'it is cold/he is cold' and 'it is hot/he is hot'.

- (52) *lunq-nán* 'it is cold'      *lhka:k-nán* 'it is hot'  
       *k-lunq-a* 'I am cold'      *k-lhka:k-a* 'I am hot'  
       1-be.cold-INCPL            1-be.hot-ICPL

There is only one term that I have identified as the unmarked name for most of the dimensions, the superordinate, and it is *xli:kcuná*, which means 'size' and not 'smallness'. It can be used to ask for any of the dimensions. Notice that, contrary to expectations from Indo-European languages, the unmarked term is not formed on 'large, big' but on 'small'.

There are, therefore, two differences in the semantic organization of the lexicon in this domain with respect to Spanish. In Spanish, not all qualities will have their respective abstract noun of quality. There is no common noun for the quality expressed by most colours, so from *rojo* 'red' there is no *\*rojura* 'redness'. On the other hand, in languages like English and Spanish there will be many nouns expressing the superordinate name of the qualities: 'colour', 'age', 'dimension', etc. With the exception for the word for 'size', no such superordinates are found in PT.

## 5. Conclusion

In this chapter I have shown that adjectives are clearly distinguished from nouns in Totonacan, in spite of claims to the contrary in the literature. I have shown that, for PT, they can be distinguished by syntactic, morphological, and semantic criteria, both from verbs and especially from nouns. It is plausible that a secondary development, the extension of syntactic, semantic, and pragmatic functions of an originally genitive-like particle, the specifier *xa-*, was one of the factors that made the distinction between adjectives and nouns clearer both for PT and UNT, but further investigation of the diachronic processes is in order. I have also shown more subtle diagnostics for identifying adjectives in both Coatepec and Misantla Totonac, the Totonacan languages for which there were claims in the literature that adjectives were indistinguishable formally from nouns: co-occurrence with the intensifier 'very', semantic correlations in sound-symbolically related items, and techniques of pluralization distinguishing them from nouns. This lends support to Dixon's suggestion that if we refine our techniques for identifying adjectives, it might well be that the class is much more common in the languages of the world than once thought.

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## The Small Adjective Class in Jarawara

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Jarawara has a small closed class of adjectives, for which fourteen members are attested. The adjectives are non-verb-like, functioning as modifier within an NP and as copula complement. They show some similarities with inalienably possessed nouns in that both can function as modifier within an NP. However, there are a number of clear criteria for distinguishing between the classes (for example, a possessed noun cannot, on its own, function as copula complement). There is also some superficial similarity between adjectives and the nominalized forms of verbs but, when examined in detail, these too can be distinguished.<sup>1</sup>

Jarawara (spoken by about 150 people spread over seven small villages in the dense jungle of southern Amazonia), together with co-dialects Jamamadí (c.190 speakers) and Banawá (c.90 speakers), make up the Madi language, belonging to the Arawá family (quite distinct from Arawak); the other extant languages in the family are Paumarí, Kulina-Dení, and Sorowahá; see Dixon (1999). It appears that each Arawá language has a small closed class of adjectives, some of which are cognate between languages and others non-cognate.

This is a highly synthetic language, basically agglutinative but with developing fusion. Jarawara is head-marking, with the predicate—which includes pronominal specification of core arguments—being the only obligatory element within a

<sup>1</sup> My major debt is to the Jarawara people who have welcomed me as a temporary member of their community, worked at teaching me their language, and answered all of my questions—Okomobi, Miotto, Soki, Kamo, Botenawaa, Kakai, Wero, and others. Alan Vogel is collaborating with me on a grammar of Jarawara and we have discussed many of the points in this paper. Alexandra Aikhenvald provided most useful comments on a draft of the paper.

Jarawara has just four vowels (*i*, *e*, *a*, and *o*) with contrastive length, and eleven consonants: bilabial *b*, *ɸ* (written as *f*), and *m*; apico-dental *t* and *n*; apico-alveolar *s* and *r* (with allophones [ɕ] and [l]), lamino-palatal stop *j* (written as *j*, with semi-vowel allophone [y]), dorso-velar *k* and *w*, and a nasalized glottal fricative written as *h*. There is also a glottal stop, ʔ (written as ' ) which only appears between vowels at the boundary between phonological words within a grammatical word; ʔ is used as the marker of such a boundary. Note that proto-Madi had a contrast between *d* and *t*; this is retained in the Jamamadí and Banawá dialects, but has been neutralized, to *t*, in Jarawara. Full details of the reconstructed phonology for proto-Arawá, and changes during the development of modern languages, are in Dixon (1995, 2004b).

clause. At an earlier stage, there was dependent-marking (involving an accusative suffix on an NP) but this has been lost from modern Jarawara.

§§1–4 briefly review clause structure, predicate structure, the open word classes, and NP structure, leading up to §5, which deals with the small class of adjectives.

## 1. Clause structure

The predicate may, optionally, be preceded by NPs referring to core arguments. At the beginning and end of the clause there may be peripheral NPs, subordinate clauses, temporal and other elements.

There are three types of clause:

- (a) An intransitive clause, with one core argument, in S function. This is realized by a pronominal element within the predicate and, optionally, by an NP before the predicate.
- (b) A transitive clause, with two core arguments, in A and O function. There are two sub-types of transitive clause which we call the A-construction and the O-construction. The A-construction has its A argument as pivot, this being coreferential with an argument in clauses which immediately precede and/or immediately follow in the discourse. For an O-construction the O argument is pivot, with similar discourse links.

The two sub-types have O and A arguments specified, in the same way, within the predicate; each can optionally be expanded by NPs before the predicate. If two NPs are included (which happens relatively rarely), that in A function tends to come first in an A-construction and that in O function first in an O-construction. However, these are simply preferences; nothing concerning the function of an NP can with confidence be inferred from its positioning. The grammatical differences between these two construction types are given in Dixon (2000a, 2004a).

- (c) A copula clause, with one obligatory argument, in copula subject (CS) function, and an optional argument in copula complement (CC) function. Like S, A, and O, the CS argument is obligatorily expressed by a pronominal element within the predicate, optionally augmented by an NP before the predicate. The CC argument is expressed just by an NP, which will normally immediately precede the predicate; see (14–15), (25–7), (29), and (31–3).

The head of an NP is generally a noun, but can be a complement clause (which may then be modified by an adjective, as in (17) below). Consider the intransitive verb *hawa* (*to-*)*ha-* ‘be finished’. This can take a straightforward NP in S function, as *jobe* ‘house’ in (1). In the examples we use ‘[ . . . ]’ to enclose an NP, ‘{ . . . }’ to enclose the predicate, and ‘⟨ . . . ⟩’ to enclose a complement clause.

- (1) [jobe]<sub>S</sub> { $\emptyset$  hawa to-he}  
 house(m) 3sg.inanS be.finished AWAY-AUXILIARY:m  
 'the house is finished'

A clause such as (2) can be recast as a complement clause and function as S argument to *hawa* (*to-)*ha-, as in (3).

- (2) {*o-tafa*}  
 1sgS-eat:f  
 'I'm eating'
- (3) <*oko tafi*><sub>S</sub> { $\emptyset$  hawa to-ha}  
 1sgS.POSS eat:COMPLEMENT.CLAUSE 3sg.inanS be.finished AWAY-AUXILIARY:f  
 'I've finished eating' (lit. my eating is finished)

Note that the 1sg S argument is realized by prefix *o-* in the main clause, (2), but by possessive form *oko* in the complement clause within (3). The complement clause is marked as such by the final vowel *a* of the verb being raised to *i* (this mark is missing where the final vowel of the verb in a complement clause is anything other than *a*).

## 2. Predicate structure

The predicate is the most complex part of the grammar of Jarawara. We can here just focus on those elements which are needed for the discussion of adjectives:

- First pronominal slot, marks O argument; obligatory in all transitive clauses.
- Second pronominal slot, marks S, A, or CS argument; obligatory in all clauses.
- Prefixes:
  - first prefix slot: one of *o-*, 1sg subject pronoun; *ti-*, 2sg subject pronoun; *hi-*, marker of an O-construction where both A and O arguments are 3rd person; *to-* 'away (from a place or from a state)';
  - second prefix slot: *ka-*, applicative;
  - third prefix slot: *na-* ~ *niha-*, causative.
- Verb root (and auxiliary); note that only a verb (not a noun or adjective) can function in this slot as predicate head.
- Twenty-plus orders of suffixes, including mood (declarative, interrogatives, imperatives), tense/evidentiality, modality, and miscellaneous affixes which include *-witiha* 'from place', as in (8), *-ine* 'continuous', as in (12), *-tee* 'habitual', as in (17), and *-ra*, the negator, as in (17).

There are some further complications (see Dixon 2002, for a full statement). For instance, a pronoun from the first or second pronominal slot is—under certain conditions—repeated in a third pronominal slot just before mood, towards the end of the predicate, as in (17) and (22). Late in the predicate there can be a 'secondary

TABLE 1. Pronominal forms in Jarawara

	First pronominal slot (O argument)	Second pronominal slot (S, A, CS argu- ments)	Copula complement NP (CC)	Alienable possessor in NP	NP head when fol- lowed by possessed noun
1sg	owa	o-	owa	oko	o-, oko
2sg	tiwa	ti-	tiwa	tika	ti-, tika
3sg.animate	∅	∅	—	hinaka	fee
3 inanimate	∅	∅	—	—	—
1nsg.inc	era	ee	ee	ee kaa	ee
1nsg.exc	otara	otaa	otaa	otaa kaa	otaa
2nsg	tera	tee	tee	tee kaa	tee
3nsg.animate	me(ra)	mee	mee	mee kaa	mee

verb', either *ama-* 'extended in time' (which is cognate with copula verb *ama-* 'be'), as in (17), or *awine* (feminine form) /*awa* (masculine form) 'seems', as in (37).

The only way of showing negation is by suffix *-ra* to the verb—as in (17)—or verbal auxiliary. There is no form 'no'. To provide a negative response to a question such as 'Are you eating?' one must use a full clause, with negative suffix on the verb: *o-tafa-ra* (1sgS-eat-NEGATIVE) 'I'm not eating'.

The pronominal system plays a central role in Jarawara grammar. Table 1 sets out the paradigm. Those forms in the first pronominal slot plus non-singular (nsg) forms in the second pronominal slot are separate words, which precede the verb within the predicate. However, 1sg *o-* and 2sg *ti-* from the second pronominal slot are prefixes, and move into the first prefix slot (making up a system with *hi-* and *to-*, shown above).

In other parts of the grammar, there is a distinction between sg (referring to one), dual (to two), and plural (to three or more), so that it is convenient to adopt these labels for the grammar as a whole. Pronouns simply distinguish singular (sg) from non-singular (nsg); nsg refers to two or more, and covers dual and plural. Within 1nsg there is a distinction between inclusive (inc), which includes the addressee, and exclusive (exc), which excludes the addressee.

It will be seen, in Table 1, that a number distinction in 3rd person is made only for animates. All inanimates are coded by ∅ within the predicate. For animates, 3sg is ∅ but 3nsg is shown as *mee* or *me(ra)*.

Most of the pronominal forms have cognates in other Arawá languages, a notable exception being 3nsg *mee*. It appears that this is a recent grammaticalization from the noun *\*madi* 'person', with concomitant phonological reduction *\*madi* >

*mati* > *mai* > *mee*. (The form *mai* is used in the Jamamadí dialect and in Jarawara songs, while *mati* is an allomorph of *mee* in clause-final position for Jarawara.)

### 3. Word classes

Jarawara has two large lexical classes, verbs and nouns. Besides the small lexical class of adjectives, there are small grammatical classes of pronouns (as in Table 1), demonstratives and locatives, interrogatives, clause-final modifiers (e.g. 'also', 'again'), time/discourse markers (e.g. 'then'), and postpositions. We can briefly profile the open classes.

#### 3.1. VERBS

Verbs occur as the head of a predicate. They are classified in terms of two independent parameters:

- (a) Transitivity. Some verbs only occur in intransitive clauses, others only in transitive clauses. Many verbs can occur in either clause type and are labelled 'ambitransitive'. Some of these are of type S = A, where the S of the intransitive corresponds to the A of the transitive; for example, *haa -na-* 'call (intransitive), call to (transitive)'. Most are of type S = O, where the S of the intransitive corresponds to the O of the transitive; for example, *hiri -na-* 'catch fire (intransitive), set fire to (transitive)'. There is also a small class consisting of two copula verbs, *ama-* 'be' and *(to-)ha-* 'become'. (The copula *-ha-* and the homophonous auxiliary *-ha-* always take prefix *to-* 'away', unless this is displaced by 1sg *o-*, 2sg *ti-*, or O-construction marker *hi-* within the first prefix slot.)
- (b) Inflecting or non-inflecting. About one-third of verbs are inflecting, and themselves take prefixes and suffixes; for example, *-wina-* 'lie in a hammock'. The remainder are non-inflecting and are followed by an auxiliary (*-ha-* for about a dozen verbs, *-na-* for the remainder) to which affixes are attached; for example, *amo -na-* 'sleep'. Compare:

- (4) {*o-wina-bana*}  
1sgS-lie.in.hammock-FUTURE:f  
'I'll lie in a hammock'
- (5) {*amo o-na-habana*}  
sleep 1sgS-AUXILIARY-FUTURE:f  
'I'll sleep'

In (4) the 1sg S prefix *o-* and feminine future suffix *-bana* are added to the inflecting verb root *-wina-*, whereas in (5) prefix and suffix are added to the auxiliary *-na-* which follows the non-inflecting verb root *amo*. (Feminine future has allophone *-habana* when two moras precede it in the phonological word, and *-bana* when three moras precede.)



Verbs show various modes of productive reduplication (see Dixon and Vogel 1996); initial CV- reduplication occurs in (9) and final -CV reduplication in (21). Just one adjective and a handful of nouns derive verbs through partial or full reduplication; for example, from adjective *hinita* 'empty, alone' is derived intransitive verb *hi.hinita-na-* '(water) be empty (of fish)', and from possessed noun *tone* 'bone' is derived intransitive verb *tone.tone -na-* 'be skin and bones'.

### 3.2. NOUNS

There is a major division between inalienably possessed nouns, a class which has about 170 attested members (with no well-established loans<sup>2</sup>), and free nouns, a large open class.

(a) Free nouns include proper names and common nouns. Each free noun has an inherent gender—feminine (f) or masculine (m). (Just a handful can take either gender, depending on the sex of the referent; for example, *inamatewe* 'child'.) Gender cannot be inferred from the form of the noun itself; it is shown by gender agreement of other items in the NP and by gender agreement of verbal suffixes. Most verbal suffixes (and auxiliaries and inflecting roots, when in word-final position) have distinct f and m forms. They agree in gender with the CS in a copula clause, with the S in an intransitive clause, with the A in a transitive A-construction, and with either O or A in a transitive O-construction (the somewhat complex rules for gender assignment in an O-construction are set out in Dixon 2000a, 2004a).

All human nouns have gender according to their sex reference. About 85 per cent of non-human animates are m, around 80 per cent of non-flora inanimates are f, while about 53 per cent of plant names are f. Although there are some minor rules for gender assignment (for example, all liquids are f), as a rule the gender of a non-human noun simply has to be learnt.

Interestingly, f is the functionally unmarked term in the gender system. For example, all pronominal arguments (whatever the sex of their referent) take f agreement on verbal suffixes. Note the f form of the future suffix in (4–5), determined by the S argument, 1sg pronoun *o-*.

(b) Inalienably possessed nouns (PNs) cannot make up a full NP (except under specific conditions of discourse anaphora) but follow a free noun or pronoun, which is head of the NP. Slightly less than half the PNs distinguish gender; these agree in gender with the head noun. We write them as f/m, as in *tame/teme* 'foot'. With an f free noun (for instance, woman's name *Jane*) we get the f form; thus *Jane tame* 'Jane's foot'. With an m free noun (for instance, man's name *Okomobi*) we get the m form; thus *Okomobi teme* 'Okomobi's foot'.

<sup>2</sup> Loans *saokato* 'salted' and *saoti* 'health' (from Portuguese *salgado* and *saude* respectively) have been heard in grammatical environments typical of possessed nouns, but appear to be ad hoc—rather than fully established—members of this category.

PNs in Jarawara cover a wide semantic range:

- Orientation (17 members) include *mese/mese* ‘top surface of’, *baki/bako* ‘inside surface of’.
- Whole and part (14): *boni/bono* ‘whole thing’, *kote/kote* ‘piece’, *nafi/nafi* ‘all’.
- Body parts (62): *noki/noko* ‘eye, face’, *tame/teme* ‘foot’, *jifori/jifori* ‘tail’.
- Parts of plants (19): *mowe/mowe* ‘flower’, *mati/matone* ‘cord, rope’.
- Physical characteristics and properties (18): *kakitiri/kakitiri* ‘itch’, *mahi/maho* ‘smell’.
- Noise and language (4): *moni/moni* ‘noise’, *ini/ino* ‘name’, *ati/ati* ‘voice’.
- Image and dream (5): *hani/hano* ‘design, picture’, *watari/watari(ne)* ‘dream’.
- Association (9): *tehe/tehene* ‘something mixed with’, *tase/tesene* ‘companion of’.
- Containers and other artefacts (7): *wije/wijene* ‘vessel, container’, *atori/atori* ‘ornament’.
- Water, fire, and light (11): *jifi/jifone* ‘fire, firewood’, *fehe/fehene* ‘liquid, juice, sap, water’.
- Food (3): *tafe/tefe* ‘food’, *saharine/saharine* ‘broth, mush’.
- Place (6): *hawi/hawine* ‘path’, *tame/temene* ‘grave’.

Reconstructed forms of PNs in proto-Arawá each have a single base form plus suffix *-ni* for f and *-ne* for m. A number of phonological changes (set out in detail in Dixon 1995) have given rise to the complexities of modern forms. For instance *\*mano-ni/mano-ne* > *mani/mano* ‘arm’ (where gender is shown by the final vowel), *\*atha-ni/atha-ne* > *ate/ete* ‘forehead’ (where gender is shown by the first vowel), and *\*mowe-ni/mowe-ne* > *mowe/mowe* ‘flower’, *\*athi-ni/athi-ne* > *ati/ati* ‘voice’ (where the gender distinction has been lost). For about thirty PNs the original m suffix *-ne* is retained and this may be the sole marker of gender, as in *\*hagi-ni/hagi-ne* > *hawi/hawine* ‘path’, or an additional marker, as in *\*mado-ni/mado-ne* > *mati/matone* ‘cord, rope’.

#### 4. Noun phrase structure

Noun phrase structure is less complicated than predicate structure and, as a rule, less of the possibilities are taken up. More than half the NPs in my corpus consist of a single monomorphemic noun, whereas the average predicate includes about five morphemes. Nevertheless, we do encounter longer NPs and there are considerable structural possibilities, involving PNs and adjectives. The structure of the NP is set out in Table 2.

The gender of an NP is determined by the head in all but two circumstances. The first is that when *fana* ‘female’ or *maki* ‘male’ is included in slot Bi, these determine the gender. For example, *kerewe* ‘sloth’ generally has f gender but to refer specifically to a male sloth, *maki* may be added; the NP *kerewe maki* then has m gender.

TABLE 2. Structure of the noun phrase

- 
- A. Alienable possessor, an embedded NP, plus possessive marker *kaa* (kinship possession is a special sub-type of alienable possession).
- B. Head of NP (the only obligatory constituent).  
This can be a common noun; a pronoun; an interrogative; *one/owa* ‘another’; a complement clause (see (17)); a proper noun; or a demonstrative.  
Modifiers to B:
- Bi, a noun referring to sex (*fana* ‘female’ or *maki* ‘male’) or to material (e.g. *jati* ‘stone’, *awa* ‘wood’);
  - Bii, one or more adjectives;
  - Biii, augment modifier *mee*.
- C. One or more Possessed Nouns (PNs).  
Modifiers to a PN at C:
- Ci, one or more adjectives.
- D. Contrastive marker *taa*.
- E. Accusative suffix *-ra*—an archaic feature found productively only in the speech of two old shamans, both now dead; examples (7) and (9) are from them.
- 

*Note:* In addition an NP may occasionally include one or more of a limited set of mood, tense/evidential, modal, and miscellaneous predicate suffixes; the intention suffix is used in (9) and the future suffix in (10a–b).

The other exception concerns augment modifier *mee*, in slot Biii. This is diachronically—but not synchronically—related to the 3nsg pronoun *mee* (see Table 1). When *mee* occurs within an NP it marks nsg number and (like 3nsg pronoun *mee*) engenders f gender agreement on verbal suffixes (irrespective of the gender of the head noun).

There are several interesting properties of NPs. A pronoun can function freely at slot A in an NP, as alienable possessor, but in slot B (as head of the NP) only when there is a following PN. That is, a pronoun cannot on its own make up an NP. In keeping with this, all NPs count as 3rd person. That is, something like *o-mano* (1sg *o-* as NP head plus PN *mano* ‘arm’) ‘my arm’ counts as 3rd person and so too does *ee nafi* ‘all of us (inclusive)’ which is an NP with 1nsg.inc pronoun *ee* as head, followed by the quantifier PN *nafi/nafi* ‘all’. Another property is that any NP which includes a PN counts as inanimate. There is detailed discussion of these points in Dixon (2000b), including statements of the criteria for deciding that every NP is 3rd person and that every NP which includes a PN is inanimate.

#### 4.1. GENDER SPECIFICATION ON POSSESSED NOUNS

PNs divide into two classes according to the form of a 1sg or 2sg inalienable possessor (in the head slot of the NP). One class takes *o-* and *ti-* and the other class takes *oko* and *tika*. For example:

<i>o-teme</i>	‘my foot’	but	<i>oko jehene</i>	‘my fat’
<i>o-taboro</i>	‘my home’		<i>oko hawine</i>	‘my path’

TABLE 3. Gender on the PN in an NP with one PN

NP head	Gender of PN	Example	Gloss
m free noun	m	Okomobi mano	Okomobi's arm
f free noun	f	Jane mani	Jane's arm
1sg o-	m	o-mano	my arm
2sg ti-		ti-mano	your (sg) arm
1nsg.inc ee	m	ee mano	our (inc) arms
1nsg.exc otaa		otaa mano	our (exc) arms
2nsg tee		tee mano	your (nsg) arms
3nsg mee	f	mee mani	their arms

It is interesting that nsg pronouns and nouns as NP heads show no differences here; for example:

<i>ee teme</i>	'our feet'	<i>ee jehene</i>	'our fat'
<i>mee tame</i>	'their feet'	<i>mee jehe</i>	'their fat'
<i>Okomobi teme</i>	'Okomobi's foot'	<i>Okomobi jehene</i>	'Okomobi's fat'

However *o-/ti-* or *oko/tika* behave in the same way with respect to the assignment of gender on PNs within an NP.

The gender of PNs following a head noun or pronoun within an NP is determined by the head, but in a rather complex way. Table 3 illustrates what happens when a single PN follows the head; here the PN *mani/mano* 'arm' is added, to every kind of NP head—m free noun, f free noun, sg pronoun, 1/2 nsg pronoun and 3nsg pronoun.

Note that if augment modifier *mee* comes between head noun and PN, then *mee* overrides the gender of the head noun and requires that the PN be in f form. Compare *borokoo ataro* ('pirarucu (m) scale:m') 'scales of a pirarucu fish' with *borokoo mee atari* ('pirarucu (m) AUG scale:f') 'scales of pirarucus'.

Because of this distribution of gender marking, one is able to ascertain the f and m forms of every PN. Consider 'scrotum', an exclusively masculine body part. The m form, *tenehe*, occurs in *Okomobi tenehe* 'Okomobi's scrotum', *o-tenehe* 'my scrotum', and *ee tenehe* 'our scrotums'. But 3nsg must be followed by the f form of a PN, and we get the f form *tanehe* in *mee tanehe* 'their scrotums'.

When we have two or more PNs following the head of an NP, the principles of gender choice are again different. We can illustrate, in Table 4, with *mani/mano* 'arm' followed by *baki/bako* 'underside, inside'. It will be seen that whereas the first PN is m when following any 1/2 pronoun, the second and later PNs are f following 1/2sg and m following 1/2nsg.

As mentioned at the end of §2, the 3nsg pronoun is a recent innovation in Jarawara and the other Madi dialects, having developed from the free noun *\*madi*

TABLE 4. Gender on PNs in an NP with two or more PNs

NP head	Gender of first PN	Gender of later PNs	Example	Gloss
m free noun	m	m	Okomobi mano bako	Okomobi's inside arm
f free noun	f	f	Jane mani baki	Jane's inside arm
1sg o- 2sg ti-	m	f	o-mano baki ti-mano baki	my inside arm your (sg) inside arm
1nsg.inc ee 1nsg.exc otaa 2nsg tee	m	m	ee mano bako otaa mano bako tee mano bako	our (inc) inside arms our (exc) inside arms your (nsg) inside arms
3nsg mee	f	f	mee mani baki	their inside arms

'people'. If the free noun had had f gender, this could explain why today the 3nsg pronoun *mee* requires f agreement on following PNs. The reasons for the gender of PNs following 1st and 2nd person pronouns are not at present understood.

## 5. The adjective class

Like other Arawá languages and dialects, Jarawara has a small closed class of adjectives. We have identified fourteen members, just two of which have distinct f/m forms. Adjectives are most similar in their grammatical properties to PNs, but they can be distinguished from them. §5.1 details the adjectives, §5.2 lists their grammatical properties, §5.3 presents criteria for distinguishing adjectives from PNs, and then §5.4 shows how adjectives differ from the nominalized forms of verbs.

### 5.1. MEMBERSHIP

Adjectives in Jarawara fall into a number of semantic types:

#### A. DIMENSION

- |                                        |              |                      |                 |
|----------------------------------------|--------------|----------------------|-----------------|
| A1. <i>ehbotee</i> (or <i>webote</i> ) | 'big, large' | A2. <i>bite/bití</i> | 'little, small' |
| A3. <i>howe</i>                        | 'large type' | A4. <i>biri</i>      | 'small type'    |

We find *howe* and *biri* used for large/small varieties of some animal or thing. Thus, a picture of elephants drew the response *bani howe* 'a large type of animal'. Batteries (called *bija*, from Portuguese *pilha*) are especially important in a village with no electricity, and they come in various sizes. D-cells are called *bija howe* 'large type of battery' and AA-cells are *bija biri* 'small type of battery'.

In one text the narrator saw some large specimens of pirarucu (which is the largest freshwater fish in the world) and said:

- (6) [*borokoo howe*]<sub>CS</sub> {*mee ama-ke*}  
 pirarucu(m) large.type 3nsgCS be-DECLARATIVE:f  
 ‘they are large pirarucus’ (lit. large pirarucu they are)

The forms *bite/bit*i are also used as kinship nouns, for ‘daughter/son’ of a 3sg possessor.

#### B. PHYSICAL PROPERTY

B1. *tati* ‘(fruit) full-sized but not yet ripe and ready to eat’

B2. *kini* ‘small, immature (fruit) which has not yet reached its full size’

Words for ‘be ripe’ are discussed in §5.4.

#### C. AGE

C1. *jati* ‘new, young’      C2. *botee* ‘old’

There is a PN *boteri/boteri* ‘oldness’, derived from *botee*; this is discussed in §5.3. And there is a non-inflecting verb *jati -na-* ‘be alive, be raw (not sufficiently cooked)’ which is probably diachronically related to the adjective *jati*.

*Botee* can be used for an old person or old thing, and *jati* for a young person or thing. The Jarawara believe that a new sun (*bahi*) comes into the sky each day, and can describe this as *bahi jati* ‘new sun’. When one is referring to one’s children ‘my younger daughter/son’ is described as *okoto/okatao jati*. (‘My elder daughter/son’ is *okoto/okatao tai.ti*, involving the verb *tai (to-)ha-* ‘go in front’.)

#### D. VALUE

There is no adjective ‘good’ in Jarawara, but instead a verb *-amosa-* ‘be good’ that has very wide use. There are the following adjectives:

- D1. *towe* ‘bad’. This is recognized by the Jarawara but said to be ‘really a Jamamadí word’. They prefer to use the verb *-hija-* ‘be bad, broken, ruined’, which generally takes the negative affix *-ra* (redundantly, it appears), or else the verb *-amosa-* ‘be good’ plus negative suffix, *-ra*.
- D2. *faja* ‘enough’. This has a wide range of meaning, e.g. ‘slept enough’, ‘had enough food’, ‘dug a hole deep enough to bury a corpse’. It is typically used to signal the end of a story: *faja ama* (lit. ‘enough be’) ‘that’s enough’ (and see (26)).
- D3. *jokana* ‘real, prototypical’. This can be used to describe the prototypical variety of some plant or animal, e.g. *fowa jokana* is ‘bitter manioc (*Manihot esculenta*)’ which is the staple food of the people. The Jarawara people’s name for themselves is *ee jokana*, ‘we, the real people’ (lit. ‘real us’), Jarawara being a term applied to them by the white people in the region.

#### E. QUALIFICATION and QUANTIFICATION

E1. *one/owa* ‘other, another’. This has two grammatical affiliations—it functions as an adjective, modifying a noun, and also as a noun, in NP head slot.

Typical examples of *one/owa* functioning as an adjective are (7–8).

- (7) [okasima one-ra]<sub>O</sub> [Towija]<sub>A</sub> {iti}  
 1sgPOSSESSOR:younger.sister(f) other:f-ACCUSATIVE name(m) marry  
 ‘Towija married my other younger sister’
- (8) [fatara botee one]<sub>O</sub> {otaa to-wasi-witiha}  
 garden(f) old another:f 1sg.exCA AWAY-find-FROM.PLACE:f  
 ‘we encountered another old garden (as we went along an old track)’

In (9) *one/owa* functions as head of an NP, in fact as (alienable) kinship possessor to *fati* ‘wife’ (compare *owa fati* ‘another(m)’s wife’ with *Manowaree fati* ‘Manowaree’s wife’).

- (9) [owa fati-bonehe-ra]<sub>O</sub> {a.’ahi to-he}  
 another:m wife-INTENTION:f-ACCUS REDUP.SWIVE AWAY-AUXILIARY:m  
 ‘he was swiving (copulating with) another man’s intended wife’

The relationship between *one/owa* as head of an NP and as modifier is brought out in (10a,b). On an expedition into the forest a lot of Brazil nuts were found and a Jarawara youth told me that I should say, in order to ask for another, either of:

- (10) (a) [oko owa]-ba<sub>S</sub> {ee-ra}?  
 1sgPOSSESSOR another(m)-FUTURE what.about-POLAR.INTERRO-  
 GATIVE:m  
 ‘can I have another?’ (lit. what about my future another?)
- (b) [oko mowe owa]-ba<sub>S</sub> {ee-ra}?  
 1sgPOSSESSOR brazil.nut(m) another:m-FUT what.about-POLAR.  
 INTERROG:m  
 ‘can I have another brazil nut?’ (lit. what about my future another brazil nut?)

In (10a) *owa* is NP head (in slot B of Table 2) whereas in (10b) the noun *mowe* ‘brazil nut’ is NP head (slot B) and *owa* is an adjective (in slot Bii).

E2. *hinita* ‘empty, alone’. This can be used to refer to an empty canoe, or an empty tape-recorder (with no cassette in it), or an empty cassette (with nothing recorded on it), or to an unmarried person. Or it can refer to something unaccompanied by anything else, e.g.

- (11) [aba hinita]<sub>S</sub> {foje}  
 fish(m) alone be.inside:m  
 ‘there was just fish (alone) inside (the bundle)’

There is a derived intransitive verb *hi.hinita -na-* ‘(water) be empty of (fish)’.

E3. *hinama* ‘all and only (that is, all this and nothing/no one else)’. Examples of its use include:

- (12) [*mee.fanawi hinama*]<sub>S</sub> {*afi n-ine-ke*}  
 women(f) all bathe AUXILIARY-CONTINUOUS-DECLARATIVE:f  
 ‘all the people bathing are women (and no one else)’

The adjective *hinama* can be preceded by *fai* (which is not attested outside this context), the combination then being pronounced *fai.hinama* or *fai.inama* or *fainama*. It appears to mean ‘the same’ or ‘the same size’, as in:

- (13) [*o-jee fai(hi)nama*]<sub>S</sub> {*fama-ke*}  
 1SGPOSSESSOR-hand same.size be.two-DECLARATIVE:f  
 ‘my two fingers are the same size (lit. my fingers same size is two)’

A case could be made out for regarding *fai(hi)nama* as a fifteenth adjective. We prefer to treat it as nonce form *fai* followed by the adjective *hinama*.

Adding to the stock of fourteen monomorphemic forms, there are a small number of derived adjectives. A semi-productive process which involves adding *-bote* to a verb, appears both to derive an adjective and to add an intensive meaning. From verb *-hiwa-* ‘be hot’ is formed adjective *hiwa-bote* ‘very hot’, as in the copula clause:

- (14) [*jama*]<sub>CS</sub> [*hiwa-bote*]<sub>CC</sub> {*ama-ke*}  
 thing(f) be.hot-VERY be-DECLARATIVE:f  
 ‘the weather (lit. thing) is very hot’

And from verb *-amosa-* ‘be good’ is derived adjective *amosa-bote* ‘very good’ as in:

- (15) [*bani*]<sub>CS</sub> [*amosa-bote*]<sub>CC</sub> {*ama-ka*}  
 animal(m) be.good-VERY be-DECLARATIVE:m  
 ‘the bird is very pretty’ (lit. the animal is very good)

All the verbs attested with *-bote* are intransitive and inflecting, referring to states. They include ‘be cold’, ‘be strong’, ‘be strong-tasting’, ‘be mean, nasty’, ‘be angry’, ‘be tall’, and ‘be many’.

Corresponding to intransitive verb *-amosa-* ‘be good’, there is the derived adjective *amosa-wi* ‘very, very good’ (we were told that this indicates a higher degree of excellence than *amosa-bote*). This suffix *-wi* is not attested with any other word.

Derived adjectives may function as copula complements, as in (14–15), but not as modifiers within an NP.

Adjectives do not take any affixes. We noted that *one/owa* ‘another’ can function as an adjective or as a free noun, that there is a PN *boteri/boteri* ‘oldness’ related to adjective *botee* ‘old’, that there is a derived intransitive verb *hi.hinita -na-* ‘(water) be empty of (fish)’ related to adjective *hinita* ‘empty, alone’, and that there is a verb *jati -na-* ‘be alive, be raw’ which appears to be related to the adjective *jati* ‘new, young’. There are no other examples of nouns or verbs related to (or derived from) adjectives.



Table 5 surveys for Jarawara the semantic types typically associated with an adjective class. Note that no lexemes are attested for 'difficult', 'easy', 'probable', or 'possible'. There is a peripheral clause type which carries the meaning 'be similar to, be the same as'. For some concepts, periphrastic means are employed. For example,

TABLE 5. Coding of 'adjectival' concepts

	Adjectives	Verbs	Possessed nouns
DIMENSION	4	-neme- 'be tall, high', -jabo- 'be long, far', -kowi- 'be deep', etc.	—
AGE	2	—	boteri/boteri 'oldness'
VALUE	3	-amosa- 'be good', -hija-ra- 'be bad, broken', siba -ra- 'be acceptable'	—
COLOUR	—	all are verbs, including: -soki- 'be black, dark', tefo -na- 'be blue/green'	sokirine/sokirine 'blackness'
PHYSICAL PROPERTY	2	-siri- 'be cold', -hoko- 'be dry', -kanaha- 'be heavy', tafo (to-)ha- 'be soft', -kita' 'be strong', and many more.	siririne/siririne 'coldness', kanahari/kanahari 'heaviness', kori/korone 'nakedness', and a few more.
HUMAN PROPENSITY	—	-jaha- 'be kind, generous', -jawa- 'be angry, jealous', ja.jai -na- 'be happy', etc.	habi/habo 'courage', kamoniri/kamoniri 'loneliness', jawari/jawari 'being angry'.
SPEED	—	only verbs, including: kerewe-ra- 'be fast'.	—
SIMILARITY	one/owa 'another'	—	—
QUANTIFICATION	2	—	nafi/nafi 'all', boni/bono 'whole thing'.
POSITION	—	-jabo- 'be far, long'	many dealing with orientation; see §3.2
NUMBERS	—	all are verbs, including: -fama- 'be two, be a pair', -ohari- 'be one, be alone', -tama- 'be many', and loans such as: terei-na- 'be three'.	—

a description 'courageous' involves the PN *habi/habo* 'aerial root, tendon', used in the extended sense 'courage', as subject of the verb *-kowi-* 'be deep'; literally '[his] courage is deep'.

## 5.2. GRAMMATICAL FUNCTIONS

Adjectives can function at two slots within an NP, or as the sole constituent of a copula complement. We consider these one at a time.

- (1) Modifier within an NP. Most frequently, an adjective (in slot Bii from Table 2) follows the head noun (which is in slot B), as in (6–8), (10b), (11–13) and:

- (16) [jara                      boteɛ]<sub>A</sub> {era                      haa-ka}  
white.man(m) old                      insg.incO call.to-DECLARATIVE:m  
'the old white man called to us'

An adjective can modify a nsg pronoun as NP head; for example, the Jarawara people's autodenomination *ee jokana* (lit. 'real us'), mentioned under D3 in §5.1. However, I have not encountered an adjective modifying a sg pronoun, as NP head (in the way that a PN can modify a sg pronoun).

As mentioned earlier, a complement clause fills the head slot in an NP and may be followed by an adjective, as in:

- (17)    [⟨[sefeja]<sub>O</sub> {fawi}⟩<sub>CS</sub>  
         beer(f) drink:COMPLEMENT.CLAUSE real  
         {o-ha-tee-ra                                  ama      o-ke}  
         1sgA-become-HABITUAL-NEGATIVE:f EXTENT 1sg-DECLARATIVE:f  
         ‘I don’t habitually drink beer very much’ (lit. my real beer-drinking is not  
         habitual)

In (17) the copula subject NP consists of a complement clause ‘my drinking beer’ as head, modified by the adjective *jokana* ‘real’. By a regular rule of Jarawara grammar, the subject of the complement clause is raised into the subject slot in the predicate of the main clause, attaching to copula verb (*to-)*ha- ‘become’.

The other possibility for occurrence within an NP is slot Ci, immediately following a PN (in slot C) which is itself modifying the head noun, as in:

- (18) [Jobeto tomene ehebotee]<sub>CS</sub> {ama-ka}  
 name(m) size:m big be-DECLARATIVE:m  
 'Jobeto is big' (lit. Jobeto's size big is)

In (19) the adjective follows two PNs:

- (19) [jara                    teme    bako                    ehebotee]<sub>CS</sub> {ama-ka}  
       white.man(m) foot:m underside:m big                    be-DECLARATIVE:m  
       ‘the white men have big soles on their feet’

Compare these with (20), where the adjective *ehbotee* (in slot Bii) follows the head, and is itself followed by a PN (in slot C):

- (20) [*bani ehebotee tone*]<sub>CS</sub> {*ama-ka*}  
 animal(m) big bone be-DECLARATIVE:m  
 'they are the bones of a big animal'

An NP can include a sequence of PNs and any one of them may be modified by an adjective. In (21) we get 1sg *o-* as NP head, followed by two PNs ('head' and 'hair'), then adjective *bite* 'small', then another PN 'all':

- (21) [*o-tati kone bite nafi*]<sub>S</sub> {*sawa.wa*  
 1sg-head hair small:f all be.white.REDUPLICATED  
*kawaha-ke*}  
 FOR.A.WHILE-DECLARATIVE:f  
 'all of my little head hairs are getting white now'

The corpus does not include any example of an adjective in slot Bii and one in slot Ci, within the same NP.

Although Jarawara has a small class of adjectives, two or even three can be used together in an NP. In (8) we have *botee* 'old' followed by *one* 'another' modifying *fatarā* 'garden'. Once, when the youths of my fieldwork village were having to use a small children's ball for their football games, I offered to buy a proper football for them, and was told to say, using an NP with adjectives *jati* 'new' and *jokana* 'real':

- (22) [*bora jati jokana*]<sub>O</sub> {*o-kanika-bana o-ke*}  
 ball(m) new real 1sgA-buy-FUTURE:f 1sg-DECLARATIVE:f  
 'I'll buy a proper, new ball'

On another occasion, I walked five hours through the jungle to the main village of the Jamamadi tribe with Motobi, a Jarawara friend; while with the Jamamadi, the batteries on my small tape recorder ran out. A few days later Motobi noticed the recorder in operation again and used a string of three adjectives after the head, in surmising that I had inserted:

- (23) [*bija bite one jati*]  
 battery(f) small:f another:f new  
 lit. 'new other small batteries'

When elicitation was directed to what might be the preferred order of adjectives, it was consistently stated that both orders were equally acceptable, e.g. *bija botee howe* ('battery old large-type') and *bija howe botee* are equally acceptable, as are *bite botee* ('small old') or *botee bite* to describe a fruit.

(2) As copula complement. A copula clause can have just one argument, in copula subject function, as in:

- (24) [*okoto*]<sub>CS</sub> {*ama-ke*}  
 1sgPOSSESSOR:daughter(f) be-DECLARATIVE:f  
 'I have a daughter' (lit. my daughter is)

Or it can have a second argument, in what we call copula complement function; this comes between the copula subject NP and the copula verb, as in:

- (25) [okoto]<sub>CS</sub> [biroto]<sub>CC</sub> {ama-ke}  
 1sgPOSSESSOR:daughter(f) pilot be-DECLARATIVE:f  
 ‘my daughter is a pilot’

Now a copula complement can be a full NP or just an adjective, as in:

- (26) [faja]<sub>CC</sub> {ama o-ke}  
 enough be 1sgCS-DECLARATIVE:f  
 ‘I (have said) enough (lit. I am enough)’ (said at the conclusion of a story)
- (27) [jifari]<sub>CS</sub> [tati]<sub>CC</sub> {ama-ke}  
 banana(f) unripe be-DECLARATIVE:f  
 ‘the banana is unripe’

Note that an adjective can also be modifier within the subject NP of a single-argument copula clause, as in:

- (28) [jifari tati]<sub>CS</sub> {ama-ke}  
 banana(f) unripe be-DECLARATIVE:f  
 ‘it is an unripe banana (lit. unripe banana is)’

The sentence *jifari tati ama-ke* is thus ambiguous between the parsing and meaning in (27) and those in (28); it would be likely to be disambiguated by the discourse context.

Note that there is no comparative construction in Jarawara.

### 5.3. DISTINGUISHING ADJECTIVES FROM POSSESSED NOUNS

At first blush, adjective and PN have rather similar grammatical properties; most basically, both may follow the head of an NP. There are, however, a number of criteria for distinguishing them.

(A) *Place with respect to mee within an NP.* It will be seen, from the statement of NP structure in Table 2, that the augment modifier *mee* (slot Biii) will follow an adjective (slot Bii), but precede a PN (slot C). That is, we can have adjective-plus-*mee*, as in:

- (29) [haaha]<sub>CS</sub> [bani howe mee]<sub>CC</sub> {ama-ke}  
 THIS:f animal(m) large.type AUGMENT be-DECLARATIVE:f  
 ‘these are animals of a large type’

And we can get *mee*-plus-PN, as in:

- (30) [jara mee tame]<sub>CS</sub> {ama-ke}  
 white.man(m) AUGMENT foot:f be-DECLARATIVE:f  
 ‘the white men’s feet’

Note that we cannot get PN-plus-*mee*. That is, *\*jara teme mee* is ungrammatical. (This is a consequence of the fact that, as pointed out in §4, an NP including a PN counts as inanimate, and *mee* can only be applied to animates.)

We can, of course, get adjective (slot Bii)-plus-*mee*-plus-PN, as in *jara howe mee tame* 'the feet of the large type of white men' and *mee*-plus-PN-plus-adjective (slot Ci), as in *jara mee tame ehebotee* 'the large feet of the white men'.

(B) *Possibilities as copula complement (CC)*. A CC can be an NP (with the full structural possibilities set out in Table 2) or just an adjective. It cannot be just a PN. That is, an adjective can make up a complete CC or can modify a noun within an NP which is CC, but a PN can only modify a noun within an NP which is CC.

It was mentioned that corresponding to the adjective *botee* 'old', there is a PN *boteri/boteri* 'oldness'. These can be used to illustrate the different possibilities for adjective and for PN within a copula clause. Using the adjective *botee*, one can say both:

- (31) [Jowao]<sub>CS</sub> [botee]<sub>CC</sub> {ama-ka} waha  
 name(m) old be-DECLARATIVE:m NOW  
 'João is now old'
- (32) [Jowao]<sub>CS</sub> [iti botee]<sub>CC</sub> {ama-ka} waha  
 name(m) grandfather old be-DECLARATIVE:m NOW  
 'João is now an old grandfather'

Using the possessed noun *boteri/boteri* we can only have a sentence corresponding to (32), where the PN modifies the noun *iti* 'grandfather, elderly relative':

- (33) [Jowao]<sub>CS</sub> [iti boteri]<sub>CC</sub> {ama-ka} waha  
 name(m) grandfather old be-DECLARATIVE:m NOW  
 'João is now an old grandfather'

We cannot have a sentence corresponding to (31) where *boteri* makes up the whole CC. That is, *\*Jowao boteri ama-ka waha* is unacceptable.

(C) *Gender marking within an NP*. Only two adjectives show distinct f and m forms, but these do provide a third criterion for distinguishing adjectives from PNs.

Recall from Table 4 that if two PNs follow a 1/2 nsg pronoun, each must be in m form, as in:

- (34) [ee mano bako]  
 1nsg.inc.POSSessor arm:m inside:m  
 'our (inc) inside arms'

We can examine what happens when an nsg pronoun is followed by a PN and then an adjective. The PN is in m form, as expected, but the adjective is in f form. Examples include (21) and:

- (35) [*ee*                      *taboro*    *one*]    and not \* [*ee taboro owa*]  
           insg.incPOSSessor village:m other:f                      other:m  
           ‘our other village’
- (36) [*ee*                      *teme*    *bite*]    and not \* [*ee teme biti*]  
           insg.incPOSSessor foot:m small:f                      small:m  
           ‘our small feet’

If *one/owa* and *bite/bit*i were PNs, they would be in m form in these NPs. Examples (35–6) point to a crucial difference between the gender assignment for PNs and for adjectives within an NP. That for PNs is complex, and is set out in Table 4. That for adjectives is simple. Just as a pronoun in pivot function requires f agreement within the predicate, so it requires f agreement on a modifying adjective within its NP (whether or not a PN intervenes between pronominal head and adjective).

This provides further support for the analysis pursued here (and argued for in some detail in Dixon 2000b), that in an NP such as *o-mano* ‘my arm’ or *ee teme* ‘our feet’, it is the pronominal possessor (here *o-* and *ee*) which is NP head. Both *mano* and *teme* are in m form and if they were head we should expect a following adjective to be in m form. The adjective is actually in f form, this being determined by the pronominal head of the NP.

(D) *Ordering within a sequence of adjectives or of PNs.* We mentioned that if an NP includes more than one adjective, these may occur in any order with no apparent difference in meaning. In contrast, PNs generally occur in a fixed order, which is semantically determined. For example, *fowa bete maho* (manioc(m) rotten:m smell:m) ‘the smell of rotten manioc’.

However, this is a less sharp criterion than (A–C). There can occasionally be fluidity in the ordering of PNs. For example, we have heard *fowa maho bete*. Strictly speaking, this should mean ‘the rotten smell of manioc’, implying that all manioc has a bad smell. But all manioc does not have a bad smell and this piece of common knowledge ensures that *fowa maho bete* is understood as ‘the smell of rotting manioc’, despite the liberty which a speaker took with the ordering of PNs in this instance.

Table 6 summarizes the criteria which serve to distinguish adjectives from PNs. Although the distinction between PNs and adjectives is fairly clear, it is not absolutely clean-cut. We have found *hinita* ‘empty, alone’ used like an adjective in most

TABLE 6. Grammatical differences between adjectives and possessed nouns

	Adjectives	Possessed nouns
A followed by <i>mee</i> in NP	yes	no
B functions alone as copula complement	yes	no
C gender when following PN, after 1/2nsg pronoun as NP head	f	m
D order within sequence	free	generally fixed

circumstances but like a PN in some (for example, following augment modifier *mee* within an NP). And the PN *kori/koro-ne* 'nakedness, lack of cover' appears sometimes to behave like an adjective (being followed by *mee* within an NP). We mentioned that *one/owa* 'another' may function both as a free noun and as an adjective; there are, in addition, just a few instances where it appears to behave like a PN. The word classes set up for Jarawara are fairly self-contained, but there appears to be a little overlap between them, with *hinita*, *kori/koro-ne* and *one/owa* each having a foot in more than one class.

#### 5.4. DISTINGUISHING ADJECTIVES FROM NOMINALIZED VERBS

There are three intransitive verbs with meanings similar to the adjectives *tati* '(fruit) full-sized but not yet ripe and ready to eat' and *kini* 'small, immature (fruit) which has not yet reached its full size'. They are:

- hata*- 'be ripe, mature'
- kaha*- 'be roasted'
- haro*- 'be boiled'

The verb *-hata-* is used of fruit which has come into an edible state naturally; it falls into the same semantic system as *tati* and *kini*. The other two verbs are used to describe the two ways of making fruit, meat, or fish edible by cooking.

These three verbs are typically used in complement clauses or in other nominalized frames. There is then no formal change to *-haro-* but the final *a* of *-kaha-* and *-hata-* changes to *i* and the forms become *-kahi-* and *-hati-*. These have similar meanings to adjectives but there are grammatical differences. Consider a sentence:

- (37) *aba mee kahi to-ha awine-ke*  
 fish(m) AUG be.roasted:NOM AWAY-become:f SEEMS:f-DECLARATIVE:f  
 'it seems that there is roasted fish'

Now if *kahi* were a (simple or derived) adjective it would have to precede augment modifier *mee* (see Table 2). The only possible analysis of (37) is for *aba mee kahi* to be a complement clause which is subject of the copula verb (*to-*)*ha-* 'become'. Within the complement clause, *aba* is S NP, *mee* is 3nsg pronoun in S function, and *-kaha-* is the verb, its final *a* changing to *i* as the mark of a complement clause (this is a kind of nominalization). That is:

- (37')  $\langle [aba]_S \{mee \ kahi\}_{CS} \{to-ha \ mee$   
 fish(m) 3nsgS be.roasted:COMP AWAY-become:f 3nsg  
*awine-ke\}*  
 SEEMS:f-DECLARATIVE:f  
 'it seems that there is roasted fish' (lit. fish being roasted appears to be-  
 come)

That is, the semantic field which describes foodstuffs as being unripe or ripe, raw

or cooked involves two adjectives (*tati* and *kini*) and three verbs (*-hata-*, *-kaha-* and *-haro-*). And, as mentioned in §5.1, there is also the verb *jati -na-* ‘be alive, be raw (not sufficiently cooked)’ (which is probably diachronically related to the adjective *jati* ‘new, young’). We have seen that the nominalized forms of the verbs have different grammatical behaviour from the adjectives.

## 6. Summary

The small adjective class in Jarawara has just fourteen attested members, four in the DIMENSION semantic type, two in AGE, three in VALUE, two in PHYSICAL PROPERTY, and three in QUANTIFICATION and QUALIFICATION. The adjectives are non-verb-like; that is, they cannot function as head of an intransitive predicate. Since neither nouns nor adjectives take any inflectional affixes, there can be no morphological similarities between nouns and adjectives.

An adjective may function as modifier to the head of an NP, or as modifier to an inalienably possessed noun which itself modifies the head. The rule for gender marking for adjectives in an NP is different from the rule of gender marking on possessed nouns. An adjective (but not a possessed noun) may constitute a copula complement.

Present-day Jarawara is head-marking. The first slot in the predicate bears a pronominal element marking the O argument in a transitive clause; this ends in *-ra* if non-singular. The second slot is a pronominal element marking the subject argument (S in an intransitive, A in a transitive, and CS in a copula clause). An accusative suffix *-ra* occurs on NPs in the Paumari language, in the Sorowahá language, and in the Jamamadí dialect of Madi, suggesting it should be reconstructed for proto-Arawá. The *-ra* suffix on NPs—an indicator of dependent-marking—has recently dropped out of use in Jarawara (the last old speaker who employed it productively died in 2002).

It is possible that an earlier stage was exclusively dependent-marking. The suffix *-ra* may originally have occurred just on NPs. Then, pronouns (with *-ra* for O function) could have developed into obligatory head-marking elements within the predicate. Later, *-ra* was dropped from NPs. That is, there could have been a development from just dependent-marking through a combination of head- and dependent-marking to just head-marking. The fact that adjectives are non-verb-like may relate to the past stage of dependent-marking. But this is a highly speculative scenario.

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# The Russian Adjective: A Pervasive yet Elusive Category<sup>1</sup>

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## 1. Introduction

Russian undoubtedly has a class of adjectives, and several properties converge to define the category. While adjectives are numerous, few lexical items have all the defining properties. There is considerable overlapping with noun and verb, and adjectives expand out to cover typologically unusual areas. We shall see that Russian adjectives form a category with two focal points.

## 2. Typological profile of Russian

Russian is a member of the Slavonic family, a fairly conservative branch of Indo-European. It is synthetic and fusional. Nouns serve as the semantic head of noun phrases, of certain modifier phrases within the noun phrase, and of copula complements. Verbs head intransitive and transitive predicates. Case is marked on noun phrases, and verbs agree with subject noun phrases; the language is of the nominative-accusative type. Within the noun phrase, word order is largely fixed. In contrast, order within the clause is relatively free, in that it is sensitive to information structure: given information typically precedes new information. Since subjects frequently represent given information, subject-verb-object emerges as the canonical word order. A fine overview of Russian is provided by Timberlake (1993), and this is a good pointer to more detailed accounts. For a formal account of nominal morphology see Corbett and Fraser (1993) and for the verbal morphology see Brown (1998); an exhaustive reference source on inflection is Zaliznjak

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(1977). Aspect is tackled in Comrie (1976) and Timberlake (1985). For word order, see Yokoyama (1986) and for agreement see Corbett (1998). Developments over the twentieth century are traced in Comrie, Stone, and Polinsky (1996).

### 3. Canonical Russian adjectives

A canonical or 'ideal' Russian adjective has the following properties:

#### *Syntactic*

- it occurs as the complement of a copula;
- it occurs as a modifier in noun phrases.

These properties are discussed in §4.1.

#### *Morphological*

- it has a regular paradigm (the long form), which allows agreement in gender (including the sub-gender of animacy), number, and case;
- it also has a paradigm for use in the predicate (the short form);
- it has a (synthetic) comparative.

These properties are discussed in §5.

### 4. Identifying the adjective (syntax and sources)

We examine the syntactic means for identifying adjectives, and then look at the sources of the category.

#### 4.1. THE SYNTAX OF CANONICAL ADJECTIVES

In general it is relatively unproblematic to identify a class of adjectives in Russian. In terms of syntax, typical members of the class occur as the complement of a copula:

- (1) *Ded*            *byl*            *dobr-ym*  
 grandfather was.MASC.SG kind-(LF)MASC.SG.INST  
 'grandfather was kind'

Uppsala corpus, text XDLI0201

We examine the use of the long form (LF) vs. short form (SF) in §7.1 below. Note that the verb *byt'* 'be' is not normally expressed in the present tense, and so the complement appears without a copula:

- (2) *Katja očen' krasiv-aja*  
 Katja very beautiful-(LF)FEM.SG.NOM  
 'Katja is very beautiful'

Zemskaja (1973: 248) example from conversation

This property is shared with noun phrases and it suggests that Russian adjectives

are noun-like rather than verb-like. Typical adjectives also occur as agreeing modifiers within the noun phrase:

- (3) *Kak-aja interesn-aja stat'j-a!*  
 what-FEM.SG.NOM interesting-FEM.SG.NOM article.FEM-SG.NOM  
 'what an interesting article!'

Zemskaja and Kapanadze (1978: 233) example from conversation

The items which show this combination of syntactic properties include items of the semantic types DIMENSION (*bol'soj* 'large'), AGE (*staryj* 'old'), VALUE (*xorošij* 'good'), and COLOUR (*sinij* 'dark blue'). While canonical adjectives function readily in both syntactic environments, many others are predominantly associated with one or other position, as we shall see below.

#### 4.2. ADJECTIVES AS AN OPEN CLASS

Adjectives form a large class. Townsend (1975: 211) suggests there are between 200 and 300 synchronically underived adjectives; there is a much larger number of derived members. The class is in principle open. However, stems must be consonant final. There are occasional marginal instances of vowel final borrowings remaining indeclinable (*bordo* 'bordeaux colour') but these tend to be regularized (*bordovyj* 'bordeaux colour'); see Vonen (1997: 75–6), but see Zemskaja (1987: 97) for a conflicting view. A useful indication is provided by Lazova (1974: 941), where thirty-five indeclinable adjectives are found from a total of 24,786 adjectives. Statistical data on usage are given in §9 below.

#### 4.3. DERIVATIONAL SOURCES OF ADJECTIVES

There are many patterns of derivation which produce adjectives. What would be noun–noun compounds in many European languages are likely to be expressed in Russian by a derived adjective plus noun, e.g. *knižnyj magazin* 'bookshop' (*knižnyj* is derived from the noun *kniga* 'book'). Adjectives are commonly derived from nouns, verbs, and adjectives, and less often from other parts of speech. However, derivation is not a major issue, since the resulting forms can be identified according to the normal properties of adjectives, without making reference to derivational history. For extensive examples see Townsend (1975: 212–37) and Lopatin (1980a). The derivational models most productive in colloquial Russian can be found in Zemskaja, Kitajgorodskaja, and Širjaev (1981: 103–6).

### 5. Properties of inflectional morphology

Russian adjectives can be distinguished on morphological criteria from nouns and verbs, though there are overlaps with each. The arguments are spelled out in Vonen (1997: 53–102),<sup>2</sup> and his summary table makes the point well:

<sup>2</sup> Vonen considers syntactic criteria too. A useful, brief introduction to work on the 'adjective

(4) Distribution and expression of morphosyntactic features (Vonen 1997: 69)

	Noun	Adjective	Finite verb
Case	choice	agreement	no
Number	choice	agreement	agreement
Gender	inherent	agreement	agreement (PAST only)
Animacy	inherent	agreement	no
Degree	no	(choice)	no
Person	(inherent 3)	no	agreement (NON-PAST only)
Tense	no	no	choice
Voice	no	no	choice
Mood	no	no	choice
Aspect	no	no	inherent

The overlaps with other categories are evident.<sup>3</sup> Like the noun, but unlike the finite verb, the adjective expresses case. Like the verb, it expresses the nominal categories of number and gender through agreement. On the evidence so far, the adjective appears rather ‘noun-like’. Note, however, that the verb shows agreement in person and number in the present and future, and agreement in number and gender in the past (historically a participle). This point will be relevant when we come to the short form adjective below, where we shall see some additional verb-like properties of the adjective.

We now turn to the expression of these features through inflectional morphology. A typical paradigm of the **long form** is given in (5):

(5) Paradigm of the long form adjective (traditional presentation): *novyj* ‘new’

	Masculine	Feminine	Neuter	Plural
Nominative	novyj	novaja	novoe	novye
Accusative	as NOM/GEN	novuju	novoe	as NOM/GEN
Genitive	novogo	novoj	novogo	novyx
Dative	novomu	novoj	novomu	novym
Instrumental	novym	novoj(u)	novym	novymi
Locative	novom	novoj	novom	novyx

Not only are the feature specifications different from those of nouns (see (4) above), the inflections typically differ too. For instance, two classes of nouns may be feminine, and their nominative singular is in *-a* or the bare stem. The traditional adjectival paradigm<sup>4</sup> has many more cells than there are distinct phonological forms,

problem’ can be found in Pustet (1989: 11–26). For recent work on languages without adjectives see Francis and Matthews (2005).

<sup>3</sup> The relation to adverbs is discussed briefly at the end of §6.

<sup>4</sup> A truly traditional presentation has the accusative ordered after the dative, which obscures some

owing to pervasive syncretisms. The most interesting of these concerns the accusative case, where for the masculine singular and for the plural the form is identical to the accusative for animates and to the nominative for inanimates. For a formal account of this syncretism, which goes over paradigm boundaries, see Corbett and Fraser (1993), and for the typological implications see Corbett, Baerman, and Brown (2002). In addition, the masculine and neuter are identical in the oblique cases and the feminine does not distinguish the oblique cases (the instrumental inflection *-oju* is now largely limited to poetry for adjectives). If we exclude this latter form, there are twelve distinct inflections, with surprisingly the masculine/neuter instrumental singular being identical to the dative plural. These syncretisms are brought out in (6):

(6) The paradigm of the long form adjective *novyj* 'new' (showing syncretisms)

	Feminine	Neuter	Masculine	Plural
Nominative	novaja	novoe	novyj	novye
Accusative	novuju		as NOM/GEN	
Genitive	novoj	novogo		novyx
Locative		novom		
Dative		novomu		novym
Instrumental	novoj(u)	novym		novymi

Long form adjectives are predictable: each adjective has all the forms, and the native speaker has no problem in producing them. They have fixed stress, typically on the stem, as with *nóvyj* 'new', less commonly on the ending. Adjectives are inflectionally considerably more regular than nouns or verbs in Russian. The importance of the patterns of syncretism is that they are preserved even for other items which are not canonical adjectives; thus *étot* 'this' is of irregular inflection, but it has the same 'pattern' as in (6).

Russian has a second set of forms, the so-called **short form** (now restricted to predicative use, as discussed in §7.1 below):

(7) The paradigm of the short form adjective *nov* 'new'

Masculine	Feminine	Neuter	Plural
nov	nová	novó	nóvý

Short forms do not distinguish case. Unlike the long forms, they can have different stress patterns. In many instances there are alternative stresses for particular forms, as with the plural of *nov* 'new' in (7) above, and there are considerable un-

certainties (Zaliznjak 1977: 58). This is an indicator of the insecure status of the short form for some adjectives. Moreover, a substantial proportion of the available short forms are involved, unlike the uncertainties in other major categories which affect a small number of the members. This pattern of four forms is like that of the past tense verb, for example: *byl*, *byla*, *býlo*, *býli* 'was/were'. The past tense has a palatalized consonant in the plural; otherwise the forms are phonologically comparable (see Timberlake 1993: 831 on vocalic allophones).

The status of the short form is problematic. Furthermore many adjectives do not have a short form. Simplifying considerably we may say that adjectives which are freely used in the predicate and which are underived, synchronically at least, are most likely to have short forms. Adjectives which are synchronically derived from nouns are unlikely to have short forms. Where a short form exists, it may not be available for all of the meanings of the corresponding long forms.<sup>5</sup> Note the direction of the restriction: short forms are found only in the predicate in modern Russian;<sup>6</sup> adjectives without a short form can still be used in the predicate, using the long form.

A similar restriction is found with the **comparative**. Russian has a synthetic comparative, formed productively with a suffix, thus *novyj* 'new', *novée* 'newer', *krasivyj* 'beautiful', *krasivee* 'more beautiful'. Many adjectives form the comparative with *-e*, and a mutation of consonant (this is not fully predictable, and there are minor irregularities), for example: *molodoj* 'young' > *molože* 'younger', *korotkij* 'short (time)' > *koroče*, *širokij* 'wide' > *šire*, *staryj* 'old' > *starše*. Not all adjectives have a synthetic comparative. There is considerable overlap with those that have a short form, but it is not complete, and the decline in the short form does not appear to affect the synthetic comparative. The synthetic comparative, like the short form, is largely restricted to use in the predicate (it also occurs as a postpositive reduced relative clause; Timberlake 1993: 845). There is an analytical comparative formed with *bole* 'more', which is itself indeclinable, but the adjective with which it combines declines normally, for example *bole krasivyj* 'more beautiful'. The analytic comparative is required in attributive position; it can also be used in the predicate, first with adjectives which have no synthetic form, and second in place of the synthetic form (though this usage is markedly formal written). Running counter to the regularity stated, a handful of adjectives have synthetic declinable comparatives, available for use in attributive position.

The normal expression of the superlative is with *samyj* plus the long form of the adjective: *krasivyj* 'beautiful' > *samyj krasivyj* 'most beautiful'. For the theory of agreement this is particularly interesting, since *samyj* semantically modifies the adjective and yet agrees like an adjective with the head noun. This analytical for-

<sup>5</sup> For interesting comparison with the dialect of Ostrovcy (Pskov area) see Honselaar (2001: 123–40). There long form adjectives are contracted in some instances, making it more difficult to identify short forms. As one would expect, Honselaar cites relatively few examples of unambiguous short form adjectives. On the other hand, possessive adjectives are well attested.

<sup>6</sup> The earlier use of the short form in attributive position is preserved in a few set expressions.

mation is available in attributive and predicative use. There is also a suffixal superlative, now restricted in the adjectives to which it can apply, and often with an intensive rather than genuinely superlative force, for example *složnejsij* (< *složnyj* 'complex') suggests 'very complex'. There is an analytic superlative with *naibolee* 'most', which functions like the comparative with *bolee*, but tends to be restricted to formal written Russian.

## 6. The derivational potential of adjectives

Here we note the derivations which have adjectives as their base. Adverbs are of particular interest.

- *Derivation of nouns*: there are several available suffixes. A particularly frequent one is *-ost'*, which gives rise to abstract nouns, for example *staryj* 'old' gives *starost'* 'old age'.
- *Derivations of verbs*: again there are several possibilities; for example, *staret'* 'grow old' from *staryj* 'old'.
- *Derivations of adjectives*: a typical example is: *zelenovatyj* 'greenish' from *zelenyj* 'green'.
- *Derivations of adverbs*: the main type consists of the adjective stem and the suffix *-o*, for instance, *krasivo* 'beautifully' from *krasivyj* 'beautiful'. Thus the derived adverb is frequently, but not always, identical to the short form neuter (Lopatin 1980b). Other possibilities include a derivation from the abstract noun which is equivalent to the neuter long form, thus *novoe* 'the new' gives the adverb *po-novomu* 'in a new way'. From adjectives denoting languages there are adverbials according to the pattern *rususkij* 'Russian' giving *po-russki* 'in Russian'. The synthetic comparative of adjectives is typically available as a comparative adverb too, thus *sil'nee* is both 'stronger' and 'more strongly'.

## 7. Further syntactic properties of adjectives

In this section we discuss the syntactic properties of adjectives in greater detail, making comparisons where appropriate with nouns and verbs.

### 7.1. COMPLEMENT OF COPULA

As we noted earlier, canonical adjectives can occur as the complement of a copula (like nouns).<sup>7</sup> In this use, there are three morphosyntactic options, best viewed as two binary choices. First, the adjective may appear in the short form or the long form. Second, if it appears in the long form, there is then a choice between nominative and instrumental case (as for the noun).

<sup>7</sup> According to Zemskaja (1987: 86), in conversation the more common use of adjectives is predicative.



The choice of the short form or the long form is a complex issue that requires more extensive treatment than is possible here. Taking the long view, we see that over the last two millennia in Slavonic, the long form has gained inexorably at the expense of the short form. The adjective originally had the inflections of the major noun types (short forms) to which were added the anaphoric pronoun *j-* to yield the definite or long forms (Schenker 1993: 91). From a situation where it was possible in attributive position and excluded in predicate position, the long form has steadily extended its range. The short form is better preserved in Russian than in several of the Slavonic languages; in Russian the situation has changed dramatically over the last two centuries. We are viewing the final stages of the process, and many factors are in play (Gustavsson 1976 found 6,615 'parameter combinations'). There is a great difference between genres (with the short form typically being a sign of older/written use), also between individual styles and between consultants' judgements. For the essentials see Timberlake (1993: 861–5); for much more detail see Nichols (1981); a transformational account is given in Babby (1975); the sketch given here is based substantially on my own observations. Let us start from the basic structure:

(8) subject–verb–complement adjective–dependents on complement adjective

Each of the four elements can have a substantial influence on the choice of the short form or the long form. We begin with the **verb**. The copula *byt'* 'be' allows the most open choice (and there must be an overt verb for the long form instrumental to be possible). Semi-copulas like *stat'* 'become' allow the short form, but less readily. *Kazat'sja* 'seem' strongly favours the long form (instrumental). Full lexical verbs, such as verbs of motion, allow the adjective as an adjunct and in modern Russian require the long form (with a choice of nominative or instrumental; see Timberlake 1986, Nikunlassi 1993, Richardson 2001).

The **subject** also has an influence. The most substantial factor is that if the subject is a non-canonical noun phrase this will strongly favour the use of the short form:

- (9) *Rabotat'*                      *byl-o*                      *trudn-o*  
 work.INFINITIVE was-NEUT.SG difficult-(SF)NEUT.SG  
 'to work was difficult'/'it was difficult to work'

Non-canonical noun phrases include complete clauses and infinitive phrases, phrases headed by action nominals or by *éto* 'this', *vsë* 'everything', *čto* 'which', and the totally absent phrase of impersonal constructions, for example:

- (10) *zdes' xolodn-o*  
 here cold-(SF)NEUT.SG  
 'it's cold here'

Non-canonical noun phrases typically lack agreement features and so the adjective appears in the 'default form', the neuter singular short form. Since this form is frequently available for use also as an adverb, some would treat such sentences as

having an adverb as predicate and/or as belonging to the 'Category of State'.<sup>8</sup> Postulating such a category appears to be an unwarranted complication. A second subject factor is that the short form is more likely to be found with subjects denoting animates than with those denoting inanimates (Iversen 1978: 60–2).

We now move to **dependents** of the adjective. These are of two types. The presence of an argument of the adjective strongly favours the short form, as in:

- (11) *on*            *gotov*                      *ko*            *vs-emu*  
       3.SG.MASC ready.(SF)SG.MASC towards everything-SG.DAT  
       'he is ready for anything'

See Gustavsson (1976: 169) for statistical data. Other modifiers, such as degree modifiers (e.g. *očen'* 'very'), also favour the short form but these have a lesser effect.

Finally the **adjective** itself has an influence. This is true in the trivial sense that if it lacks a form it will be used in the other form. More interestingly, there are marked lexical effects of two types. First, some adjectives are much more likely to occur in one form rather than the other. For instance, adjectives, like *gotov* 'ready', typically imply a complement even when it is not stated; these adjectives strongly favour the short form. Gustavsson (1976) demonstrated this convincingly using a corpus of 7,729 examples from fiction and newspapers from a short time period (1964–70). Colloquial Russian shows similar lexical effects, together with a shift away from the short form by comparison with other genres (Krasil'nikova 1973: 196–216). This shift is greater in the dialects, as reported by Mjasnikov (1959). The second type of lexical effect is that various adjectives differ at least partially in meaning between long and short form (see Groen 1998: 161–5) for lists.

The different factors listed are quite likely to be in conflict, which is what makes the situation complex. When all things are equal—and they rarely are—then we may recognize the following difference. 'The short form indicates that the subject, viewed as a unique individual rather than as a type, manifests the property in potentially variable ways under different circumstances.' (Timberlake 1993: 863). This fits with its use with complements and degree modifiers. 'The long form signals that the subject, viewed as a type of individual, instantiates an essence, a quality' (Timberlake 1993: 862). The short form suggests a graded quality, while the long form implies a categorial judgement. In other words, we may say that short forms are more like verbs, and long forms are more like nouns (see §7.6), an observation that goes back at least as far as Fontenoy (1925).

If the long form is selected, then that brings with it the choice of nominative or

<sup>8</sup> There has been a tradition in linguistics in Russia to recognize a separate category, the 'category of state' (*kategorija sostojanija*). In some versions of this idea, certain items here treated as adjectives would be assigned to the category of state. The original idea of the category goes back to L. V. Ščerba, and its development is particularly associated with V. V. Vinogradov. I find the arguments unconvincing: see, for example, Migirin (1970) and Sperber (1972) for discussion. The main argument against the category is, of course, Occam's Razor.

instrumental case. (Unless the copula is the verb *byt'* 'be' in the present tense, which is zero, when the nominative is required.) The choice of nominative or instrumental is similar to that with the noun, except that while the instrumental is used in the great majority of instances with the noun, it is less dominant with the adjective. Over the last two centuries the instrumental has extended its use substantially in copula complements, but with nouns considerably ahead of adjectives. Timberlake (1993: 862) proposes that the instrumental 'indicates a restriction on a property':

- (12) *ona byl-a sčastliv-oj*  
 3.SG.FEM was-3.FEM happy-(LF)FEM.SG.INST  
 'she was happy'

Here the instrumental suggests that 'happiness was limited to some time' (Timberlake 1993: 862). This is comparable to the suggestion for the short form, and indeed the rise of the long form instrumental has gone together with the decline of the short form over the last two centuries. Perhaps surprisingly, however, the long form instrumental is particularly prevalent in journalistic and technical writing.

## 7.2. MODIFIER IN NOUN PHRASE

The adjective in attributive position typically stands between any determiner and the noun; for ordering see Sussex (1974). It may take a complement there. Most often, however, if there is a complement the adjective is postposed:

- (13) *Lev-yj rukav bjaze-v-oj*  
 left-(LF)MASC.SG.NOM arm.MASC.SG.NOM calico-(LF)FEM.SG.GEN  
*rubuš-k-i, čern-yj ot krovi, lip k ruke.*  
 shirt.FEM-GEN.SG black-(LF)MASC.SG.NOM from blood stuck to arm  
 'The left arm of his calico shirt, black with blood, stuck to his arm.'

Uppsala corpus, text XVBA0101

In contemporary Russian only the long form is found in this construction.

## 7.3. SOLE ELEMENT OF NP

The adjective may be the sole element of the noun phrase. First, this may be contextually determined, as in this description of the village of Andi (Dagestan):

- (14) *Nov-ye doma, kak pravilo, bol'she star-yx . . .*  
 new-PL.NOM house-PL.NOM as rule large.COMP old-PL.GEN  
 'the new houses, as a rule, are larger than the old ones'

Borščev 2001, *Za jazykom*, p. 35

Second there are regular and productive uses of adjectives as the sole element in a noun phrase, limited only by the lexical semantics of the adjective. Examples in the masculine, such as *slepoj* 'blind (adjective), blind person', or in the plural denote persons. Examples in the neuter singular denote a mass/abstract. Thus *staroe* 'what is old', *modnoe* 'what is fashionable':

- (15) *Vs-e*            *star-oe*            *plox-o,*            *vs-e*  
 all-NEUT.SG old-(LF)NEUT.SG bad-(SF).NEUT.SG all-NEUT.SG  
*nov-oe*            *xoroš-o*  
 new-(LF)NEUT.SG good-(SF).NEUT.SG  
 'all the old (all that is old) is bad, all the new is good'

Uppsala corpus, text XGGRO201

Finally, morphological adjectives may be lexicalized as nouns, to varying degrees (see §11.2).

#### 7.4. SECOND ARGUMENT

Several adjectives can take a second argument, either in an oblique case, or with a preposition: *polnyj* (plus genitive) 'full of', *blagodarnyj* (plus dative) 'grateful to', *poxožij* (plus *na* plus accusative) 'similar to'. Such adjectives, when in copula complement function, are likely to appear in the short form (§7.1). If an adjective with a second argument occurs within the noun phrase it is usually postposed (§7.2). A very few adjectives can take an accusative (without preposition) when in their default form (neuter singular short form): *nužno* 'necessary', *slyšno* 'audible', and *vidno* 'visible' are examples.

#### 7.5. PARAMETER OF COMPARISON

The means of forming comparatives were described in §5. Given a synthetic comparative, the object of comparison is normally in the genitive case (as in (14) above). The alternative is *čem* 'than' plus the noun phrase in the case justified by its syntactic position. If the comparative is in attributive position (hence it is analytic), only *čem* 'than' is possible.

#### 7.6. AGREEMENT WITH HYBRID CONTROLLERS

This agreement phenomenon is of special relevance here, because it gives a delicate measure of the position of the adjective in comparison with noun and verb. Comrie (1975: 406) claimed that verb and noun represent two poles of a continuum 'with individual languages having different specific categories along this continuum'. His evidence was drawn from plural pronouns used politely of a single interlocutor. These are often hybrid controllers, that is, the agreements they take depend in part on the target. Comrie's data demonstrated that syntactic (formal) agreement is most likely when the target is a verb, then for the participle, then for the adjective, and is least likely for the noun. A detailed investigation of the Slavonic family confirmed Comrie's claim (Corbett 1983: 56; 1998). Russian is of particular interest precisely because of the two adjectival forms. With honorific *vy*, non-past verbs, the past participle, and the short form adjective show syntactic agreement:

- (16) *Vy vid-ite*  
 2.PL see-2.PL  
 'you see'

- (17) *Vy videl-i*  
2.PL saw-PL  
'you saw'
- (18) *Vy bol'n-y*  
2.PL ill-(SF)PL  
'you are ill'

In terms of agreement with honorific *vy* there is no reason for separating the verb and the participle in *-l*. In contrast, the long form adjective, like the noun, usually shows semantic agreement:

- (19) *Vy molčaliv-aja*  
2.PL silent-(LF)FEM.SG  
'you are silent' (addressed to a woman)
- (20) *Vy genij*  
2.PL genius.SG  
'you are a genius'

It is unusual for predicate nouns to agree, and they normally 'escape' from agreement to have their number determined by semantics. But syntactic agreement is possible, as in some types of nineteenth-century Russian (see Corbett 1983: 55). If one wished to split the predicates into two the most likely place would be between the short form and the long form. But here too there is overlap: in Šukšin's short story *Čeredničenko i cirk* (1980: 234), we find the following example:

- (21) ... *nikomu vy bol'she ne nužn-y*  
... no one.DAT 2.PL more NEG necessary-(SF)PL  
'no one needs you any more'

As expected, we find the short form in the plural. But on the same page we find, again in honorific use:

- (22) *Komu vy potom bud-ete nužn-a?*  
who.DAT 2.PL then will.be-2.PL necessary-(SF)FEM.SG  
'Who will need you then?'

The data may be summarized as follows, taking statistical data from four sources (Corbett 1983: 53).

- (23) Predicate agreement with honorific *vy* in Russian

Non-past verb	Past participle	SF adjective	LF adjective	Noun
PL	PL	pl [97%] N = 145	SG [89%] N = 37	SG

The data argue in favour of a continuum from verb to noun, with the short form closer to the verb and the long form closer to the noun. Given the special nature of honorific pronouns, it is preferable to find confirming data from some other controller type. This has been done, within a wider account of agreement (Corbett 1983: 166–72).

## 8. Adjectives as a canonical category

We have now assembled the essential data. If we review the five characteristics given in §3, then we have seen clear evidence that these are indeed characteristics of adjectives. Yet relatively few adjectives have all the properties. The main problem is the short form. As we saw in §5, many adjectives do not have a short form, and for some which do, its status is uncertain. There are signs of this inflectional category becoming lexicalized.

Given the status of the short form, an obvious idea would be to omit it from the list of criteria for canonical adjectives. However, *rad* 'glad' has only the short form (though the rise of the long form means that sporadic instances of a long form appear; see Gustavsson 1976: 66). This is the clearest example; for other candidates see Ilola and Mustajoki (1989: 116). Moreover, there is an important group (around a score) which are very frequent in use, which are used mainly in the short form. The group includes: *gotov* 'ready' ('for something' *k* plus dative or *na* plus accusative or 'to do something' infinitive), *dovolen* 'satisfied' ('with something' instrumental case), *nameren* 'intending' ('to do something' infinitive). As we have seen (§7.4), these adjectives take various sorts of second argument. We would not wish to exclude these frequent items from the category. Note that it is precisely the syntactic characteristic of taking two arguments, rather than their semantic grouping, which distinguishes these adjectives (see Evans 2000: 104 for a similar point about the salient difference of kinship verbs).

We have to recognize, therefore, that the adjective category in Russian shows a partial split, with some members being more noun-like and others more verb-like. Some adjectives bridge the gap, but those with all the canonical properties form a small proportion. We have an interesting category where the criteria are clear but the canonical members are few in number. Given that the category is structured in this way, it is also interesting to note that there is the 'opposite' problem, that is there are items with several of the canonical properties but which are unusual adjectives from a cross-linguistic perspective. We consider these 'outliers' in §§10.14–10.16 and §11.

## 9. Usage

To see how adjectives are distributed as types in the lexicon, we may calculate data from Lazova (1974: 944) a reverse dictionary, covering 121,532 words. An

alternative source is Ilola and Mustajoki (1989: 7), using 98,728 items, based on Zaliznjak (1977).

(24) Distribution of the major parts of speech in Russian: types (%)

	Lazova <sup>9</sup> (121,532 words)	Zaliznjak/Ilola and Mustajoki (98,728 words)
Noun	46.4	47.6
Verb	30.7	28.8
Adjective	20.4	21.1
Other	2.6	2.5

In terms of types, the share of the adjective is substantial. All three major parts of speech naturally have a lower share in terms of tokens. However, for the adjective there is also considerable variation across genres. This can be illustrated from Zazorina's frequency dictionary. The corpus was around one million words of Russian, divided into four approximately equal sub-corpora: I: newspapers and magazines, II: drama (intended to reflect conversational Russian), III: non-fiction (especially political texts), IV: literary prose. When the corpus is described according to tokens, we reach the picture in (25), calculated from Zazorina (1977: 927).

(25) Distribution of major parts of speech in a one-million word corpus: tokens (%)

	Total <sup>10</sup>	Sub-corpora			
		I	II	III	IV
Noun	26.7	32.8	20.4	31.0	23.4
Verb	17.1	14.5	20.9	13.5	19.0
<b>Adjective</b>	<b>9.4</b>	<b>12.0</b>	<b>6.2</b>	<b>12.5</b>	<b>7.4</b>
Other	46.9	40.7	52.6	43.1	50.2

There are considerable differences between the genres. However, the most striking is with adjectives, where the figure for non-fiction is all but double that for drama.

### 10. Semantic types

The core semantic types for adjectives, as established cross-linguistically, are all expressed most naturally by adjectives in Russian. See Raxilina (2000: 104–233) for discussion of these types. We shall illustrate each type (we cannot give all

<sup>9</sup> The columns do not total to exactly 100 because of rounding.

<sup>10</sup> Again, not all columns total to 100 because of rounding.

the examples), but will focus on two areas of special interest: the COLOUR type, since Russian has proved of great typological interest here, and on the additional semantic types found in Russian adjectives which are rarely found in adjective inventories.<sup>11</sup>

#### 10.1. DIMENSION

The most versatile here are *bol'soj* 'big' and *malen'kij* 'small'. The latter includes the diminutive suffix *-en'k-*, which limits its derivational possibilities. The underived form *malyj* is still in use, and is relatively frequent (it is ranked 1,016 in Sharoff's 2002a list), though less so than *malen'kij* (ranked 224). Since *malyj* has an unproblematic stem, it is used, for instance, for forming the short form of *malen'kij*. Other members include: *dlinnyj* 'long', *korotkij* 'short', *širokij* 'wide', *uzkij* 'narrow', *glubokij* 'deep', *melkij* 'shallow', *vysokij* 'high, tall', *nizkij* 'low, short'. See Apresjan (1992: 43–5, 74–7) for discussion of the difference between the antonymic pairs. And for a contrastive study of these adjectives in Russian, English, and German, see Sharoff (2002b).

#### 10.2. AGE

*Novyj* 'new', *molodoj* 'young', *staryj* 'old' (that is, both 'not new' and 'not young').

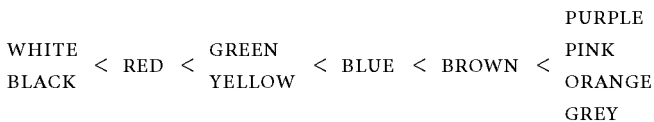
#### 10.3. VALUE

*Xorošij* 'good', *ploxoj* 'bad', *užasnyj* 'awful', *otličnyj* 'excellent', *nastojaščij* 'real', *strannyj* 'odd, strange', *neobxodimyj* 'essential', *važnyj* 'important'.

#### 10.4. COLOUR

Russian is of special interest, because of its relevance to typological work on colour terms. This was stimulated by Berlin and Kay (1969), one of the few typological works devoted to lexical semantics. They proposed a hierarchy of basic colour terms (1969: 5):

##### (26) The Berlin and Kay Hierarchy



The hierarchy constrains the possible inventories of basic colour terms in that the presence of any given term implies the existence of all those to the left (thus a language with a basic term for YELLOW will have basic terms for WHITE, BLACK, and RED). For revisions to the hierarchy, see Kay, Berlin, and Merrifield (1991) and references there. Russian has an exceptional colour inventory, with two basic terms

<sup>11</sup> Traditional Russian grammar draws a semantic distinction between 'qualitative' and 'relational' adjectives. For some problems associated with this, see Isačenko (1954: 233–6).



for BLUE (a possibility noted by Berlin and Kay 1969: 99). This gives an inventory of twelve basic terms (instead of the normal maximum of eleven): *belyj* 'white', *černyj* 'black', *krasnyj* 'red', *zelenyj* 'green', *želtij* 'yellow', *sinij* 'dark blue', *goluboj* 'light blue', *koričnevij* 'brown', *fioletovij* 'purple', *rozovij* 'pink', *oranževij* 'orange', *serij* 'grey'. Our research suggests strongly that both terms for BLUE are indeed basic (see, for example, Corbett and Morgan 1988, Corbett and Davies 1995, Davies and Corbett 1994 and references there; for comparison across East Slavonic see Hippisley 2001).

The claims of Berlin and Kay depend on the notion *basic* colour term; there has been criticism of their criteria, and so a good deal of research has gone into comparative experimental work assessing both linguistic and behavioural measures for identifying basic colour terms (for example, Corbett and Davies 1995, Davies and Corbett 1998). One simple experiment, the list task, proves particularly effective. In an experiment involving seventy-seven subjects (fifty-three women and twenty-four men), all native speakers of Russian, living in Moscow, subjects were asked in Russian to write down as many colour terms as they could think of (Davies and Corbett 1994). A total of 126 terms were offered; the mean number offered was 19.94, and the total number across subjects was 1,535. The twelve basic terms, including the two BLUE terms, were the most frequently offered, by a considerable margin. It is worth asking how children fare when acquiring this system. Davies, Corbett, McGurk, and MacDermid (1998) investigated 200 Russian children, and found that both blue terms were firmly in the basic group (see the original paper for details on the difficulties the two terms cause for children).

#### 10.5. PHYSICAL PROPERTY

*Tverdyj* 'hard, resistant', *žestkij* 'hard, stiff', *mjagkij* 'soft', *tjaželyj* 'heavy', *legkij* 'light', *mokryj* 'wet', *suxoj* 'dry', *sil'nyj* 'strong, powerful', *krepkij* 'strong, durable', *čistij* 'clean', *kislyj* 'sour', *sladkij* 'sweet', *gorjačij* 'hot (to the touch)', *žarkij* 'hot (felt through the air)', *xolodnyj* 'cold'; for details of the range of adjectives relating to temperature see Koptjevskaja-Tamm and Raxilina (1999), Raxilina (2000: 212–21). The sub-class for corporeal properties includes: *zdorovij* 'well', *bol'noj* 'sick', *mertvyj* 'dead', *živoj* 'alive'.

#### 10.6. HUMAN PROPENSITY

*Sčastlivyj* 'happy', *dobryj* 'kind', *zloj* 'evil', *umnyj* 'clever', *glupyj* 'stupid', *ščedryj* 'generous', *žestokij* 'cruel', *gordyj* 'proud', *skromnyj* 'modest', *xvastlivyj* 'boastful'. For 'jealous', Russian has the adjectives *revnivij* (in respect of affection) and *zavistlivyj* (in the sense of 'envious'). Both are likely to be replaced by the cognate verbs: *revnovat'* 'to be jealous of' and *zavidovat'* 'to envy'.

#### 10.7. SPEED

*Bystryj* 'fast, rapid, quick', *medlennyj* 'slow', *skoryj* 'fast' (particularly as in *skoryj poezd* 'fast train'), also 'forthcoming, impending'.

## 10.8. DIFFICULTY

*Legkij* 'easy', *trudnyj* 'difficult', *prostoj* 'simple', *složnyj* 'complex'.

## 10.9. SIMILARITY

*Poxožij* 'like', *nepoxožij* 'unlike', *sxodnyj* 'similar', *drugoj* 'other'.

## 10.10. QUALIFICATION

*Vernyj* 'true, dependable', *verojatnyj* 'probable', *vozmožnyj* 'possible', *obyčnyj* 'usual, normal', *obyknovenyj* 'common, usual', *pravil'nyj* 'right'.

## 10.11. QUANTIFICATION

Various quantifiers have adjectival morphology, to a greater or lesser extent. *Každyj* 'each' and *ljuboj* 'any' have regular long form paradigms. *Ves'* 'all, whole' has irregular forms but has the full 'paradigm shape' of an adjective (i.e. the shape of the long form, as in (6), but not those phonological forms). *Mnogie* 'many' has the plural forms of an adjective, while *mnogo* 'many', *neskol'ko* 'a few', *skol'ko* 'how many', *stol'ko* 'so many' have adjective forms (plural) for their oblique cases. In addition, *ëtot* 'this' and *tot* 'that' have irregular forms but still have the 'paradigm shape' of adjectives.

## 10.12. POSITION

The main examples are: *vysokij* 'high, tall', *nizkij* 'low, short', *blizkij* 'near', *dalekij* 'far, distant', *pravyyj* 'right', *levyj* 'left' (which has some negative connotations, as in *vstat' s levoj nogi* 'to get up from the left foot' i.e. 'to get out of bed on the wrong side'), *severnij* 'northern', *južnyj* 'southern', *zapadnyj* 'western', *vostočnyj* 'eastern'.

## 10.13. NUMERALS

## 10.13.1. Ordinal numerals

Ordinal numerals are adjectival, most formed quite regularly from the corresponding cardinal, for example, *pjatyj* 'fifth' (*pjat'* 'five'), *desjatyj* 'tenth' (*desjat'* 'ten'). Then there are *pervyj* 'first', *vtoroj* 'second', and *tretij* 'third', the latter belonging to a less regular inflectional type than that given in (6) above, but still having the same paradigm pattern.

## 10.13.2. Cardinal numerals

Russian numerals are of legendary complexity; see Corbett (1978, 1983: 215–40, 1993 for key references). Russian numerals are of particular typological importance given the number of distinctions that can be motivated. Here the relevant point is their relation to adjectives. The numeral *odin* 'one' has an irregular declension. However, in terms of its paradigm cells (see (6)), it is just like an adjective. It agrees in gender and case, and even in number (with *pluralia tantum* nouns it stands in the plural). *Dva* 'two' shows minimal agreement in gender (*dva*

is masculine and neuter, while *dve* is feminine). *Tri* 'three' and *četyre* 'four' show no agreement in gender, but like all the lower numerals they show agreement in the sub-gender of animacy. *Pjat'* 'five' and similar numerals inflect like a particular inflectional class of nouns, in the singular only. However, in the oblique cases such numerals fail to govern the genitive, as would be expected with a noun, but instead they agree in case. And so on up the scale. These morphosyntactic properties of the simple cardinal numerals are summarized in (27) (for examples and details of the tests see Corbett 1978).

(27) The simple cardinal numerals of Russian

	odin	dva	tri	pjat'	sto	tysjača	million
	1	2	3	5	100	1,000	1,000,000
1. agrees with noun in syntactic number	+	—	—	—	—	—	—
2. agrees in case in the direct case	+	—	—	—	—	—	—
3. agrees in gender	+	(+)	—	—	—	—	—
4. agrees in animacy	+	+	+	—	—	—	—
5. has no semantically independent plural	+	+	+	+	(—)	—	—
6. fails to take agreeing determiners	+	+	+	+	+	—	—
7. does not take noun in genitive plural throughout paradigm	+	+	+	+	+	±	—

Each numeral in turn shows slightly fewer adjective-like (more noun-like) properties. It is obvious, but none the less significant, that they are arranged in numerical order. This is a good illustration of the universal 'if the simple cardinal numerals of a given language vary in their syntactic behaviour, the numerals showing nounier behaviour will denote higher numerals than those with less nouny behaviour' (Corbett 1978: 363; cf. Hurford 1987: 187–97).

#### 10.14. POSSESSION

In Slavonic languages, to different degrees, possession may be expressed by a derived adjective, typically when the referent is human, singular, and specific. In Modern Russian, use of the genitive case is more common than use of the possessive adjective. However, the possessive adjective is often used in speech, when derived from kinship terms, given names, short forms of names (like *Saša* for *Aleksandr*), and diminutives of these; for details and sources see Corbett (1987). Two suffixes are used to form possessive adjectives: *-in-*, which survives better, and *-ov-*.

The possessive adjective has some inflections which are phonologically distinct from other adjectives (though the paradigm shape is as for other adjectives); it has no distinct short forms. The important point about syntax is that these possessive adjectives can readily control a personal pronoun:

- (28) *I Jur-in-a mašina zagora-et bez*  
 and Jur-POSS-FEM.SG.NOM car.FEM-SG.NOM stand.idle-3.SG without  
*nego v Gigatli*  
 3.MASC.SG.GEN in Gigatli  
 'and Yura's car is standing idle without him in Gigatli'

Borščev 2001, *Za jazykom*, p. 70

In (28) *nego* 'him' is masculine singular because the possessive adjective is derived from a masculine singular noun. This is the only control possibility of the possessive adjective in Modern Russian, though formerly it had greater control possibilities (see Corbett 1987 for examples, and for the remarkable case of Upper Sorbian, where the possessive adjective is an agreement controller, controlling attributive modifiers).

In terms of usage, the distribution of the possessive adjective is also noteworthy. Its main area of use is in colloquial use within the family and other close groups (Koptjevskaja-Tamm and Šmelev 1994 discuss its competition with the genitive). It also has an interesting specialized role in providing specialist terms in learned domains; examples include *adamovo jabloko* 'Adam's apple' and *pifagorova teorema* 'Pythagoras' theorem' (Bräuer 1986).

#### 10.15. INTENSIFICATION

Various intensifiers have adjectival properties, for instance: *takoj* 'such a', *kakoj* 'what a' (see example (3)), and the superlative marker *samyj* 'the most' (see §5 above). As noted for *samyj* 'the most', even when intensifying an adjective, these forms agree as adjectives with the head noun.

#### 10.16. MODALITY

*Dolžen* 'must' indicates primarily deontic modality (for extended discussion see Chvany 1975); it is used exclusively in the short form, its long form now having the meaning 'due':

- (29) *On dolžen rabotat'*  
 3.SG.MASC must.3.SG.MASC work.INFINITIVE  
 'he must work'

The adjectival noun *dolžnoe* exists, and this is used when the instrumental is required in raising constructions. It is reasonable to treat *možno* 'may, can' as a defective adjective; it occurs only in the predicate, with 'non-canonical' subjects, but allows *eto* 'this', as in *eto možno* 'this is possible'.

## 11. Adjectival outliers

We have considered semantic classes of adjective which are cross-linguistically unusual. In this section we consider classes of lexical item which have some adjectival properties, together with properties of another major word class.

### 11.1. PARTICIPLES

Russian has active and passive participles, which are verb-like in retaining argument structure but adjective-like in their morphology and to a large extent in their syntax. Participles are stylistically limited, being found primarily in written language. (Krasil'nikova 1973: 177–96 discusses the use of participles in conversational Russian.) The past passive participle is the most productive, and this occurs even in spoken usage. It is the one most like an adjective, and has a short form which is all but obligatory when the past passive participle is used in the predicate.

Original participles may be lexicalized as ordinary adjectives (which are then available in various genres of Russian). For example, *ljubimyj* 'favourite' is originally the present passive participle of *ljubit'* 'like, love'.

### 11.2. ADJECTIVAL NOUNS

The adjective may function fully productively as the sole element of a noun phrase (§7.3). Other examples show varying degrees of lexicalization, where morphological adjectives function essentially as nouns. A common type includes *vannaja* 'bathroom' and *stolovaja* 'dining room', which have the inflections of feminine singular adjectives, and of the plural, and function as nouns. The 'missing' noun is identifiable as *komnata* 'room', but this noun is unlikely to appear with the adjectival noun. Then there are instances like *portnoj* 'tailor' (with masculine and plural forms). This shows its noun-like property in that it has a derived adjective *portnovskij* 'tailor (adjective)'. Next we find instances like *zapjataja* 'comma', which has feminine and plural forms, and for which it is difficult to suggest any possible 'missing' noun. As an aside, it is worth pointing out that the 'bridging' status of adjectives is shown by the neuter form *prilagatel'noe* 'adjective'. Here the noun *imja* 'noun, nominal' is clearly understood, and often appears, and equally is often absent. (See Graščenko and Saj 2002 for further discussion.)

All these forms have the syntax of nouns (taking adjectival modifiers and adnominal genitives, for example) and the morphology of part of the adjectival paradigm (see Spencer 2002). There is one respect, however, in which they retain the syntactic behaviour of adjectives. The numerals *dva* 'two', *tri* 'three', and *četyre* 'four', when in a direct case, take nouns in the genitive singular (compare §10.13.2), but adjectives in the genitive plural. In this respect, adjectival nouns are adjectival, in that they must appear in the genitive plural.

### 11.3. NAMES

Many Russian names are adjectival in form, for part or all of their paradigm. Some

are derived from monomorphemic personal names—as possessive adjectives—and some from place names (Unbegaun 1972: 26–34). The well-known names in *-skij* are just one type.

## 12. Conclusion

There are five characteristics of canonical adjectives in Russian. A canonical adjective occurs as the complement of a copula and as a modifier in noun phrases (the two syntactic properties); furthermore, it has a regular long form paradigm, a paradigm for use in the predicate (the short form) and a synthetic comparative (the three morphological properties). However, while adjectives are numerous, few of them have all the characteristics of canonical adjectives. We observed considerable overlapping of adjectives with nouns and verbs, and they have additional functions which are typologically unusual. The distribution of adjectives varies remarkably according to genre. Rather than forming a homogeneous category, Russian adjectives have two focal points. Some occur primarily in the predicate, and have a second argument; these are the more verb-like adjectives, which typically occur in the short form. Other adjectives favour attributive position, where they occur in the long form; these are more noun-like and many of them are derived adjectives. Thus Russian has many adjectives, but the category cannot be pinned down as clustering around a single focal point.

## Sources for examples

The *Uppsala Corpus* comprises some 600 Russian texts, with a million words of running text, half literary prose and half non-fiction. The time span is 1960–89. More details can be found at <http://www.slaviska.uu.se/korpdesc.htm>

Serge Sharoff's *The frequency dictionary for Russian* is based on about 40 million words of modern prose (fiction and non-fiction) from the period 1970–2002. It is available at <http://www.artint.ru/projects/frqlist/frqlist-en.asp>

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# The Adjective Class in Korean<sup>1</sup>

*Ho-min Sohn*

## 1. A typological profile of Korean

With a total of approximately 75 million speakers, Korean is the national and native language of the mono-ethnic Korean people living in North and South Korea. The current population of South Korea is over 46 million and that of North Korea around 23 million. Some 5.5 million Koreans are estimated to reside outside of the Korean peninsula, the major countries with a large Korean population being the USA (2.1 million), China (2 million), Japan (700,000), and the former Soviet Union (500,000).

Typologically, Korean, like Japanese, is a language of head-final AOV- and SV-order syntax. All kinds of modifiers precede their heads. All particles are postpositional, while all inflectional affixes indicating tense, aspect, honorific, modality, and clause type are suffixed to the predicate that occurs at the end of a clause. It is an analytic language with a typical agglutinative morphology, in that a series of suffixes and particles are attached respectively to predicates and nominals in a fixed order with clear-cut meanings and functions. Korean is a 'dependent-marking' language, in that the syntactic functions of core constituents are shown mainly by case marking and postpositional particles associated with core NPs.

In Korean, there is a clear syntactic and morphological distinction between nouns and verbs. The major syntactic function of nouns is the head of NP. The order of occurrence among constituents in a noun phrase is (1) relative clause, (2) genitive construction, (3) demonstrative, (4) specifier, (5) the head noun, and (6) case and/or delimiter particles, but the first three elements can be scrambled for stylistic purposes. The major syntactic function of verbs is the head of predicate. All Korean verbs require a clause-type ender. Clause-type enders include sentence-type enders (indicating declarative, interrogative, imperative, propositive, and promissive),

<sup>1</sup> This is a revised version of the paper I presented at the International Workshop on Adjective Classes held at La Trobe University in August 2002. I appreciate R. M. W. Dixon and A. Y. Aikhenvald for providing me with valuable comments and suggestions on the earlier version. I take this opportunity to thank them sincerely for inviting me to the impeccably well-organized workshop and giving us generous hospitality.

conjunctives, relativizers, and complementizers (including the infinitive suffix *-e/-a*). Such enders must always occur at the end of a VP as suffixes.<sup>2</sup>

Korean is often called a free-order language. As long as the predicate-final constraint is maintained, the NPs in a clause can be scrambled rather freely for stylistic purposes. This practice must be due to the fact that Korean has a large number of case-marking particles, including nominative and accusative ones. Other things being equal, however, the most neutral order is subject first, indirect object second to last, and direct object last, with other oblique cases (locative, source, goal, direction, instrument, etc.) in between.

Korean is an honorific language. Sentences can hardly be uttered without the speaker's approximate knowledge of his social relationship with his addressee and human referent in terms of age, social status, kinship, in- or out-groupness, and/or the speech act situation. Honorific forms appear in address-reference terms; human-related nouns and verbs; pronouns; case particles; verbal suffixes, and, above all, six different speech levels (deferential, polite, blunt, intimate, familiar, and plain).

Korean vocabulary consists of native words (approx. 30 per cent), Sino-Korean (SK) words (approx. 65 per cent), and loanwords (approx. 5 per cent). Some 90 per cent of loanwords are from English and the rest are from Japanese, German, Portuguese, Dutch, Italian, and other languages. Except for some adverbs, all SK and loanwords have been introduced in the Korean lexicon as nouns regardless of their original word classes in the source languages. Therefore, to function as predicates, the original verbal or adjectival words have gone into compounds, most productively with the native verb/adjective *hata* 'do, be'. Due to the overwhelming number of SK words, there are many native-SK doublets or near-doublets.

## 2. The adjective class in Korean

While most traditional and contemporary grammarians and lexicographers distinguish between verbs and adjectives in Korean, several linguists including Martin (1992) and Yu (1998) view Korean adjectives as belonging to the class of verbs. Martin (1992: 88–9) assigns all the inflected words (i.e. verbs, adjectives, and copulas) to the class of verbs, dividing it into transitive and intransitive, including adjectives or 'descriptive verbs' in the intransitive, and assigning the copulas as a sub-set of descriptive verbs.

Yu (1998) argues that unaccusative verbs are more similar to adjectives than to unergative and transitive verbs in certain morphosyntactic behaviour and therefore the division between the class of adjectives and that of verbs is not fully justified. There are, however, many significant morphosyntactic, as well as semantic, features that call for the division between the two classes, as will be elaborated in what follows.

<sup>2</sup> For this reason, the meaningless citation suffix *-ta* is attached to verb stems in dictionary entries and citation purposes, as we do in this chapter, as in *kata* 'go', *cohta* 'good', and *ita* 'be' where *ka-*, *coh-*, and *i-* are respective stems. The Yale romanization system is followed in transcribing Korean examples.

## 2.1. IDENTIFICATION OF THE ADJECTIVE CLASS

Although not as extensive as the noun and verb classes, there is a large class of underived, as well as derived, words in Korean that can be classified as the adjective class as per Dixon's proposal (in Chapter 1). First, the Korean adjective class is distinct from the noun class in that the former functions as head of VP, inflecting just like the verb class, while the latter is head of NP, inflecting only in number. It is grammatically distinct from the verb class, however, in morphological, syntactic, and semantic functions, as will be seen in detail in §3 and §4.

Second, the adjective class contains a large number of underived, as well as derived, words in all four prototypical adjective semantic types. Underived, monomorphemic native adjectives are illustrated in (1).

- (1)
- |                            |                                                  |
|----------------------------|--------------------------------------------------|
| 1. DIMENSION               |                                                  |
| khuta 'big'                | cakta 'small'                                    |
| kilta 'long'               | ccalpta 'short'                                  |
| nelpta 'wide'              | copta 'narrow'                                   |
| kiphta 'deep'              | yathta 'shallow'                                 |
| twukkepta 'thick'          | yalpta, yelpta 'thin'                            |
| nophta 'tall'              | nacta 'low' (as in high-rise, low-rise building) |
| 2. AGE                     |                                                  |
| elita 'infant, young'      | celmta 'young'                                   |
| nalkta 'old' (things)      |                                                  |
| 3. VALUE                   |                                                  |
| cohta 'good'               | napputa 'bad, wrong'                             |
| ssata 'cheap'              | pissata 'expensive'                              |
| kwiyepta 'cute'            | musepta 'scary'                                  |
| kopta, yeyppta 'pretty'    | mipta 'ugly'                                     |
| nasta 'better, preferable' | akkapta 'precious'                               |
| 4. COLOUR                  |                                                  |
| kemta 'black'              | huyta 'white'                                    |
| pulkta 'red'               | phuluta 'green, blue'                            |
| nwuluta 'yellow'           |                                                  |

Third, Korean adjectives function as intransitive predicate of clauses. They cannot function as copula complement within a copula clause. On the other hand, the Korean copula is similar to the English copula in that they function as head of predicate. While adjectives in English and many other languages are used as pre-nominal modifiers without any formal change, Korean pre-nominal adjectives are always in the form of a relative clause, being connected to the head noun by a relativizer suffix such as *-(u)n*, as in *khu-n/cak-un salam* 'big/small person'.<sup>3</sup>

<sup>3</sup> There is a set of adjective-like words that are used only pre-nominally, such as *say* 'new', *oy* 'only', *mat* 'oldest', *oyin* 'left', and all numerals (e.g. *han* 'one', *twu* 'two', *sey* 'three'). These constitute a separate category called specifier or pre-noun, a sub-set (along with demonstratives) of the determiner class, and are not treated as adjectives in Korean grammar in that they do not inflect and are not used as predicate head (e.g. Sohn 1999).

## 2.2. MEMBERSHIP OF THE ADJECTIVE CLASS

Yu (1998: 29) indicates that a dictionary of Korean adjectives has a total of 13,000 entries of which some 2,500 are commonly used. The number of monomorphemic adjectives, which are all native words, is relatively small and closed. My own count in the fifty-eight-page Korean-English part of the concise Hippocrene Practical Dictionary (New York, 1998) shows that some 100 words are monomorphemic adjectives out of a total of 335 adjectives (or some 8 per cent of the entire entries, compared to over 50 per cent of nouns and some 25 per cent of verbs).

Where did thousands of polymorphemic adjectives come from? Some representative derivational sources are illustrated below (for the derivation of nouns, verbs, adjectives, and other word classes, see Sohn 1999: 218–31).

The most productive and open pattern is of the form: adjectival noun + native *-hata* 'be'. Adjectival nouns are nouns morphosyntactically but adjectives semantically, denoting a certain property or a state. They include not only free or bound nouns but also noun-like sound symbolic words (frequently in reduplicated form), most of which are from the native stock. Sino-Korean nouns may be single-syllabic and monomorphemic but much more frequently bi-syllabic and bi-morphemic. When such adjectival nouns compound with the native predicate *hata* 'do, be', the resultant words are regular adjectives both morphosyntactically and semantically. Adjectival nouns are of three kinds as illustrated in (2): native, Sino-Korean, and loan, with Sino-Korean ones being predominant.

(2) *Native*

kkaykkus-hata (cleanness-) 'clean'	ttak-hata (pity-) 'pitiful'
ttattus-hata (warmth-) 'warm'	ttokttok-hata (cleverness-) 'clever'
SK	
chincel-hata (kindness-) 'kind'	kantan-hata (simplicity-) 'simple'
phikon-hata (fatigue-) 'tired'	yak-hata (weakness-) 'weak'
Loan	
hayphi-hata 'happy'	sumathu-hata 'smart'
thephu-hata 'tough'	theykhunikhel-hata 'technical'

Another frequently occurring pattern is of the form: abstract noun + native *-lopta/-sulepta* 'like, characterized by'. In general, the suffix *-lopta* occurs after a vowel and *-sulepta* occurs after a consonant. Loanwords do not have this form.

(3) *Native*

oy-lopta (singleness-) 'lonely'	say-lopta (newness-) 'new'
sulki-lopta (wisdom-) 'wise'	salang-sulepta (love-) 'lovely'
SK	
i-lopta (profit-) 'advantageous'	hyangki-lopta (fragrance-) 'fragrant'
kothong-sulepta (pain-) 'painful'	sang-sulepta (commonness-) 'vulgar'

Another derivational pattern is of the form: noun + native *-tapta* 'like, worthy of'.

(4) *Native*

kkoch-tapta (flower-) 'flower-like'	pom-tapta (spring-) 'spring-like'
sanay-tapta (man-) 'manly'	sikol-tapta (country-) 'of a rural character'

## SK

ceng-tapta (affection-) 'friendly'	hakca-tapta (scholar-) 'scholar-like'
kwunin-tapta (soldier-) 'soldier-like'	yeca-tapta (woman-) 'ladylike'

In addition, there are a wide variety of adjective compounds consisting of noun + adjective as in *caymi-issta* (interest-exist) 'funny', *him-tulta* (power-enter) 'difficult', and *mas-epsta* (taste-lack) 'tasteless', or adjective + adjective as in *kwut-seyta* (hard-strong) 'strong'.

Many synchronically simple, monomorphemic adjective stems end in a vowel + *p* across many semantic types. Examples are *mukeypta* 'heavy', *kakkapta* 'near', *maypta* 'spicy', *mipta* 'hateful', *etwupta* 'dark', *chwupta* 'cold', *ttukeypta* 'hot', *swipta* 'easy' (*swita* 'rest'), *wusupta* 'funny' (*wusta* 'laugh'), *akkapta* 'precious' (*akkita* 'value (something)'), *mulepta* 'itchy' (*multa* 'bite'), *pankapta* 'glad to see' (*pankita* 'rejoice at'), *culkeypta* 'happy' (*culkita* 'enjoy'), *kulipta* 'missed' (*kulita* 'yearn after'), *maykkulepta* 'smooth' (*maykkul* 'smoothness'), *noyepta* 'offended' (*no* 'anger'), and *kwiyepta* 'cute' (*kwi* 'esteem'). The vowel + *p* or simply -*p* appears to have once been an adjective formative attached to a noun or a verb stem, which is frequently not identifiable at present.

### 3. Grammatical properties of the adjective class

Dixon (Ch. 1) proposes two parameters for recognizing adjective class types. The primary parameter is whether adjectives can fill an intransitive predicate slot (I type: 'verb-like adjectives') or fill a copula complement slot (II type: 'non-verb-like adjectives'). The second parameter is whether adjectives within NP can take some or all of the morphological processes applying to nouns (A type: 'noun-like adjectives') or can take none of them (B type: 'non-noun-like adjectives'). Thus, there are roughly four general adjective types.

- (5) Type 1: (I) verb-like and (B) not-noun-like
- Type 2: (II) not-verb-like and (A) noun-like
- Type 3: (I) verb-like and (A) noun-like
- Type 4: (II) not-verb-like and (B) not-noun-like

Korean belongs to Type 1 in that adjectives fill not a copula complement slot but an intransitive predicate slot. When adjectives occur within NP, they take no morphosyntactic processes applying to nouns, such as definiteness, number, case, possessor, possessed, and NP head. The grammatical properties of the Korean adjective class are similar to those of verbs in functioning as predicate head in both main and embedded clauses, taking similar morphological processes. There are

considerable morphosyntactic differences between verbs and adjectives too, as summarized in Table 1 and elaborated in §3.1 and §3.2.

### 3.1. MORPHOLOGICAL PROPERTIES

#### 3.1.1. *Within the predicate slot*

One feature shared by verbs and adjectives is that all the members of both classes are bound and cannot occur without a clause-type ender. Furthermore, both verbs and adjectives share all the major inflectional categories within the predicate slot: subject honorific, tense/aspect (past/perfect, non-past), modal (volition/conjecture), addressee honorific, mood (indicative, retrospective, requestive), and clause-type (declarative, interrogative, propositive, imperative, promissive, admonitive), as illustrated in (6) where all these categories are manifested.

- (6) Verb: *alh-usi-ess-keyss-sup-ni-ta*  
 be.ill-SH-PPS-MD-AH-IN-DC  
 '(a senior person) must have fallen ill'
- Adjective: *coh-usi-ess-keyss-sup-ni-ta*  
 happy-SH-PPS-MD-AH-IN-DC  
 '(a senior person) must have been happy'

There are, however, morphological criteria by which an adjective can be distinguished from a verb, in that different inflectional allomorphs are attached to them. The most clear-cut difference appears in plain-level non-past indicative forms.<sup>4</sup> If the stem takes the suffix *-nun* (after a consonant-final stem) or *-n* (after a vowel-final stem), it is a verb. If the stem takes a ZERO suffix, it is an adjective.

- (7)
- |            |                   |                     |                     |
|------------|-------------------|---------------------|---------------------|
|            | plain             | subject honorific   |                     |
| Verb:      | <i>alh-nun-ta</i> | <i>alh-usi-n-ta</i> | '(someone) is ill'  |
|            | be.ill-IN-DC      | be.ill-SH-IN-DC     |                     |
|            | <i>ka-n-ta</i>    | <i>ka-si-n-ta</i>   | '(someone) goes'    |
|            | go-IN-DC          | go-SH-IN-DC         |                     |
| Adjective: | <i>coh-ta</i>     | <i>coh-usi-ta</i>   | '(someone) is good' |
|            | good-DC           | good-SH-DC          |                     |
|            | <i>khu-ta</i>     | <i>khu-si-ta</i>    | '(someone) is big'  |
|            | big-DC            | big-SH-DC           |                     |

Notice that extension of the stem to include the subject honorific suffix *-(u)si* does not affect the appearance of the indicative suffix in verbs. This time, *-nun* changes to *-n* because now the stem is vowel-final. All other inflectional suffixes obliterate the verb-adjective distinction, as in *ka-(si-)keyss-ta* 'may go' vs. *khu-(si-)keyss-ta* 'may be big' and *ka-(si-)ni?* 'does (he) go?' vs. *khu-(si-)ni?* 'is (he) big?'

<sup>4</sup> The plain-level is the lowest among six speech levels, which is typically used to a child addressee. It is also used to one's own child or grandchild, younger sibling, school junior, and close friend, as well as in general writings such as articles, academic papers, newspapers, and literary works.

Adjectives are limited mostly to declarative and interrogative sentences, whereas verbs occur in propositive, imperative, promissive, and admonitive sentences as well. For example, adjectives with the imperative suffix *-ela/-ala*, the propositive suffix *-ca*, the promissive *-(u)ma/(u)lkkey*, or the admonitive *-(u)lla* in (8a) are not grammatical. There are exceptions, however. Some commonly used human-

TABLE 1. Grammatical properties of verbs and adjectives

Morphosyntactic features	Verbs	Adjectives
1 All bound—requiring a clause-type ender	yes	yes
2 Inflects in all grammatical categories	yes	yes
3 Indicative suffix form within predicate slot	<i>-nun</i> after C <i>-n</i> after V	zero
4 Can occur in propositive and imperative	yes	rare
5 Can occur in promissive and admonitive	yes	rare
6 Function of clause-ender <i>-ala/-ela</i>	imperative	exclamatory
7 Indicative suffix form in relative clause	<i>-nu</i>	zero
8 Past relativizer form	<i>-un</i> after C <i>-n</i> after V	N/A
9 Can occur with nominalizers and conjunctive suffixes	yes	yes
10 Can take conjunctive suffixes <i>-(u)lyeko</i> , <i>-(u)le -koca</i> , <i>-nulako</i> , <i>-kose</i> , <i>-nuni</i>	yes	no
11 Can take intensifier <i>-ti</i>	no	yes
12 Can have derivational affixes <i>che-</i> , <i>cis-</i> , <i>nay-</i> , <i>pi-</i> , <i>sel-</i> , <i>tes</i> , <i>yes-</i> , <i>-keli</i> , <i>-chi</i> , <i>-coli</i> , <i>-ttuli</i> , <i>-tay</i>	yes	no
13 Can have derivational affixes <i>-sulep</i> , <i>-lop</i> , <i>-tap</i> , <i>-ah</i> , <i>-tap</i> , <i>-talah</i> , <i>-kyep</i> , <i>-mac</i>	no	yes
14 Can have derivational suffix <i>-ci</i>	yes (means process)	yes (means state)
15 Can take causative suffixes	yes	yes (derives transitive verbs)
16 Meanings of noun + <i>hata</i>	activity or process	property or state
17 Meanings of reduplication	repeating or continuing action	continuing state
18 Can form adverbs	no	yes
19 Can form <i>-ko iss</i> progressive	yes	no
20 Can form <i>-e/a iss</i> resultative	yes	no
21 Can occur in comparative and superlative	no	yes
22 Can occur with phrases <i>-ki wihaye</i> , <i>-ko siphta</i>	yes	no
23 Can occur with all auxiliary predicates	yes	only some
24 Can occur with all thematic roles	yes	only some
25 Case marking of object	accusative ( <i>l</i> ) <i>ul</i>	nominative <i>ka/i</i>
26 Can occur with negative adverbs <i>an</i> , <i>mos</i>	both <i>an</i> and <i>mos</i>	only <i>an</i>



related adjectives may occur with these suffixes as well, as in (8b). In general, this sub-set of adjectives seems to denote daily states that can be changed by human effort.

- (8) (a) \*kip-p-ela 'be happy!'                      \*coh-ala 'be good!'  
           \*celm-ca 'let's be young'                \*nuli-lkkey 'I promise to be slow'  
           \*sulphu-lla 'you could be sad'  
       (b) kenkanghay-la 'be healthy!'           hayngpokhay-la 'be happy!'  
           pucilenha-ca 'let's be diligent'        solcikha-ma 'I promise to be frank!'

The plain-level imperative suffix *-ela/-ala* has an exclamatory function only when it occurs with an adjective.

- (9) Verb:        *ikes-ul al-ala!*  
                   this-ACC know-IM  
                   'be aware of this!'  
       Adjective: *aiko chwuw-ela!*  
                   oh cold-EXC  
                   'oh, it's so cold!'

### 3.1.2. As modifiers within an NP

Both verbs and adjectives modify a head noun within an NP in the form of relative clause.

- (10) Verb:        [*nay-ka a-nu-n*] [*salam*]  
                   Isg-NOM know-IN-RL person  
                   'a person I know'  
       Adjective: [*khi-ka khu-n*] [*salam*]  
                   height-NOM big-RL person  
                   'a tall person' (lit. the person whose height is big)

Notice that, as in *-(nu)n/ZERO* alternation in predicative uses as observed in (7), there is an allomorphic difference in the pre-nominal non-past indicative forms too. That is, *-nu* occurs after a verb stem and ZERO after an adjective stem.

The lack of pre-nominal past forms only in adjectives is another morphological difference. Notice incidentally in (11) that the past relativizer *-(u)n* of verbs is of the same form as the non-past relativizer of adjectives.

- (11) Verb:        (Past)        alh-**un** salam        'a person who was ill'  
                   (Non-past) alh-nun salam        'a person who is ill'  
       Adjective: (Past)        n/a  
                   (Non-past) coh-**un** salam        'a good person'

### 3.1.3. Nominalizers and conjunctive suffixes

Both verbs and adjectives are essentially the same in nominalization. They are nominalized with a nominalizer such as the factive *-um* or the non-factive *-ki*.

While no bare verb or adjective can be head of an NP or make up an NP all by itself, a nominalized verb or adjective functions as head of an NP just like any other noun.

- (12) Verb: *ka-ss-um-ul a-n-ta*  
 go-PPS-NR-ACC know-IN-DC  
 '(I) know that (he) went'  
*ka-ki ttaymun-ey*  
 go-NR because-of  
 'because (he) goes'
- Adjective: *coh-ass-um-ul a-n-ta*  
 good-PPS-NR-ACC know-IN-DC  
 '(I) know that (he) was good'  
*coh-ki ttaymun-ey*  
 good-NR because-of  
 'because (he) is good'

A morphological difference appears in constructions like *ka-ki-nun ha-n-ta* '(he) goes, but' (lit. 'as for going, (he) does', and *coh-ki-nun ha-ta* '(he) is good, but' (lit. 'as for being good, he is'). Notice that the pro-verb *hata* 'do' takes the indicative suffix *-n*, but the pro-adjective *hata* 'be' takes ZERO indicative.

Many conjunctive suffixes are shared by verbs and adjectives, but there are some that are not. While no conjunctive suffixes can occur only with adjectives, only verbs occur with suffixes like *-(u)lyeko* 'intending to', *-(u)le* 'for the purpose of', *-koca* 'wanting to, wishing to', *-nulako* 'while doing (something else)', *-kose* 'and then', and *-nuni* 'instead of doing'.

- (13) Verb: *sengkongha-lyeko/koca kongpuha-n-ta*  
 succeed-intending/wanting to study-IN-DC  
 '(I) study in order to succeed'
- Adjective: *\*kippu-lyeko/koca kongpuha-n-ta*  
 happy-intending/wanting to study-IN-DC  
 '(I) study in order to be happy'

On the other hand, the intensifier suffix *-ti* occurs only with adjectives in the construction of Adjective *x* + *-ti* + Adjective *x*.

- (14) Verb: \*mek-ti mek-nun-ta '(someone) eats a lot'  
 eat-ti eat-IN-DC  
 \*alh-ti alh-nun-ta '(someone) is very ill'  
 be.ill-ti be.ill-IN-DC
- Adjective: cha-ti cha-ta '(something) is very cold'  
 cold-ti cold-DC  
 tal-ti tal-ta '(something) is very sweet'  
 sweet-ti sweet-DC

3.1.4. *Derivational affixes*

While derivational prefixes do not change word classes, many derivational suffixes do. Most such suffixes are either verb-derivational (e.g. *-keli* ‘keep doing’), adjective-derivational (e.g. *-sulep* ‘characterized by’), noun-derivational (e.g. *-um* ‘fact, thing’, *-ki* ‘~ing’), or adverb-derivational (e.g. *-i* ‘-ly’, *-nay* ‘finally’).

One prefix shared by verbs, adjectives, and nouns is *es-* ‘obliquely’, as in verbs *es-kata* ‘(-go)go awry’, *es-kelta* ‘(-hang)stack’, adjectives *es-kwuswu-hata* ‘(-tasty)rather tasty’, *es-pisus-hata* ‘(-similar)somewhat similar’, and nouns *es-kakey* ‘slant-roofed stall’, *es-kyel* ‘cross-grain’ (of timber). On the other hand, prefixes like *che-* ‘recklessly’, *cis-* ‘randomly’, *nay-* ‘outwardly’, *pi-* ‘twisted’, *sel-* ‘insufficiently’, *tes-* ‘additionally’, and *yes-* ‘stealthily’ occur only with verb stems, whereas prefixes like *ol-* ‘early’, *say-/si-* ‘deep, vivid’, *tu-* ‘very’, and *yal-* ‘peevishly’ occur only with adjective stems.

Suffixes like *-chi* (intensifier), *-coli* ‘gently’, *-ttuli* (intensifier), and *-tay* ‘do repeatedly’ occur only in verbs, whereas suffixes like *-ah* ‘give the impression’, *-tap* ‘like’, *-talah* ‘rather’, *-kyep* ‘full’, and *-mac* ‘characterized by’ occur only in adjectives. While no derivational suffix is shared by verbs and nouns or by adjectives and nouns, the suffix *-ci* ‘get/be characterized by’ is shared by verbs and adjectives. It denotes process in verbs and state in adjectives.

- |      |                      |                             |               |
|------|----------------------|-----------------------------|---------------|
| (15) | Verb from noun:      | <i>kunul-cita</i> (shade-)  | ‘get shaded’  |
|      |                      | <i>ellwuk-cita</i> (stain-) | ‘get stained’ |
|      | Adjective from noun: | <i>entek-cita</i> (hill-)   | ‘hilly’       |
|      |                      | <i>kaps-cita</i> (price-)   | ‘expensive’   |

Causative suffixes (*-i*, *-hi*, *-ki*, *-li*, *-wu*, *-kwu*, *-chwu*, *-iwu*, *-ay*) are also shared by verbs and adjectives. While a causative suffix makes an intransitive verb transitive and a transitive verb ditransitive, it makes an adjective a transitive verb.

- |      |            |                            |                          |                            |
|------|------------|----------------------------|--------------------------|----------------------------|
| (16) | Verb:      | → transitive/ditransitive: | <i>wus-kita</i> (laugh-) | ‘make (him) laugh’         |
|      |            |                            | <i>mek-ita</i> (eat-)    | ‘feed (food) to (animate)’ |
|      | Adjective: | → transitive verb:         | <i>nelp-hita</i> (wide-) | ‘widen’                    |
|      |            |                            | <i>kh-iwuta</i> (big-)   | ‘enlarge, raise’           |

The most productive way of deriving verbs and adjectives from native or SK verbal and adjectival nouns is to attach the predicate formative *-hata* ‘do, be’ to them. If a noun denotes an activity or a process, *hata* means ‘do’ and the resultant word is a verb, as in native *nolay-hata* (song-do) ‘sing’ and SK *yehayng-hata* (travel-do) ‘take a trip’. If a noun denotes a property or a state, *-hata* means ‘be’ and the resultant word is an adjective, as in native *kkaykkus-hata* (cleanness-be) ‘clean’ and SK *hayngpok-hata* (happiness-be) ‘happy’. The difference shows up when they inflect in the non-past indicative form, as in *yehayng-ha-n-ta* ‘takes a trip’ vs. *hayngpok-ha-ta* ‘is happy’ and *yehayng-ha-nu-n salam* ‘a person who travels’ and *hayngpok-ha-n salam* ‘a happy person’.

Unlike certain nouns that are reduplicated for plurality (e.g. *cip-cip* 'houses', *kos-kos* 'places'), verbs and adjectives do not usually participate in reduplication. However, hundreds of verbs and adjectives have derived from reduplicated sound symbolic stems compounded with *-hata*. Most such stems are native, but some SK words are also found. Reduplicated verbs denote repeated or continuing actions or processes, whereas reduplicated adjectives denote continuing state.

- |      |            |                                           |                        |
|------|------------|-------------------------------------------|------------------------|
| (17) | Verb:      | huntul-huntul-hata (swing-swing-do)       | 'swing, sway,<br>rock' |
|      |            | khwung-khwung-hata (bang-bang-do)         | 'bang'                 |
|      |            | thwutel-thwutel-hata (grumble-grumble-do) | 'grumble'              |
|      | Adjective: | mikkul-mikkul-hata (slippery-slippery-be) | 'slippery'             |
|      |            | netel-netel-hata (tatters-tatters-be)     | 'tattered,<br>ragged'  |
|      |            | sayng-sayng-hata (life-life-be)           | 'lively' (SK)          |

A difference between adjectives and verbs appears in the former's ability and the latter's inability to form adverbs. A common adverbializer suffix is *-i*, as in *kkaykkus-i* (clean-ly) 'cleanly', *ttattus-i* (warm-ly) 'warmly', *noph-i* (high-ly) 'highly', *manh-i* (much-ly) 'a lot', and *kiph-i* (deep-ly) 'deeply'. Such adverbial derivation is not possible from verbs.

### 3.2. SYNTACTIC PROPERTIES

As predicate head, Korean adjectives grammatically function as intransitive verbs in many ways, so much so that Martin (1992) and Martin and Lee (1969) call them 'descriptive verbs' (adjectives) in contrast to their 'processive verbs' (verbs). While adjectives and verbs share a host of syntactic properties, there are characteristic differences too.

First, one sure test that does not allow any exception is that only verbs are allowed to be made progressive with the construction *-ko issta* (-and exist) 'be ~ing'.

- |      |            |                         |
|------|------------|-------------------------|
| (18) | Verb:      | <i>nulk-ko issta</i>    |
|      |            | get.old-and exist       |
|      |            | 'be getting old'        |
|      | Adjective: | * <i>kippu-ko issta</i> |
|      |            | happy-and exist         |
|      |            | 'being happy'           |

Second, adjectives cannot occur in resultative construction with the phrase *-e/a issta* (-INF exist) 'be in the state of', while intransitive verbs can, as illustrated in (19). (Like adjectives, transitive verbs cannot be used in this construction for different reasons.)

- |      |       |                                   |
|------|-------|-----------------------------------|
| (19) | Verb: | <i>hakkyo-ey ka-a issta</i>       |
|      |       | school-to go-INF exist            |
|      |       | 'went to school and is there now' |

Adjective: \**acik celm-e issta*  
 still young-INF exist  
 'still stay young'

Third, only adjectives and adverbs can be compared and thus occur in comparative and superlative constructions as 'gradability' is one of their prototypical semantic properties (Croft 1991). The typical comparative and superlative patterns are given in (20).

- (20) (a) *A-ka B-pota te* + ADJECTIVE  
 A-NOM B-than more  
 'A is more ADJECTIVE than B'  
 (b) *A-ka X-cwung-eyse kacang/ceyil* + ADJECTIVE  
 A-NOM X-among-from most/utmost  
 'A is the most ADJECTIVE among Xs'

In casual speech, an adverb can often be omitted in a comparative or superlative construction, as in *A nun B pota te (manh-i) ka-ss-ta* 'A went more than B' and *A-ka X cwung-eyse kacang (manh-i) nol-ass-ta* 'A played most among Xs', where *manh-i* is an adverb meaning 'much'.

Furthermore, the idiomatized superlative phrase *-ki ccak-epsta* 'matchless' occurs only with adjectives. Thus, *kippu-ki ccak-epsta* 'happy beyond measure' is natural but *\*nol-ki ccak-epsta* 'play most' is unacceptable.

Fourth, the 'purposive' phrase *-ki wiha-ye* (NR for) 'in order to, with a view to' and the desiderative phrase *-ko siph-ta* 'wish to, want to' occur only with verbs before them.

- (21) Verb: *mek-ki wiha-ye ilha-n-ta*  
 eat-NR for work-IN-DC  
 'work in order to eat'  
*ca-ko siph-ta*  
 sleep-to wish-DC  
 'want to sleep'  
 Adjective: \**kippu-ki wiha-ye nolayha-n-ta*  
 happy-NR for sing-IN-DC  
 'sing in order to be happy'  
 \**kippu-ko siph-ta*  
 happy-to wish-DC  
 'want to be happy'

Fifth, verbs can take many more auxiliary predicates than adjectives. Auxiliaries like *pelita* 'finish doing', *cwuta* 'do for', *twuta* 'get it done just in case', *nohta* 'do for later', *kata* 'continue', *pota* 'try', and *malta* 'end up' occur only with verbs, whereas *ppacita* 'complete' and *pota* 'appear' can occur with both. The second verb in each example in (22) is auxiliary.

(22)	Verb:	mek-e	pelita	‘eat up’
		eat-INF	finish	
		wul-ko	malta	‘end up crying’
		cry-and	stop	
		talh-a	ppacita	‘completely worn out’
		wear-INF	complete	
	Adjective:	o-na	pota	‘appear to come’
		come-to	appear	
		*silh-e	pelita	‘completely dislike’
		dislike-INF	finish	
		*nappu-ko	malta	‘end up being nasty’
		bad-and	stop	
		key.ull-e	ppacita	‘extremely lazy’
		lazy-INF	complete	
		coh-una	pota	‘appear to be happy’
		good-to	appear	

Sixth, argument structures in terms of thematic roles are different between verbs and adjectives to a great extent. Unlike verbs, adjectives cannot have Agent, Patient, Goal, Source, Direction, and Instrument. They can have Experiencer and Theme as subject.

- (23) (a) *Mia-nun na-lul po-ass-ta* <AGT, PAT + VERB>  
Mia-TP 1sg-ACC see-PPS-DC  
‘Mia saw me’  
*Mia-nun nay-ka philyohay-ss-ta* <EXP, TH + ADJECTIVE>  
Mia-TP 1sg-NOM need-PPS-DC  
‘Mia needed me’
- (b) *nalssi-ka kay-n-ta* <TH + VERB>  
weather-NOM clear-IN-DC  
‘the weather is clearing’  
*nalssi-ka coh-ta* <TH + ADJECTIVE>  
weather-NOM good-DC  
‘the weather is good’

Seventh, as observed in (23a), the patient object of a transitive verb takes the accusative particle (*lul*), whereas the object (or theme) of an adjective takes the nominative particle *ka/i*. This latter phenomenon is extensively observed in sensory (or psychological) adjectives such as *pulepta* ‘envious, envy’, *musepta* ‘scared, fear’, *mipta* ‘hateful, hate’, *cohta* ‘good, like’, and *silhta* ‘disagreeable, dislike’ as in (24), and existential adjectives such as *issta* ‘exist/have’, *epsta* ‘not exist/have’, *manhta* ‘many, much’, and *cehta* ‘few, little’ as in (25).

- (24) (a) *na-nun ney-ka pulep-ta*  
 1sg-TP 2sg-NOM envious-DC  
 'I envy you'  
 (b) *ne-nun kay-ka musep-ni?*  
 2sg-TP dog-NOM scary-INTE  
 'do you fear a dog?'
- (25) (a) *Mia-ka cha-ka eps-ta*  
 Mia-NOM car-NOM not.have-DC  
 'Mia does not have a car'  
 (b) *Yongho-ka chayk-i manh-ta*  
 Yongho-NOM book-NOM many-DC  
 'Yongho has many books'

Eighth, while the general negative adverb *an* occurs with both a verb and an adjective, the negative adverb *mos* 'cannot, not' normally occurs only with a verb.

- (26) Verb: *hakkyo-ey mos ka-n-ta*  
 school-to cannot go-IN-DC  
 '(he) cannot go to school'  
 Adjective: *\*i cha-nun mos coh-ta*  
 this car-TP cannot good-DC  
 'this car cannot be good'

As observed thus far, adjectives have more limited morphological and syntactic possibilities than do verbs in Korean.

## 4. Semantics of the adjective class

### 4.1. SEMANTIC TYPES

The core meaning shared by all adjectives in Korean is 'property' or 'state' as against 'action' or 'process' that characterizes verbs. In addition to the four core semantic types as presented in (1), Dixon's peripheral and other recurrent adjective semantic types include the following. Korean has abundant underived (all native) as well as derived (native, Sino-Korean, and loan) adjectives in each of these types. Synchronically monomorphemic native ones are illustrated in (28). Note that, as in other native lexical items, many adjectives are polysemous and may belong to two or more semantic types. Examples are arranged in antonymic pairs as much as possible.

- (28) 5. PHYSICAL PROPERTY
- |                         |                                 |
|-------------------------|---------------------------------|
| <i>mukepta</i> 'heavy'  | <i>kapyepta</i> 'light'         |
| <i>kechilta</i> 'rough' | <i>putulepta</i> 'soft, smooth' |
| <i>kwutta</i> 'hard'    | <i>muluta</i> 'soft'            |
| <i>ccata</i> 'salty'    | <i>singkepta</i> 'not salted'   |

	talta 'sweet'	ssuta 'bitter'
	maypta 'hot' (taste)	sita 'sour'
	ttukepta 'hot'	chata 'cold, chilly'
	palkta 'bright'	etwupta 'dark'
	malkta 'clear'	hulita 'cloudy'
	seyta 'strong'	aphuta 'sick'
	telepta 'dirty'	
6.	HUMAN PROPENSITY	
	cohta 'like'	silhta 'dislike'
	tepta 'feel warm'	chwupta 'feel cold'
	kipputa 'happy'	sulphuta 'sad'
	culkepta 'delightful'	noyepta 'indignant'
	pankapta 'glad to see'	cikyepta 'sick of'
	pulepta 'envious'	twulyepta 'afraid of'
	komapta 'thankful'	koylopta 'painful'
	kulipta 'beloved'	pukkulepta 'ashamed'
	aswipta 'feel at a loss'	kkatalopta 'fastidious'
	puluta 'full' (stomach)	kophuta 'hungry'
	ecilepta 'dizzy'	siphta 'wishful, want'
	papputa 'busy'	key.uluta 'lazy'
7.	SPEED	
	ppaluta, ssata 'fast, quick'	nulita 'slow'
	cacta 'frequent'	tetita 'tardy, slow'
8.	DIFFICULTY	
	swipta 'easy'	elyepta 'difficult'
	ikta 'practised'	sethwuluta 'unpractised'
	kkatalopta 'complicated'	penkelopta 'intricate'
9.	SIMILARITY	
	kathta 'same'	taluta 'unlike, different'
10.	QUALIFICATION	
	paluta 'correct'	thullita 'wrong'
	olhta 'true'	kuluta 'incorrect'
	macta 'correct, suitable'	
11.	QUANTIFICATION	
	manhta 'many, much'	ceкта 'few, little'
	tumulta 'rare'	
12.	POSITION	
	nophta 'high'	nacta 'low'
	kakkapta 'near'	melta 'far/distant'

CARDINAL NUMBERS are not adjectives in Korean but form a separate numeral class. Like nouns, they do not inflect and, when used pre-nominally, they behave as specifiers, as in *hana* 'one' vs. *han salam* 'one person'.



There are some lexical or morphosyntactic characteristics correlated with the above semantic types. For example, in DIMENSION, only the positive terms in antonym pairs have derived nouns with the nominalizer suffix *-i*, as in *kh-i* 'height', *khu-ki* 'size', *kil-i* 'length', *nelp-i* 'width', *kiph-i* 'depth', and *noph-i* 'height'. Also, most monomorphemic adjectives in this semantic type take the suffix *-talah* 'rather, very', as in *noph-talahta* 'lofty', *khe-talahta* 'very big', and *cop-talahta* 'rather narrow'. In AGE, while the young side of animates is expressed by an adjective, the word for 'old' is expressed only by the verb *nulkta* 'get old' (animate). While inanimate oldness is expressed by an adjective, newness is expressed only by the pre-nominal specifier *say* 'new'. In VALUE, concepts like 'atrocious', 'perfect', 'real', 'odd', 'strange', 'curious', 'necessary', 'crucial', 'important', and 'lucky' are all expressed only in SK-native compounds, as in *wancen-hata* 'perfect', *cwungyo-hata* 'important', and *tahayng-ita* 'lucky'. In COLOUR, there are five monomorphemic native terms: 'blue/green', 'red', 'yellow', 'black', and 'white'. There are, however, a wide variety of derivatives with affixes or partially reduplicated elements, as well as sound symbolic (vowel harmonic) counterparts. For example, *phuluta* 'green, blue' is extended to *phalahta*, *phelehta* 'green, blue', *say-phalahta*, *si-phelehta* 'deep green, deep blue', *phulu/phaluteytey-hata*, *phulu/phalu-cwukcwuk-hata*, *phulu/phalu-sulem-hata* 'bluish, greenish', *phulus-phulus-hata*, *phallus-phalus-hata* 'green/blue here and there'. Here, *a* is a 'bright' vowel, connoting relative brightness, sharpness, lightness, and shallowness, whereas *u* and *e* are 'dark' vowels, connoting relative darkness, heaviness, dullness, and deepness. Partial reduplication like *-teytey* means 'poorly', *-cwukcwuk* 'unevenly', and *phulus-phulus* 'spotted'. There are a large number of finely differentiated SK colour nouns.

As expected, PHYSICAL PROPERTY seems to have the largest class, since the most common function of adjectives in languages is to denote the property of nominal referents. HUMAN PROPENSITY includes sensory adjectives whose morphosyntactic properties were discussed in the previous section. In parallel to SPEED words such as *ppaluta* 'fast' vs. *nulita* 'slow', there are native pairs that indicate time: *iluta* 'early' vs. *nucta* 'late'.

A syntactic property of DIFFICULTY adjectives is that they take a nominalized clause as a complement in the nominative case, as in *ku chayk-un ilk-ki-ka ely-epa/swipta* 'that book is hard/easy to read'. In SIMILARITY, the meaning 'similar' is expressed either by native *pisus-hata* or SK-native *yusa-hata* or by the past/perfect form of the verb *talmta* 'resemble, look alike'. In QUALIFICATION, there are many polymorphemic adjectives including SK-native compounds like *kanung-hata* (possibility-be) 'possible' and *cektang-hata* (appropriateness-be) 'appropriate' and native phrases like *swu issta* (way exist) 'possible', *tus hata* (appearance be) 'likely', and *kes kathhta* (fact same) 'appear, probable'. In QUANTIFICATION, 'all' and 'some' are expressed only by native noun *motwu* and SK noun *yakkan*, respectively, and 'enough' by SK-native adjectives *chwungpun-hata*, *cok-hata*, and native adjective *neknok-hata* and native verb *calata* 'become enough'. Existential adjectives such as

*issta* 'exist', *epsta* 'not exist, absent', and *kyeysita* 'stay' (honorific) may be viewed as forming a sub-set of this semantic type. In POSITION, 'right', 'left', 'northern', etc. are expressed only by SK nouns or native nominal compounds.

As noticed, antonym pairs are ubiquitous in most semantic types, except perhaps in colour terms. In regard to the syntagmatic order among adjectives, Korean, a relatively free-order language, does not seem to have any preferred ordering among different semantic types. In general, individual adjectives with a wider scope tend to occur first.

#### 4.2. SEMANTIC OVERLAP BETWEEN THREE MAJOR WORD CLASSES

Lexical items are usually assigned to different word classes based on their morphosyntactic properties, although meanings are correlated with the grammatical properties to a great extent. For example, Dixon (Ch. 1) indicates that the concept of 'beauty' is a noun in some languages (including English) but a verb in others (*to-toka* in Fijian). It is an adjective in native Korean (*yeypputa*, *alumtapta*) and a noun in Sino-Korean (*mi*).

The semantic contents of the adjective classes in Korean and English are very similar in that most adjectives in Korean correspond to adjectives in English, and vice versa. There are, however, some small semantic fields for which Korean has native adjectives while English has verbs, and vice versa.

- |          |                      |                     |
|----------|----------------------|---------------------|
| (29) (a) | Verb in English      | Adjective in Korean |
|          | hate                 | mipta               |
|          | differ               | taluta              |
|          | miss                 | kulipta             |
|          | like                 | cohta               |
|          | be                   | ita, issta          |
| (b)      | Adjective in English | Verb in Korean      |
|          | dry                  | maluta              |
|          | wet                  | cecta               |
|          | old (animate)        | nulkta              |
|          | tired                | cichita             |
|          | dead                 | cwukta              |

Dixon points out that, in individual languages, a given concept may be coded (1) by both verb and noun; (2) by both adjective and noun; and (3) by both verb and adjective. In English, he finds many instances of (1) and (2), but few of (3), one example being *fear* and *afraid*. He also finds exactly the opposite situation in Dyirbal, in which no overlap is found between verb and noun classes, or between adjective and noun classes, but considerable semantic overlap exists between the classes of verb and adjective. How about Korean? Observe the following pairs, where (a) illustrates non-cognate pairs, (b) cognate pairs, and (c) pairs of no formal difference.

(30)	Verb	Noun
(a)	chita, ttaylita 'hit'	tha-kyek 'blow' (SK)
	ketta 'walk'	po-hayng 'walking' (SK)
	tahta 'arrive'	to-chak 'arrival' (SK)
	tephtha 'cover'	twukkeng 'lid'
	elisekta 'stupid'	papo 'fool'
(b)	eltha 'freeze'	el-um 'ice'
	mutta 'bury'	mut-em 'grave'
	salta 'live'	sal-m 'life'
(c)	sinta 'wear (shoes)'	sin 'shoes'
	pista 'comb'	pis 'comb'
	payta 'conceive'	pay 'stomach'
	ttita 'girdle oneself'	tti 'girdle'
	Adjective	Noun
(a)	etwupta 'dark'	am-huk 'darkness' (SK)
	twulyepta 'afraid'	kong-pho 'horror' (SK)
	ppaluta 'fast'	sok-to 'speed' (SK)
	pulkta 'red'	cek-sayk 'red (colour)' (SK)
(b)	kilta 'long'	kil-i 'length'
	nophtha 'high'	noph-i 'height'
	twukkepta 'thick'	twukke-y 'thickness'
(c)	n/a	
	Adjective	Verb
(a)	aphuta 'sick'	alhta 'suffer from illness'
	twungkulta 'round'	tolta 'turn, go round'
	chata 'cold'	sikta 'become cold'
	cekta 'few, little'	cwulta 'decrease'
	manhta 'much'	nulta 'increase'
	epsta 'empty'	pita 'become empty'
(b)	musepta 'afraid'	musewe-hata 'fear'
	nelpta 'wide'	nelp-hita 'widen'
	culk-epta 'happy'	culk-ita 'enjoy'
	kuli-pta 'missed'	kulita 'yearn after'
	kilta 'long'	kil-uta 'bring up, grow'
	caltta 'fine, small'	cal-uta 'cut (a thing) fine'
(c)	khuta 'big'	khuta 'grow'
	palkta 'bright'	palkta 'brighten'
	hulita 'cloudy'	hulita 'get cloudy'
	thullita 'different'	thullita 'differ'
	kwutta 'hard'	kwutta 'harden'
	nucta 'late'	nucta 'get late'

Korean appears to be close to the Dyirbal type as far as the native stock is concerned. When SK words are included, Korean extensively involves both the English and Dyirbal types.

## 5. Conclusion

Let us sum up the typological characteristics of Korean adjectives. First, Korean is a language with a large adjective class. Monomorphemic adjectives form a closed set of native words, while derived adjectives, an open class, are from the native, SK, and loan stocks. Secondly, the semantic content of Korean adjectives ranges over all the semantic types proposed by Dixon, except the NUMERAL type, which does not share grammatical functions with adjectives and thus constitutes a separate word class. Thirdly, Korean belongs to the type in which adjectives are verb-like, functioning as intransitive predicates, and not-noun-like, not functioning as copula complements. It also belongs to the group in which adjectives function as modifier to the head only through relativization. Fourthly, although Korean adjectives are verb-like, there are extensive significant morphosyntactic differences between the class of adjectives and the class of verbs that significantly warrant the division between the two word classes. Fifthly, when an adjective takes a theme object, that object is in the nominative case, generating a double nominative construction. This is particularly the case with sensory adjectives taking an object and existential adjectives denoting possession. Finally, in the native stock, there is considerable semantic overlap between verbs and adjectives but not between nouns and adjectives. If the SK stock is also taken into account, there is great semantic overlap among nouns, verbs, and adjectives.

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# Is There an Adjective Class in Wolof?

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## 1. Introduction

One of the striking characteristics of many Niger-Congo languages is the small set of underived adjectives that they possess. Igbo, for example, has only eight underived adjectives which occur as antonym pairs (Welmers 1973: 259; Dixon 1982: 4), while Ewe has only five (see Ameka 2002). In some languages, such as Akan, words with an adjectival function are barely distinguishable from nouns, while in others, such as Yoruba, they resemble verbs (Welmers 1973: 255–7). Remarking on the latter type, Creissels (2000: 249–50) adds that ‘Wolof illustrates the borderline case of a language that properly speaking does not have a category “adjective”, and in which even notions most typically encoded through adjectival lexemes are encoded through lexemes that fulfil the predicate function in exactly the same way as typically verbal lexemes.’ Lexical items most likely to be adjectives on a semantic basis behave in an overwhelmingly verb-like manner in Wolof. They function as intransitive predicates and not as copula complements, and they modify nouns in an NP within relative clause constructions. While verb-like adjectivals are found widely in the world’s languages, in Chapter 1 Dixon proposes that all languages have an adjectival class that is in some way distinct from other word classes in a given language, thereby predicting that adjectivals in languages like Wolof will exhibit some behaviour, however subtle, that sets them apart from other verbs. In a recent discussion of adjectives in sub-Saharan languages, Creissels (2003) points out an important, and indeed subtle, difference in Wolof between non-adjectival verbs and prototypically adjectival verbs like *njool* ‘tall’ or *xonq* ‘red’. The difference occurs in the position of the definite article in relative clauses that modify nouns. In their indefinite forms the noun phrases have the same structure, as shown in examples (1) and (2), where (1) contains an adjectival verb and (2) does not. The relative marker is /Cu/ where C is a noun class marker that shows concord with the noun.<sup>1</sup>

<sup>1</sup> Unless otherwise indicated, all Wolof examples in this chapter are from a large corpus of naturally occurring discourse recorded in Senegal between 1989 and 2002, or have been elicited from Wolof speakers. I especially thank Mame Selbee Diouf, Thierno Seydou Sall, and Cheikh Thiam for their grammaticality judgements and discussion of their intuitions about adjectival verbs in Wolof. I would like to thank the participants in the International Workshop on Adjective Classes held at

- (1) *xale bu rafet*  
child REL pretty  
'a pretty child'
- (2) *xale bu xam*  
child REL know  
'a child who knows'

When the two phrases occur in definite form there is a difference in the placement of the definite article. With adjectival verbs it occurs at the end of the noun phrase, while with non-adjectival verbs it occurs in conjunction with the relativizer as the examples in (3)–(5) illustrate.

- (3) *xale bu rafet bi*  
child REL pretty DEF  
'the pretty child'
- (4) *xale bi xam*  
child REL:DEF know  
'the child who knows'
- (5) \**xale bi rafet*  
\**xale bu xam bi*

While Creissels' observations support the establishment of an adjective class, a more thorough investigation into such constructions reveals that as soon as an adjective enters into more complex morphological or syntactic structures via the addition of, say, a tense morpheme, an adverb, or a second argument, it reverts to canonical verbal behaviour in relative clauses. Moreover, there is some variation among Wolof speakers as to which lexical items pattern as adjectives and which as verbs. The goal of this chapter is to lay out the facts of Wolof in order to determine whether or not there is a class of words that is distinct from verbs and that can be said to comprise an adjective class. I conclude that although it is possible to posit an adjective class in Wolof based on the behaviour of relative clauses, as in Lao (see Enfield, Ch. 14), the class of adjectives is best characterized as a sub-class of verbs. Throughout this chapter adjectival verbs will none the less be referred to as adjectives for ease of exposition.

the Research Centre for Linguistic Typology at La Trobe University in August 2002, especially Bob Dixon, Sasha Aikhenvald, John Hajek, and Felix Ameka, for their insightful discussions of many of the issues raised in this chapter. I am likewise grateful to Denis Creissels for pointing the way towards distinguishing an adjective class in Wolof as I was beginning this project. Any inaccuracies or shortcomings in the analysis are strictly my own. Standard Wolof orthography, described in Fal, Santos, and Doneux (1990), is used throughout this chapter. An acute accent over a vowel (as in *téy*) indicates that the vowel is [+ATR], a grave accent (as in *jàng*) indicates a semi-long vowel, the symbol *ẽ* is equivalent to schwa. Long vowels are written as a sequence of two vowels, and marked for [+ATR] only on the first; geminates are written as a sequence of two consonants; and prenasalized stops are written as a nasal + consonant sequence (as in *njool*).

## 1.1. INTRODUCTION TO WOLOF

Wolof, along with its sister languages Fula and Seereer, is a member of the northern branch of Atlantic. It is spoken primarily in Senegal and the Gambia on the Atlantic coast of West Africa. Wolof serves as a lingua franca in Senegal where approximately 40 per cent of the population speak it as a first language and 45 per cent speak it as a second language. Extrapolating from the 1988 Senegalese census figures, there are currently at least 4–5 million native speakers of the language, and at least as many who speak it as a second or third language, making for a total of no fewer than eight million speakers, and possibly as many as ten million or more. In urban areas, and particularly in the Senegalese capital, Dakar, Wolof has been in close contact with French, the former colonial language, for more than a century. Consequently, urban Wolof has absorbed a great number of French lexical items and has undergone other grammatical changes as a result of this contact, diverging in some significant ways from rural varieties of the language.

Wolof is a relatively isolating language that has an AVO, SV constituent order. There is little morphological marking of grammatical relations or of most other types of inflection, but genitive constructions indicate head-marking. Because of the paucity of inflectional morphology, verb stems and noun stems from the same root are often identical. With regard to verbs, Wolof has close to thirty derivational verbal extensions (Dialo 1981), a single tense marker (past), and a single aspectual marker (imperfective). There is also an extensive syntactically encoded focus system. With regard to nouns, Wolof has a noun class system comprising eight singular and two plural classes, but one in which nouns, unusually, exhibit no morphological marking for class, although certain nominal dependents such as determiners do. Consonant mutation, an important morphophonological characteristic of the northern Atlantic languages in general, plays a significant role in nominal derivation, but not in Wolof inflection. Like several other Atlantic languages Wolof is not tonal, but ideophones carry a high pitch accent.

## 2. The verbal system of Wolof

The Wolof verb, including the sub-class of adjectives, consists of an invariable main verb, which may be extended by derivation as described below, and a conjugated auxiliary that carries person, number, and frequently aspect. The paradigm in example (6) illustrates the inflectional function of the perfective auxiliary for the verb *dem* 'go' and (7) for the adjective *sonn* 'tired'. In their perfective form, non-stative verbs have a past tense meaning, whereas stative verbs and adjectives get a present tense reading.

- (6) *Dem naa*      *Ndakaaru*  
       v:go 1sg:PERF Dakar  
       'I went to Dakar'

<i>Dem nga Ndakaaru</i>	2sg:PERF
<i>Dem na Ndakaaru</i>	3sg:PERF
<i>Dem nañu Ndakaaru</i>	1pl:PERF
<i>Dem ngeen Ndakaaru</i>	2pl:PERF
<i>Dem nañu Ndakaaru</i>	3pl:PERF

- (7) *Sonn naa*  
 ADJ:tired 1sg:PERF  
 'I am tired'  
*Sonn nga* 2sg:PERF  
*Sonn na* 3sg:PERF  
*Sonn nañu* 1pl:PERF  
*Sonn ngeen* 2pl:PERF  
*Sonn nañu* 3pl:PERF

Some auxiliaries, like the perfective forms in (6) and (7), come after the verb while others precede it, as illustrated in (8) with the adjective *tang* 'hot' and in (9) with the non-adjectival verb *dem* 'go'.

- (8) (a) *Dafa tang*  
 3sg:VFOC ADJ:hot  
 'It is hot'  
 (b) *Tang na*  
 ADJ:hot 3sg:PERF  
 'It is hot'  
 (c) *Dina tang*  
 3sg:FUT ADJ:hot  
 'It will be hot'  
 (d) *Tey la tang*  
 today 3sg:OFOC ADJ:hot  
 'Today it is hot'
- (9) (a) *Dafa dem*  
 3sg:VFOC V:go  
 'He/she has gone'  
 (b) *Dem na*  
 V:go 3sg:PERF  
 'He/she has gone'  
 (c) *Dina dem*  
 3sg:FUT V:go  
 'He/she will go'  
 (d) *Tey la dem*  
 today 3sg:OFOC V:go  
 'Today he/she went'



## 2.1. VERBAL EXTENSIONS

Verbal stems in Wolof may be expanded by derivational extensions of which there are close to thirty in Wolof (Dialo 1981). Derivational suffixes encode diverse concepts such as privative (*xam* (v) 'know' *xam-adi* 'be ignorant'), reflexive (*raxas* (v) 'wash' *raxas-u* 'wash oneself'), iterative (*fóot* (v) 'wash' *fóot-aat* 'wash again'), re-verse (*suul* (v) 'bury' *sull-i* 'dig up'), depreciative, without a goal (*dox* (v) 'walk' *dox-antu* 'stroll'), directional (*wut* (v) 'look for' *wut-si* 'come and look for'; *baax* (ADJ) 'good' *baax-si* 'become good'), and detransitive (*mey* (v) 'give' *mey-e* 'give, detransitive'). Some verbal extensions, such as the comportative, require a reduplicated verb stem in conjunction with a verbal extension (*wopp* (v/ADJ) 'ill' *wopp-wopp-lu* 'behave as if one were ill'; *gan* (N) 'guest' *gangan-lu* 'behave as if one were a guest'). Depending on the specific suffix, extended verbs may form vowel harmony domains in which suffix vowels harmonize for the feature [+/- ATR] (advanced tongue root) with the stem (Ka 1994). Verbal extensions may also be productively combined with one another (*jéem* (v) 'try' *jéem-ëntu-waale-eti* 'try also without conviction once more'; Ka 1994: 48).

## 2.2. TENSE, ASPECT, AND MOOD

The past tense marker, /(-)(w)oon/, is the sole tense marker in Wolof. It behaves variously as a bound morpheme, exhibiting ATR vowel harmony with the verbal stem, as in (10), where it attaches to an adjective, or as an independent word, as in (11). It may be suffixed to a verb stem, but in some cases allows intervening clitics, as in (12) and (13).

- (10) *Dafa xonq-oon*  
3sg:VFOC ADJ:red-PAST  
'It was red'
- (11) *Maangi woon Ndakaaru*  
1sg PAST Dakar  
'I was in Dakar'
- (12) *Nekk-uma-fa-woon*  
v:be-1sg:NEG-LOC-PAST  
'I was not there'
- (13) *Lekk-ulo-ko-woon*  
v:eat-2sg:NEG-3sgO-PAST  
'You did not eat it'

Wolof distinguishes broadly between perfective and imperfective aspect. The former is morphologically marked by the aspect marker, /di/ (which is also the Wolof copula), or its allomorph, [-y]. Stative verbs and adjectives are inherently imperfective and occur infrequently in conjunction with the imperfective marker, unless the meaning is a habitual one, such as being habitually tired (*sonn*),

illustrated in (14), or sitting down (*toog*), as in (15).

- (14) *Ci ngoon, dama-y sonn*  
 PREP afternoon, 1sg:VFOC-IMP ADJ:tired  
 ‘In the afternoon, I am tired’
- (15) *Fii laa-y toog*  
 LOC 1sg:OFOC-IMP V:sit  
 ‘Here is where I sit (habitually)/Here is where I will sit’

Verb stems may also be inflected for mood, as in the irrealis examples in (16) and (17).

- (16) *soo dem-ee Ndakaaru*  
 when:2sg V:go-IRR Dakar  
 ‘when you go to Dakar’
- (17) *bu xonq-ee*  
 if:3sg ADJ:red-IRR  
 ‘if it becomes red’

### 2.3. FOCUS AND TOPICALIZATION

Wolof has a syntactically encoded focus system that includes subject, verbal, and object focus. Creissels and Robert (1998) claim that, although largely ignored in the literature, such grammatical encoding of an information hierarchy via verbal inflection is widespread in African languages. In Wolof the auxiliary differs for each type of focus, as illustrated by the examples in (18)–(20), each of which focuses a different element in the sentence meaning ‘I eat fish’.

- (18) *Maa-y lekk jën*  
 1sg:SFOC-IMP V:eat fish  
 ‘I eat fish’ (subject focus)
- (19) *Dama-y lekk jën*  
 1sg:VFOC-IMP V:eat fish  
 ‘I eat fish’ (verb focus)
- (20) *Jën laa-y lekk*  
 fish 1sg:OFOC-IMP V:eat  
 ‘I eat fish’ (object focus)

Arguments in focused phrases can also be topicalized via left dislocation, as illustrated in (21).

- (21) *Man, jën, dama ko faral di lekk*  
 1sg:EMPH fish 1sg:VFOC 3sgO favour IMP V:eat  
 ‘Me, fish, I often eat it’

## 2.4. BASIC CLAUSE TYPES

Wolof exhibits the three basic clause types: transitive, intransitive, and copula clauses. Adjectives do not function as copula complements but pattern instead as verbs that generally function as intransitive predicates, although in some cases they may take a second argument, as in (51) and (52) below.

According to Kihm (1999: 247), Wolof makes a clear distinction between identificational and predicational sentences that involve a copula or an auxiliary with a copula function. The Wolof copula proper, which also functions as an imperfective aspectual marker, namely /*di*/, is used only in identificational sentences in which the nominal arguments can be transposed without changing the informational content of the proposition, as in (22) and (23).

- (22) *Faatu di sama jàngalekat*

Fatou COP 1sg:POSS teacher

'Fatou is my teacher'

- (23) *Yaa di sama soppee*

2sg COP 1sg:POSS darling

'You are my darling'

The verbal construction associated with object focus also functions as a copula, but without the identificational restriction required by *di*. Examples are given in (24) and (25).

- (24) *Faatu sama jàngalekat la*

Fatou 1sg:POSS teacher 3sg:OFOC

'Fatou is my teacher'

- (25) *Maalik tëgg la*

Malik blacksmith 3sg:OFOC

'Malik is a blacksmith'

Adjectives do not have the function of copula complements in Wolof, but generally occur as intransitive, and occasionally transitive (see (51) and (52) below), predicates. Example (26) illustrates an intransitive clause with a non-adjectival predicate while example (27) shows a parallel structure for an intransitive clause in which the predicate is the adjective *njool* 'tall'. The ungrammatical forms in (28) and (29) show that adjectives cannot function as copula complements.

- (26) *Maalik [dafa tukki] INTRANSITIVE PREDICATE*

Malik 3sg:VFOC v:travel

'Malik has gone on a trip'

- (27) *Maalik [dafa njool] INTRANSITIVE PREDICATE*

Malik 3sg:VFOC ADJ:tall

'Malik is tall'

- (28) \**Maalik di njool*  
 Malik COP ADJ:tall
- (29) \**Maalik njool la*  
 Malik ADJ:tall 3sg:OFOC

In imperfective negative constructions, however, the clause types converge in form and the distinction is lost. The negative auxiliary, *du*, is also the negative copula and can be combined with either a verb or adjective to form a predicate, as in (30) and (31), or with a copula complement, as in (32).

- (30) *Faatu du tukki*  
 Fatou NEG v:travel  
 'Fatou doesn't travel'
- (31) *Fatou du njool*<sup>2</sup>  
 Fatou NEG ADJ:tall  
 'Fatou will never be tall'
- (32) *Faatu du jàngalekat*  
 Fatou NEG teacher  
 'Fatou is not a teacher'

In (30) and (31) *du* functions as a negative auxiliary, while in (32) it functions as a negative copula. A negative verbal extension, *l-(w)ull*, can also be added to verbs and adjectives as shown in (33) and (34), but there is no other way to negate copula clauses such as that in (32).

- (33) *Faatu tukki-wul*  
 Fatou v:travel-NEG  
 'Fatou has not gone on a trip'
- (34) *Ndox mi tang-ul*  
 water DEF ADJ:hot-NEG  
 'The water is not hot'

## 2.5. SUMMARY

This brief sketch of the verbal system of Wolof shows that adjectives pattern in a manner identical to verbs with regard to clause type and focus constructions, derivation, and inflection, including tense, aspect, and mood. The following section on relative clauses focuses on distinctions between the behaviour of adjectives and non-adjectival verbs, thereby providing the basis for positing an adjective class.

<sup>2</sup> The Wolof equivalent of 'Fatou is not tall' requires a relative clause: *Faatu du ku njool*, which literally means 'Fatou is not one who is tall'.

### 3. Relative clauses

Relative clauses in Wolof may be either indefinite or definite. The syntactic behaviour of indefinite relative clauses containing adjectives is identical to that of relative clauses that contain other kinds of verbs, but the two are syntactically distinguishable within definite relative clauses, as mentioned in §1. While the syntactic test is quite useful in distinguishing adjectives from other kinds of verbs, there is not complete agreement among Wolof speakers as to which type of definite relative clause construction many verbs require. Moreover, as soon as a predicate adjective is augmented by the addition of morphological or syntactic material such as a tense morpheme or a second argument, relative clauses in which they occur behave like those containing any other type of verb and the distinction is once again neutralized.

#### 3.1. INDEFINITE RELATIVE CLAUSES

Indefinite relative clauses involve a relativizer of the form /Cu/<sup>3</sup> in which C is a noun class marker. The imperfective marker, /-y/, may be added to the relativizer, as in (36). The relative clause may be part of a larger noun phrase, as in (35) and (36), or may constitute a noun phrase itself, as in (37) and (38). In (37) the l-class is the neutral class for indeterminate things, while in (38) the k-class is human singular.

- (35) *Ndox mu sedd laa bëgga naan*  
 water REL ADJ:cold 1sf:OFOC v:want v:drink  
 'I want to drink cold water'
- (36) *nag wu-y lekk*  
 cow REL-IMP v:eat  
 'a cow that is eating'
- (37) *Lu am solo laa la bëgg-oon wax*  
 REL v:have importance 1sg:OFOC 2sgO v:want-PAST v:say  
 'I wanted to tell you something important'
- (38) *Am na fii ku soxor*  
 v:have 3sg:PERF LOC REL ADJ:mean/evil  
 'There is someone evil here'

#### 3.2. DEFINITE RELATIVE CLAUSES

Definite relative clauses may also take a simple relativizer in conjunction with a definite article that comes at the end of the noun phrase, a construction that is typical of adjectives. Again, the definite relative clause may be part of a larger noun

<sup>3</sup> Njie (1982: 61) refers to the relativizer as an adjective marker (*marqueur d'adjectif*) and considers the relativizer and the adjectival verb to be an adjectival complex headed by a node ADJ.

phrase, as in (39) and (40), or it may constitute a noun phrase itself, as in (41).

- (39) *ndox mu sedd mi*  
 water REL ADJ:cold DEF  
 'the cold water'
- (40) *nag wu ñuul wi*  
 COW REL ADJ:black DEF  
 'The black cow'
- (41) *Ku xees ki laa-y wut*  
 REL ADJ:light-skinned DEF 1SG:OFOC-IMP V:look for  
 'I am looking for the light-skinned person'

In relative clauses involving non-adjectival verbs, the relativizer and the definite article occur together as a single word, a definite relativizer.<sup>4</sup> Examples are given in (42) and (43).

- (42) *xale bi dem-oon Ndakaaru*  
 child REL:DEF V:go-PAST Dakar  
 'the child who went to Dakar'
- (43) *góor gi xam*  
 man REL:DEF V:know  
 'the man who knows'

The clauses in (39)–(43) have no aspectual marking, hence they are perfective by default. Examples of definite relative clauses that are imperfective are given in (44)–(46). The imperfective marker *di* or its allomorph *y* immediately precede the verb. *y* occurs only as a clitic to the preceding word, and may appear in conjunction with the definite article-cum-relativizer as in (44) and (45).

- (44) *picc mi-y woy*  
 bird REL:DEF-IMP V:sing  
 'the bird that is singing'
- (45) *ki-y bey dugub*  
 3SREL:DEF-IMP V:cultivate millet  
 'the one who cultivates millet'

As illustrated by the ungrammatical clause in (46), adjectives in such constructions do not occur in imperfective form, even though they may occur elsewhere as imperfectives with a habitual meaning, as in (14) in §2.2.

- (46) *\*ku-y sonn ki*  
 3SREL-IMP ADJ:tired DEF  
 'the one who is (habitually) tired'

<sup>4</sup> Dunigan (1994) considers what I am calling a definite relativizer to be simply the definite article.

The NP that is modified by the relative clause may be in subject position, as in (44)–(45), or in object position, as in (47) and (48).

- (47) *sëriñ bi ma gis démb*  
 marabout REL:DEF 1sg v:see yesterday  
 ‘The marabout (Sufi spiritual leader) whom I saw yesterday’
- (48) *ligéey bi ma wara yeggale tey*  
 work REL:DEF 1sg AUX:must v:complete today  
 ‘the work that I have to finish today’

### 3.3. AUGMENTED RELATIVIZER PHRASES

An additional type of relative clause which joins two main clauses, a thorough discussion of which is beyond the scope of this chapter, involves an augmented relativizer phrase consisting of a relativizer plus the phrase *nga xam ne* ‘that you know that’. Second person singular in Wolof functions as an impersonal in discourse contexts as well as in the augmented relativizer phrase. Examples of main clauses conjoined by the augmented relativizer phrase are given in (49) and (50). Since they conjoin two main clauses, there is no distinction between the behaviour of verbs and adjectives in augmented relativizer phrases.

- (49) *Gis naa loo (li + nga) xam ne lu doy waar la*  
 v:see 1sg:PERF REL + 2sg v:know COMPLR REL v:worth wonder 3sg:OFOC  
 ‘I saw something strange’
- (50) *Yegg naa ci sama yaram feebar bi nga xam*  
 v:feel 1sg:PERF in 1sg:POSS body illness REL:DEF 2sg know  
*ne ñàppati la tudd*  
 COMPLR chickenpox 3sg:OFOC v:be called  
 ‘I feel in my body a disease that is called chickenpox’

### 3.4. EXTENDED PREDICATES

Although a syntactic distinction can be made between definite relative clauses containing adjectives and those containing non-adjectival verbs, when adjectival predicates are extended through syntactic or morphological augmentation the distinction disappears and adjectives revert to canonical verbal behaviour. Again, it should be pointed out that there is some variation between Wolof speakers as to what constitutes an extended predicate and triggers the reversion to verb-like behaviour. What follows is a list of extended predicate types, all of which trigger verb-like behaviour in adjectives in relative clauses for some speakers.

Extended adjective predicates include second arguments, as shown in (51) and (52).

- (51) (a) *nit ku ragal ki*  
 person REL ADJ:fearful DEF  
 'The fearful person'  
 (b) *nit ki ragal gaynde*  
 person REL:DEF ADJ:fearful lion  
 'The person who is fearful of lions'  
 (c) *\*nit ki ragal*  
 (d) *\*nit ku ragal gaynde ki*
- (52) (a) *paa bu mar bi*  
 old man REL ADJ:thirsty DEF  
 'The thirsty old man'  
 (b) *paa bi mar àttaaya*  
 old man REL:DEF ADJ:thirsty tea  
 'the old man who is thirsty for tea'  
 (c) *\*paa bi mar*  
 (d) *\*paa bu<sub>i</sub> mar àttaaya<sub>ii</sub> bi<sub>i</sub>*<sup>5</sup>

Extended adjectives also include those that take adverbs or adverbial phrases as shown in (53) or ideophonic intensifiers as shown in (54).

- (53) (a) *tànk bu metti bi*  
 leg REL ADJ:hurt DEF  
 'the leg that hurts'  
 (b) *tànk bi metti lool*  
 leg REL:DEF ADJ:hurt very  
 'the leg that hurts a lot'  
 (c) *\*tànk bi metti*  
 (d) *?tànk bu metti lool bi*<sup>6</sup>
- (54) (a) *bant bu dëgër bi*  
 wood REL ADJ:solid DEF  
 'the solid wood'  
 (b) *bant bi dëgër këññ*  
 wood REL:DEF ADJ:solid IDEO  
 'the very solid wood'  
 (c) *\*bant bi dëgër*  
 (d) *?bant bu dëgër këññ bi*<sup>7</sup>

<sup>5</sup> This phrase is grammatical if *àttaaya* and *bi* are coindexed so as to mean 'An old man who is thirsty for the tea.'

<sup>6</sup> Many Wolof speakers find this phrase acceptable, others do not.

<sup>7</sup> Again, there are different grammaticality readings on this phrase. Njie (1982) gives similar examples from Gambian Wolof where the ideophone comes phrase finally, after the definite marker, so that this NP would be rendered as *bant bu dëgër bi këññ*.



A tense marker may also extend an adjectival predicate causing it to behave in a verb-like manner in definite relative clauses as illustrated in (55).

- (55) (a) *téere bi weex-oon*  
 book REL:DEF ADJ:white-PAST  
 'the book that was white'  
 (b) *\*téere bi weex*  
 (c) *\*téere bu weexoon bi*

Verbal extensions may also extend the adjectival predicate, as illustrated in (56).

- (56) (a) *xale bi woppwopplu*  
 child REL:DEF behave as if sick (ADJ:wopp 'be sick')  
 'the child who is behaving as if he/she were sick'  
 (b) *\*xale bu woppwopplu bi*

As the examples in this section have shown, extended adjectival predicates cover almost the entire range of syntactic and morphological augmentation. The only affix that has no effect on the status of the adjective is the negative suffix, as illustrated in (57).

- (57) *xaj bu rey-ul bi*  
 dog REL ADJ:big-NEG DEF  
 'the dog that is not big'

### 3.5. ADJECTIVES AS A DISTINCT CLASS

Although the distinction between adjectives and other types of verbs tends to disappear in definite relative clauses with extended predicates, there are some additional generalizations that can be made about adjectives that support positing them as a distinct sub-class of verbs. The first observation involves relative clauses that consist of several verbs. When strings of adjectives are used in the same clause, the conjunction *te* 'and' connects the last two, as in (58).

- (58) *xaj bu rey, ñuul te soxor bi*  
 dog REL ADJ:big ADJ:black CONJ ADJ:mean DEF  
 'the big, black, mean dog'

Non-adjectival verbs may occur in a similar construction, conjoined by *te*, especially if the actions described by those verbs do not follow one from the other, as in the example in (59). They may also form a serial-like construction without conjunctions, as in (60), or show repetition of the imperfective marker *di*, as in (61).

- (59) *Maangi-y dem te ñow*  
 1sg-IMP V:go CONJ V:come  
 'I am going and coming back' (I'll be right back)

- (60) *Dafa daw jàpp ko dóor ko ba mu daamu*  
 3sg:s v:run v:catch 3sg:o v:hit 3sg:o until 3sg:s v:fall  
 'He/she<sub>i</sub> ran and caught him/her<sub>ii</sub> and hit him/her<sub>ii</sub> until he/she<sub>ii</sub> fell'
- (61) *Dafa-y sëqat di waccu rek*  
 3s:IMP v:cough IMP v:vomit just  
 'He/she is just coughing and vomiting'

When an adjective is used in conjunction with a non-adjectival verb in a relative construction, the adjective occurs closest to the noun being modified, as in (62). Moreover, adjectives and non-adjectival verbs cannot co-occur in the same definite relative clause, but must belong to sequential clauses:

- (62) (a) *xaj<sub>i</sub> bu ñuul bi<sub>i</sub> lekk yàpp<sub>ii</sub> bi<sub>ii</sub>*  
 dog REL ADJ:black REL:DEF v:eat meat DEF  
 'the black dog that ate the meat'
- (b) *\*xaj bu ñuul te lekk yàpp bi*
- (c) *\*xaj bi ñuul te lekk yàpp*

Clearly, the relationship between a noun and an adjective that modifies the noun in a relative clause is somewhat different from the relationship between a noun and a non-adjectival verb in a relative construction. The adjective is more closely associated with the noun since they occur adjacent to one another. Similarly, the position of the definite article in a relative clause delineates the noun and relativized adjective as a constituent NP within a larger clause structure so that in (62) the definite article-cum-relativizer, *bi*, delineates the NP *xaj bu ñuul bi* 'the black dog' as the subject of the relative clause. Taken together, these facts about the behaviour of adjectival verbs serve to support the reality of an adjective class in Wolof.

#### 4. Adjectival verbs

Based uniquely on the relative clause test, it is possible to posit a class of adjectives in Wolof that turns out to be a relatively large one, consisting of several score of underived members and at least that many derived ones. It is also an open class, evidenced by the frequency with which French loans from several word classes are incorporated into the class of adjectives. The class as a whole conforms by and large to the semantic typology of adjectives laid out by Dixon in Chapter 1. This section will take a closer look at the class of adjectives and discuss their semantics, the verb-like way in which they behave in comparative constructions, adverbs, or adverbial phrases with which they can occur, compounding, and finally loanword behaviour. Adjectives are much more likely than other verbs to take coverbal ideophones which are mentioned throughout this section, so the preliminary discussion in §4.1 provides a very brief introduction to Wolof ideophones.

## 4.1. A NOTE ON IDEOPHONES

Ideophones in Wolof can either accompany a verb as an intensifier and are thus known as coverbal ideophones, or they can be used in quotative constructions with the verb *ne* 'say', as in the examples in (63) and (64).

- (63) *Sa mbubb dafa set wecc*  
 2sg:POSS gown 3sg:VFOC ADJ:clean IDEO  
 'Your gown is perfectly clean'

- (64) *Ne-leen mott!*  
 say-2pl:IMPER IDEO:of leaving  
 'Get out of here!'

Like ideophones in many languages they have phonological features that are unique to the set of ideophones and not found elsewhere in the language, in this case certain geminates (as in *guyy* 'of being cold' or *jërr* 'of being hot') and a high pitch accent. Most frequently, but not uniquely, coverbal ideophones occur with adjectives, but there are also adjectives that do not have coverbal ideophones. Certain classes of adjectives, especially those denoting COLOURS and PHYSICAL PROPERTIES, are more likely to have coverbal ideophones that have a high frequency of use in natural discourse.

## 4.2. SEMANTIC TYPES

Wolof has adjectives that cover the core semantic categories of DIMENSION, AGE, VALUE, and COLOUR. The category of DIMENSION has upwards of fifteen members, including *mag* 'big', *tuuti* 'small', *ngande* 'enormous', *cappe* 'tiny', *réy* 'big', *yaa* 'wide', *njool* 'tall', *gàtt* 'short', *gudd* 'long', *xat* 'narrow, tight', *xóot* 'deep', and *tell* 'shallow'. There are two adjectives that fit the category AGE: *bees* 'new, fresh', and *màgget* 'old'. The category of VALUE includes *baax* 'good', *bon* 'bad', *neex* 'nice', *naqari* 'unpleasant', and *tumuranke* 'strange', among others.

There are three underived COLOUR adjectives in Wolof, *ñuul* 'black', *weex* 'white', and *xonq* 'red'. Additional colour terms include adjectives that are derived from nouns, such as *mboq* 'corn; yellow', *coy* 'parrot; green', or *doomu taal* 'ashes; grey'. In urban Wolof French colour terms, e.g. *wert* 'green' (>*verte*), *soon* 'yellow' (>*jaune*), and *bulo* 'blue' (>*bleu*), are also borrowed as adjectives. The three underived colour adjectives have coverbal ideophones that function as intensifiers, e.g. *ñuul kukk*, 'black as night'.

Some but not all members of the four core semantic types can be nominalized, primarily by suffixation of the abstract nominal morpheme */-aay/*, e.g. *ñuulaay* 'blackness', *guddaay* 'length', and *baaxaay* 'goodness'.

Beyond the core semantic types, Wolof adjectives also fall into many of the peripheral types. There is a relatively large set of adjectives that refer to PHYSICAL PROPERTIES and which show a propensity to co-occur with their ideophones in natural discourse. Several of these adjectives have an extended metaphorical

meaning when applied to humans. Members of this class include, among others, *nooy* 'soft', *dëgër* 'hard, sturdy' (also resilient, of a person), *tooy* 'wet', *wow* 'dry', *set* 'clean', *tilim* 'dirty', *tang* 'hot', *sedd* 'cold', *diis* 'heavy', *woyof* 'light' (weight), *lëndëm* 'dark', *forox* 'sour', *lewet* 'sweet', *wex* 'bitter', *nëb* 'rotten', *ënn* 'fermented' (of farinaceous substances), *fëex* 'cool', *gàkk* 'stained', *guus* 'damp'. On the other hand, the equivalent of the English adjective 'strong' in Wolof is rendered by the phrase *am doole* 'have strength'.

There is also quite a large set of adjectives that denote CORPOREAL PROPERTIES, many of which can also function as non-adjectival verbs such as *xees* 'pale-skinned', *wopp* 'sick', *sonn* 'tired', *bori* 'have a nosebleed', *booy* 'have a rash', *dër* 'stutter', *dong* 'tremble', *faxaj* 'have a sprain', *fër* 'have indigestion', *fot* 'have something stuck in one's throat', *lafañ* 'paralysed in the legs', *lapp* 'thin and sickly', *patt* 'one-eyed', *regg* 'be satisfied after eating', *rëq* 'fractured', *taay* 'plump', *xàñq* 'completely bald', etc. There are also numerous adjectives that denote illness (*sibbiru* 'have malaria', *xarñëññ* 'have bilharziosis', *ràmm* 'have scabies', *ñas* 'have the measles', *ñàppati* 'have chickenpox', *soj* 'have a cold', etc.) but the noun for the illness is identical in form, so it is difficult to say whether or not they are derived. Likewise, there is a set of adjectives that denote BODILY DEFECTS or diseases that are identical to the noun for the person who suffers from the illness or defect (*gumba* 'be blind/blind person', *gaana* 'have leprosy/leper', etc.)

Adjectives denoting HUMAN PROPENSITY are also numerous. This semantic type includes words such as *muus* 'clever', *nay* 'miserly', *rus* 'ashamed', *soxor* 'mean, cruel', *añaan* 'jealous', *aay* 'unkind', *bew* 'haughty', *bég* 'happy', *bëqët* 'fearful', *dof* 'mad', *giif* 'calm', *lëmb* 'effeminate', *ñjaxlaf* 'vivacious', *sawar* 'hard-working', *soof* 'mischievous', *tabe* 'generous', *të* 'unmanageable', etc. The equivalent of the English adjective 'intelligent', on the other hand, is rendered in Wolof by the expression *am xel* 'have mind/intelligence'.

In the semantic category of SPEED we find *yéex* 'slow' and *gaaw* 'fast', and for DIFFICULTY there are *jafe* 'difficult, hard/expensive' and *yomb* 'easy/inexpensive'. The adjectives *niroo* 'resemble' and *wuute* 'differ from' fall within the semantic category of SIMILARITY, and the category of QUANTIFICATION is represented by *doy* 'to be sufficient' and *bari* 'be numerous, much'. With regard to POSITION, there are the adjectives *jeye* 'near' and *sore* 'far', but high and low are verbs derived from nouns, and other positions, such as left, right, north, south, etc., are nominals.

#### 4.3. COMPARATIVES

Adjectives follow the same pattern of comparative formation as other verbs by using the verb *gën* 'to be better, to be more, to surpass'. *Gën* may take a human nominal complement,<sup>8</sup> as in (65), but when it takes a verbal complement it takes the suffix /-a/ that connects auxiliaries and main verbs, as in (66) and (67).

<sup>8</sup> The verb *ëpp* 'to be/have more' also takes nominal complements, e.g. *Ibu moo ko ëpp xel* 'Ibou is more intelligent than him' [*xel* 'intelligence'], but not verbal ones.

- (65) *Maa la gën sériñ*  
 1sg 3plO v:surpass marabout  
 'I have a better marabout than you'  
 \**Maa la gëna sériñ*
- (66) *Ibu moo gëna nay Aamadu*  
 Ibou 3sg v:surpass ADJ:miserly Amadou  
 'Ibou is more miserly than Amadou'
- (67) *Maa la gëna ligéey*  
 1sg 2plO v:surpass v:work  
 'I work more than you do'

There are also a few verbs that are inherently comparative, such as *sut* 'to be taller/more competent than' and *dàq* 'to be prettier/better at than':

- (68) *Aamadu moo sut Ibu*  
 Amadou 3sg taller Ibou  
 'Amadou is taller than Ibou'

#### 4.4. ADVERBS, ADVERBIAL PHRASES, AND COMPOUNDS

There are few true adverbs in Wolof, but several ways to express adverbial meaning. The adverb *lool* is a general intensifier meaning 'very', and is most often used with adjectives, as in (66). The loanword, *torop*, from French *trop* 'too much',<sup>9</sup> is widely used as an adverb that also means 'very' and can be used more or less interchangeably with *lool*:

- (69) *Añ bi neex na lool/torop*  
 lunch DEF ADJ:nice 3S:PERF very  
 'The lunch is delicious'

Although they cannot be considered true adverbs, the coverbal ideophones discussed briefly in §4.1 have something akin to an adverbial function since they denote intensity. The following utterance illustrates an ideophone being used in conjunction with *torop* 'very' to emphasize the intensity of the cold.

- (70) *Fii dafa sedd guyy, torop sax*  
 LOC 3sg:VFOC ADJ:cold IDEO, very even  
 'Here it's terribly cold'

Other adverbial expressions include *ba dee*, literally 'to (the point of) dying' but which also means 'very' or 'terribly', as in (71) with adjectives and (72) with a non-adjectival verb.

<sup>9</sup> In Wolof, the concept of too much is expressed by the verb *ëpp* (see previous note) as in *Ceeb bi ëpp na* (rice DEF more 3sg:PERF) 'There is too much rice'.

- (71) *Xale bi dafa ñaaw/rafet ba dee*  
 child DEF 3sg:VFOC ADJ:ugly/ADJ:pretty to die  
 'The child is terribly ugly/pretty'
- (72) *Dama-y jàng ba dee*  
 1sg:VFOC-IMP v:study to die  
 'I am studying terribly hard'

Finally, a few adjectives themselves may be used within relative clauses as adverbs, as shown in the examples in (73) and (74).

- (73) *Ndekki naa bu gaaw*  
 have breakfast 1sg:PERF REL ADJ:fast  
 'I ate breakfast fast'
- (74) *Lekk-al bu baax waay!*  
 eat-2sg:IMPER REL ADJ:good INT  
 'Eat well!'

Adjectives can form verbal or nominal compounds with nouns just as other verbs can. Examples are given in (75) with the adjectives *neex* and *xonq* and the non-adjectival verb *bëgg*.

- (75) *neex-deret* 'be pleasant' ADJ:nice + blood  
*xonq-nopp* 'white person' ADJ:red + ear  
*bëgg-suukar* 'species of ant' v:want/like + sugar

#### 4.5. ADJECTIVAL VERBS AND LOANWORDS

Wolof has borrowed a great number of lexical items from other languages, including Arabic, French, Portuguese, Pulaar, and English. Many are borrowed as adjectives, regardless of their category in the original language, as evidenced in the following examples:

- (76) *seytaane* 'be deceitful/devil' (>Arabic 'devil') noun  
*feebat* 'be sick/illness' (>Portuguese 'fever') noun  
*salte* 'be dirty/dirt' (>French 'dirt') noun  
*kontar* 'be against' (>French 'against') preposition  
*dakkor* 'be in agreement' (>French 'in agreement') PP  
*nays* 'nice' (>English 'nice') adjective  
*bulo* 'blue' (>French 'blue') adjective

Urban Wolof, in particular, is characterized by extensive lexical borrowing from French, including numerous adjectives. There is no extensive or systematic study of French loans in Wolof, but in this author's fairly extensive corpus of phrases containing such loanwords there is no readily apparent pattern to whether adjectives are borrowed in masculine or feminine forms. Obviously, since gender of the French type is not a functional category in Wolof, it does not influence the form in which the

adjective is borrowed. Codeswitching between Wolof and French, however, is a different matter, but one that is beyond the scope of this discussion. By way of example, the colour green, *vert*, is borrowed in its feminine form as the adjective *wert*, but the adjective *rond* 'round' is borrowed in its masculine form, *ro* ~ *rō*, while the adjective for 'happy', *content*, is borrowed as something that is phonologically in between the masculine and feminine forms, namely *kontaan*. In the masculine form in French the final nasal consonant is not pronounced although the preceding vowel is nasalized, but in the feminine form the nasal consonant is both pronounced and followed by a voiceless alveolar stop, [t]. In the Wolof loan form the [n] is pronounced, but the [t] is not there, although [nt] is a licensed final cluster in Wolof. Future research may show that such variables as frequency of use, hypercorrection, or phonological and prosodic considerations play a role in deciding which form of the adjective is borrowed, but for the moment the question must remain unanswered.

Even in urban Wolof, adjectives from core semantic categories such as SIZE, AGE, and DIMENSION tend not to be borrowed. The exception, however, comes with COLOUR terms of which Wolof has only three underived items, *ñuul* 'black', *weex* 'white', and *xonq* 'red', in accordance with universal patterns of colour terms described by Berlin and Kay (1969). These three basic colour terms are sometimes borrowed, but it is the other colours, like yellow, green, and blue, that are far more frequently borrowed from French even though they can be captured by Wolof nouns, as seen in §4.2. Adjectives in other semantic categories, such as those of human propensity and physical properties, more readily occur as loans. Some smaller semantic fields, such as adjectives that denote religious values, tend to be borrowed from Arabic, which is understandable given that Islam is the predominant religion of Wolof speakers.

There is at least one French adjective that appears to be borrowed without becoming an adjectival verb, although its status is ambiguous. This is the Wolof word *piir* 'pure' from French *pur*. It is used in post-nominal position, just as it is in French, in expressions like *olofpiir* 'pure Wolof', *soowpiir* 'pure curdled milk', or *xaalispiir* 'pure gold'. It sometimes gets the high pitch accent associated with ideophones, but there are no conominal ideophones elsewhere in Wolof, only coverbal ones. The behaviour of *piir* is puzzling, and is just one example of the effects of the grammatical influence of French on urban Wolof.<sup>10</sup>

## 5. Summary and conclusions

This chapter has attempted to examine the widespread hypothesis that Wolof has no adjectives in light of Dixon's observations about the universality of adjective classes articulated in Chapter 1. While lexemes most likely to be adjectives from a uni-

<sup>10</sup> Meechan and Poplack (1995: 181) have another example, *vrai gayn*, in which a French adjective, *vrai*, 'real, true', precedes a Wolof noun *gayn* 'friend' as it would in French. Although the phrase is embedded in a Wolof sentence, it is none the less uttered in a situation of codeswitching where the Wolof speaker also speaks French. Such examples demand a different approach and are beyond the scope of this discussion.

TABLE 1. A comparison of the relevant characteristics of adjectives and non-adjectival verbs

Reference	Characteristic	Adjectives	Non-adjectival Vs
§2.4	Function as copula complement	No	No
§2.4	Function as intransitive predicate	Yes	Yes
§2.4	Function as transitive predicate	Yes	Yes
§2.2	Inflect for tense	Yes	Yes
§2.2	Inflect for aspect	Yes	Yes
§2.2	Inflect for mood	Yes	Yes
§2.1	Take verbal extensions	Yes	Yes
§2.3	Participate in syntactically encoded focus system	Yes	Yes
§1.0, §3.0, §3.2	Relativizer separated out from definite article in definite simple relative clauses	Yes	No
§3.3	Relativizer separated out from definite article in definite extended relative clauses	No	No
§3.5	Adjacent to modified noun in relative clauses	Yes	No
§4.4	Take adverbs	Yes	Yes
§4.4	Can form a compound	Yes	Yes
§4.3	Comparatives using <i>gën</i>	No	No
§4.3	Comparatives using <i>gëna</i>	Yes	Yes
§4.1, §4.2, §4.4	Take coverbal ideophones	Some	Some
§4.0, §4.5	Open class	Yes	Yes

versal perspective behave in Wolof in a manner that is overwhelmingly verb-like, there are none the less some subtle differences in their behaviour, especially in relative clauses, that set them apart from other verbs. Their properties are summarized in Table 1. Most notably, as a sub-class of verbs, adjectives conform to the semantics of adjective classes and occur closer to the noun they are modifying than do other types of verbs. While it is possible to isolate a class of adjectival verbs in Wolof, the extent of class membership is not completely clear since many lexical items may be used either as adjectives or as non-adjectival verbs. As this chapter has shown, while there may be good evidence to posit an adjective class within the class of verbs in Wolof, the class cannot be said to be distinct from the class of verbs.

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## Adjectives in North-East Ambae

*Catriona Hyslop*

### 1. Lolovoli, North-East Ambae, Vanuatu

North-East Ambae is one of two languages spoken on the island of Ambae in northern Vanuatu. The language covers the northern, eastern, and southern parts of the island. The languages of Ambae are members of the Northern Vanuatu linkage, a sub-group of the Oceanic branch of Austronesian. With approximately 5,000 speakers, the language has a relatively large population of speakers compared to most Vanuatu languages. The dialect described here is that spoken in the Lolovoli district, in the south-east of the island. Throughout the chapter I shall refer to the language simply as Ambae.

### 2. Typological profile

Ambae is a conservative Oceanic language. The language is agglutinative with very little allomorphy. Typical of languages in this sub-group, it is a nominative-accusative language, the grammatical functions A and S patterning together in contrast to O in terms of strict AVO/SV constituent order and indexing in the verb phrase (VP) of the subject argument by a proclitic, and of the object argument by an enclitic. Ambae is predominantly a head-marking language, although relativization is dependent-marked.

There is a clear distinction between nouns and verbs in Ambae. However, a considerable number of roots are precatégorial. That is to say, some roots can occur underived as the head of a noun phrase (NP) as in (1) or as the head of a VP as in (2), and it is not possible to state categorically whether they belong essentially to the class of nouns or verbs. Despite this, for each occurrence of a form its word class in that context can be determined according to its syntactic function and morphological marking. If a word occurs as the head of a VP, preceded by a subject proclitic, then it is a verb. A word functioning as a noun will occur as the head of an NP, generally preceded by an article, depending on the sub-class of noun.

- (1) *Mo mena.*  
REAL ripe  
'It is ripe/ripening.'

- (2) *No=mo gani na mena.*  
 1sgSP=REAL eat ACC ripe  
 'I am eating a ripe (banana).'

A noun can function syntactically as either a head of an NP or as a modifier of a noun in an NP. An NP can be: a subject or object in a verbal clause; an object of a preposition; a locative adjunct; the subject or complement of a non-verbal clause; or an extra-clausal topic. Verbs form the head of a VP, which can be either an intransitive or transitive predicate. Adjectives are a sub-class of verbs, distinguished from other sub-classes largely on the basis that apart from functioning as the head of a VP, they can also modify nouns in an NP.

### 3. The class 'adjective'

Adjectives in Ambae constitute a medium-sized open class. The fact that the class is open is evidenced by the fact that loans can be incorporated into this class. Some examples of borrowings that have come from English via Bislama<sup>1</sup> are *girake* 'crazy, stupid', *nambawani* 'great, excellent', and *olfala* 'old'. The adjective class has approximately 100 underived members and contains words from nine of the thirteen semantic types recognized by Dixon (Chapter 1, this volume) (§6).

#### 3.1. ADJECTIVES AS A SUB-CLASS OF VERBS

In Ambae adjectives are a sub-class of verbs. I have previously referred to this sub-class of intransitive verbs as stative-inchoative verbs (Hyslop 2001). This sub-class could equally be called adjectival verbs, verb-like adjectives, or simply adjectives. What is important to state is that there is a class of words in the language whose members can function either as the predicate in an intransitive clause, making a statement about a property of an object, or as a modifier of the head noun in an NP. As words in this class can occur as the head of a VP and share many properties of verbs, they must be classified as a sub-class of verbs. However, due to the fact that they function differently from words in the sub-class of active intransitive verbs, and have many properties that adjectives generally possess, they must be established as a separate sub-class. I will here refer to that sub-class as adjectives.

#### 3.2. VERB CLASSES

Considering that adjectives in Ambae are a sub-class of verbs, I would firstly like to look at the different sub-classes of verbs found in the language and discuss the criteria used for establishing these sub-classes. This will demonstrate the fact that while adjectives must clearly be classified as verbs, the evidence for setting them up as a separate sub-class also indicates why this sub-class should be called adjectives.

<sup>1</sup> Bislama is the national language of Vanuatu, an English lexifier pidgin/creole.

A verb in Ambae is defined by the fact that it can occur as the head of a VP. That is, it can be preceded by a subject proclitic which is marked for person and number of the subject of the clause as in (3), and which can cliticize to verbal particles, which specify the aspect and mood of the clause as in (4). As the head of a VP, all verbs can take a subject NP as in (5)<sup>2</sup> except those which are members of the small sub-class of meteorological verbs. A transitive verb can also have an object enclitic attached as in (6).

- (3) *Go=vano!*  
2sgSP=go  
'You go!'
- (4) *Ra=mo            gato.*  
3nsgSP=REAL talk  
'They are talking.'
- (5) *Maresu mo   ngara.*  
child   REAL cry  
'The child is crying.'
- (6) *Ra=mo            sina=eu.*  
3nsgSP=REAL lie.to=1sgO  
'They are lying to me.'

Verbs can be assigned to various sub-classes according to three main factors:

1. the transitivity of the verb;
2. whether the verb is stative or active; and
3. whether the verb is A-type or O-type.

In terms of transitivity, in Ambae there are five possibilities for classification according to the valency of the unmarked verb, and options for valency increase or decrease. A verb may:

- have only an intransitive form; or
- be intransitive in its unmarked form, but can be marked to indicate a valency increase; or
- be ambitransitive (can be both intransitive and transitive with the same form); or
- have only a transitive form; or
- be transitive in its unmarked form, but can be marked to indicate a valency decrease.

Apart from five exceptions, the stative–process–active distinction is only relevant for intransitive verbs, as transitive verbs are, on the whole, active.<sup>3</sup> The sub-class

<sup>2</sup> Note that the third singular subject marker is zero.

<sup>3</sup> The five transitive stative verbs are *ilo* 'know', *haro* 'not know', *mwere* 'be like', and the two compound verbs *lehi garea* 'like' and *lehi hesi* 'not like, hate'.

TABLE 1. Sub-classes of verbs

Intransitive	Stative (Adjectives)	Have no transitive form
		O-type. Take causative prefix <i>vaga-</i>
	Active	A-type. Take applicative suffix <i>-Ci</i>
		A-type. Take applicative suffix <i>-gi(ni)</i>
		O-type. Take causative suffix <i>-tagi(ni)</i>
		Have no transitive form
Ambitransitive	A-type	
	O-type	
Transitive	O-type. Take anticausative prefix <i>ma-</i> (or <i>ta-</i> )	
	A-type. Reduplicated to form intransitive	
	Have no intransitive form (both unmarked transitive and those with <i>-Ci</i> or <i>-gi(ni)</i> but no intransitive form)	
Extended transitive	Take O of DAT/BEN preposition. Have no intransitive form	

of stative verbs forms the class of adjectives. They can also be called state-process verbs, due to the fact that these verbs refer to a state when marked for telic aspect, but a process when marked for realis or irrealis mood (§4.2.1).

The division into A-type vs. O-type verbs is important for those intransitive verbs which can be marked for an increase in valency, and those transitive verbs which can be marked for a decrease in valency (Dixon 1988). A-type intransitive verbs are those for which the subject of the intransitive verb (S) becomes the agent (A) of the derived transitive, and the introduced argument is in object (O) function. On the other hand, with O-type intransitives, the S becomes the O of the derived form, and the introduced argument is in A function. Using the same terminology to describe transitive verbs, the A of an A-type transitive remains as the sole argument of the derived intransitive form of the verb, whereas in the case of the O-type verbs, the remaining argument of the derived verb, in S function, represents the O argument of the original transitive.

The various sub-classes of verbs are summarized in Table 1.

### 3.2.1. *Stative verbs: the class of adjectives*

Within the sub-class of intransitive verbs, the initial distinction is between stative and active verbs. Stative verbs form the class of adjectives. For each of the two

sub-classes, further distinctions can be made on the basis of options for increase in valency. The majority of active intransitive verbs have a derived transitive form. Active verbs can be either O-type or A-type, whereas those few adjectives that can be increased in valency are all O-type. Most adjectives do not have a transitive form. There are two sub-classes of adjectives; the members of one have no transitive counterpart, while members of the other small sub-class can be causativized (O-type).

While the basic distinction between active intransitive verbs and adjectives is a semantic one, contrasting those verbs which describe an event with those which denote a state or process, this sub-classification can be justified on morphosyntactic grounds.

#### 4. Criteria for distinguishing adjectives from other verb classes

In languages in which adjectives behave similarly to verbs, there are a number of criteria that can be used in order to establish whether adjectives can be distinguished from verbs or from different verb sub-classes (as discussed by Dixon, Chapter 1). In Ambae, the most significant factor is that adjectives can modify a noun in an NP, whereas active intransitive verbs cannot. The defining characteristics of members of the class of adjectives which distinguish them from active intransitive verbs are as follows:

- Adjectives can modify nouns in the NP (§4.1).
- The function of aspect-mood marking differs with active verbs and adjectives, in that if an adjective is marked for realis or irrealis mood, this refers to a process or change in state, while if it is marked for telic aspect, it refers to a state (§4.2.1).
- If an imperative, dehortative, or apprehensive construction is formed with an adjective, this results in a pragmatically marked predication (§4.2.2).
- A comparative construction is formed by a VP with an adjective as its head which takes a PP adjunct with the preposition *dene* 'from' as its head. If a VP with an active verb as its head takes a *dene* PP adjunct, this specifies the ablative (§4.3).
- Adjectives can be nominalized with the suffix *-gi* (§4.4).
- There are differences in options for valency increase. Adjectives cannot take the applicative suffixes, but a small number can take the causative prefix *vaga-*, which does not occur on active verbs (§4.5).
- Adjectives can only occur in two types of serial verb construction, as the second verb in a causative SVC or an ambient SVC. It is rare for a serial verb construction to consist of two adjectives (§4.6).
- There are differences in the functions of reduplication for adjectives and active verbs (§4.7).
- In terms of semantic roles, when an adjective forms a predicate, its subject is always an undergoer rather than an actor (§4.8).

## 4.1. ADJECTIVES CAN FUNCTION AS A MODIFIER IN AN NP

The most significant criteria for distinguishing adjectives as a sub-class distinct from active intransitive verbs is the fact that adjectives can occur with a typical attributive function as a modifier of the head noun in an NP. Both adjectives, as in (7), and active intransitive verbs, as in (8), can function as the head of a predicate. However, it is not possible for an active intransitive verb such as *laka* 'be noisy' to modify a noun as shown by ungrammatical sentence (10).

- (7) *Ra=u                garea.*  
       3nsgSP=TEL good  
       'They are good.'
- (8) *Ra=mo            laka.*  
       3nsgSP=REAL be.noisy  
       'They are (being) noisy.'
- (9) *Ngie tangaloi garea.*  
       3sg person good  
       'S/he is a good person.'
- (10) \**Ngie tangaloi laka.*  
       3sg person be.noisy  
       'S/he is a noisy person.'

Transitive verbs can never modify nouns and neither can underived active intransitives. However, there are some A-type transitive verbs that can be reduplicated to form an intransitive, and this derived transitive can modify a noun. In some instances the reduplicated form cannot occur predicatively as an intransitive verb, but only as a modifier.

<i>hue</i> 'to paddle' (v.t.)	<i>huhue</i> 'to paddle' (v.i.) <i>aka huhue</i> '(paddling) canoe'
<i>vatu</i> 'to weave' (v.t.)	<i>vavatu</i> 'to weave' (v.i.) <i>gamali vavatu</i> 'weaving house'
<i>tunu</i> 'to roast' (v.t.)	<i>tutunu</i> 'to roast' (v.i.) <i>qeta tutunu</i> 'roasted taro'
<i>goa</i> 'to scrape' (v.t.)	<i>gogoa</i> *'to scrape' (v.i.) <i>gari gogoa</i> 'scraping shell'
<i>inu</i> 'to drink' (v.t.)	<i>inuinu</i> *'to drink' (v.i.) <i>wai inuinu</i> 'drinking water'
<i>teve</i> 'to cut' (v.t.)	<i>teveteve</i> *'to cut' (v.i.) <i>bue teveteve</i> 'cutting knife'

A noun can also be modified by another noun, which functions to further define certain characteristics of the referent, and which results in a compound form. Only a pair of common nouns can combine to form a compound. Compounds can be

formed to express such qualities of the head noun as sex, as in (11), or material which an object is made from as shown in (12).

- (11) *Mo baba na maresu mwera.*  
 REAL give.birth ACC child male  
 'She gave birth to a baby boy.'
- (12) *Mo gagaliu na ara watu.*  
 REAL jump ACC fence stone  
 'He jumped over the stone fence.'

#### 4.2. MOOD AND ASPECT MARKING IN STATIVE CLAUSES

While adjectives can behave fully as verbs, as the head of an intransitive VP, there are differences in their occurrence with some verbal markers when they occur as the head of a VP, which is further evidence for distinguishing this sub-class from other classes of verbs. In Ambae the set of verbal particles used to mark aspect, mood, and polarity in VPs is quite small. It is useful to list all these forms, before discussing which particles share the same function when marking both stative and active predicates, and which have variable functions.

As can be seen from Table 2, the function of the negative particles and most aspect particles is the same for both active intransitive verbs and adjectives (§5).

TABLE 2. Verbal particles

		Head of VP	
		active verb	adjective
<i>mo</i>	realis mood particle	realis	process (past or present)
<i>ni</i>	irrealis mood particle	irrealis	process (future)
<i>u</i>	telic aspect particle	telic	state
$\emptyset$	imperative mood	imperative	marked construction
<i>bo</i>	apprehensive mood particle	apprehensive	marked construction
<i>mese/vese</i>	dehortative mood particle	dehortative	marked construction
<i>mas</i>	'must'* (hortative mood particle—occurs with irrealis)		same
<i>bei</i>	'just, for the first time' (aspect particle)		same
<i>beno</i>	'already' (aspect particle)		same
<i>tau/ teu</i>	'still, yet' (aspect particle)		same
<i>radu</i>	'still, forever' ongoing, continuous event (aspect particle)		same
<i>hi</i>	pre-verbal negative particle		same
<i>tea</i>	post-verbal negative particle		same

\* This is clearly a borrowing from English via Bislama. Previously there was no mood particle specifying obligation.



However, there are differences in the meaning and function of all mood particles used for commands, and for the telic aspect particle and realis and irrealis mood particles when used with active verbs and adjectives.

#### 4.2.1. *State vs. process*

There is an interesting extended function of the telic aspect when it is used to mark adjectives functioning as the head of a VP. When adjectives are marked for realis or irrealis mood this refers to a process. If telic aspect is specified for an adjective, this signals either past time reference (in which case either a process or stative reading is possible) or that a state is referred to. For example, when preceded by the telic aspect particle, *garea* 'good' refers to a state, as in (13), whereas the realis form specifies the process of moving into that state, 'get better, improve' as in (14). If irrealis mood is specified this means that the process will take place in the future, as in (15). Whereas (13) refers to a present state, (16) refers to a past state.

- (13) *Gineu dolegi ra=u garea.*  
 thing all 3nsgSP=TEL good  
 'Everything is alright.'
- (14) *Qatu-mu mo ga-gara-si teu?*  
 head-2sgP REAL REDUP-hurt-APPL still  
*Hate, mo garea.*  
 no REAL good  
 'Do you still have a headache? No, it has improved/it is better.'
- (15) *Vi=ni garea.*  
 3sg.IRRSP=IRR good  
 'It will improve.'
- (16) *Tuei ra=u garea, ngie siseringaha, hate.*  
 before 3nsgSP=TEL good but now NEG  
 'Before they were good, but now they aren't.'

To contrast these examples demonstrating aspect and mood particles marking adjectives, with their function when marking active verbs, when the verb *ngara* 'cry' is marked for realis mood then this could refer to an act of crying in either the present or past, as in (17), or a habitual action, as in (18). If *ngara* is marked for telic aspect, this must refer to a completed action in the past, as in (19).

- (17) *Mo ngara.*  
 REAL cry  
 'S/he is crying/cries/cried.'
- (18) *Mo ngara tamwere.*  
 REAL cry always  
 'S/he cries all the time.'

TABLE 3. Adjectives specified for telic aspect or realis mood

	Telic		(Ir)realis
	Stative reading	Past reading	Process reading
<i>garea</i>	'to be good'	'to be good/better' (past)	'to get better'
<i>hasi</i>	'to be bad'	'to be bad/worse' (past)	'to get worse'
<i>lague</i>	'to be big'	'to be big/bigger' (past)	'to get bigger'
<i>biti</i>	'to be small'	'to be small/smaller' (past)	'to get smaller'
<i>mate</i>	'to be dead'	'to be dead/die' (past)	'to die'
<i>mwaso</i>	'to be alive'	'to be alive/live' (past)	'to become alive'
<i>bibilu</i>	'to be wet'	'to be/get wet' (past)	'to get wet'
<i>mamaha</i>	'to be dry'	'to be/get dry' (past)	'to get dry'
<i>sao</i>	'to be many'	'to be(come) many'	'to become many'

- (19) *U ngara.*  
TEL good  
'S/he cried.'

Examples of some of the adjectives which can describe either a state or process are listed in Table 3.

This function of telic aspect marking for specifying states would seem to have a logical origin, as telic aspect is used to view an event from its endpoint, and a state is the natural endpoint of a process. When the process is complete, the subject, which has an undergoer role, will have undergone a change in state, and thus a new state arises. To demonstrate the way telic aspect can be used as opposed to realis mood to specify that the endpoint of a process has been reached, consider the use of an adjective such as *mena* 'to be ripe, ripen'. With this adjective, realis mood is used rather than the telic aspect to describe a situation in which the subject referent has basically reached the state of being 'ripe', but because the fruit is still on the tree, it is still being affected, and going through the process of 'ripening'. The speaker does not express that the endpoint of the process has been reached and does not use the telic aspect until the fruit is picked, and thus it is true to say that the process can no longer continue as the activity which is causing the process to occur has stopped.

- (20) *Gavige ra=mo mena.*  
Malay.apple 3nsgSP=REAL ripe  
'The Malay apples are ripe(ning).'

- (21) *Gavige ra=u mena.*  
Malay.apple 3nsgSP=TEL ripe  
'The Malay apples are ripe.'

4.2.2. *Commands*

There are three different moods in Ambae used for giving commands. The imperative is marked by zero, *mese* marks the dehortative, and *bo* the apprehensive. The functions of the imperative and dehortative are straightforward, used respectively to order the addressee to perform, as in (22), or not perform, as in (23), an action. The function of the apprehensive is a little more complex. The speaker uses the apprehensive mood to warn the addressee that there will be some negative result if the action of the verb occurs. In some cases the speaker is warning the addressee not to carry out the actual action of the verb, as in (24), while in other cases the warning is in fact not to carry out an unspecified action, lest the undesired event expressed in the clause occur, as in (25).

- (22) *Go=veve      lawe=a!*  
 2sgSP= tell DAT=3sgO  
 'You tell him/ her!'
- (23) *Go=mese      kali-keli!*  
 2sgSP=DEHOR REDUP-lie  
 'Don't lie!'
- (24) *Go=bo      kali-keli!*  
 2sgSP=APPRE REDUP-lie  
 'Watch out, don't lie!' (e.g. if you do lie and I find out I will be cross.)
- (25) *Go=bo      tai=go!*  
 2sgSP=APPRE cut=2sgO  
 'Watch out, don't cut yourself!' (i.e. be careful using that knife or you may cut yourself.)

Adjectives, when used predicatively, refer to something being in or entering into a state. Logically, it is generally not possible to command someone to be or not be in or enter into a state, considering that the subject has little control over being in that state. In Ambae this is a further test for distinguishing adjectives from active intransitive verbs. It is generally not possible for an adjective to be marked for imperative, dehortative, or apprehensive mood. While not actually being ungrammatical, they are definitely pragmatically marked constructions, as shown by examples (26)–(28). Native speakers would find these constructions unusual, while not necessarily completely dismissing them as ungrammatical.

- (26) *?Go=qaravu!*  
 2sgSP= tall  
 'Get taller!'
- (27) *?Go=mese      mavute!*  
 2sgSP=DEHOR white  
 'Don't be white!'

- (28) ?Go=*bo*        *hasi*!  
       2sgSP=APPRE bad  
       ‘Careful, don’t be/become bad!’

I have no examples of an adjective being marked for imperative mood. The few adjectives that can be marked for dehortative or apprehensive mood are all physical property or human propensity adjectives. No adjectives belonging to the semantic types of DIMENSION, AGE, VALUE, or COLOUR can be marked for dehortative or apprehensive mood. An example of a context where a dehortative may be acceptable with an adjective is with *mate* ‘die, be dead’. In (29) the addressee is on her deathbed, and her son pleads with her not to die. The woman has little control over this process, but the speaker is using the dehortative to express his wish that the woman not enter into that state. In (30) the speaker is warning the addressee to be careful not to become sick. In a given situation the speaker could be advising the addressee to stay out of the cold or avoid being bitten by mosquitoes, lest s/he become sick.

- (29) Go=*mese*        *mate beno*!  
       2sgSP=DEHOR die    yet  
       ‘Don’t die yet!’

- (30) Go=*bo*        *sege*.  
       2sgSP=APPRE sick  
       ‘Careful not to become sick.’

#### 4.3. COMPARATIVE CONSTRUCTIONS

A comparative relationship is expressed in Ambae by a construction which comprises a stative VP with an adjective as its head, which takes a PP adjunct with *dene* ‘from’ as its head. The preposition *dene* can mark any of three semantic relations, where the object has a semantic role of ablative, source, or object of comparison. When a PP with *dene* as its head occurs with an unmodified active verb, it carries its ablative, as in (31), or source, as in (32), meaning. When it occurs with an adjective, it expresses a comparative relationship, as in (33).

- (31) *Mo mule dene=a*.  
       REAL go.home ABL=3sgO  
       ‘He went home from it.’
- (32) *Siu, ne=rongo na leo-gi dene=eu...*  
       CONJ 2nsgSP=hear ACC language-ASS ABL=1sgO  
       ‘So, (you all) hear the word from me...’

- (33) *Mwere, vanua-ra, bataha u garea u garea u garea<sup>4</sup> dene na*  
 like land-3nsgP I.reckon TEL good TEL good TEL good SOURCE ACC  
*vanua-da.*  
 land-1nsg.inP  
 'Like, I reckon their land is much, much better than ours.'

In order for a comparative relationship to be expressed with an active verb, the verb must be modified by an adjective. Thus in sentences (34) and (35), the head of the VP is the verb *toa* 'run', but the preposition in (34) has an ablative reading, whereas the preposition in (35) marks a comparative relationship. If the verb is unmodified as in (34), *dene* 'from' indicates motion away. When the verb is modified by an adjective as in (35), this expresses a comparative relationship. In this case, it is not the action of the active verb that is the parameter of comparison, but rather the manner in which the action was carried out, as expressed by the modification of the active verb with an adjective.

- (34) *Gu toa dene=eu.*  
 2sgSP:TEL run ABL=1sgO  
 'You ran from me.'
- (35) *Niko gu toa siaga dene=eu ngie go=hi toa tea siaga*  
 2sg 2sgSP:TEL run hard SOURCE=1sgO but 2sgSP=NEG run NEG hard  
*dene Danuta.*  
 SOURCE Danuta  
 'You ran faster than me, but you didn't run faster than Danuta.'

#### 4.4. NOMINALIZATION

There are two nominalizing suffixes in Ambae. The suffix *-ana* is not productive and it has been observed on only nine roots, six of them active verbs and three of them adjectives. The meaning of the derivations is not entirely predictable. The adjectives which can be nominalized with *-ana* are:

*garea* 'good' → *gareana* 'goodness'  
*mate* 'dead' → *mateana* 'death, black magic'  
*mwaso* 'alive' → *mwasoana* 'life'

Examples of verbs nominalized with *-ana* are:

*tabe* 'love, respect' → *tabeana* 'gift'  
*domi* 'think' → *domiana* 'thought'  
*bulu* 'join' → *buluana* 'friend'

The suffix *-gi* however is a productive nominalizer which only derives nouns from adjectives, not active verbs. The derived nominalization has the meaning, 'the one

<sup>4</sup> Repetition is a common device in Ambae used with verbs and adjectives alike to express emphasis.

which is in the state described by ADJ.’ Ability for a form to be nominalized with this suffix is another test for membership of the class of adjectives. Some examples of adjectives nominalized with *-gi* are:

<i>angoga</i> ‘yellow’	<i>angogagi</i> ‘a yellow one’
<i>biti</i> ‘small’	<i>bitigi</i> ‘a small one’
<i>hasi</i> ‘bad’	<i>hasigi</i> ‘a bad one’
<i>manivinivi</i> ‘thin’	<i>manivinivigi</i> ‘a thin one’
<i>mena</i> ‘ripe’	<i>menagi</i> ‘a ripe one’
<i>mwaso</i> ‘alive’	<i>mwasogi</i> ‘a live one’

*-gi* nominalizations often occur as the predicate in a non-verbal equational clause, and in many cases this nominalized expression shows little difference in meaning from its verbal counterpart as in (36) and (37).

- (36) *Ngie u biti.*  
 3sg TEL small  
 ‘It is small.’
- (37) *Ngie biti-gi.*  
 3sg small-NR  
 ‘It is a/the small one.’  
 ‘It is small.’

#### 4.5. VALENCY INCREASE

The options that a predicate has for valency increase is another means for distinguishing adjectives from active intransitive verbs. Most active intransitive verbs have a derived transitive form; most are A-type verbs, only four have been observed as being O-type. However, few adjectives have a derived transitive, and those that do are all O-type. The causative prefix *vaga-* only occurs on nine adjectives all of which belong to the semantic types of PHYSICAL PROPERTY or HUMAN PROPENSITY. Some examples are:

<i>mate</i> ‘be dead, die’
<i>sala</i> ‘be/become lost’
<i>lenga</i> ‘be/become crazy, naughty’

The function and distribution of the valency increasing affixes found in the language are shown in Table 4.

#### 4.6. SERIAL VERB CONSTRUCTIONS

Verb serialization is a common process in Ambae and verbs from all sub-classes can occur in different types of serial verb constructions (SVCs). It is rare for two adjectives to be serialized. Adjectives only occur in causative and manner ambient SVCs.

TABLE 4. Function and distribution of valency increasing affixes

Affix	Function	Distribution	Example
<i>vaga-</i>	S → O	adjectives	<i>mwasara</i> 'be clean' → <i>vagamwasara</i> '(make) clean'
<i>-Ci</i>	S → A	active intransitive verbs	<i>garu</i> 'swim, bathe' → <i>garuhi</i> 'bathe, splash s'one'
<i>-gi(ni)</i>	S → A	active intransitive verbs	<i>qalo</i> 'fight' → <i>qalogi</i> 'fight over, for sth'
<i>-tagi(ni)</i>	S → O	active intransitive verbs	<i>dule</i> 'hang' → <i>duletagi</i> 'hang sth'
∅	∅	some adjectives and active intransitive verbs (no transitive form)	<i>lague</i> 'be/become big' (adj) <i>dadari</i> 'arrive' (active V)

#### 4.6.1. Causative serial verb constructions

There are two morphological causatives in Ambae, but these are very restricted, occurring with only a small number of verbs, and the most common means of expressing a causative relationship is by a switch-subject SVC. The causative verb is the first verb in the construction, where the subject of the transitive verb is the causer, and the object of the first verb is coreferential with the subject of the second verb, and this is the causee. The first verb is most commonly either *vai* or *loli*, both of which mean 'make, do', as in (38). The second verb can be any kind of verb, either an adjective or an active verb.

- (38) ... *tangaloi ngihie mo vai na gineu mo hasi* ...  
 person that REAL make ACC thing REAL bad  
 '... that person made the thing get worse ...'

- (39) *Vavine ngihie u gari-geri mwere. Mo vede na singo-na mo memea.*  
 woman that TEL REDUP-flashy INTENS REAL paint ART lips-3sgP REAL  
 red  
 'That woman is really flashy. She paints her lips red.'

#### 4.6.2. Ambient serial verb constructions

In manner SVCs, the first verb is generally an active verb, which describes the main action of the clause. The second verb is always an adjective, which describes the manner in which the action of the first verb is carried out. The transitivity of the first verb determines the transitivity of the clause as a whole. If the first verb is transitive, then both the first verb and the adjective must be marked for aspect or mood as in (40). If the first verb is intransitive then the adjective is not marked for aspect or mood as in (41). There are a limited number of adjectives that can occur

in SVCs and they all seem to be members of the semantic types DIMENSION, VALUE, as in (42), PHYSICAL PROPERTY, as in (41), and SIMILARITY, as in (40). However, certainly not all adjectives of these semantic types can occur in SVCs.

- (40) ... *go=mo*      *teve=a*      *ra=ru*      *mo*      *tatarese* ...  
          2sgSP=REAL cut=3sgO 3nsgSP=dl REAL same  
          ‘... cut them the same (length) ...’

- (41) *Ne=mese*      *dige siaga*.  
          2nsgSP=DEHOR walk hard  
          ‘Don’t walk hard.’

Sentence (42) is the only natural example that I have of two adjectives being serialized in an ambient SVC. I have insufficient data to state with certainty, but I believe that only the value adjectives *hasi* ‘bad’ or *garea* ‘good’ could occur as the second adjective in an ambient SVC where the first verb is also an adjective.

- (42) *Mata-na ngire ngaha, mwere vo ra=u*      *memea hasi ngaha*.  
          eye-3sgP 3nsg DEM like if 3nsgSP=TEL red bad DEM  
          ‘Those eyes of his, like they were badly red.’

#### 4.7. REDUPLICATION

As in most Oceanic languages, reduplication is a widespread process with a variety of different functions. As can be seen from Table 5, reduplication of verbs is a lot more common than of either nouns or adjectives in Ambae. There are a lot of productive functions of reduplication, particularly for transitive verbs.

Reduplication can mark intensity for active verbs, as in (43), and also for adjectives, whether they are functioning predicatively as in (44) or attributively as in (45). The other function that reduplication has for adjectives is to mark complete effect as in (46).

TABLE 5. Functions of reduplication according to word class

Function	Active verb	Adjective	Noun
Unspecified object deletion	✓	X	X
Reciprocal	✓	X	X
Repetitive action	✓	X	X
Habitual	✓	X	X
Intensity	✓	✓	X
Complete effect	✓	✓	✓
Plurality	✓	X	✓
Nominalization	✓	X	X
noun → active intr. verb	X	X	✓
trans. verb → modifier	✓	X	X



- (43) *Ne=u laka-laka, netu-ku mo rada.*  
 2nsgSP=TEL REDUP-make.noise child-1sgP REAL wake  
 'You (all) made a lot of noise and my baby woke up.'
- (44) *Vai-gi ngire ra=u qi-qilodo.*  
 do-ASS 3nsg 3nsgSP=TEL REDUP-short  
 'Those things are very short.'
- (45) *aka la-lague*  
 canoe REDUP-big  
 'a very big canoe'
- (46) *Go=wali=re ngire hogo la-lague.*  
 2sgSP=take=3nsgO 3nsg true REDUP-big  
 'Take all the big ones.'

#### 4.8. SEMANTIC ROLE OF SUBJECT

When an adjective functions as a predicate, its subject always has the semantic role of undergoer, either entering into (as in (47)) or being in (as in (48)) a state. In contrast, the subject of an active verb is always an actor, not a passive participant with an undergoer role, as in (49).

- (47) *Tama-ku mo sesea.*  
 father-1sgP REAL old  
 'My father is getting old.'
- (48) *Gavu-ku ra=u bibilu.*  
 clothes-1sgP 3nsgSP=TEL wet  
 'My clothes are wet.'
- (49) *Go=mo toa siseri.*  
 2sgSP=REAL run quickly  
 'You run quickly.'

### 5. Marking the same for adjectives and active verbs

Apart from marking of telic aspect (§4.2.1), all other aspect marking has the same meaning and distribution for adjectives as for active verbs. The following sentences demonstrate this with the aspect marker *bei* 'just' for the adjective *lague* 'big' (50) and the active intransitive verb *dige* 'walk' (51).

- (50) *Maresu ngihie mo bei lague.*  
 child that REAL just big  
 'That child has just grown (got bigger).'

- (51) *Maresu ngihie mo bei dige.*  
 child that REAL just walk  
 'That child has just (started to) walk.'

Likewise, negation operates in the same way with adjectives as with other verbs, both transitive and intransitive. A negative verbal clause is formed by two negative particles, one of which, *hi*, occurs pre-verbally, the other, *tea*, post-verbally. The following examples demonstrate this for the active verb *gato* 'speak' (52) and the adjective *garea* 'good' (53).

- (52) *Hi gato tea.*  
 NEG speak NEG  
 'S/he didn't speak.'

- (53) *Hi garea tea.*  
 NEG good NEG  
 'It is not good.'

All adverbs and intensifiers modify both active verbs and adjectives in the same manner, as examples (54)–(57) illustrate.

- (54) *U mate vorogi.*  
 TEL die without.anything  
 'S/he died for no reason.'

- (55) *Mo dige vorogi.*  
 REAL walk without.anything  
 'S/he walks/is walking barefoot.' (lit. S/he walks/is walking without anything.)

- (56) *Maresu ngihie u garea mwere.*  
 child that TEL good INTENS  
 'That child is very good.'

- (57) *Maresu ngihie mo vi-visi mwere.*  
 child that REAL REDUP-swear INTENS  
 'That child can really swear/swears a lot.'

## 6. Semantic types

Dixon recognizes thirteen different semantic types that are typically associated cross-linguistically with words belonging to adjective classes (Ch. 1). For the most part, adjectives in Ambae can be classified as belonging to one of seven of these different semantic types: DIMENSION, AGE, VALUE, COLOUR, PHYSICAL PROPERTY, HUMAN PROPENSITY, or DIFFICULTY. For some semantic types there is overlap, such as with HUMAN PROPENSITY, for which some members are adjectives and others

are verbs. In other cases, such as SPEED, all words of that semantic type are members of a word class other than adjectives, in this case adverbs. Following is an explanation of all semantic types, indicating word class membership for each:

- DIMENSION—All adjectives, e.g. *biti* 'small', *lague* 'big, wide', *bue* 'deep, high tide', *manivini* 'shallow, low tide, thin', *qaravu*, 'long, tall', *qilodo* 'short'.
- AGE—All adjectives, e.g. *sesea* 'old', *qaro* 'new, raw, unripe'.
- VALUE—There are only two words belonging to this semantic category and both are adjectives, i.e. *garea* 'good', *hasi* 'bad'.
- COLOUR—All adjectives, e.g. *mavute* 'white', *maeto* 'black', *memea* 'red', *angoga* 'yellow'.
- PHYSICAL PROPERTY—All adjectives, e.g. *bibilu* 'wet', *mamaha* 'dry', *mava* 'heavy', *mamarae* 'light', *kulo* 'round', *makenikeni* 'sharp'. Words referring to corporeal properties are also adjectives, e.g. *mwaso* 'alive', *sege* 'sick', *bao* 'dumb (unable to speak)'.
- HUMAN PROPENSITY—Some words in this category are adjectives, such as *mai-mai* 'shy, ashamed', *dalo* 'stupid', and *lenga* 'crazy, naughty, silly'. Others are verbs, such as *mero* 'be angry', *hagavi* 'feel sorry (for)', *havusi* 'make happy', and *gari* 'show off'. Those words which are verbs differ from the adjectives in that they cannot modify a noun and they are A-type transitive and intransitive verbs.
- SPEED—There are three words belonging to this category, all adverbs: *rorongo* 'slowly', *ribi* 'slowly, for a long time', and *siseri* 'quickly'.
- DIFFICULTY—There are three forms of this type, all of which are adjectives, *siaga* 'difficult', the compound *mata mwasara* 'easy, clear', and the borrowing *isi* 'easy'.
- SIMILARITY—*Dolue* 'different' and *tatarese* 'same' are both adjectives. *Tuegi* 'other' is a quantifier and can form the head of an NP or be a nominal modifier. *Mwere* 'like' can be a transitive verb and an intensifier, modifying the head of a VP.
- QUALIFICATION—*hogo* 'true' can be an adjective, as the head of a VP or modifying a noun. However it can also be an adverb, modifying a verb. Otherwise, words belonging to this semantic category, used to qualify statements, are verificationals, which occur as clausal adjuncts, such as *bataha* 'probably'.
- QUANTIFICATION—most members of this semantic type belong to the class of 'quantifiers', which are like adjectives in that they can modify a noun, but they can also stand as the head of an NP. Generally they cannot function as a predicate, apart from *sao* 'many', which can be the head of an NP or VP and modify a noun.
- POSITION—words of this type are all members of the sub-class of locational nouns. Some are absolute (free) nouns, such as *aulu* 'high, up there' and *vine* 'low, down there', while others are relational (bound) nouns, such as *mawiri*- 'left (of)' and *matue*- 'right (of)'.
- CARDINAL NUMBERS—all numbers belong to a separate word class, 'numerals'. Like adjectives, they can modify a noun or form the head of a VP, but they are classified as a separate word class rather than as another sub-class of verbs on the basis that they also share properties with nouns, being able to function as the

head of an NP. Also they can be derived with the causative prefix *vaga-* to form a multiplicative, which can be either the head of a VP or modify a verb.

## 7. Word class overlap

Non-cognate semantic overlap between word classes is extremely rare in Ambae. I have found only one example in my data, between a noun and an active intransitive verb (*tai-* 'excrement' (n.), *deo* 'defecate' (v.)). I have no examples of overlap between adjectives and nouns or verbs. This lack can be explained by the fact that, as discussed above (§2), some words in Ambae are precategorial, meaning that it is possible to have underived words being members of more than one word class. In such cases it is possible to have underived forms occurring as both noun and verb, or verb and adjective. Otherwise, where semantic overlap occurs, a word occurs underived in one word class and has a derived form that is a member of a separate class. For example, all adjectives can be nominalized with the suffix *-gi* (§4.4). There is not a great deal of overlap between the adjective and verb classes. Nine adjectives have derived causative transitive verb forms (§4.5) and a small group of transitive verbs can be prefixed with the anti-causative prefix *ma-* to form an adjective. These adjectives describe a state or spontaneous event and an agentive argument, representing the A of the underived transitive verb cannot be expressed.

<i>volo</i> 'break sth'	<i>mavolo</i> 'break (intr), be broken'
<i>utu</i> 'break sth into pieces'	<i>mautu</i> 'break (intr), be broken into pieces'
<i>lingi</i> 'pour, spill sth'	<i>malingi</i> 'spill (intr), be spilt'
<i>visa</i> 'split sth'	<i>mavisa</i> 'split (intr), be split'

Note that these derived adjectives can be demonstrated to be incorporated into the class of adjectives by virtue of the fact that they can be further derived by the nominalization suffix *-gi*. However, they cannot modify nouns.

- (58) \**Go=bete na bue ma-volo.*  
 2SGSP=give ART knife ANTI=break  
 'Give (me) the broken knife.'

## 8. Ordering of adjectives in the NP

It is rare for more than one adjective to modify the head noun in an NP. As discussed in the following section (§9), it is actually much more common for adjectives to occur with a predicative function than with an attributive function. I have no natural examples with more than two adjectives modifying a noun. In elicited examples I have been told that any order is acceptable.

## 9. Adjectives as predicate vs. attribute

While all adjectives can modify the head noun in an NP, it is important to note that it is quite rare for an adjective to have an attributive function. Adjectives occur much more commonly as the head of a VP than as a modifier of a noun. For example, while sentence (59) is a perfectly grammatical sentence, (60) is the way such a statement would usually be expressed. The item is introduced into the discourse as the object of an active transitive verb, and then it can occur as the subject of an adjective, in order to describe a quality of the object.

- (59) *Go=lehi na boe laque ngihie.*  
 2sgSP=look ACC pig big that  
 'Look at that big pig.'
- (60) *Go=lehi na boe ngihie. U laque mwere.*  
 2sgSP=look ACC pig that TEL big INTENS  
 'Look at that pig. It's really big.'

## 10. Conclusion

In conclusion, I have given ample evidence demonstrating that adjectives in Ambae are a sub-class of verbs. It is also evident that words in this sub-class have a number of characteristics which distinguish them from other classes of verbs, and these are characteristics that adjectives commonly possess in languages, thus providing support for calling this sub-class of verbs adjectives.

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# Adjectives in Semelai

*Nicole Kruspe*

## 1. Introduction

Semelai is a Southern Aslian language (Benjamin 1976). Aslian languages belong to the Mon-Khmer division of Austroasiatic. Semelai is spoken in Peninsular Malaysia around Tasek Bera in Pahang and in settlements along the Bera, Triang, Seriting, and Muar Rivers, straddling an area of south-west Pahang, north-east Negeri Sembilan, and northern Johore. In 1999, the population figure given in the government census was 4,055. This figure would be representative of the number of Semelai speakers. Semelai of all ages exhibit a preference for speaking their own language, and the use of Malay is limited to dealings with non-Semelai. The language is not written.<sup>1</sup> Malay, the national language and language used in education, is the lingua franca used with all other peoples, including those from other aboriginal minorities in the Peninsula.

## 2. Typological profile

### 2.1. THE LEXICON

#### 2.1.1. *Word classes*

Semelai has clearly distinguished word classes, both syntactically and morphologically. The open classes are Nominal, Verb, and Expressive (Kruspe 2004: 97–102).

Nominals function as the heads of NPs, complement arguments in non-verbal clauses and nominal modifiers in associative constructions.

Verbs function as predicates. The majority of verbs are clearly transitive or intransitive; there are also a small number of ambitransitive verbs. The distinction

<sup>1</sup> The orthographic system used in this chapter is essentially phonemic, differing from the standard IPA only with regard to /j/, /ɟ/, and /ɛ/, which are represented here as /y/, /j/, and /s/ respectively. Semelai words frequently contain strings of consonants separated by the non-phonemic vowel [ə] or one of its conditioned variants [a, i, u]. In order to accommodate the reader, these vowels have been included in the orthography. See Kruspe (2004) for a detailed analysis of Semelai phonology.

The chapter is based on data collected in 1990–1 for my Ph.D. and in 2000–1 during a post-doctoral position at the Max Planck Institute for Evolutionary Anthropology, Leipzig. Particular thanks go to my teacher Normah Het and the Kampong Putat community, Malaysia.

TABLE 1. Word classes and prototypical and derived functions

Nominal Head of NP	Attributive Modifier	Verb Head of predicate
<i>dəl</i> ‘house’	<i>məvəm dəl</i> ‘house-like’	<i>bər-dəl</i> ‘to be housed’ <i>par-dəl</i> ‘to house (s.o.)’
<i>rə&lt;l&gt;məl</i> ‘male, man’ <i>mə=rəməl</i> ‘the male one’	<i>rəməl</i> ‘to be male’	
<i>naʔ-gəʔ</i> ‘felling’	<i>bər-gəʔ</i> ‘felled’	<i>gəʔ</i> ‘to fell (a tree)’

between stative and active verbs cuts across the transitive/intransitive division.

Expressives<sup>2</sup> are iconic utterances, which function to simultaneously provide information about both the predicate and its arguments, in the form of a single lexical item. They function as clausal adjuncts, or stand alone as minor clauses.

Members of this class express sensate imagery—aural, visual, oral, tactile—e.g. *cəralāp* ‘the sound of (someone/something) entering the undergrowth.’<sup>3</sup> Expressives frequently combine a cluster of properties, e.g. the lexeme *bərʔol* ‘(something) large, dark and motionless, lying submerged in the water’ combines DIMENSION, COLOUR, and POSITION. In addition, they have irregular phonology, irregular reduplication patterns, and vowel alternation.

Lexemes must undergo derivational procedures, either morphological or syntactic, in order to function in a different word class. This is illustrated in Table 1 where the prototype member is shown in bold.

### 2.1.2. Avoidance speech style

Semelai has an Avoidance speech style, *cəkəp bə-sener* (speak MID-tease.by. allusion), a system of word substitution, utilizing the normal phonology and grammar of Semelai (Kruspe in press: 7–10). It is employed when people enter the forest or go out on the lake or rivers, in order to prevent any misfortune, either a mishap or illness, befalling the individual or the wider group involved in the expedition. Some examples are: *tijə* ‘snake’ which in avoidance speech is *mə=rus kəbəʔ* (REL=drag body) literally ‘the one who drags himself’; *paraʔol* ‘dug out canoe’ is from *dəʔ* ‘large cooking vessel’; and *ʔareʔ* ‘rain’ is *mə=ramay* (REL=be.many) ‘the one who is many’.

While many Aslian languages have taboo-based speech styles—Semai (Difloth 1980); Ceq Wong and Jah Hut (Kruspe fieldnotes)—Semelai is unusual in

<sup>2</sup> Expressive is a term used by scholars of Austroasiatic; the more widely used term is ideophone (see Sohn, Ch. 9, this volume).

<sup>3</sup> The following conventions are used: Semelai lexemes are in italics; Malay lexemes are in underlined italics. Morpheme boundaries of prefixes and suffixes are represented by a hyphen ‘-’; infixes and the circumfix by parentheses ‘< >’; underspecified affixes are enclosed by ‘+’; and clitic boundaries are shown by ‘=’.

extending this to include verbs (G. Diffloth, pc), e.g. the regular verb *cɔʔɔŋ* 'to roast' is replaced by *kəlwəl*, and *k<sup>h</sup>əbəs* 'to die' is replaced by *cəlvɔy*. The etymology of these terms is unknown. COLOUR and DIMENSION adjectives are also represented in the avoidance lexicon, e.g. the regular term *t<sup>h</sup>əy* 'be big' is *lənlən* in avoidance speech, and *putih* 'be white' is *pərantəh*.

It is possible that the taboo has resulted in the lexical replacement of indigenous words by Malay loans, e.g. the colour terms discussed in §§3.2.2 and 5.1, and the avoidance term is actually an archaic indigenous lexeme.

## 2.2. MORPHOLOGY

Semelai is an isolating language with agglutinating features. The complex morphological system contains a rich inventory of prefixes, infixes, suffixes, and a circumfix. There are two systems of arrangement: (i) a non-concatenative system of prefixes and infixes, which has its origins in Mon-Khmer; and (ii) a concatenative system of prefixes, suffixes, and a circumfix acquired through contact with Austro-nesian, notably Malay. Both systems of attachment are prosodically driven; the selection of allomorphs is determined by the syllable structure of the root or base. Some typical functions of derivational morphology are to change the word class of the root, e.g. nominalization; or valency changing operations, e.g. causativization and detransitivization.

## 2.3. MORPHOSYNTAX

Semelai has a morphologically ergative system. Grammatical relations are marked by clitics. There is a mix of head- and dependent-marking. In the transitive clause, the A is cross-referenced on the verb by a pronominal proclitic as in (1). Examples of dependent-marking are the role marking proclitics: *la=* 'A=' on the external post-verbal NP A, and the optional *hn=* 'O' on the post-verbal NP O as in (1). The O is not cross-referenced on the verb. Indirect objects and obliques are coded by prepositions, see (1).

## 2.4. CONSTITUENT ORDER

Constituent order at the clause level is fluid, with a strong tendency to be predicate initial. Fluidity is pragmatically driven. The minimal clause consists of the predicate alone.

### 2.4.1. The transitive clause

Constituent order in the transitive clause is predicate-initial V A O as in (1), or O-initial O V A as in (2):

- (1) *ki=tikam la=kənlək hn=pɔdɔŋ rɔm ləməŋ*  
 3A=stab A=husband O=tiger with spear  
 'The husband stabbed the tiger with the spear.'



- (2) *pɔdɔŋ ki=tikam la=kənlək rəm ləmeŋ*  
 tiger 3A=stab A=husband with spear  
 ‘The husband stabbed the tiger with the spear.’

Where the order is A V O, the A is followed by a slight pause:

- (3) *kənlək, ki=tikam hn=pɔdɔŋ rəm ləmeŋ*  
 husband 3A=stab O=tiger with spear  
 ‘The husband, he stabbed the tiger with the spear.’

The morphologically simplest clause A V O, in which grammatical relations are not coded, states general or universal conditions:

- (4) *paŋreŋ par-niŋ səmaŋ, la=reŋ kawan*  
 ghost CAUS-be.ill person BCS=seek friend  
 ‘The ghosts (of those who have died a violent death) make people ill, because (they) seek friends.’

#### 2.4.2. *The intransitive clause*

In the intransitive clause, the predicate is in either initial (5) or final position (6). S is not cross-referenced on the verb, and there is no NP-marking of the external NP. There are suppletive third person absolutive pronominal forms *kəhn* (< *kəh=hn* 3=ABS) ‘3S’ and *dehn* (< *deh=hn* 3pl=ABS) ‘3plS’ used for pre-predicate subjects.

- (5) A driver in a four-wheel drive is going cross-country.  
*suwak daŋ bə-təroŋ kəh*  
 go NEG HAVE-path 3  
 ‘He is going without a road.’
- (6) *kənən cəh təŋəh təroŋ*  
 offspring be.born middle path  
 ‘The baby was born on the way.’

#### 2.4.3. *The external cause clause*

Predicates containing verbs of motion and emotion have two possibilities for marking as in (7)–(8). The basis of the split is to mark a type of involuntary compulsion resulting from external causation. The subject of the intransitive clause is cross-referenced by the ‘A=’ proclitic on the verb, although the clause is still monovalent and the subject displays low agentivity (8). The causer is encoded in a causal clause *la=* ‘BCS’.

- (7) *kəhn maluŋ*  
 3S be.shy  
 ‘She is shy.’
- (8) *ki=maluŋ la=he*  
 3A=be.shy BCS=1incl  
 ‘She is shy because of us.’

## 2.5. NOMINAL SYNTAX

Semelai is a right branching language. All modifiers excluding the Quantifier Phrase follow the head. Constituent order at the phrase level is fixed. The ordering of constituents in the NP is:

(Quantifier)      **Head**      (Attributive)      (Associative NP)      (Demonstrative)

Only nominals or derived nominals may function as the head. The Quantifier is a number, numeral classifier, measure, or quantity word, e.g. *peʔ naʔ-rɔʔ baba* (three UNIT-basket unhusked.rice) ‘three basketfuls (of) unhusked rice’. The Attributive is either a property verb: *ʔareʔ pəret* (day be.hot) ‘a hot day’; a verb functioning as a quasi-adjective, *səmaʔ kaʔ-kʰeʔ* (person IMPERF-know) ‘a knowledgeable person’ (see §4.2.2), or a restrictive modifier, *dak ʔen* (water just) ‘plain water’. The Associative NP is a modifying nominal: *dɔʔ babu* (house [name]) ‘Babu’s house’; *dak ʔə<nah>ʔɔh* (water drink<NR>) ‘drinking water’. The Demonstrative is always phrase final: *tɔŋ kɔ kəke* (container 2fam there) ‘your container right there’.

## 2.5.1. Non-verbal clauses

There is no copula verb in Semelai. Equative and Ascriptive clauses simply involve a verbless clause subject NP and a verbless clause complement NP; in Locative clauses, it is a locative prepositional phrase. Like intransitive clauses, either the complement, (9), or the subject can be in initial position. The only ‘verbal’ grammatical marking possible in the non-verbal clause complement is the imminent aspect proclitic *ga*= ‘IMM’, which has a predictive reading.

- (9) On returning home, the daughter, who has just been mistakenly caught in the casting net of a short-sighted man, relays her experience to her mother:  
*ʔə-nam kəhʔ kʰəʔəŋ [cəreʔ tʰəy]Pred [ʔəŋ]Subj*  
 NR-sense 3 QUOTE [fish be.big]Pred [1fam]Subj  
 ‘“His feeling”, (she) said, “(was) (that) I (was) a big fish.”’

There is an existential copula *daʔ* ‘EXIST’ from Malay *ada* ‘there is/are’:

- (10) *ʔɔh, kuweh daʔ ʔen tʰi sɔn*  
 EXCL biscuit EXIST LOC hand PART  
 ‘Oh, there’s a biscuit in her hand, you know.’

## 3. The adjective class in Semelai

Adjectives in Semelai are treated as a sub-class of verbs. They form an open class, although there are two distinctive sub-classes, DIMENSION and COLOUR, which are closed. Semelai adjectives belong to the ‘verb-like’ type of Dixon’s proposed typology (Ch. 1), based on their common morphological and syntactic properties. While adjectives display strong ‘verb-like’ characteristics, they also exhibit a

number of subtle differences, e.g. different possibilities both within the predicate slot and as modifiers within an NP, see §4.2. Adjectives do not share properties with nominals. The similarities and differences of verbs and adjectives are discussed in §4, and summarized in Table 6.

Adjectives represent less than 10 per cent of the lexicon. In the current lexical database of 3,870 entries, there are approximately 300 adjectives. New members of the adjective class are predominantly loan words from Malay. Interestingly, there is no morphological process whose specific function is to derive adjectives from other word classes, as there is, for example, to derive deverbal nouns from verbs.

Adjectives occur in texts in predicates more frequently than as attributives. Examples of attributive use in the database tend to occur most often in folk definitions, e.g. *leweh* 'be uneven' was defined as *malay̕ ʔnas*, *malay̕ dəpēs* (side be.high side be.low) '(one) side high (and) one side (low)'.

There are two types of quasi-adjective, verbs which are morphologically derived in order to function as modifiers; and syntactically derived forms like *mvcvm* N 'like N, N-like', as shown in Table 1 above. Quasi-adjectives have limited morphological and syntactic possibilities compared to 'true' adjectives; see §4.2.2 and Table 6.

Adjectives function as: (a) the head of intransitive type predicates:

- (11) *ləpəc deh səleh*  
 stomach 3pl be.hungry  
 'They were hungry.' (lit. Their stomachs (were) hungry.)

(b) modifiers of nominals in NPs:

- (12) *ki=dəs dak tʰəy, ʔampuh*  
 3A=arrive water be.big inundate  
 'The flood water came (and) inundated (the land).'

### 3.1. SEMANTIC TYPES

Adjectives in Semelai include ten of the thirteen semantic types identified by Dixon (Ch. 1). Semantic types, approximate membership, and examples are provided below:

1. DIMENSION [8] *ʔnas* 'be high', *ʔələʔ* 'be short'
2. COLOUR [8] *kuney* 'be yellow', *hijaw* 'be green'
3. PHYSICAL PROPERTY [200+] *cərem* 'be brittle, piercing', *səbəŋ* 'be full'
4. VALUE [7] *ʔilək* 'be good', *ʔnat* 'be ugly, malformed', *ʔədəʔ* 'be beautiful'
5. AGE [5] *gədo* 'be old (persons)', *ʔleʔ* 'be old (things)', *ʔareh* 'be new'
6. DISTANCE [3] *ʔləp* 'be far', *dədes* 'be near'
7. QUANTIFICATION [12] *ramay* 'be many (people)', *kəŋəm* 'be many (things)'
8. QUALIFICATION [3] *biyasaʔ* 'be usual, normal', *ʔaseŋ* 'be unusual, different'
9. SPEED [4] *ʔərəs* 'be swift', *ʔayon* 'be slow'
10. HUMAN PROPENSITY [12] *laʔlʊʔ* 'be insane', *cərdek* 'be clever', *panay* 'be adept'

### 3.1.1. Semantic overlap

Thirteen semantic types are listed in Dixon (Ch. 1), of which ten are present in Semelai. Those absent from the Semelai inventory are expressed by other word classes: NUMBER, QUANTIFICATION, and POSITION are all nominals: *muy* ‘one’, *sambroh* ‘all’, *karom* ‘below’, *sawel* ‘left-side’; nationality terms are also nouns, *gob* ‘Malay’, *kəliŋ* ‘southern Indian’.

Intransitive stative verbs convey DIFFICULTY—*susah* ‘be difficult’, *sənvŋ* ‘be easy’—and HUMAN PROPENSITY—*ŋəren* ‘be angry’, *kali* ‘be brave’. HUMAN PROPENSITY can also be expressed as descriptive nouns, using the Excessive Agent derivation: *ca* ‘to eat’ > *par-ca* (XS-eat) ‘a glutton’; *cəkvp* ‘to talk’ > *pər-cəkvp* (XS-talk) ‘a talkative person, chatterbox’.

### 3.2. ADJECTIVE SUB-CLASSES

Three sub-classes of adjective are defined according to morphological criteria:

1. DIMENSION terms;
2. COLOUR terms;
3. the rest.

Sub-classes 1 and 2 exhibit closed membership; class 3 is an open class acquiring loanwords from Malay.

#### 3.2.1. Class I: DIMENSION

The class of eight DIMENSION terms contrasts four antonymic pairs; see Table 2. All eight members of the set have the ability to:

- feed the derivation of the morphological comparative +*raʔ*+ ‘COMP’: *jəlēʔ* ‘be short’ > *jə<raʔ>lēʔ* ‘be shorter’
- form the intensive: *kēt* ‘be small’ > *kē-kēt* ‘be really small’
- form the causative: *sey* ‘be thin’ > *par-sey* ‘make thin’

Class 3 adjectives also feed the latter two derivations; Class 2 adjectives do not. Only one term from each antonymic pair:

- feeds nominalization: *t<sup>h</sup>əy* ‘be big’ → *niy-t<sup>h</sup>əy* ‘bigness, size’. Typically, this is the positive term, but note that both thick and thin may be nominalized.

TABLE 2. The class of dimension adjectives

Dimension	Positive	Negative
Size	<i>t<sup>h</sup>əy</i> ‘be big’	<i>kēt</i> ‘be small’
Length	<i>jələŋ</i> ‘be long’	<i>jəlēʔ</i> ‘be short’
Height	<i>ʔnas</i> ‘be high’	<i>dəpēs</i> ‘be low, short’
Thickness	<i>sēʔ</i> ‘be thick’	<i>sey</i> ‘be thin’

- derives the diminutive, *kēt* ‘be small’ > *kīt* ‘really tiny’. The ‘negative’ term undergoes vowel alternation in which the vowel of the final syllable is raised to /i/ or /i/. Vowel alternation, a feature common to the expressive word class, is not found in other word classes, or with other adjectives, except for the pair of indigenous COLOUR terms in Class 2 (see §3.2.2).

The morphological comparative +*raʔ*+ ‘COMP’. This derivation is restricted to dimension terms. The function of this morpheme is to make a relative comparison of dimension in terms of one of the four antonymic pairs: size (big), height (high), length (long), and thickness (thick). The derived form may be used as a modifier as in (13), or predicate as in (14):

- (13) *dʒl raʔ-tʰəy, raʔ-kēt ʔilɔk, buruk . . .*  
house COMP-be.big COMP-be.small be.good be.old  
‘(Whether) the house was big (or) small, in good (condition) (or) bad . . .’
- (14) *mə=mirah haʔ raʔ-kēt, ke=sɔn, raʔ-tʰəy*  
REL=be.red AT COMP-be.small that=PART COMP-be.big  
‘The red ones here are smaller, those see, are bigger.’

In (13) note that the evaluative adjectives *ʔilɔk* ‘to be good’ and *buruk* ‘to be old’ are not marked for the comparative, despite the same comparative relationship implicit to the pair. The relationship can only be expressed by juxtaposition for those terms, which do not derive the comparative. In (15) the object of comparison is expressed as a prepositional phrase with *tɔm* ‘from’:

- (15) *ʔɨaŋ, cim raʔ-tʰəy tɔm kleŋkeŋ*  
hornbill bird COMP-be.big from pied.hornbill  
‘The *enggang* hornbill, (it’s) a bigger bird than the pied-hornbill.’

In stating the comparison, it is not necessary to have both dimensions overtly expressed. In most cases, there is no obvious object of comparison other than some kind of prototype entity or attribute:

TABLE 3. Summary of morphological properties of dimension adjectives

Dimension		COMP	CAUS	INTNS	NR	DIM
Size	<i>tʰəy</i> ‘be big’	+	+	+	+	
	<i>kēt</i> ‘be small’	+	+	+		+
Length	<i>ʔaləŋ</i> ‘be long’	+	+	+	+	
	<i>ʔələʔ</i> ‘be short’	+	+	+		+
Height	<i>ʔnas</i> ‘be high’	+	+	+	+	
	<i>dəpēs</i> ‘be low, short’	+	+	+		+
Thickness	<i>sēʔ</i> ‘be thick’	+	+	+	+	
	<i>sey</i> ‘be thin’	+	+	+	+	+

- (16) *kədop raʔ-tʰəy, kənkən pər-nih*  
fontanelle COMP-be.big child xs-be.ill  
'(If) a bigger (than normal) fontanelle, the child will always be sickly.'

The features of this sub-class are summarized in Table 3.

### 3.2.2. Class 2: COLOUR

The COLOUR terms are a finite set. Six members of this class are borrowed from Malay and two are indigenous. The borrowed terms are:

*putih* 'to be white, silver, metallic grey' from Malay *putih* 'white'  
*hitam* 'to be black' from Malay *hitam* 'black'  
*mirah* 'to be red, orange, red-brown' from Malay *merah* 'red'  
*kuning* 'to be yellow, gold' from Malay *kuning* 'yellow'  
*hijaw* 'to be green/light blue' from Malay *hijau* 'green'  
*biruʔ* 'to be darker blue' from Malay *biru* 'blue'

The indigenous terms are: *johor* 'be russet' and *johər* 'be lighter russet'. Other indigenous COLOUR terms belong to the class of expressives (see §6).

- (17) *beʔen daʔ cə hitam, cə johor*  
NEGAT EXIST dog be.black dog be.russet  
'On the contrary, it isn't that there was a black dog, (there was) a russet dog.'

As a sub-class, COLOUR terms do not feed any derivational process other than the Collective *bə<...>an* 'TOG', a derivation common to all adjectives.

- (18) *bə<mirah>an mukaʔ deh, la=pə<t>ret*  
be.red<TOG> face 3pl BCS=be.hot<NR>  
'They were all red-faced together, because of the heat.'

Only black derives a causative form: *hi<r>tam* (be.black<CAUS>) 'to blacken' <*hitam* 'to be black'.

The COLOUR terms are not attested in the reduplicated intensive form. Lighter and darker shades may be indicated by qualifying a COLOUR term with either *putih* 'white' or *hitam* 'dark', e.g. *mirah putih* 'to be light red'.

COLOUR terms can be nominalized syntactically with a referential meaning only, e.g. *mə=mirah* (REL=be.red) 'the red one', and never as an abstract noun. This feature is common to all adjectives.

### 3.2.3. Class 3: The rest

As the name suggests, this class contains all semantic types other than those of DIMENSION or COLOUR. The majority are physical property terms. Some examples along with their antonyms are listed in Table 4.

TABLE4. Examples of Class 3 adjectives with antonyms

Positive term	Negative term
<i>pəret</i> 'be hot (weather)' from Malay <i>panas perit</i> 'scorching heat'	<i>sədəc</i> 'be cool'
<i>gəhəp</i> 'be hot (thermal)'	
<i>kəjəh</i> 'be heavy'	<i>həmpōŋ</i> 'be lightweight'
<i>masam</i> 'be sour'	
from Malay <i>masam</i> 'sour'	
<i>ləm</i> 'be tasty, delicious'	<i>sədəc</i> 'be tasteless, bland'
<i>pədas</i> 'be spicy, hot'	
from Malay <i>pedas</i> 'spicy'	
<i>kədəc</i> 'be bitter'	
<i>nom</i> 'be ripe'	<i>daʔ nom</i> 'unripe'
<i>lələk</i> 'be good' from Malay <i>elok</i> 'good'	<i>daʔ lələk</i> 'be bad'
	<i>buruk</i> 'be old, worn out'
	from Malay <i>buruk</i> 'old, decayed'
<i>jədēʔ</i> 'be beautiful, well-formed'	<i>ʔnat</i> 'be ugly, malformed'
<i>jəruh</i> 'be deep'	<i>surut</i> 'be shallow'
	from Malay <i>surut</i> 'to recede'
<i>ləluh</i> 'be sharp (blades)'	<i>daʔ ləluh</i> 'be blunt'
<i>cin</i> 'be cooked'	<i>jaʔjəʔ</i> 'raw (rice, game)'
<i>təkəh</i> 'be wet'	<i>kəreŋ</i> 'be dry' from Malay <i>kering</i> 'dry'
<i>təraŋ</i> 'be clear, light'	<i>bəsəŋet</i> 'be dark'
from Malay <i>terang</i> 'clear'	
<i>lədoy</i> 'be coarse' (basketweave only)	<i>ləlus</i> 'be fine, delicate (general)' from Malay
<i>kasar</i> 'be coarse, rough'	<i>halus</i> 'refined, fine'
from Malay <i>kasar</i> 'coarse, rough'	
	<i>sələw</i> 'smooth'
<i>mələn</i> 'be flexible'	<i>kəbət</i> 'be rigid, stiff'

Class 3 adjectives do not share any features which systematically distinguish them as a cohesive class. The following are general statements:

- many Class 3 adjectives form the antonym by negating the positive term with the verbal negator *daʔ* 'NEG': *daʔ* Adj (NEG Adj), *daʔ lələʔ* (NEG be.long) 'be short (time)' (§5.2)
- nominalized forms may have a concrete entity as the referent: *sədəc* 'be cool' > *si<c>dəc* 'coolness'; 'cold food/leftovers'; *bətək* 'to be overgrown, clogged up' > *bə<k>tək* 'non-cultivar, weed'; 'scrub, undergrowth'
- some adjectives in this class are morphologically complex, whereas Class 1 and 2 adjectives are monomorphemic. Bimorphemic forms exhibit inherent reduplication, e.g. *jaʔjiʔ* (*jaʔ-jiʔ*) 'be dirty', for which no roots are identifiable.

## 4. Grammatical properties

We will now examine some of the morphological and syntactic properties peculiar to adjectives. A table summarizing these properties is provided at the end of the section (Table 7).

### 4.1. MORPHOLOGICAL PROPERTIES

Adjectives generally exhibit low productivity with respect to morphological processes, in contrast to other verbs. For the most part, adjectives feed the same morphological derivations as verbs, with the same semantic result, e.g. verb/adjective + causative gives ‘to cause to do/be X’, whereas noun + causative results in ‘to provide or equip with X’. However, nominalization stands out, in terms of the actual structural process. This is discussed below in §4.1.1.

Adjectives do not feed the Imperfective, Middle voice, Happenstance (involuntary action), or Excessive agent derivations.

#### 4.1.1. *Nominalization*

Adjectives display low productivity with respect to nominalization. Antonymic pairs usually allow the nominalization of only one member. Many adjectives do not feed nominalization, whereas virtually all verbs freely nominalize, with the exception of certain stative verbs expressing cognitive processes (*səɖər* ‘remember’), emotion (*ŋərən* ‘be angry’), and ability (*gələt* ‘be physically able’).

The formal process of nominalization of adjectives differs from that of verbs. Verbs, both mono- and disyllabic, take an *+n+* affix, usually in combination with coda copy <C>. Coda copy is the reduplication and infixation of the final syllable coda (Kruspe 2004: 73). Adjectives, on the other hand, take different affixes, dependent on whether the root is monosyllabic or disyllabic.

Monosyllabic roots derive nouns like other verbs: *n-* prefix + coda copy is prefixed to the root, e.g. *ɬɲəs* ‘be high’ > *nɪs-ɲəs* ‘height’. Monosyllabic verbs nominalize in the same way: *hūm* ‘to bathe’ > *nəm-hūm* ‘act/manner of bathing’.

Disyllabic roots derive nominalized forms by coda copy (<C>) alone: *jəlɲp* ‘smell bad’ (food, unwashed hair/body/clothing) > *jə<p>ɲp* ‘bad odour’. Verbs infix <*nC*> into the initial syllable: *jəlɲh* ‘to drink’ > *jə<nah>ɲh* ‘act/manner of drinking’. Some verbs infix <*n*> alone (*pəlɲt* ‘to stay’ > *pə<n>ɲt* ‘act/manner of staying’), but never coda copy alone as for adjectives.

The actual function of coda copy is dependent on the word class of the root, whether a transitive verb, an active intransitive verb, a bound root, an adjective, or a nominal. The most frequently attested function is the derivation of the imperfective of transitive roots. The full range of possible functions is shown in Table 5.

#### 4.1.2. *Light syllable reduplication*

Adjectives reduplicate using light syllable reduplication (‘INTNS’) to derive an intensified form. Light syllable reduplication copies the root minus the coda, and



TABLE 5. The range of functions of coda copy

Root	Function	Example
Active transitive verb <i>sec</i> 'to steal'	Imperfective	<i>sic-sec</i> 'to be stealing'
Active intransitive verb <i>jətek</i> 'to sleep'	New lexeme	<i>jə&lt;k&gt;tek</i> 'to camp out'
Bound Root <i>dəm</i> (lie)	Intransitive verb	<i>dəm-dəm</i> 'to be lying down'
Adjective <i>jələŋ</i> 'be long'	Nominalization	<i>jə&lt;ŋ&gt;ləŋ</i> 'length'
Nominal <i>pərac</i> 'wing'	Stative intransitive verb	<i>pi&lt;c&gt;rac</i> 'to have wings'

prefixes this to the root, *jələ-jələŋ* (INTNS-be.long) 'really tall' < *jələŋ* (be.long). The reduplicated adjective may function as a predicate as in (19), modifier as in (20), or adverb as in (21):

- (19) *ʔlə-ʔləp kəh*  
INTNS-be.far 3  
'She was really far (away).'
- (20) *bə-reŋ dələŋ taha-tahan, mvcəm dələŋ cəŋay*  
MID-seek wood INTNS-last like wood *Neobalanocarpus heimii*  
'Really lasting wood was sought, like *Neobalanocarpus heimii* wood.'
- (21) *bək ʔilə-ʔilək!*  
fasten INTNS-be.good  
'Fasten (it) really well!'

The light syllable reduplication of verbs ('RDP') is restricted to predicative use. Intransitive and transitive verbs have a continuative interpretation, but for intransitives aimlessness or lack of purpose is also implied, see (22), while for transitive verbs it is attentiveness as in (23):

- (22) *suwa-suwak*  
RDP-go  
'(I'm) wandering around.'
- (23) *ki=cəŋɛ-cəŋɛw*  
3A=RDP-watch  
'He watched and watched'

Stative transitive verbs, e.g. *məh* 'to want', *sədər* 'to remember', do not reduplicate.

A summary of the functions of light syllable reduplication is given in Table 6.

TABLE 6. Summary of verb type and semantic result of light syllable reduplication

Verb type	Light syllable reduplication
Intransitive verb:	continuative
Active	+ aimlessness
Stative	intensification
Adjective	intensification
Transitive verb:	continuative
Active	+ attentiveness
Stative	

#### 4.1.3. The causative

Both adjectives and verbs causativize in the same manner: monosyllabic roots form the causative with the prefix *par-* 'CAUS'; disyllabic roots with the infix <*r*> or prefix *pə-* 'CAUS'.

- (24) *ki=sec*                      *pə-ladaʔ*    *pə<r>das*  
 3A=surreptitiously EQUIP-chili be.spicy<CAUS>  
 'She surreptitiously added chilli, (and) made (it) spicy.'

Ability to feed this derivation is constrained by the semantics of individual lexemes, and possible states that can be perceived of as being caused to change. For example, *pəret* 'be hot (weather)' and *nom* 'be ripe' cannot be causativized, as these are states which manifest autonomously or through indirect causation. The cause can only be expressed as a causal clause with *la=* 'BCS'; see (18) above.

#### 4.1.4. Collective circumfix: *bə<...>an* 'TOG'

All adjectives and most verbs feed this derivation with the same semantic result: adjective *bə<ʔaseŋ>an* (be.different<TOG>) 'all (of them) different' < *ʔaseŋ* 'to be different, unusual'; transitive verb *bə<ca>ʔan* 'to all be eating together' < *ca* 'to eat' and intransitive verb *bə<jətek>an* 'to all be asleep together' < *jətek* 'to sleep'.

#### 4.1.5. Directional applicative -*iʔ* 'APPL'

The suffix -*iʔ* 'APPL' is a valence-increasing suffix which occurs with verbs of motion and emotion. Three adjectives feed this derivation: *dək<sup>h</sup>es* 'be near' > *dək<sup>h</sup>es-iʔ* 'to draw near to (something)'; *masam* 'be sour' > *masam-iʔ* 'to be sour toward (someone)'; and *təraŋ* 'to be light' > *təraŋ-iʔ* 'to explain'.

### 4.2. SYNTACTIC PROPERTIES

We will now examine syntactic properties of the adjective class.

4.2.1. *Attributive modifier*

Adjectives modify nouns, including deverbal nouns as in (25)–(26), but not pronouns.

- (25) *dʒs kəloc bəri deh, bəri jəruh*  
 reach inside jungle 3pl jungle be.deep  
 ‘They reached the jungle, the deep jungle.’

- (26) *nəl-cəl ləmbut*  
 NR-pronounce be.weak  
 ‘weak pronunciation’

The head may be repeated with each adjective in a distributed or coordinated reading (27) or the adjective may occur without the head repeated (28):

- (27) *ʔleʔleʔ de=kədeʔ dʒl tʰəy, dʒl kēt*  
 eventually 3plA=stay.in house be.big house be.small  
 ‘Eventually they stayed (some) in big houses (and) (some) in small houses.’

- (28) *deneŋ, liyaŋ raʔ-tʰəy raʔ-kēt, kəməŋ ki=tuduŋ*  
 wall crack COMP-be.big COMP-be.small exhaustively 3A=close  
 ‘(As for) the walls, the cracks big (and) small, he closed up every (one).’

When the adjective is contained in a relative clause (*mə*= ‘REL’), it functions to delineate a specific referent, providing a contrastive or emphatic reading:

- (29) A woman has inadvertently committed bigamy:  
*ʔadiʔ kənlək mə=ʔareh*  
 YSIB husband REL=be.new  
 ‘The new husband’s younger sibling.’ (The younger sibling (of) the husband who was new.)

An adjective can only occur as the head of an NP if it is nominalized, either morphologically, e.g. *tə<ŋ>raŋ bulan* (be.light<NR> moon) ‘moon-light’, or syntactically as in (30). Unlike deverbal nouns, the syntactically derived form cannot be further modified.

- (30) The shaman is performing an exorcism on two siblings, one female and one male, who have turned into snakes. He chooses the male:  
*ʔleʔleʔ, ləh ʔantat [mə=rəmɔl] təʔen jəŋ dak*  
 then go:across take [REL=be.male] TO:down foot water  
 ‘Then, (he) went across to take the male down to the lower reaches of the water.’

4.2.2. *Verbs as quasi-adjectives*

Verbs may also function as nominal modifiers, but the form of the verb is dictated by the role of the nominal. Intransitive verbs directly modify the head-like adjectives:

- (31) *səmaʔ pər*  
people fly  
'flying people'
- (32) *resɲes, rɔh dəlɔŋ kʰəbəs*  
twig branch tree die  
'twigs (are) dead tree branches'

Transitive verbs require modification of the verb before they can function attributively. The verb must be in the imperfective if the noun being modified is in A (transitive subject) function:

- (33) *gəres daʔ kaʔ-kʰɛʔ*  
liver NEG IMPERF-know  
(lit. an unknowing liver) 'to be unaware (of what one is doing)'

If the modified noun is in O function, the verb must be in the Middle voice (*bər*- 'MID') (34), or host the irrealis proclitic *ma*= 'IRR' (35):

- (34) *dəlɔŋ bər-gɔʔ*  
tree MID-fell  
'a felled tree'
- (35) *pəle ma=ca*  
fruit IRR=eat  
'edible fruit'

The behaviour of quasi-adjectives is summarized in Table 7.

#### 4.2.3. Adjectives as adverbs

An adjective may modify a noun, or another verb as a manner adverb, without any additional marking, as in (36)–(38), in the same manner as an intransitive verb.

- (36) *dak jərəs*  
water be.swift  
'swift water'
- (37) *suwak jərəs*  
walk be.swift  
'walk swiftly'
- (38) The folk definition for the expressive *ləkəkən*:  
*suwak ʔayon, suwak ʔalus, mɔvcɔm sə<n>wak ci*  
walk be.slow walk be.delicate like walk<NR> louse  
'(It means) to walk slowly, walk delicately, like the manner of walking (of) lice.'

4.2.4. *Adjectives as predicates*

Adjectives function as intransitive predicates. Ordering may be predicate final, see (39), or predicate initial, see (40):

- (39) *dehn lvc dādes*  
 3plS already be.near  
 ‘They (were) already near.’
- (40) *ga=dāmdām lān [bihih nɔʔ]<sub>Pred</sub> [lāpəc]<sub>Subj</sub>*  
 IMM=lie.down 1f [be.full very]<sub>Pred</sub> [stomach]<sub>Subj</sub>  
 ‘I’m going to lie down, (my) stomach is very full.’

Adjectives occur with the same aspectuals as verbs, e.g. the imminent aspect proclitic *ga*= ‘IMM’, or the temporal adverbs *lāreh* ‘recently’, *lvc* ‘already’ and modal verbs like *mastiʔ* ‘must’. Like intransitive verbs, adjectives generally cannot host the irrealis proclitic *ma*= ‘IRR’.

The auxiliary verb *lān* ‘to desire’ shown in (41) expresses the inchoative with adjectives as in (42):

- (41) *kāhn lān ca*  
 3S want eat  
 ‘He wants to eat.’
- (42) *lān kuney*  
 want be.yellow  
 ‘(They are) starting to yellow.’

Adjectives do not occur in imperative or prohibitive clause types, except in their derived causative form, or as the second verb in a manner or resultative serialization, see (57) below.

4.2.5. *Negation*

Adjectives are negated using the same negators as verbs. The predicate negator *daʔ* ‘NEG’ is illustrated in (43) negating an adjective and in (44) negating a verb.

- (43) *daʔ llem, bər-cəl lēn gəlvr*  
 NEG be.nice MID-pronounce LOC name  
 ‘It is not nice, (if) the name is said.’
- (44) *təron daʔ dɔs haʔ nɔʔ*  
 road NEG reach AT here  
 ‘The road doesn’t reach here.’

There are three aspectual negators: *daʔ* . . . *wɔʔ* ‘no longer’; *daʔ* . . . *lagiʔ* ‘not yet’; and *daʔ* . . . *cəŋ* ‘not at all’. In example (45) an adjective is negated, and in (46) a verb.

- (45) *daʔ ʔleʔ cəŋ ʔatek*  
 NEG be.long at.all sleep  
 ‘(It) wasn’t long at all (that she) slept.’

- (46) *daʔ ki=pakay cəŋ*  
 NEG 3A=use at.all  
 ‘He doesn’t pay attention at all.’

Both adjectives as in (47) and verbs as in (48) also employ the same the metalinguistic negator *beh* ‘NO’:

- (47) *bubuh təkəh, cəreh beh*  
 fish.trap be.wet fish NO  
 ‘The fish trap is wet, the fish (are) not (wet).’

- (48) *beh, daʔ ʔi=kʰom*  
 NO NEG 2A=sit  
 ‘No, you didn’t sit (on it).’

Nominals are negated by the metalinguistic negator *beʔen* ‘NEGAT’:

- (49) *beʔen mɔvcɔm naʔ-haʔ*  
 NEGAT like NR-AT  
 ‘Not like this (stuff) here.’

#### 4.2.6. Adverbial modification

##### A. Intensification

*ɲaʔ* post-modifies adjectives and verbs. As an adjectival modifier it means ‘very’:

- (50) *cərus ʔəŋ ʔələŋ ɲaʔ*  
 claw 1fam be.long very  
 ‘My claws are very long.’

With stative verbs it means ‘really’:

- (51) *ki=kʰeʔ ɲaʔ ma=pəŋɔŋ*  
 3A=know really IRR=taboo  
 ‘She really knows the ritual prohibitions.’

With activity verbs *ɲaʔ* means ‘repeatedly’ or ‘always’:

- (52) *bɔy ma=jon baʔluʔ ɲaʔ!*  
 NEG:IMP IRR=give friend always  
 ‘Don’t repeatedly give (it) to (your) friends (to use)!’

##### B. Adverbs of degree

Adjectives may be pre-modified by grading adverbs expressing degree. These are not available as verbal modifiers:

*daʔ ləbeh* ‘not much, not very’, *daʔ ləbeh ʔləp* (NEG more be.far) ‘not very far’  
*cəmɔʔ* ‘increasingly, more’, *cəmɔʔ liyar* (increasingly be.wild) ‘increasingly wild’  
*palaʔ* ‘completely, so’, *palaʔ bihih* (so be.full) ‘so full’  
*cukup* ‘sufficiently, so’, *cukup dəgel ɲɔʔ* (so stubborn very) ‘so very stubborn’

With verbs, *cukup* means ‘enough’: *daʔ cukup ʔətek* (NEG enough sleep) ‘not enough sleep’.

#### 4.2.7. The periphrastic comparative

Only adjectives may function as the parameter of comparison in a comparative construction, a borrowing from Malay. The adjective is modified by the grading adverbs *ləbeh* ‘more’ (from Malay *lebih* ‘more’), e.g. *ləbeh ʔilək* (more be.good) ‘better’, or *kuray* ‘less’ (from Malay *kurang* ‘less’). The object of comparison is expressed in a prepositional phrase with *təm* ‘from’. It is usually only Class 3 adjectives which occur in this construction (see §3.2.1 for the comparative of Class 1 adjectives). The comparative construction is generally infrequent.

A similar construction to the comparative, without the adverb *ləbeh* ‘more’, is used to express an opinion: [(N) Adj]<sub>NP</sub> + *təm* + first person pronoun.

- (53) *kəjəh təm ye*  
 be.heavy from 1  
 ‘(It) is heavy in my opinion.’ (lit. (It) is heavy from me.)

#### 4.2.8. Secondary predicates of manner

Adjectives may occur as the  $V_2$  in a serialization describing the manner in which the event in  $V_1$  takes place. Adjectives from all three classes, Class 1 (DIMENSION) as in (54), Class 2 (COLOUR) as in (55), and Class 3 as in (56)–(57) may occur as  $V_2$ :

- (54) *bə-kənən raʔ-kēt*  
 HAVE-offspring COMP-be.small  
 ‘give birth prematurely’  
 ‘lit. give birth smaller.’
- (55) *ʔareʔ bəlɔʔ mirah*  
 day glow be.red  
 ‘The day is glowing red.’
- (56) *daʔ sot ca gɔhɔp, kʰəbəs*  
 NEG permit eat be.hot die  
 ‘(One) should not eat (millet) hot, (or one will) die.’
- (57) *kʰəbəs səleh*  
 die be.hungry  
 ‘(He) died (from) hunger.’

Intransitive verbs and derived intransitive verbs may also function as  $V_2$ : *suwak kəm<sup>h</sup>om* (go sit) ‘move sitting (bottom hop)’; *suwak bi<y>ləy* (go look.upwards) ‘go looking upwards’, the avoidance term for ‘to go blowpipe hunting’.

#### 4.2.9. Resultative serialization

Only adjectives may fill the  $V_2$  position in this serialization, which describes the state resulting from the activity of  $V_1$ . Class 1, see (58), and Class 3 adjectives, see (59)–(60), are attested in this construction.

- (58) A toddler has climbed up on the railings of the verandah. The speaker alerts her mother:

*mənjəlpē?*, *məsti?* *ki=goŋ* *gərak*, *ʔmot* *ʔŋəs*  
*small.up.high!* must 3A=bring fall mount be.high  
 ‘Small and up high! She must bring (herself) to fall, getting up high.’

- (59) *cək.wen* *ʔləp!*  
 throw.away be.far  
 ‘Throw (it) far away!’

- (60) *ki=sayor* *cin*, *ki=təŋ*  
 3A=stew.with.vegetable be.cooked 3A=dish.out  
 ‘She stewed (it) (so it) was cooked, (and) she dished (it) out.’

The morphological and syntactic behaviour of adjectives is summarized in Table 7.

## 5. The semantic content of the adjective class

Certain adjectives attribute a property to a specific entity or class of entities only. The adjectives are mainly of the PHYSICAL PROPERTY and QUANTITY types. Some of these are: *ceŋreŋ* ‘be dry, cracked (lips)’; *məlāw* ‘be bland, not sweet (fruit)’; *paŋaw* ‘be bland, tasteless (game)’; *malan* ‘be intoxicating (betel nut)’; and *səməl* ‘be plentiful (of segments in fruit, like durian or jackfruit)’.

Adjectives are also found in the Avoidance speech style (§2.1.2). The adjectives are primarily DIMENSION and indigenous COLOUR terms; see §5.1 below.

### 5.1. SYNONYMY

Synonymy is extremely rare in Semelai. Some examples where both terms are indigenous are: *ləŋləŋ*, *tərlay* ‘be naked’; *ʔrəy*, *kənəm* ‘be many (inanimate)’; and *dək<sup>hes</sup>*, *dədəs* ‘be near’.

It is more common to find synonyms where an indigenous word coexists with a Malay loan: *təraban* ‘to be smashed’ and *pəcah* ‘be smashed’ from Malay *pecah* ‘to smash’; *hət* ‘be wrinkled’ and *kərot* ‘be wrinkled’ from Malay *kerut* ‘wrinkle’.

Synonymy is also found amongst adjectives from the Avoidance speech style. This is due in part to certain terms being used in specific locations within the lake



TABLE 7. Summary of morphological and syntactic properties of adjectives and other verbs

	Adjectives			Other verbs		
	Class 1	Class 2	Class 3	Quasi-adjective function	Intransitive verb	Transitive verb
<b>Morphological properties:</b>						
Nominalization	Positive term	–	some	–	+	+
Causative	+	<i>hitam</i> ‘black’	Limited, see §4.1.3	–	+	+
Light syllable reduplication	Intensive	–	Intensive	–	Continuative, see Table 6	Continuative, see Table 6
Comparative	+	–	–	–	–	–
Collective	+	+	+	–	+	+
Applicative	–	–	<i>masam</i> ‘be sour’ <i>tray</i> ‘be clear’ <i>dk<sup>h</sup>es</i> ‘be near’	–	+	+
<b>Syntactic properties:</b>						
Attributive	+	+	+	+	+	Only derived forms
Predicative	+	+	+	like verbs like verbs	+	+
Adverb	–	–	+	–	+	–
Imperative	–	–	–	–	+	+
Periphrastic comparative	–	+	+	–	–	–
V2 manner	+	+	+	–	–	–
V2 result	+	?	+	–	–	–

system, e.g. *bakalɔr*, *pərəntɔh* ‘white’, *galəktāk*, *hayōŋ* ‘black’, *lənlɔn*, *rəbɔk*, *ka<ɔ>bəʔ* (< *kəbəʔ* ‘body’) ‘big (game)’.

## 5.2. ANTONYMY

Many antonyms are formed by negation with *daʔ* ‘NEG’: *ɪrəy* ‘be many’ > *daʔ ɪrəy* (NEG be.many) ‘be few’; *ɪluh* ‘be sharp’ > *daʔ ɪluh* (NEG be.sharp) ‘blunt’.

The negated form may have an idiomatic meaning. The lexeme *lɔm* ‘be tasty, sweet (tubers)’ has the antonyms *gəncar* and *gənrāc* ‘be bitter, taste uncooked (tubers)’. The negated form *daʔ lɔm* ‘be bad’ is used for bad dreams. This appears to be related to *dageŋ lɔm* (meat be.sweet) ‘sweet meat’, the Avoidance style term for the *kijaŋ* ‘Barking Deer (*Muntiacus muntjak* (Zimmermann))’. The Barking Deer is an ill-omened animal. Malevolent shamans, when dreaming, see the human soul in the form of this animal, and consume it, killing the person.

## 5.3. HYPONYMY

Some adjectives have a single lexeme to express the hyponym, rather than modifying with an intensifier. Folk definitions, which utilize the intensifier *ɲɔʔ* ‘very’, are provided in brackets.

*jəreh* ‘be tired out’, *piyhəy* ‘be exhausted’ [*jəreh ɲɔʔ* (tired.out very) ‘very tired out’]  
*masin* ‘to be salty’, *cahaŋ* ‘to be very salty’ [*masin ɲɔʔ* (salty very) ‘very salty’]  
*gədo* ‘be old (people)’, *tuwayeŋ* ‘be very old’ [*gədo ɲɔʔ* (old very) ‘very old’]

Similarly, some gradable adjectives have suppletive graded terms: *sədəc* ‘be cool’, *təkɔt* ‘be cold’, *kəjɔt* ‘be really cold’, *dəhyuh* ‘be cold to the point of shivering’.

## 5.4. COMPOUND ADJECTIVES

Compound adjectives, both indigenous and borrowed, are rare. The compound *liʔir layāw* (slimy (meaning unknown)) ‘be murky’ consists of two indigenous terms, although there is no definition for the second, as for the following two compounds. Some compounds combine a Malay term and an indigenous one, such as *hitam gəliyam* (black (meaning unknown)) ‘pitch black’ and *gəmuʔ gədempɔŋ* (fat (meaning unknown)) ‘short, fat (people)’.

The majority of compounds are direct loans from Malay. Both terms are Malay, even though there may be a Semelai adjective available, e.g. the Malay lexeme *manis* ‘sweet’ is *səŋek* ‘be sweet’ in Semelai.

*masam manis* (sour sweet) ‘be sweet and sour’

*panas tuliʔ* (hot deaf) ‘overcast, but hot as if the sun was not obscured’

*hitam ləgam* (black black) ‘pitch black’

# 6. Expressives

Expressives, introduced in §2.1 above, deserve special mention in relation to their semantic overlap with adjectives and adverbs. The semantic types attested in the

database include DIMENSION, COLOUR, PHYSICAL PROPERTY, DISTANCE, SPEED, and QUANTITY, e.g. the quantity expressive *leknek* 'be many (children)'. As with many adjectives in Semelai, expressives also tend to be specific to a narrow set of referents, or in the case of adverbials, a specific activity. The lexeme *jəmərəmpet*, which includes the meaning 'be many', is used specifically for people climbing, so 'many people climbing together'. The speaker defined it as, *ramay yvr* (be.many ascend) 'many are climbing', or *bə<yvr>an* (ascend<TOG>) 'many climbing together'.

The majority of expressives convey properties from more than one semantic type, e.g. COLOUR and DISTANCE, *cəmərəŋeʔeŋek* 'a red object seen from a distance', like a fire, or red fruit up in the forest canopy. DIMENSION and PHYSICAL PROPERTY are combined in *jəmərəŋkōh* 'the appearance of something big and round', e.g. a boulder.

Intensification or gradation may also be included in the meaning, e.g. physical property, *pəlʔit* 'very big-bellied', which was given the folk definition *tʰəy nɔʔ ləpəc* (be.big very belly) 'the belly is very big', and *kələbəcɔp* 'filthy'. The COLOUR term *rəŋɔŋ* means 'deep yellow', like the colour of roasted cassava. The onset of the final syllable is reduplicated to derive *rə<ŋ>əŋɔŋ* [rə.ŋə.ŋɔŋ] 'pale yellow and moving'. This is not a productive derivation.

Finally, expressives can also convey an action with adverbial modification: *rəkɔkɔy* and *kərɔtdɔt* 'walk slowly' (like a tortoise, or an old person), glossed as *suwak layon*, *mvcəm yoh* (walk be.slow like tortoise) 'to walk slowly like a tortoise'. Another example is *bərəpsɔp* 'grow shorter', defined as *pəh dəpē-dəpēs* (become INTNS-be.short) 'become really short'.

## 7. The ordering of adjectives

It is rare to have more than one adjective modifying a noun. When two adjectives are present, they tend to come from the same semantic sub-class; see (61)–(63). In (61), the juxtaposed COLOUR adjectives describe one entity:

- (61) *cɔ putih hitam*  
 dog be.white be.black  
 'a white dog (with) black (markings)'

- (62) *kənaʔ tʰəy jələŋ sɔn, kəh lən sunɔt*  
 happen be.big be.tall PART 3 want circumcise  
 'When (he grew) big and tall see, he wanted to be circumcised.'

Two antonymic adjectives receive a coordinated reading as in (62), or alternant reading as in (63). There is a tendency for the positive term to come first:

- (63) *dɔl raʔ-tʰəy, raʔ-kēt ʔilɔk, buruk...*  
 house COMP-be.big COMP-be.small be.good be.old  
 '(Whether) the house was big (or) small, in good (condition) (or) bad ...'

When both an adjective and verb modify an NP, the adjective precedes the verbal modifier:

- (64) *kəmus paŋlaʔ raʔ-kēt, giŋ-gvŋ*  
 [name] animal COMP-be.small IMPERF-bite  
 ‘*kəmus* (are) small biting animals.’
- (65) *səmaʔ gədo, bə-jaŋɔt, bə-misay, bə-huban*  
 person be.old HAVE-beard HAVE-moustache HAVE-grey.hair  
 (a) ‘an old bearded, moustached, grey-haired person’  
 (b) ‘an old person, with a beard, moustache (and) grey-hair’

## 8. Conclusion

Adjectives in Semelai are established as a distinct class, based on their idiosyncratic behaviour with respect to certain morphological and syntactic properties. Within this class, two semantic types stand out, the DIMENSION and COLOUR adjectives, which are considered here as sub-classes of the adjective class. However, adjectives are not considered a major word class, like noun, verb, or expressive, but a subclass of verbals, given their strong verb-like behaviour.

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## Adjectives in Qiang

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### 1. Introduction

Qiang is a Tibeto-Burman language spoken by 70,000–80,000 people in northern Sichuan Province, China, classified as being in the Qiang or Tibetan nationality by the Chinese government.<sup>1</sup> The language is verb final, agglutinative (prefixing and suffixing), and has both head-marking and dependent-marking morphology.

Nouns can be defined as underived forms which can take (in)definite marking, numeral-classifier phrases, and/or number marking, all of which follow the head. Aside from being the head of an NP, nouns can be used to modify other nouns directly (appearing immediately before the modified noun) or in a genitive phrase (also pre-head, with or without a genitive postposition), and an NP can appear as the complement of a copula clause. Reduplication of nouns (other than pronouns) is rare, but when it occurs it has a distributive meaning. Reduplication of personal pronouns has a reflexive sense.

Verbs are defined as those forms which can take the orientation/direction prefixes, the negative prefix, and/or the causative suffix. They are generally clearly transitive or intransitive, though there are some ambitransitive verbs ( $S=A$  or  $S=O$ ), and intransitive verbs can be made transitive by use of the causative suffix. Reduplication of transitive verbs can result in an intransitive reciprocal predicate. Verbs can modify nouns in NPs, though they must take a nominalizing suffix to do so, forming a pre-head relative clause.

A class of intransitive stative verbs can be distinguished from the other (intransitive and transitive) verbs by the semantics of the members of the set (words for DIMENSION, AGE, VALUE, COLOUR, QUALITY, and SHAPE) and their morphosyntactic behaviour (see also Huang 1994). Members of this class, which we can identify as ‘adjectives’, can be predicates, as can verbs, and take the same person marking (agreement) forms, orientation/direction marking, causative marking, evidential marking, and most aspect and negation marking as non-stative intransitive verbs, but unlike non-stative verbs, they can be nominalized using the definite and indef-

<sup>1</sup> The name ‘Qiang’ is an exonym given by the Chinese. The speakers of this language call themselves /zme/ (or a variant of this word) in their own language.

inite markers, many can act as adverbials (taking the adverbial particle /-ni/), and many can take the postpositive adverb /-wa/ 'very'.<sup>2</sup> Non-stative verbs can only modify a noun in the form of a pre-head relative clause construction, while adjectives can modify a noun directly in post-head position. The meaning of reduplication for most non-stative verbs is reciprocity, while the meaning of reduplication for adjectives is intensification or plurality.<sup>3</sup> There is no morphology for deriving adjectives from non-adjectival verbs, although adjectives can take causative marking and become transitive verbs.<sup>4</sup>

## 2. Semantics

The class of adjectives is an open class, currently with roughly 200 members, although the majority of new members are loanwords from Chinese. The class includes items related to DIMENSION, AGE, VALUE, COLOUR, PHYSICAL PROPERTY, HUMAN PROPENSITY, SPEED, DIFFICULTY, QUALIFICATION, and QUANTIFICATION. Words expressing the semantic field of POSITION are (locational) nouns (/steke/ 'behind', /məq/ 'top, above', /zəkū/ 'between, centre', /sqəl/ 'below', /piend/ 'near, (be)side', and /qəʃ/ 'before'), NUMBERS form a separate word class (they must appear with a classifier when used as modifier or predicate), and there are no words for SIMILARITY (see discussion below). Within some of the semantic types mentioned there a number of words that are not adjectives. For example, within the QUANTIFICATION type, the meanings 'all' and 'only' are represented by adverbs, and the meaning 'some, a few' is represented by the numeral for 'one' plus the plural marker ([a-hə]), or 'one' + 'two' plus a classifier ([ə-jə-u]). Some concepts are not represented by basic words, but by negation of basic words, e.g. in QUALIFICATION, 'correct' is a basic word, /pɛ/, but there is no native word for 'incorrect', only the negation of 'correct', /mɛ-pɛ/.

There are no ordinal numerals in Qiang. The meanings 'first', 'second', 'third', and 'last' are expressed by phrases involving locational nouns:

- |     |     |                                          |                                                     |
|-----|-----|------------------------------------------|-----------------------------------------------------|
| (1) | (a) | <i>tɛi-qəʃ-le</i> : (most-front-DEF:CL)  | 'the most front one' (= 'the first one')            |
|     | (b) | <i>tsə-steke-le</i> : (this-back-DEF:CL) | 'the one after this (one)' (= 'the second one')     |
|     | (c) | <i>thə-steke-le</i> : (that-back-DEF:CL) | 'the one after that' (= 'the third one')            |
|     | (d) | <i>tɛi-steke-le</i> : (most-back-DEF:CL) | 'the most back one' (= 'the last one') <sup>5</sup> |

<sup>2</sup> This is a sufficient but not a necessary condition for adjective status: except for /topu/ 'to like (something)', any verb that can take /-wa/ will be an intransitive state predicate verb, but a verb that cannot take /-wa/ may also be an intransitive state predicate verb.

<sup>3</sup> It could be that the sense of plurality is involved in both types, as the reciprocal must involve more than one person.

<sup>4</sup> See LaPolla (2003) and LaPolla with Huang (2003) for more extensive discussions of the Qiang language.

<sup>5</sup> Locational nouns can take the adverbial /tɛi/ 'most', but they are not adjectives; they cannot modify nouns directly and cannot be predicates.

For ordinals higher than 'third', the cardinal numbers plus classifiers are used as ordinal numbers, e.g. /yzə-ze/ ('four' + classifier) 'the fourth (one)' (= 'four (of something)').

Adjectives can be comparative even without overt marking of comparison (2a). Adding the adverb /-wa/ can clarify that a non-comparative sense is intended (2b). To specify a comparative sense, an adverbial such as [a-za] ('one' + CL(default classifier)) 'a little' can be added before the adjective (2c).

- (2) (a) *the: tiwi.* (b) *the: tiwi-wa.*  
       3sg tall 3sg tall-very  
       'He is tall/taller.' 'He is very tall.'  
       (c) *the: a-za tiwi.*  
       3sg one-CL tall  
       'He is a bit taller.'

Some adjectives are formed from noun + verb combinations with metaphorical meanings. Following are some examples using the noun /ɛtɕi:(mi)/ 'heart':

- (3) (a) *ɛtɕi:mi-zdzi* 'sad' < 'heart' + 'painful'  
       (b) *ɛtɕi:mi-ba* 'brave' < 'heart' + 'big'  
       (c) *ɛtɕi-kûâ-na* 'happy' < 'heart' + 'base' + 'good'

A number of the adjectives in Qiang are Chinese loanwords. When verbs, including adjectives (4c)–(4h), are borrowed into Qiang, they are borrowed as nouns. In order to be used as verbs in Qiang, the suffix /-tha/ is added to monosyllabic borrowed verbs, while the verb /pə/ 'to do' is added to polysyllabic borrowed verbs. Following are some examples:

- (4) (a) *tuen-tha* 'squat' < Chinese *dūn* + AUX  
       (b) *sə-tha* 'spend (money)' < Chinese *shǐ* + AUX  
       (c) *tɕin-tha* 'busy' < Chinese *jǐn* 'tight' + AUX  
       (d) *lən-tha* 'tender' < Chinese *nèn* + AUX  
       (e) *wen-tha* 'steady' < Chinese *wěn* + AUX  
       (f) *tɕiau-tha* 'cunning' < Chinese *jiǎo* + AUX  
       (g) *pən-tha* 'stupid' < Chinese *bèn* + AUX  
       (h) *tɕaukau-pə* 'proud' < Chinese *jiǎo-ào* + 'to do'  
       (i) *ɕunɣian-pə* 'train' < Chinese *xùnliàn* + 'to do'  
       (j) *tetsui-pə* 'offend' < Chinese *dézù* + 'to do'

Even if the total phrase borrowed from Chinese involves more than one syllable, if the verbal part of it is monosyllabic, then /-tha/ is added, as in, for example, /phitchi fa-tha/ 'to lose one's temper' (< Chinese *fā píqì* [emit temper]). In the case of verbs with the /-tha/ suffix, the borrowed verb, with the affix attached, is treated the same as a native verb, to the extent that it can take the directional prefixes, as in /sə-phin-tha/ 'become level' (< Chinese *píng*), and if it is an adjective, it can take the postpositive adverb /-wa/, as in /khuai-tha-wa/ 'very fast' (< Chinese *kuài*). In

the case of those loanwords that take the native verb /pə/, the prefixes are added to this verb, as in /thuntʂə-tə-pə/ 'notified' (< Chinese *tōngzhī*). For a small number of adjectives, possibly older loans, instead of having the /-tha/ suffix, the form /-ti/ follows the borrowed form, e.g. /nin-ti/ 'fragmentary, piecemeal' (< Chinese *líng*), /lan-ti/ 'blue' (< Chinese *lán*), /jyuan-ti/ 'round' (< Chinese *yuán*). This suffix is itself a loan form of the Chinese associative/nominalizing particle *de*.

There is no noun-adjective overlap, and no way to derive an adjective from a noun except in the case of the auxiliaries /-tha/ and /-pə/ mentioned above. This is done only with borrowed words, not with native words.

### 3. Functioning as predicate

The adjectives function as intransitive predicates much the same way other verbs do. They can take aspect marking, negation, person marking, causative marking, and/or interrogative marking. Many adjectives, due to the semantics of stative verbs, do not take imperative marking or prohibitive marking unless causativized.

In Qiang there are several types of aspect marking: change of state aspect, perfective aspect, prospective aspect, continuative ('still') aspect, iterative aspect, completive aspect, and experiential aspect. The adjectives can take all of these types of aspect marking except the completive aspect marker ([-das]), unless it is first causativized, due to the stative nature of adjectives. Change of state aspect marking (/ -ji/) marks the beginning of an action or the coming into being of the state represented by the adjective, as in (5). If an adjective takes the change of state marking without perfective marking, the implication is that the change into the state has begun, but not yet completed.

- (5) *pie-le: ba-ji.*  
 pig-DEF:CL big-CSM  
 'The pig has started to become big.'

If the change of state is completed, then perfective aspect marking would be used together with the change of state marker. Perfective aspect is marked by the addition of one of the eight orientation prefixes: /tə-/ 'vertically up', /fiə-/ 'vertically down', /nə-/ 'upstream', /sə-/ 'downstream', /zə-/ 'towards the centre', /də-/ 'outward from centre', /ə-/ 'in', /hə-/ 'out'. When adjectives take the orientation prefixes, the effect of adding the prefix is somewhat different from that with non-stative verbs. When one of the orientation prefixes is added to a non-stative verb, the meaning is either one of orientation or perfective aspect, but with adjectives, addition of an orientation prefix marks a change of state (a stative verb becomes an accomplishment verb).

- (6)
- |     | State               |   | Accomplishment                |
|-----|---------------------|---|-------------------------------|
| (a) | <i>ba</i> 'big'     | > | <i>təwa</i> 'become big'      |
| (b) | <i>χtʂa</i> 'small' | > | <i>fiəχtʂa</i> 'become small' |
| (c) | <i>su</i> 'dizzy'   | > | <i>fiəsu</i> 'become dizzy'   |



For this usage, usually only one of the eight prefixes is regularly used, but which prefix is used differs between adjectives. In the case of ‘become big’ and ‘become small’ there is a semantic basis for the choice of prefix, as /tə-/ is for upward direction, and /hə-/ is for downward direction. This is also true for ‘become fat’ vs. ‘become thin’. In fact these two prefixes are the most commonly used with adjectives. Following are examples of prefixed forms of some adjectives where addition of one of these two prefixes gives the sense of an accomplishment verb:

(7)	<i>təwa</i>	‘become big’	<i>haxtʂa</i>	‘become small’
	<i>təpha</i>	‘become fat’	<i>haxəi</i>	‘become thin’
	<i>təphi(φi)</i>	‘become white’	<i>təniq</i>	‘become black’
	<i>tucupu</i>	‘become red’	<i>haxtʂəp</i>	‘become dark’
	<i>tuxkuetəu</i>	‘become hard’	<i>hamətʂə</i>	‘become soft’
	<i>təʂue</i>	‘become light’	<i>hatʂha</i>	‘become deep’
	<i>təna</i>	‘become good’	<i>haxəi</i>	‘become bad’
	<i>təpha</i>	‘become swollen’	<i>heʂe</i>	‘become less swollen’
	<i>tujuku</i>	‘become dry’	<i>əji</i>	‘become wet’
	<i>təsi</i>	‘become hot’	<i>zəmāpa</i>	‘become cold (weather)’
	<i>tətshimpe</i>	‘become smart’		(no corresponding antonym)

We can see from these examples that metaphorically becoming good or light is movement upwards, while becoming dark or bad is movement downwards (except in the case of ‘become black’—colours all take the ‘upwards’ prefix; with ‘become soft’ either prefix is acceptable). We’ve given the antonyms of ‘become dry’ and ‘become hot’ in the lower right of this set of forms for the sake of completeness. These forms don’t take the ‘up’ or ‘down’ prefixes; the form for ‘become wet’ takes the ‘in’ prefix, /ə-/ , presumably because the water seeps into something to make it wet, and the form for ‘become cold (feel cold)’ takes the ‘towards the centre’ prefix /zə-/ (though [təmāpa] is also possible), possibly like in English when we say *the cold gets into your bones*. Some of these metaphoric associations are found in English as well, such as *smarten up* vs. *dumb down*. Also *heat up*, *lighten up*, *soften up*, and *dry up*.

Because of the semantic nature of adjectives as stative verbs, prospective aspect can only be used with an adjective if the continuative aspect marking is used together with it, marking the sense that a state will continue to exist or develop.

- (8) *mə tɛa-xqa:*. (< xqa)  
 sky still-clear:PROSP  
 ‘The sky is still going to become clearer or stay clear.’

Iterative aspect marks the repetition of an action with a non-stative verb, but marks the re-emergence of a state or situation with an adjective or other stative verb:

- (9) *mutup-le:* *zə-māpa-j-ji.*  
 sky/weather-DEF:CL OR-cold-IT-CSM  
 ‘It has become cold again.’

Person marking takes the same forms and has the same meaning as with non-stative verbs:

- (10) (a) *qa tiwia.* (b) *tɕile tiwiəʔ.* (< *tiwi*)  
 1sg tall:1sg 1pl tall:1pl  
 'I am tall/taller.' 'We are tall/taller.'  
 (c) *ʔũ tiwi-n.* (d) *ʔile tiwi-i.* (< *tiwi*)  
 2sg tall-2sg 2pl tall-2pl  
 'You are tall/taller.' 'You are tall/taller.'

Adjectives can also take the non-actor person marking in some contexts (this example also includes perfective and negative marking):

- (11) (a) *qa ʔə-s kə ɣua:-sə the: de-me-tshi-wu.*  
 1sg say-NOM thus COP:PROSP-LNK 3sg OR-NEG-wrong-3sgU  
 'If you ask me, he was not wrong.'

Interrogatives also have the same forms as with non-stative verbs (in this example the use of the 3rd person interrogative marker /-ɣua/):

- (12) (a) *mi wu-ɣua, mo-wu-ɣua?*  
 people many-Q NEG-many-Q  
 'Are there many people?'  
 (b) *pies-la-ha ha-m-ji-ɣua?*  
 meat-DEF-pl OR-ripe-CSM-Q  
 'Is the meat ready (to eat)?'

Adjectives, and certain verbs which represent gradiant concepts, can appear as the predicate in a comparative construction, which has the form in (13):

- (13) [NP<sub>entity being compared</sub> | NP<sub>standard of comparison</sub>-COMPAR | Predicate]

In positive sentences, the comparative marker is /-s(ə)/, while in negative sentences it is /-ɲiki/. The sentence initial NP can take the topic marker, and the predicate can take actor person marking reflecting the person and number of the topic. It is also possible to have non-actor person marking reflecting a salient standard of comparison, as in (14a). The predicate can take negation ((14b)) and adverbial modification ((14c)–(14e)). Actions can be compared, when nominalized, as in (14e). As in English, once the compared referent is established in the discourse, it need not be mentioned again in the standard of comparison, as in (14d)–(14e), where only the actor or possessor needs to be mentioned in the standard of comparison.

- (14) (a) *the:-ɣuəɲi qa-sə ba-ʂa.*  
 3sg-TOP 1sg-COMPAR big-1sgU  
 'He is bigger than me.'

- (b) *qa ʔũ-ɲiki ma-wa.* (< *ba*)  
 1sg 2sg-COMPAR NEG-big:1sg  
 'I am not as big as you are.'
- (c) *qa the:-sə̌ tɛɛ-fia.* (< *phi*)  
 1sg 3sg-COMPAR still-white:1sg  
 'I am lighter (in colour) than him (a lot lighter).'
- (d) *ʔũ-tɛ̌ə-tɛ̌ɪkua-le: the:-sə̌ tɛa-wa.* (< *ba*)  
 2sg-GEN-house-DEF:CL 3sg-COMPAR still-big  
 'Your house is bigger than his.'
- (e) *qa-kə-s-ta the:-sə̌ tɛa-dza.* (< *dza*)  
 1sg-go-NOM-LOC 3sg-COMPAR still-early:1sg  
 'I went earlier than him.' (lit. 'When I went was earlier than (when) he (went).')

In Qiang there is no way to say one referent is 'the same as' some other referent, but the same meaning can be expressed by saying that one referent and another are 'the same' in respect to some quality. If there are two NPs representing the two referents, they are joined by the comitative marker, /*na*/ (which comes between them), to form a single large NP, and so the person marking on the predicate, if there is any, is plural.

- (15) (a) *ʔũ-na-qa a-qəs ba'.* (< *ba*)  
 2sg-and-1sg one-form big:1pl  
 'You are as big as me.' (lit. 'You and I are the same big.')
- (b) *ʔũ-na-the:-tɛ-tɛ̌ɪkua a-qəs ba-tɛi.*  
 2sg-and-3sg-GEN-house one-form big-3pl  
 'Your house is as big as his.' (lit. 'Your house and his house are the same big.')

It is also possible to have one plural NP representing the two referents:

- (16) (a) *tɛizzi zuaha a-qəs we'.* (< *we*)  
 1dl height one-form have:1pl  
 'The two of us are of the same height.'
- (b) *thizzi zuaha a-qəs we-(tɛi).*  
 3dl height one-form have-3pl  
 'Those two persons are of the same height.'

If a clause with an adjective as predicate has a second argument, it is marked with one of the locative postpositions, generally /-*ɲa*/, an inessive, illative, or elative locative marker, as in (17a), or /-*ta*/, a general locative, as in (17b). This is the same marking as that used for non-direct arguments of active verbs.<sup>6</sup>

<sup>6</sup> The form /-*ta*/ is also used to mark datives and human undergoers, but here the usage seems to be that for adverbial elements, such as temporal and locative expressions.

- (17) (a) *the: layz su Ɂa tshimpe wa.*  
 3sg book study LOC smart very  
 ‘She is very good at her studies.’ (lit. she is smart in her studies)  
 (b) *the: za Ɂa bala-s ta he-the wa.*  
 3sg land LOC do/work-NOM LOC OR-capable very  
 ‘She is very good at working in the fields.’

Adjectives can take causative marking and become derived transitive verbs. They are then treated grammatically the same as any other transitive verb (see also (20a) below).

- (18) (a) *a-zə χtʂa-ka: a-Ɂu, tsan-tɕa-ɣzə-z.* (< *Ɂue*)  
 one-CL small-INDEF:one:CL OR-put too-NEG.IMP-spicy-CAUS  
 ‘Put a little (hot pepper), don’t make it too spicy.’  
 (b) *ɦa-nɔ̃-wu qəpatʂ ɦo-su-zə-ʂa.*  
 OR-sleep-INST head OR-dizzy-CAUS-1sgU  
 ‘I felt dizzy from sleeping.’

The imperative is marked by use of one of the orientation/direction prefixes,<sup>7</sup> and the prohibitive is marked by the prefix [tɕa- ~ tɕə- ~ tɕo-]. Generally only causativized adjectives appear in imperative or prohibitive clauses, as in (18a) and (19a), though there are exceptions, e.g. (19b) and (39b) below. In cases like (19b), the sense of the imperative is causative, even without causative marking.

- (19) (a) (*ʔu*) *qɦal-le: tə-tɕə-ɕtɕap-zə!*  
 2sg bread.roll-DEF:CL OR-NEG.IMP-burn-CAUS  
 ‘Don’t (you) burn the bread roll!’  
 (b) *bolu-la-ha de-phin-tha!*  
 flour-DEF-pl OR:IMP-level-AUX  
 ‘Make the flour level!’

Adjectives can take some of the auxiliary verbs that non-adjectives can take, such as in (20a)–(20b):

- (20) (a) *misəq wu qa quaha tə-niχ-z dzə.*  
 sun AGT 1sg face OR-black-CAUS able  
 ‘The sun can make my face become black.’  
 (b) *pəs mə ma-χqa, tshəi tə-niχ bu.*  
 today weather NEG-clear prickly.ash.peel OR-black will  
 ‘Today the weather is not good, the prickly ash peel will become black.’

<sup>7</sup> The particular prefix used for the imperative is based on the semantics of the action involved, and will often differ from the usual prefix used for marking direction of action or perfective aspect. For example, /phin-tha/ ‘level’ in (19b) takes /də-/ because the arm would move outward to smooth the flour, but this adjective would normally take the prefix /sə-/ in a non-imperative clause.

Certain auxiliaries relate to the ability of an actor (e.g. /ʏzə/ for learned ability, /dzə/ or /qe/ for natural (physical) ability), and so only causativized adjectives can appear with these auxiliaries.

There are at least two adjectives that are used as auxiliary verbs, /dzə/ ‘able, long’, as in (20a) and (21a), and /je/ ‘possible; good to eat’ in (21b):

- (21) (a) *qa u-tɕu ma-la.* ( $< m\grave{a} + dz\grave{a} + a$ )  
 1sg OR-see NEG-able:1sg  
 ‘I can’t see.’  
 (b) *tɕa zɛ-s me-je.*  
 here write-NOM NEG-possible  
 ‘(You) can’t write here.’

Adjectives can appear in a serial verb structure where they modify another verb, e.g. /tse na/ (‘look’ + ‘good’) ‘good looking’, /dzuə na/ (‘sit’ + ‘good’) ‘good to sit, there is room to sit’ (see also (22) below). In this structure, while the adjective semantically seems to function as an adverbial, it is syntactically the main verb, and so if the sentence is negated, the negative prefix is affixed to the adjective, not the verb, e.g. /tse-ma-na/ (‘look’ + NEG + ‘good’) ‘not good looking’. The adjective can also take the adverb /-wa/, e.g. /tse-na-wa/ (‘look’ + ‘good’ + ‘very’) ‘very good looking’. These combinations become idiomatic or lexicalized to different degrees. In the case of /tse na/ ‘good looking’, we might say this has lexicalized into an adjective; in the case of /dzuə na/ it has developed the idiomatic meaning ‘there is enough room to sit’; while in the case of /tɕhə khuai-tha/ ‘eat quickly’ in (22) we don’t find any degree of idiomization or lexicalization.

- (22) *the: stuaha tɕhə khuai-tha-wa.*  
 3sg food/rice eat fast-AUX-very  
 ‘S/he eats very quickly.’

Adjectives can also appear in adverbial subordinate clauses, as can verbs, as in (23), where the adjective takes the genitive marker as a nominalizer, and also takes negation, perfective aspect, and continuative aspect marking:

- (23) *təp-ni hia-mə-tɕi-xɿʂapə-tɕ, ʔū tɕa i-pə-l-ən-pa.*  
 tomorrow-ADV OR-NEG-yet-black-GEN 2sg here OR-arrive-come-2sg-DTV  
 ‘Come here tomorrow before it gets dark.’

#### 4. Functioning as head of an NP

Nouns can be formed from adjectives (reduplicated or not) by simply adding one of the two definite markers or the indefinite marker after the adjective, as in (24). This is not possible with other verbs except the existential verbs.

- (24) (a) *niq* 'black' + *le:* DEF:CL > *niqle:* 'the black one'  
 (b) *ba* 'big' + *te:* DEF:CL > *bate:* 'the big one'  
 (c) *tiwi* 'tall' + *ke:* INDEF:CL > *tiwike:* 'a tall one'

Once it is nominalized, the adjective can then function as an argument of a clause:

- (25) *qa phis-le:* *gua:* (< *gua*)  
 1sg white-DEF:CL wear:PROSP:1sg  
 'I want to wear the white one.'

Reduplicated forms are nominalized even without the (in)definite marking. There are three types of reduplication: AA, Au:A, AAu: (/u:/ is a syllable added to the reduplicated form—this type is only possible with adjectives); there is no ABB, ABAB, or AABB reduplication. The meaning of AA reduplication is plurality; the meaning of Au:A reduplication is intensification; the meaning of AAu: reduplication is plurality plus intensification. With AAu: and Au:A reduplication, the phonetic stress is on /u:/ (the stress is marked with an acute accent in the examples in (26)). Following are some examples:

- (26) (a) AA *patʂpatʂ* 'some round things'  
 (b) Au:A *patʂú:patʂ* 'very round things'  
 (c) AAu: *patʂpatʂú:* 'some very round things'

In most cases reduplicated forms do not modify a noun, but instead are simply nominalized by /-ke/ and used with the copula or /pe/ 'become', e.g.

- (27) *qhal patʂpatʂ-ke:* *ɲua:*  
 bread.rolls round.round-INDEF:CL COP  
 'Bread rolls are round things.'

Reduplicated adjectives can appear together in a clause with a common noun, and are often followed by the indefinite marker /-ke/. They are then noun phrases in their own right in apposition to the common noun, clarifying the nature of the referent of the common noun. In this structure the nominalized adjective can precede or follow the common noun. Following are some examples:

- (28) (a) *qhal patʂpatʂ-ke:*  
 bread.rolls round.round-INDEF:CL  
 'some round bread rolls'  
 (b) *fa niqniq-ke:*  
 clothing black.black-INDEF:CL  
 'some very black clothing'  
 (c) *patʂu:patʂ pana la-ha tɕa-la sə:*  
 round.round thing DEF-pl where-LOC have/exist  
 (could also be [*pana patʂu:patʂ*])  
 'Where are the very round things?'

## 5. Functioning as modifier of a noun

An adjective can modify a noun either in the form of a non-nominalized post-head adjective, in the form of a nominalized pre-head relative clause structure, or in the form of a post-head nominalized appositional structure. (In rare instances, a bare adjective can appear before the noun; see example (5) in Ch. 15.) Which structure is used often depends on the complexity of the modifier: a complex modifier will appear in the pre-head relative clause structure, while a simple adjective will generally appear in the post-head position. Compare the following three examples:

- (29) (a) *ɛtɛimi na-tɛ mi*                      (b) *mi na*  
          heart good-GEN person                      person good  
          ‘(a) good hearted person’                      ‘(a) good person’  
       (c) *mi na-m*  
          person good-NOM  
          ‘(a) good person’ (lit.: ‘a person, a nice one’)

This is a common pattern found in Tibeto-Burman languages. In some languages within Tibeto-Burman, and in Chinese, the original post-head adjective pattern fell into disuse, and now only the pre-head relative structure or post-head nominalized structure is possible. The pre-head pattern results in a Noun–Noun structure, with the first noun modifying the second one, as in nominal compounds.

The nominalizers used in these modificational structures are two of the three used for nominalizing non-stative verbs, /-m/ for human referents and /-tɛ/ for other referents. The instrumental nominalizer, /-s/, is not used with adjectives. In (29c), there are two NPs in apposition to each other, something like ‘a person, a nice one’. This contrasts with the usual form of the adjective without nominalization, as in (29b). In the case of nominalization by /-m/ or /-tɛ/, the form would generally be followed by the indefinite or definite marker, as in (30):

- (30) *fə ɛpu-tɛ-ke: sə.*  
       clothing red-GEN-INDEF:CL have/exist  
       ‘There is an item of red clothing.’

Although this form looks similar to a single noun phrase which has both a post-head adjective and indefinite marking (i.e. [fə-ɛpu-ke:] (clothing-red-INDEF:CL)), it is clearly two noun phrases, as the order of the two NPs could be reversed. This structure is used for emphasizing the quality, such as in a contrastive context.

When more than one adjective appears in an NP in the post-head form, the order of the adjectives in terms of type of adjective (VALUE, SHAPE, QUALITY, AGE, COLOUR; see Dixon 1982) is the mirror image of that in English, but the same if one thinks in terms of order relative to the head (i.e. HEAD^COLOUR^SHAPE^AGE^QUALITY^VALUE). Compare the examples in (31a)–(31j).

- |                                                                            |                                                                        |
|----------------------------------------------------------------------------|------------------------------------------------------------------------|
| (31) (a) <i>Ɂuatʂa lapa ba</i><br>bowl flowery big<br>'big colourful bowl' | (b) <i>fa phiʂ dzə</i><br>clothing white long<br>'long white clothing' |
| (c) <i>fa phiʂ ba</i><br>clothing white old<br>'old white clothing'        | (d) <i>fa dzə ba</i><br>clothing long old<br>'old long clothing'       |
| (e) <i>mianpau phiʂ matʂa</i><br>bread white soft<br>'soft white bread'    | (f) <i>tʂhetsə xsə na</i><br>car new good<br>'good new car'            |
| (g) <i>xɿʂepi dzə na</i><br>knife long good<br>'nice long knife'           | (h) <i>səf po tiwi</i><br>tree thick tall<br>'tall thick tree'         |
| (i) <i>stei xsə tse</i><br>axe new sharp<br>'sharp new axe'                | (j) <i>mi xsə tshimpe</i><br>person new smart<br>'smart young person'  |

## 6. Adverbial modification of adjectives

There is some difference between the adverbs that adjectives take and those that other verbs can take. Most adjectives, when they act as predicates, can take the post-verbal adverb /-wa/ 'very' (e.g. /na-wa/ (good + very) 'very good'), whereas most verbs cannot take this adverb. Only certain mental state verbs, such as /topu/ 'like', can take /-wa/ (as well as /kən/). Some adjectives also cannot take this adverb, but there does not seem to be a semantic reason for this, as the adjectives that can take /-wa/ and those that cannot are often in the same semantic field, e.g. /phi-wa/ 'very white', but not \*/niq-wa/ 'very black'. For the adjectives that cannot take /-wa/, the pre-verbal adverb /kən/ 'very' can be used. Following are some other examples of these two adverbs:

- |                                                                |                                                |
|----------------------------------------------------------------|------------------------------------------------|
| (32) (a) <i>basta-wa</i><br>slow/late-very<br>'very slow/late' | (b) <i>ba-wa</i><br>big-very<br>'very big'     |
| (c) <i>kən niq</i><br>very black<br>'very black'               | (d) <i>kən sta</i><br>very wide<br>'very wide' |

Some adjectives can only take /-wa/, while some can only take /kən/, though some other adjectives can take either of the two adverbs, e.g. /ɕupu-wa/ ~ /kən ɕupu/ 'very red'. Some loanwords can also take /-wa/, even when the loanword is followed by the auxiliary loanword particle. In this case /-wa/ follows the auxiliary particle, e.g. /khuai-tha/ ('fast' < Chinese *kuài* + auxiliary loanword particle) > [khuai-tha-wa] 'very fast'.

The adverb /-wa/ can be used with the negative prefix, though the negative prefix appears before the adjective, with /-wa/ modifying the whole negative plus



adjective combination, e.g. [ma-na-wa] (negative + 'good' + 'very') 'very not good' (this cannot have the meaning 'not very good'). The adverb /-wa/ is generally not used with verbs, though /kən/ can be used with some verbs, e.g. /kən topu/ ('very' + 'like') 'like very much'. An adjective modified by /kən/ can modify a noun (e.g. /fa-kən-niq/ ('clothing' + 'very' + 'black') 'very black clothing'), but this is not possible with /-wa/. The adverb /-wa/ can also be followed by a nominalizer, as in the following headless relative clause:

- (33) *sku-wa-m-le-ze*  
 lovely-very-NOM-DEF-CL  
 'the very lovely person' (lit. 'the person who is very lovely')<sup>8</sup>

There is another post-verbal adverb, /quəla/ 'very', used to modify adjectives and at least one auxiliary verb, e.g. /na quəla/ 'very good', /ɕupu quəla/ 'very red', /dzə quəla/ ('able' + 'very') 'very capable'. Adjectives can also be reduplicated for expressing greater intensity.

For expressing the meaning 'too much, excessively', either a preposed adverb, /tsan/, or a postposed adverb, /-ʃ/, can be used with most adjectives. Only /tsan/ can be used before the negative or prohibitive prefix (see (18a)).

- |                                                    |                                                        |
|----------------------------------------------------|--------------------------------------------------------|
| (34) (a) <i>niq-əʃ</i><br>black-too<br>'too black' | (b) <i>basta-ʃ</i><br>slow/late-too<br>'too slow/late' |
| (c) <i>ba-ʃ</i><br>big-too<br>'too big'            | (d) <i>po-ʃ</i><br>thick-too<br>'too thick'            |
- 
- |                                                              |                                                            |
|--------------------------------------------------------------|------------------------------------------------------------|
| (35) (a) <i>tsan-ma-nə</i><br>too-NEG-good<br>'not too good' | (b) <i>tsan-ma-niq</i><br>too-NEG-black<br>'not too black' |
| (c) <i>tsan-me-ʃue</i><br>too-NEG-bright<br>'not too bright' | (d) <i>tsan-me-tsue</i><br>too-NEG-sour<br>'not too sour'  |

The adverb /tɕa/ ([tɕa ~ tɕi ~ tɕa ~ tɕo]) is used generally to mean 'still, yet', but when used in the comparative construction it has the sense of 'relatively *adjective*' or 'even more *adjective*'. When this adverb appears with the negative and a directional prefix, the word order is [prefix-negative-/tɕa/-verb].

- |                                                                        |                                                         |
|------------------------------------------------------------------------|---------------------------------------------------------|
| (36) (a) <i>tɕa-wa</i> (< <i>ba</i> )<br>still-big<br>'relatively big' | (b) <i>tɕa-niq</i><br>still-black<br>'relatively black' |
|------------------------------------------------------------------------|---------------------------------------------------------|

<sup>8</sup> The nominalizer /-m/ derives from the word /mi/ 'person', and so is usually used when the nominalization refers to a person.

- |          |                                                               |     |                                                                 |
|----------|---------------------------------------------------------------|-----|-----------------------------------------------------------------|
| (c)      | <i>tɛa-basta</i><br>still-slow/late<br>'relatively slow/late' | (d) | <i>tɛo-pu</i><br>still-thick<br>'relatively thick'              |
| (37) (a) | <i>ma-tɛa-χtɕa</i><br>NEG-still-small<br>'not so small'       | (b) | <i>ha-mə-tɛa-χtɕa</i><br>OR-NEG-still-small<br>'not so reduced' |

The superlative of adjectives and some stative verbs is marked by the prefix /tɛi-/:

- |          |                                                                                           |     |                                                                  |
|----------|-------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------|
| (38) (a) | <i>tɛi-wa-la-lə</i> (< <i>ba</i> )<br>most-big-DEF-CL(stick-like.object)<br>'the biggest' | (b) | <i>tɛi-topu</i><br>most-like<br>'like (something (the))<br>most' |
| (c)      | <i>tɛi-fi</i> (< <i>phi(s)</i> )<br>most-white<br>'whitest'                               | (d) | <i>tɛi-χtɕa</i><br>most-small<br>'smallest'                      |

The form of the superlative is similar to one of the harmony forms of the preverbal adverb for marking a relative degree, but the superlative does not undergo vowel harmony.

## 7. Adverbial phrases

Some adjectives can act as manner adverbs in adverbial expressions, usually followed by the adverbial marker [-ji ~ tɛi] or /-ni/:

- |          |                                                                                                                 |
|----------|-----------------------------------------------------------------------------------------------------------------|
| (39) (a) | <i>the: na-ji</i> <i>mo-su.</i><br>3sg good-ADV NEG-study<br>'S/he doesn't study well.'                         |
| (b)      | <i>ɽũ təp-ni</i> <i>dala-ni</i> <i>tu-ju.</i><br>2sg tomorrow-ADV early-ADV OR-rise<br>'Get up early tomorrow.' |

Aside from the possibility of adjectives appearing in adverbial phrases, there is also a very small class of words that are used mainly in adverbial expressions, but can also modify nouns (in the form of appositional structures), or can act as head of a noun phrase themselves when nominalized by the definite or indefinite markers. Semantically they seem like adjectives, but they are unlike adjectives and verbs in that they cannot act as predicates (though they can appear as copula complement), cannot take negation, and cannot appear in the comparative construction, and they are also unlike other adverbs in the language in that they can modify nouns and take the (in)definite markers, (42b).<sup>9</sup> These adverbial phrases precede

<sup>9</sup> The behaviour of these words is not uniform. The form /ata/ can take the causative suffix /-z/ and then be used as a predicate, while the others cannot, and the form /akha/ cannot be nominalized.

the verbs, and can sometimes be marked by /-ni/ or [-ji ~ tci]. Generally manner adverbs take /-ni/, though if formed from a reduplicated adjective, then the adverbial marker is not used:

- (40) (a) *akha-kha ə-tchā* (b) *akha-ni ə-tchā*  
 slow OR-eat slow-ADV OR-eat  
 'eat slowly' 'eat slowly'
- (41) (a) *hama-ni dzə* (b) *ata-ni dzə*  
 stealthy-ADV eat fast-ADV eat  
 'eat stealthily (on the sly)' 'eat quickly'
- (42) (a) *the: hama-le: ŋuə.* (b) *mi hama-le:*  
 3sg stealthy-DEF:CL COP person stealthy-DEF:CL  
 'He is the evasive one.' 'the evasive person'

This class of forms can generally take the intensifying adverbs /kən/ and /-wa/, and the superlative /tci-/, but generally not the adverbs /tsan/ and /-ʃ/. They can appear before the noun as a modifier of the noun (e.g. [hama-le: mi] 'the evasive person'), but this is rather rare. More than one manner adverb can appear in a clause, with no change in marking, and no marking of coordination, and each conjunct may or may not have adverbial marking:

- (43) *the: hama-ni akhakha ə-qa.*  
 3sg stealthy-ADV slowly OR-go  
 'S/he slowly and quietly goes/went in.'

## 8. Summary

Following is a summary of the characteristics of each word class. Parentheses around a check means only a few words in that class have that characteristic, e.g. only certain mental verbs, such as /tupu/ 'like', can take the intensifying adverb /-wa/, and only nouns representing temporal expressions such as /təp/ 'tomorrow' can take the adverbial particle /-ni/.

We can see then that the class most often associated with the concept 'adjective' in Qiang is a sub-type of verb, having all of the characteristics which are used to define verbs in the language, but they form a sub-set within the class of verbs because of their ability to directly modify the noun, because of their special reduplication pattern, and because of the frequency with which they are nominalized by the (in)definite markers and then act as a noun head. We can also see that existential verbs are similar to adjectives in some ways, but differ from adjectives in being unable to modify nouns directly. The very small class of forms discussed in §7 may also be considered a type of adjective, as argued by Hajek (in Ch. 15), because of their ability to modify a noun directly, though they also share similarities with nouns, and as they are used mainly as manner adverbs and do not appear in the comparative construction, we consider them a sub-class of adverbs.

TABLE 1. Characteristics of the main form classes

	Nouns	Adverbs	Verbs				
			General	Active	Stative transitive	Adjectives (stative intrans.)	Existential
Able to take (in)definite marking (§4)	✓	✓				✓	✓
Able to take numeral-classifier phrase (§4)	✓						
Able to modify noun directly (§5)	✓	✓				✓	
Able to act as complement of copula clause	✓	✓					
Able to appear in relative clause structure (§5)			✓	✓	✓	✓	✓
Able to take orientation prefix (§3)			✓	✓	✓	✓	✓
Able to take negative prefix (§3)			✓	✓	✓	✓	✓
Able to be predicative (§3)			✓	✓	✓	✓	✓
Able to take causative marking (§3)			✓	✓	✓	✓	✓
Able to take person marking (§3)			✓	✓	✓	✓	(✓)
Able to take intensifying adverb /-wa/ (§6)		✓			(✓)	✓	✓
Able to appear in comparative construction (§3)					(✓)	✓	✓
Able to take adverbial particle (§7)	(✓)	✓				✓	
Able to appear in reduplication with /-u:/ (§4)						✓	
Able to follow another verb as modifier of that verb in a serial verb construction (§3)						(✓)	
Meaning of AA reduplication (§4)	(distributive)	no change		reciprocal or iterative repetition	no redup re-emergence of state	intensification or plurality re-emergence of state	inclusive
Meaning of iterative aspect (§3)							
Can only take prospective aspect if continuative aspect also used (§3)					✓	✓	✓

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# Adjectives in Lao

*N. J. Enfield*

It has been suggested that in every language one may establish, on morphosyntactic grounds, a class of *adjectives*, which will be ‘distinct from noun and verb’ (Ch. 1 of this volume).<sup>1</sup> The two distinct claims made here should not be confused or confounded. The first is that a class of words can be found for which the term *adjectives* is appropriate. The second is that this class will be independent from the noun and verb classes. Evidence from Lao (south-western Tai, Laos) shows that support for the first claim does not necessarily provide support for the second.

The aim of this chapter is to establish and elaborate upon the following two related points. First, there does exist a morphosyntactically distinct form class in Lao which may be identified as an *adjective* class. This class has a large number of members (hundreds), covering most of the semantic types suggested by Dixon (1982; Ch. 1 of this volume). Second, however, this class is not *distinct from* the verb class. Lao adjectives are a sub-type of verbs. They are distinct from other verb subtypes, but are not distinct from verbs as a class.

## 1. Introductory remarks on Lao

Lao is a south-western Tai language, spoken in Laos, north-east Thailand, and north-east Cambodia (Enfield 1999). It is an isolating language with lexical tone, typical of languages of the mainland South-east Asia region (Enfield 2003: ch. 2). There is no case-marking and no system of gender or other grammatical agreement. The language is neither head-marking nor dependent-marking, in any usual sense of these terms. Nominals are seldom grammatically obligatory. Ellipsis is widespread under contextual retrievability, making zero anaphora normal for definite/referential arguments. The unmarked constituent order is subject–verb–object, with a robust left position into which topics are placed, as well as a right position for afterthought constituents. There is sufficient evidence for a grammatical relation of subject, as well as one of object (or at least, direct verb complement). A copula normally has a nominal in copula complement function. There are next to

<sup>1</sup> I gratefully acknowledge the valuable contribution to the contents of this chapter made by fellow participants of the International Workshop on Adjective Classes, Melbourne, August 2002. I am particularly indebted to Sasha Aikhenvald, Felix Ameka, Wally Chafe, Grev Corbett, and Bob Dixon.

TABLE 1. Distinguishing properties of the *substantive* and *verb* classes

Property	Substantives	Verbs
Can be head of Noun phrase in subject position	+	–
Can be possessor in a possessive construction	+	–
Can take direct marking of negation	–	+
Can be a modifier linked to a head by the relativizer <i>thiɪ</i>	–	+

no bound morphemes or morphologically marked distinctions of subordination or finiteness. A great many central tasks of the grammar are performed by periphrasis. For example, manipulations of valency are handled by multi-verb constructions (Enfield forthcoming). Verbs show great flexibility in argument structure, often showing multiple patterns of transitivity. Finally, the language features a system of numeral classifiers (Enfield 2004), a feature which has been claimed to have consequences for the structure of the noun phrase (Gil 1987).

TABLE 2. A selection of properties distinguishing verbs from nouns, stative verbs from active verbs, and adjectives from other verb sub-types

	Properties (see key)	Noun (e.g. <i>maʉ3</i> 'dog')	V. achievement (e.g. <i>hɛn3</i> 'see')	V. accomplishment (e.g. <i>tam1</i> 'weave')	V. activity (e.g. <i>lɛɛn1</i> 'run')	V. state (e.g. <i>huu4</i> 'know')	V. adjective (e.g. <i>diɪ3</i> 'good')
Verb-only properties	1	–	+	+	+	+	+
	2	–	+	+	+	+	+
Stative-only properties	3	n/a	–	–	–	+	+
	4	n/a	–	–	–	+	+
Adjective-only properties	5	–	–	–	–	–	+
	6	–	–	–	–	–	+
	7	–	–	–	–	–	+
	8	–	–	–	–	–	+

*Key to properties:*

1. As NP modifier, linked by *thiɪ* (§3)
2. As predicate, directly preceded by negator *bøø* (§3)
3. V with perfective marker, entails 'V now' (§3)
4. Negation does not give future reading (§3)
5. Type A reduplication (§4, §4.2)
6. Intensification with *khanaat5* 'really, very' (§4)
7. Comparative in frame NP1 \_\_ *kuai* NP2 (§4, §4.3)
8. Superlative in frame NP1 \_\_ *thiɪ sut2* (§4, §4.3).

Two major categories of the Lao lexicon are *substantives* and *verbs*. Substantives typically refer to things and people. Verbs typically refer to actions, events, and properties. Table 1 identifies some basic distinctions between these two higher level classes.

There are sub-distinctions within the class of substantives, with pronouns a separate class, and nominals dividing into nouns and classifiers. Nominals do many things that pronouns cannot do. They form heads of noun phrases in combination with demonstrative determiners, they form heads of possessive constructions, they can be direct complements of the copula verb *pên*<sub>3</sub>, they enter into numeral classifier constructions, and they take modifiers linked by the relativizer *thii*<sub>1</sub>. Other distinct word classes of relevance to this chapter are ideophones, numerals, and quantifiers. These will be discussed as they arise, below. Further details on the broader sub-division of the Lao lexicon are beyond the scope of this discussion.

Table 2 sets out a set of specific properties which distinguish various word classes, featuring different verb sub-classes (including adjectives), as discussed in this chapter.

## 2. Preliminaries on nominals and noun phrase structure

### 2.1. NOMINALS AS VERBLESS CLAUSE COMPLEMENTS

Nominals can be used as verbless clause complements, as in the following text example:<sup>2</sup>

- (1) [*ñāφ-thaan<sub>1</sub> nan<sub>2</sub>*]<sub>NP<sub>1</sub></sub>      [*khon<sub>2</sub> mùang<sub>2</sub> phiin<sub>2</sub>*]<sub>NP<sub>2</sub></sub>  
monk          DEM.NONPROX person district P.  
‘That monk (was) a Phiin District person.’

However, no verbal trappings are available for clause complements of this kind. The following examples show that the noun phrase which functions as complement in (1) (subscripted ‘NP<sub>2</sub>’) cannot take direct negation (2), irrealis marking (3), achievement marking (4), or progressive marking (5), nor can it function as a modifier of a nominal linked by the relativizer *thii*<sub>1</sub> (6):

- (2) \**ñāφ-thaan<sub>1</sub> nan<sub>2</sub>*                      *bòφ khon<sub>2</sub> mùang<sub>2</sub> phiin<sub>2</sub>*  
monk          DEM.NONPROX NEG person district P.  
(That monk (was) not a Phiin District person.)

<sup>2</sup> There is no standard romanization of Lao. Examples are transcribed according to the following conventions:

Consonants	Vowels	Tones
<i>b d</i>	<i>i u</i>	1 /mid level/
<i>p t c k q</i> (glottal stop)	<i>ù</i> (unrounded)	2 /high rising/
<i>ph th kh</i>	<i>ê e o</i>	3 /low rising/
<i>m n ñ ng</i>		4 /high falling/
<i>f s h</i>	<i>è a ò</i>	5 /low falling/
<i>w l j</i>		φ /unstressed/



- (3) \**ñāφ-thaan1 nan2*                      *siφ khon2 mùang2 phiin2*  
 monk            DEM.NONPROX IRR person district P.  
 (That monk will (be) a Phiin District person.)
- (4) \**ñāφ-thaan1 nan2*                      *dajφ khon2 mùang2 phiin2*  
 monk            DEM.NONPROX ACHV person district P.  
 (That monk got to (be) a Phiin District person.)
- (5) \**ñāφ-thaan1 nan2*                      *kamlang2 khon2 mùang2 phiin2*  
 monk            DEM.NONPROX PROG            person district P.  
 (That monk (was) being a Phiin District person.)
- (6) \**ñāφ-thaan1 thii1 khon2 mùang2 phiin2*  
 monk            REL person district P.  
 (a/the monk who (was) a Phiin District person)

## 2.2. NOMINALS AS NOUN MODIFIERS

Nominals can be used to modify nominals, as in the following examples:

- (7) *saa3 tholasap2*  
 cable telephone  
 ‘telephone cable’
- (8) *kèèw4 nom2*  
 bottle milk  
 ‘milk bottle’

There are differences in grammatical behaviour between nominals and verbs in modifier function. First, nominal modifiers can never be linked to their heads by the relativizer *thii1*:

- (9) \**kèèw4 thii1 nom2*  
 bottle REL milk  
 (milk bottle; i.e. ‘bottle which (is) milk’)

A second difference is that modification of nominals by verbs often involves the use of a modifier classifier (Enfield 2004). In the following, the (a) examples show a verb (stative and active, respectively) directly modifying a noun, the (b) examples show these same modifiers linked to their noun heads by the semantically general classifier *qan3*:

- (10) (a) *còòk5 ngaam2*  
 cup beautiful  
 ‘beautiful cup’
- (b) *còòk5 qan3 ngaam2*  
 cup CL beautiful  
 ‘the beautiful cup’

- (11) (a) *còðk5 tok2*  
cup fall  
'fallen cup' ('cup which has fallen')
- (b) *còðk5 qan3 tok2*  
cup CL fall  
'the fallen cup' ('the cup which has fallen')

When the modifier is a nominal, however, use of a linking modifier classifier is not possible:

- (12) (a) *còðk5 din2*  
cup earth  
'earthen cup'
- (b) \**còðk5 qan3 din3*  
cup CL earth  
(the earthen cup)

### 2.3. STRUCTURE OF THE NOUN PHRASE

It is difficult to make a definitive statement about relative ordering of modifiers within the Lao noun phrase, but some generalizations are possible. For example, possessors appear further from the head than other types of modifiers:

- (13) (a) *khuaj2 dam3 phen1*  
buffalo black 3SG  
'his/her black buffalo'
- (b) *khuaj2 phen1 dam3*  
buffalo 3SG black  
'His/her buffalo is black.' (NOT: 'his/her black buffalo')

However, no obvious generalizations seem possible for the relative ordering of multiple adjectives. One difficulty in making a generalization about adjective ordering is that noun phrases in Lao can have a 'non-configurational' structure (Gil 1987). When multiple adjectives are used as modifiers of a single nominal head, often one or more of them is attached to its own classifier, in a phrase syntactically separate from the head noun. Consider the following alternative descriptions of a scene in which a big black buffalo ate my rice:

- (14) (a) *khuaj2 dam3 ñaj1 kin3 khaw5 khòðj5*  
buffalo black big eat rice 1SG  
'The/a big black buffalo ate my rice.'
- (b) *khuaj2 dam3 too3 ñaj1 kin3 khaw5 khòðj5*  
buffalo black CL.ANIMAL big eat rice 1SG  
'Black buffalo, the/a big one ate my rice.'
- (c) *khuaj2 ñaj1 kin3 khaw5 khòðj5 too3 dam3*  
buffalo big eat rice 1SG CL.ANIMAL black  
'The/a big buffalo ate my rice, the/a black one.'

Examples (14b) and (14c) have an ‘appositional’ feel, as conveyed by the English translations. Also note that presence of the classifier in the noun phrase suggests (but does not entail) definiteness of the referent (Enfield 2004).

Another point to note about modifier ordering is that while both adjectives and active verbs may be unmarked modifiers of nouns in noun phrases, they do not combine with each other readily:

- (15) (a) *maa3 dam3*  
dog black  
‘black dog’  
(b) *maa3 haw1*  
dog bark  
‘barking dog’  
(c) \**maa3 dam3 haw1*  
dog black bark  
(barking black dog)

### 3. The class of verbs in Lao

The term *verb* may be used for members of the class of words accessible to a defined set of grammatical markings and processes associated with words denoting semantically prototypical actions/events (e.g. *tii3* ‘hit’, *lèn1* ‘run’, *haj5* ‘give’, *hèn3* ‘see’, *vaw4* ‘speak’). This category in Lao includes words denoting not only actions and events, but also words denoting ‘property concepts’, which in some other languages are confined to a distinct *adjective* class (e.g. *suung3* ‘(be) tall’, *dii3* ‘(be) good’, *dèng3* ‘(be) red’).

Canonical main verbs such as *tii3* ‘hit’, *vaw4* ‘say’, or *hèn3* ‘see’ in simple clauses have a number of distinguishing properties which they do not share with nominals, as illustrated in Figure 1.

- Verbs may be directly marked by aspect-modality elements, including:
  - preposed – irrealis markers *siφ* and *caφ*
  - negator *bòd1/bòφ*
  - attainment marker *dajφ*
  - progressive markers *kamlang2* and *phum2*
  - postposed – perfective marker *lèw4*
- Verbs are commonly used alone in affirmative responses to polar questions (‘yes-answers’)
- Verbs may (in combination with their complements) form nominal modifiers linked to their heads by the relativizer *thii1*
- Verbs may be modified directly by ideophones

FIGURE 1. Distinguishing properties of Lao verbs

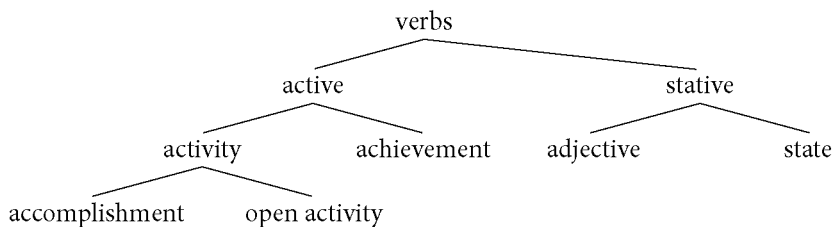


FIGURE 2. A taxonomy of Lao verb sub-types

While all Lao verbs display these properties, they vary with respect to more subtle grammatical possibilities. This variation may be used as a basis for sub-categorization of the verb class, as illustrated in Figure 2.

A first division is between active and stative verbs. Unlike active verbs, stative verbs (a) do not normally take marking for progressive aspect, and (b) when marked with the postposed perfective *lèw4*, entail their own truth at the moment of speech. For example, *mii2 ngen2 lèw4* [have money PFV] means ‘(I) already have (the) money’ (entailing that I have it now), while *hèn3 ngen2 lèw4* [see money PFV] means ‘(I) have already seen (the) money’ (not entailing that I see it now). Semantically, active verbs entail ‘something happens’, while stative verbs do not. Within the class of active verbs, a first distinction is between achievements and activities, where for example only the latter may appear as a complement of *leem4* ‘begin to’. Activities may be further subdivided into accomplishments and open activities, where for example only the former can take *bòø lèw4* [NEG PFV] as a complement (e.g. *huan2 kuu3 puk2 bòø lèw4* [house 1SG build NEG PFV] ‘My house is not finished being built’). The class of stative verbs is divided into adjective verbs and state verbs, with only adjective verbs being available for ‘Type A reduplication’. This and other differences are discussed in later sections.

Figure 2 is a true taxonomy. This means that any node is a more narrowly defined instance of any of the nodes to which it is connected by lines above it. Adjectives, thus, cannot be said to be ‘distinct from verbs’ in Lao, because they *are* verbs in Lao. They possess all the defining properties of the verb class (Figure 1).

The following examples illustrate the common behaviour of various different verb sub-types. The examples used are *phop1* ‘meet’ (achievement), *puk2 huan2* ‘build house’ (accomplishment), *ñaang1* ‘walk’ (open activity), *mii2 pum4* ‘have book’ (state), and *suung3* ‘tall’ (adjective). First, all these verb sub-types may be directly marked (pre-verbally) by the irrealis markers *siø* and *caø*:

- (16) *khòøj5 siø phop1 man2*  
 1SG IRR meet 3SG  
 ‘I will meet him.’

- (17) *khòòj5 siø puk2 hùan2*  
1SG IRR build house  
'I will build a house.'
- (18) *khòòj5 siø ñaang1*  
1SG IRR walk  
'I will walk.'
- (19) *khòòj5 siø miiz pùm4*  
1SG IRR have book  
'I will have a book.'
- (20) *khòòj5 siø suung3*  
1SG IRR tall  
'I will be tall.'

All verbs may be directly marked (pre-verbally) by the negator *bòò1* (which takes the unstressed form *bòø* when pre-marking a verb):

- (21) *khòòj5 bòø phop1 man2*  
1SG NEG meet 3SG  
'I won't/don't meet him.'
- (22) *khòòj5 bòø puk2 hùan2*  
1SG NEG build house  
'I don't/won't build a house.'
- (23) *khòòj5 bòø ñaang1*  
1SG NEG walk  
'I don't/won't walk.'
- (24) *khòòj5 bòø miiz pùm4*  
1SG NEG have book  
'I don't have a book.'
- (25) *khòòj5 bòø suung3*  
1SG NEG tall  
'I am not tall.'

Note that the two stative verb sub-types group together here in not giving future readings when appearing with the negation marker (24, 25).

All verbs may be directly marked (pre-verbally) by the achievement marker *dajø*:

- (26) *khòòj5 dajø phop1 man2*  
1SG ACHV meet 3SG  
'I did/got to meet him.'

- (27) *khòðj5 dajø puk2 huan2*  
 1SG ACHV build house  
 'I did/got to build a house.'
- (28) *khòðj5 dajø ñaang1*  
 1SG ACHV walk  
 'I did/got to walk.'
- (29) *?khòðj5 dajø mii2 pum4*  
 1SG ACHV have book  
 '?I did have a book.'
- (30) *?khòðj5 dajø suung3*  
 1SG ACHV tall  
 '?I was/got to be tall.'

The use of the pre-verbal achievement marker *dajø* with stative verbs is somewhat marked (29, 30). Elicitation gets mostly negative responses, but these combinations are considered acceptable with inchoative readings and with negation. They certainly occur in spontaneous speech.

All verbs may be directly marked (pre-verbally) by the progressive markers *kamlang2* and *phum2*:

- (31) *khòðj5 kamlang2 phop1 man2*  
 1SG PROG meet 3SG  
 'I am meeting him.'
- (32) *khòðj5 kamlang2 puk2 huan2*  
 1SG PROG build house  
 'I am building a house.'
- (33) *khòðj5 kamlang2 ñaang1*  
 1SG PROG walk  
 'I am walking.'
- (34) *?khòðj5 kamlang2 mii2 pum4*  
 1SG PROG have book  
 'I am having/getting (a) book(s).'
- (35) *?khòðj5 kamlang2 suung3*  
 1SG PROG tall  
 'I am being/getting tall.'

Again, this marking is unusual with stative verbs, unless some kind of gradability is construed (e.g. coming into possession of many books, getting tall).

All verbs may be used in combination with the post-verbal perfective marker *lèèw4* (elsewhere meaning 'finish'):

- (36) *khòòj5 phop1 man2 lèèw4*  
 1SG meet 3SG PFV  
 'I met him already.'
- (37) *khòòj5 puk2 hùan2 lèèw4*  
 1SG build house PFV  
 'I built a/the house already.'
- (38) *khòòj5 ñaangi lèèw4*  
 1SG walk PFV  
 'I have walked/did walk already.'
- (39) *khòòj5 mii2 pùm4 lèèw4*  
 1SG have book PFV  
 'I already have a book.'
- (40) *khòòj5 suung3 lèèw4*  
 1SG tall PFV  
 'I am already tall.'

The 'perfective' *lèèw4* shows another contrast between stative and active verbs. When a stative verb combines with *lèèw4*, there is an entailment that '*p* is the case now'. This entailment does not hold with active verbs. In (36–40), both and only the examples featuring stative verbs entail that the predication is the case at the time of utterance. In other words, if a speaker utters (39), then he 'has a book' at the time of speech; if he utters (40), then he is 'tall' at the time of speech. In none of (36–8), however, does the combination 'V+*lèèw4*' entail 'V now'.

All verbs may (in combination with their complements) form nominal modifiers in combination with the relativizer *thii1*:

- (41) *khon2 thii1 phop1 man2*  
 person REL meet 3SG  
 'the person who meets him'
- (42) *khon2 thii1 puk2 hùan2*  
 person REL build house  
 'the person who builds a house'
- (43) *khon2 thii1 ñaangi*  
 person REL walk  
 'the person who walks'
- (44) *khon2 thii1 mii2 pùm4*  
 person REL have book  
 'the person who has a book'
- (45) *khon2 thii1 suung3*  
 person REL tall  
 'the person who is tall'

All verbs may be used alone as affirmative responses to polar questions (i.e. as ‘yes-answers’), as illustrated in the following two examples:

- (46) Q: *caw4 phop1 man2 bòð3*  
           2SG meet 3SG PCL  
           ‘Did/will you meet him?’  
   A: *phop1*  
       meet  
       ‘(Yes, I did/will) meet (him).’
- (47) Q: *man2 suung3 bòð3*  
           3SG tall PCL  
           ‘Is he tall?’  
   A: *suung3*  
       tall  
       ‘(Yes, he is) tall.’

Many verbs may be nominalized using either of the nominalizers *kaan3* ‘work, activity’ or *khuam2* ‘sense’. These nominalizers have different meanings, *kaan3* appearing more often with activity verbs and *khuam2* appearing more often with adjectives (and other stative verbs):

- (48) (a) *kaan3 khaa5* [work kill] ‘killing’  
       (b) *kaan3 lùùm2* [work forget] ‘forgetting’  
       (c) *kaan3 khañaaj3* [work expand] ‘expansion’
- (49) (a) *khuam2 dii3* [sense good] ‘goodness’  
       (b) *khuam2 dang3* [sense loud] ‘volume’  
       (c) *khuam2 ngaam2* [sense beautiful] ‘beauty’

However, these tendencies are far from consistent. Sometimes adjectives can appear with *kaan3* (e.g. *kaan3 dii3* [work good] ‘an appropriate action’), and sometimes active verbs can appear with *khuam2* (e.g. *khuam2 fan3* [sense dream] ‘a dream’). Some verbs can appear with both (Prasithrathsint 2000: 264), and some with neither. And occasionally even nouns can appear with these nominalizers.

Finally, ideophones—a class of sound-symbolic expressions denoting highly specific semantic distinctions of appearance or other perceptual quality—can only appear in direct combination with verbs:

- (50) *maa3 too3 nii4*      *\*(dam3) piφ-pii4*  
       dog CL DEM.GNL black EXPR.VERY.BLACK  
       ‘This dog is really black.’
- (51) *maa3 too3 nii4*      *\*(nòðn2) sêφ-lêê2*  
       dog CL DEM.GNL lie EXPR.AT.AWKWARD.ANGLE  
       ‘This dog is lying at an awkward angle.’



#### 4. Characteristics of the adjective sub-class of verbs

Lao adjectives have all the defining properties of verbs, as described in the previous section. Accordingly, they share none of the grammatical properties of nouns. In addition, and unlike other verb sub-types, Lao adjectives show the properties listed in Figure 3.

Compare the grammatical behaviour of the adjective *suung3* ‘tall’ with the active verb *lèen1* ‘run’. First, the active verb (in the (b) example) does not undergo Type A reduplication:

- (52) (a) *khon2 sung0-suung3 mèen1 qaaj4 khòòj5*  
 person REDUP-tall be O.BRO 1SG  
 ‘The tallish person is my brother.’  
 (b) *\*khon2 lèn0-lèen1 mèen1 qaaj4 khòòj5*  
 person REDUP-run be O.BRO 1SG  
 (The run-ing-ish person is my brother.)

Second, the active verb may not be marked directly by *kua1* ‘more than’ in a comparative construction:

- (53) (a) *qaaj4 khòòj5 suung3 kua1 qaaj4 caw4*  
 O.BRO 1SG tall more.than O.BRO 2SG  
 ‘My brother is taller than your brother.’  
 (b) *\*qaaj4 khòòj5 lèen1 kua1 qaaj4 caw4*  
 O.BRO 1SG run more.than O.BRO 2SG  
 (My brother runs more than your brother.)

Third, the active verb does not give a ‘somewhat’ reading when it appears with the complement-taking verb *jaak5* (‘want’):

- (54) (a) *qaaj4 khòòj5 jaak5 suung3*  
 O.BRO 1SG want tall  
 i. ‘My brother wants to be tall.’  
 ii. ‘My brother is somewhat tall.’

- Adjectives may undergo Type A reduplication (if monosyllabic)
- Adjectives may be marked directly by *kua1* ‘more than’ in comparative and superlative constructions, and by *thiit-sut2* in superlative constructions
- Adjectives may take *jaak5* (elsewhere ‘want’) as a pre-verbal modal with the meaning ‘somewhat’
- Adjectives may be intensified by postposed *khanaat5* ‘extent’ and *teep5* ‘rather’

FIGURE 3. Distinguishing properties of Lao adjectives

- (b) *qaaj4 khòòj5 jaak5 lèèn1*  
 O.BRO 1SG want run  
 'My brother wants to run.'  
 (NOT: My brother somewhat runs.)

Fourth, the active verb cannot be modified by intensifiers *khanaat5* 'extent' and *teep5* 'rather':

- (55) (a) *qaaj4 khòòj5 suung3 khanaat5/teep5*  
 O.BRO 1SG tall extent/rather  
 'My brother is really/rather tall.'  
 (b) *\*qaaj4 khòòj5 lèèn1 khanaat5/teep5*  
 O.BRO 1SG run extent/rather  
 (My brother really/rather runs.)

Lao adjectives perform the two major adjective functions (see Ch. 1 of this volume), namely (1) making a 'statement of property', as the predicate of an intransitive clause, and (2) modifying a noun (in underived form) within a noun phrase. However, these properties are general properties of verbs in Lao, and are not exclusive to adjectives.

The following sub-sections discuss in more detail the properties of adjectives just described. We begin, however, with a discussion of some semantic distinctions within the adjective class.

#### 4.1. DIXON'S SEMANTIC TYPES

Lao adjectives cover most of the semantic classes suggested by Dixon (1982; Ch. 1 of this volume). The four 'core adjective semantic types' are as follows:

DIMENSION	<i>ñaj1</i> 'big', <i>nòòj4</i> 'small', <i>ñaaaw2</i> 'long', <i>san5</i> 'short', <i>naa3</i> 'thick' (and many more)
AGE	<i>thaw5</i> 'old (of a person)', <i>num1</i> 'young' (of a person), <i>kaw1</i> 'old (of a thing)', <i>kèè1</i> 'old (of fruit or other edible)'
VALUE	<i>dii3</i> 'good', <i>ngaam2</i> 'beautiful', <i>phèèng2</i> 'dear', <i>cop2</i> 'wholesome, fine' (and a few more)
COLOUR	<i>dèèng3</i> 'red', <i>luang3</i> 'yellow', <i>khiaaw3</i> 'green/blue', <i>khaaw3</i> 'white', <i>dam3</i> 'black' (five terms only)

Other semantic types are listed as follows:<sup>3</sup>

PHYSICAL PROPERTY	<i>dip2</i> 'green, raw', <i>suk2</i> 'ripe, cooked', <i>naw1</i> 'rotten', <i>sot2</i> 'fresh', <i>lèèm3</i> 'sharp', <i>khêm2</i> 'salty', <i>vaan3</i> 'sweet', <i>nak2</i> 'heavy', <i>ñaq1</i> 'gritty', <i>lèèw3</i> 'sloppy', <i>khun4</i> 'opaque (of liquid)', etc. (many more: very large class)
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<sup>3</sup> SIMILARITY expressions and NUMBERS are not adjectives in Lao. Similarity is expressed by a verb *khùu2* 'like' (as in *caw4 khùu2 khòòj5* [2SG be.like 1SG] 'You're like me'). Numbers form a class of their own, distinct from other kinds of modifiers (for example, unlike other kinds of modifiers, numerals precede the nominal in their phrase).

HUMAN PROPENSITY	<i>kêng1</i> 'adept', <i>salaat5</i> 'clever', <i>ngoo1</i> 'stupid', <i>nguang1</i> 'sleepy', etc. (many more: large class)
SPEED	<i>vaj2</i> 'fast', <i>saa4</i> 'slow'
DIFFICULTY	<i>ngaaj1</i> 'easy', <i>ñaak4</i> 'difficult'
QUALIFICATION <sup>4</sup>	<i>thèè4</i> 'real', <i>cing3</i> 'true'
QUANTIFICATION	<i>laaj3</i> 'much', <i>nòòj5</i> 'little, not much'
POSITION	<i>kaj3</i> 'far', <i>kaj4</i> 'near', <i>thi1</i> 'close together', <i>haang1</i> 'far apart'

## 4.2. TYPE A REDUPLICATION

In Type A reduplication, an element  $\sigma^a$  becomes  $\sigma^o\text{-}\sigma^a$ , where  $\sigma^a$  takes full stress and bears lexically specified tone, while  $\sigma^o$  is unstressed, with no lexical tone and with neutralization of the usual length contrast in the vowel:<sup>5</sup>

- (56) *khon2 suung3*  
person tall  
'the tall person'

- (57) *khon2 sungø-suung3*  
person REDUP-tall  
'the tallish person'

This type of reduplication is normally used in attributive function (58) rather than predicative function, although the latter occurs (59) (with constraints; e.g. while ir-realis marking is possible (60), negation is not (61)):

- (58) *hùan2 sungø-suung3 mèèn1 hùan2 phen1*  
house REDUP-high be house 3SG  
'The tallish house is his house.'

- (59) *hùan2 phen1 sungø-suung3*  
house 3SG REDUP-high  
'His house is tallish.'

- (60) *hùan2 phen1 caø sungø-suung3*  
house 3SG IRR REDUP-high  
'His house will be tallish.'

- (61) *\*hùan2 phen1 bòø sungø-suung3*  
house 3SG NEG REDUP-high  
(His house is not tallish.)

<sup>4</sup> The two terms shown here are defective in that they do not take direct preposed aspect-modality marking (such as negation).

<sup>5</sup> A second type of reduplication—Type B—derives from  $\sigma^a$  the structure  $\sigma^{2+}\text{-}\sigma^a$ , where  $\sigma^{2+}$  is a stressed and lengthened version of  $\sigma^a$  with tone 2 overriding the original  $\alpha$  tone. This type is not restricted to adjectives, nor is it restricted to monosyllabic input. Note that Thai has the same two types of reduplication. Prasithrathsint (2000: 264–5) has argued that Thai adjectives are indistinct from other verbs, but she does not refer to Type A reduplication, which in fact does provide a clear basis for an adjective distinction.

None of the other verb sub-classes allow Type A reduplication. Many adjectives also cannot occur with Type A reduplication due to their being non-monosyllabic (e.g. *salaat5* ‘clever’). Note also the case of *lùajɸ-lùaj4*, a common expression meaning ‘all the time’, which has the structure of Type A reduplication, but where there is no input verb/adjective form *lùaj4* (i.e. it is inherently reduplicated).

Very occasionally, nominals are used in a Type A reduplication structure, as in the following attested example:

- (62) *juu1 theng2 phuɸ-phuu2      phunɸ*  
       be.at top    REDUP-mountain DEM.PCL.FAR.DISTAL  
       ‘far far away over in the mountains’

This is apparently an extended use of a nominal in an adverbial function; i.e. ‘mountain’ as ‘in the mountains’. Another attested example is *thùuk5 bòn1 sinɸ-siin4* [strike place REDUP-meat] ‘(It) struck (my rump) in the very meat’.

#### 4.3. COMPARATIVE AND SUPERLATIVE EXPRESSIONS

Comparative expressions involve a marker *kuaɸ* ‘more than’, which is derived from a verb *kua1* meaning ‘cross, surpass’ (cf. Ansaldo 1999).

- (63) *khòòj5 suung3 kuaɸ      caw4*  
       1SG    tall    more.than 2SG  
       ‘I am taller than you.’

None of the other verb classes can appear in this construction, as the following examples demonstrate:<sup>6</sup>

- (64) *\*khòòj5 phop1 man2 kuaɸ      caw4*  
       1SG    meet 3SG    more.than 2SG  
       (I meet him (more) than you.)
- (65) *\*khòòj5 puk2 huan2 kuaɸ      caw4*  
       1SG    build house more.than 2SG  
       (I build (a) house(s) (more) than you.)
- (66) *\*khòòj5 ñaang1 kuaɸ      caw4*  
       1SG    walk    more.than 2SG  
       (I walk (more) than you.)
- (67) *\*khòòj5 mii2 pum4 kuaɸ      caw4*  
       1SG    have book more.than 2SG  
       (I have (a) book(s) (more) than you.)

<sup>6</sup> Note, however, that in all these examples, insertion of the quantification adjective *laaj3* ‘much, very’ before the comparative particle *kua1* gives a grammatical expression with the required meaning.

The comparative particle can be used in combination with *muu1* '(member of) group' to create a superlative expression, as in the following example:

- (68) *khòòj5 suung3 kuaø muu1*  
 1SG tall more.than member(s).of.group  
 'I am the tallest (i.e. taller than the other members of the group).'

Another apparent 'superlative' construction—which lacks any noun phrase referring to a standard, but instead involves the word *sut2* 'extremity' in a locative adjunct—is often used not in a true superlative sense, but as merely strong emphasis ('really tall'):

- (69) *khòòj5 suung3 thii1 sut2*  
 1SG tall ORDIN extremity  
 'I am the tallest.' (or 'I am really tall.')

Neither of these constructions allow verbs from other verb classes.

#### 4.4. ADVERBIAL FUNCTION IN SERIAL VERB STRUCTURES

Some adjectives can function adverbially in serial verb structures, describing the quality or property of an action rather than of a thing. The following example shows the 'HUMAN PROPENSITY' adjective *kêng1* 'adept' in adverbial function:

- (70) *man2 vaw4 kêng1*  
 3SG speak adept  
 'S/he's good at talking.' ('S/he speaks well.')

Also, adjectives can be used as 'depictive secondary predicates' (in the sense of Schultze-Berndt and Himmelmann 2004), predicating a secondary and temporally transient property of one of the participants of a main clause (Enfield 2005). The following example shows *dip2* 'raw' in such a function:

- (71) *man2 kin3 siin4 nan4 dip2*  
 3SG eat meat DEM.NONPROX raw  
 'He ate that meat raw.'

So-called 'subject depictives' are ordered differently, as shown by the position of *maw2* 'intoxicated' in the following example:

- (72) *man2 maw2 maa2 hùan2*  
 3SG drunk come house  
 'He came home drunk.'

These adverbial functions cannot be performed by all adjectives (at least DIMENSION, AGE, and COLOUR are excluded). Adverbial and depictive functions thus constitute a grammatical property which subdivides the adjective class.

## 4.5. INCHOATIVIZATION OF ADJECTIVES USING DIRECTIONAL COMPLEMENTS

There is variation within adjectives in how they are ‘inchoativized’. Four directional verbs—*khaw5* ‘enter’, *qòòk5* ‘exit’, *khùn5* ‘ascend’, and *long2* ‘descend’—can be used after an adjective to express the meaning that the adjective property becomes ‘more’.<sup>7</sup>

- (73) *phêṭ1 khaw5*  
spicy enter  
‘get spicier’
- (74) *ñaj1 qòòk5*  
big exit  
‘enlarge’
- (75) *dii3 khùn5*  
good ascend  
‘improve’
- (76) *nòòj4 long2*  
small descend  
‘shrink, reduce’

Many verbs can take only one of the directional verbs in such a construction.

- (77) *dii3 khùn5/\*long2/\*khaw5/\*qòòk5*  
good ascend/descend/enter/exit  
‘improve’

Other verbs can take more than one:

- (78) *baa4 khaw5/khùn5*  
crazy enter/ascend  
‘get crazier’
- (79) *cèèng4 qòòk5/khùn5*  
clear exit/ascend  
‘become clearer’

One might expect there to be some systematicity relating to the apparent parallelism within the system, i.e. given that enter/exit and ascend/descend are opposites, and that many adjectives come in opposite pairs. But while one says *naaw3 khaw5* [cold enter] for ‘get colder’, one cannot say *\*hòòn4 qòòk5* [hot exit] for ‘get hotter’.

<sup>7</sup> Directional verbs are also used in combination with other verb types, but without ‘inchoative’ meanings. They regularly combine with active verbs which refer to a kind of action which can cause motion along some path (e.g. *khùn5* ‘ascend’ in *lèèṇ khùn5 khòòj4* [run ascend hill] ‘run up a hill’).

Rather, one says *hòòn4 khùn5* [hot ascend] ‘get hotter’. The degree and nature of the systematicity of these patterns remains to be investigated.

#### 4.6. VERBS OF STATE CHANGE AS ADJECTIVES

A number of verbs show properties of both active verbs and adjectives. These include state-change verbs such as intransitive *tèèk5* ‘break, broken’ and (S=O) ambitransitive *phang2* ‘destroy, destroyed’. Such verbs can be functionally similar to adjectival participles in English, yet without any ‘derivational’ morphological marking:

- (80) *caan3 nii4 caø tèèk5*  
 plate DEM.GNL IRR break  
 ‘This plate will break.’

- (81) *caan3 tèèk5 mèn1 caan3 khòòj5*  
 plate break be plate 1SG  
 ‘The broken plate is my plate.’

So far, these are properties of any verb. However, verbs of this kind, in addition, show a number of full adjective properties. They appear with Type A reduplication and in comparative constructions:

- (82) *caan3 tèkø-tèèk5 mèn1 caan3 khòòj5*  
 plate REDUP-break be plate 1SG  
 ‘The broken-ish plate is my plate.’

- (83) *caan3 khòòj5 tèèk5 kua1 caan3 caw4*  
 plate 1SG break more.than plate 2SG  
 ‘My plate is more broken than your plate.’

However, since verbs of state change always allow an ‘event’ reading, they do not show the stative-only property of not allowing a future reading under negation (see Figure 2).

The bridging context which allows reanalysis of some state change verbs as adjectives seems clear. As active verbs they predicate an event which entails a certain state change, where the resulting state is enduring. If the relevant event is understood as realized, such a verb can be equally regarded as predicating a ‘past event’ (where the result state automatically now holds) or a ‘present state’ (where a change-into-state event is assumed to have preceded).

Other state change verbs such as intransitive *taaj3* ‘die’ or (S=O) ambitransitive *peet5* ‘open’ do not display these adjective properties. It seems clear that these latter forms are excluded because they do not allow gradability, possibly a defining semantic component of adjectives in Lao.

#### 4.7. CIRCADIAN TIME-PERIOD TERMS

Terms for time periods within the cycle of a day such as *kham1* ‘evening’, *saw4*

'early morning', *suaj3* 'late morning', *vên2* 'daytime', and *dek2* 'late at night' behave like adjectives (taking direct negation and Type A reduplication), but show fairly restricted possibilities for occurrence with nominal arguments. Mostly, they are used adverbially:

- (84) *tòòŋ3 dek2*  
time.period late.at.night  
'the period late at night'
- (85) *tòòŋ3 dekø-dek2*  
time.period REDUP-late.at.night  
'the period late-ish at night'
- (86) *phen1 maa2 dek2*  
3SG come late.at.night  
'S/he came late at night.'

Not all circadian time-period terms behave in this way. The terms *vên2* 'daytime' and *saw4* 'early morning' may be Type A reduplicated, but require the addition of *tèè1* 'from' in adverbial function:

- (87) *tòòŋ3 sawø-saw4*  
time.period REDUP-early.morning  
'early-ish in the morning'
- (88) *phen1 maa2 \*(tèè1) saw4*  
3SG come from early.morning  
'S/he came in the early morning.'

While *khùùn2* 'night' does occur as a modifier in the expression *tòòŋ3 khùùn2* [time.period night] 'night time', it cannot be used at all as an adverbial modifier (89), nor can it be Type A reduplicated (90):

- (89) *\*phen1 maa2 (tèè1) khùùn2*  
3SG come from night  
(S/he came at night.)
- (90) *\*tòòŋ1 khùnø-khùùn2*  
time.period REDUP-night  
(the night-ish period)

#### 4.8. COLOUR TERMS

There are two classes of words used to describe COLOUR in Lao. The class of primary colour terms consists of five adjectives: *khaaw3* 'white', *dam3* 'black', *dèèŋ3* 'red', *khiaw3* 'blue/green', and *lùang3* 'yellow'. These behave like regular adjectives, taking direct negation, acting as direct nominal modifiers, appearing in comparative expressions, and allowing Type A reduplication. Secondary colour terms are



nominal, derived from nouns (e.g. *faa4* 'sky; blue', *bua3* 'lotus; pink', *namø-taan3* 'sugar; brown').<sup>8</sup> These do not display any of the properties of predicative adjectives. They cannot function as direct modifiers of heads in noun phrases:

- (91) (a) *lot1 (sii3) dam3*  
           vehicle colour black  
           'black (coloured) car'  
       (b) *lot1 \*(sii3) faa4*  
           vehicle colour blue  
           'blue coloured car'

They cannot be used alone as attributive predicates:

- (92) (a) *lot1 khan2 nan4 bøø dam3*  
           vehicle CL.VEHICLE DEM.NONPROX NEG black  
           'That car is not black.'  
       (b) *\*lot1 khan2 nan4 bøø faa4*  
           vehicle CL.VEHICLE DEM.NONPROX NEG blue  
           '(That car is not blue.)'

A more complex structure (involving the copula *mèèn1*) is required in order to express the meaning intended by (92b):

- (93) *lot1 khan2 nan4 bøø mèèn1 sii3 faa4*  
       vehicle CL.VEHICLE DEM.NONPROX NEG be colour blue  
       'That car is not blue-coloured.'

Finally, secondary colour terms cannot be Type A reduplicated:

- (94) (a) *lot1 damø-dam3 mèèn1 lot1 khòòj5*  
           vehicle REDUP-black be vehicle 1SG  
           'The blackish vehicle is mine.'  
       (b) *\*lot1 faø-faa4 mèèn1 lot1 khòòj5*  
           vehicle REDUP-blue be vehicle 1SG  
           '(The blueish vehicle is mine.)'

## 5. Derivation

There are various patterns by which adjectival expressions can be derived.

<sup>8</sup> The term *namø-taan3* literally means 'water/juice of the toddy palm'. In former times (and still, in some cases), Lao villagers would reduce the juice of the toddy palm seed and use the resulting brown lumps as sugar. White cane sugar has long replaced this in most places in Laos, yet the term *namø-taan3* is used for the white substance. Thus, while the substance *namø-taan3* is white, the colour *namø-taan3* is brown. This is a clear demonstration that the colour term is not a (synchronically) transparent reference to a thing or substance typically having the denoted colour, but is idiomatically specified.

## 5.1. COMPLEX ADJECTIVES

## 5.1.1. Compounds involving noun and verb

Some types of complex adjectives combine a verbal and a nominal element. Not being monosyllabic, these do not enter into Type A reduplication. They are nevertheless adjectives as defined by their behaviour in comparative constructions, with the modal *jaak*<sub>5</sub> 'want/tends to' and with the intensifiers *khanaat*<sub>5</sub> 'extent' and *teep*<sub>5</sub> 'rather'.

A set of some hundreds of terms involve *caj*<sub>3</sub> 'heart', such as *caj*<sub>3</sub>-*dii*<sub>3</sub> 'kind' (lit. 'good heart') and *dii*<sub>3</sub>-*caj*<sub>3</sub> 'glad' (lit. 'heart good'; cf. Diller and Juntanamalaga 1990 on the nearly identical Thai system). There appear to be different patterns of grammaticalization with respect to becoming a simple adjective. For example, *man*<sub>2</sub> *caj*<sub>3</sub>-*dii*<sub>3</sub> [3SG heart-good] can be paraphrased as 's/he is good-hearted' or 'his/her heart is good', and accordingly negation can appear in two different slots:

- (95) (a) *man*<sub>2</sub> *caj*<sub>3</sub> *dii*<sub>3</sub>  
           3SG heart good  
           'He's good-hearted.'  
       (b) *man*<sub>2</sub> *bò* *caj*<sub>3</sub> *dii*<sub>3</sub>  
           3SG NEG heart good  
           'He's not good-hearted.'  
       (c) *man*<sub>2</sub> *caj*<sub>3</sub> *bò* *dii*<sub>3</sub>  
           3SG heart NEG good  
           'He's not good-hearted.' (i.e. 'He, (the) heart is not good.')

On the other hand, while *man*<sub>2</sub> *caj*<sub>3</sub>-*dam*<sub>3</sub> [3SG heart-black] can be paraphrased as 's/he is black-hearted', it is odd paraphrased as '?his/her heart is black', perhaps since it draws on a more tenuous metaphor. Accordingly, negation directly on the verb component *dam*<sub>3</sub> 'black' is not preferred:

- (96) (a) *man*<sub>2</sub> *caj*<sub>3</sub> *dam*<sub>3</sub>  
           3SG heart black  
           'He's black-hearted.'  
       (b) *man*<sub>2</sub> *bò* *caj*<sub>3</sub> *dam*<sub>3</sub>  
           3SG NEG heart black  
           'He's not black-hearted.'  
       (c) ?*man*<sub>2</sub> *caj*<sub>3</sub> *bò* *dam*<sub>3</sub>  
           3SG heart NEG black  
           (He's not black-hearted; or, He, (the) heart is not black.)

Other examples of compound adjectival expressions involving noun and verb include body-part-plus-quality combinations such as *haang*<sub>3</sub> *kut*<sub>2</sub> 'missing tail' or *phom*<sub>3</sub> *dèeng*<sub>3</sub> 'red hair'. These appear as adjective type predicates in the following examples:

- (97) *mèèw2 caw4 caø haang3 kut2*  
 cat 2SG IRR tail lopped  
 'Your cat will be lopped-tailed.'
- (98) *luuk4 man2 bòø phom3 dèèng3*  
 child 3SG NEG hair red  
 'Her children are not red-haired.'

These body-part-plus-quality combinations show the full grammatical behaviour of verb/adjectives, as the following attested example shows, with *mèn3 paak5* [stink mouth] in a comparative construction:

- (99) *phakø-hòòm3 mèn3 paak5 kua1 phakø-thiam2*  
 CT.VEGETABLE-onion stink mouth more.than CT.VEGETABLE-garlic  
 'Onions are more mouth-stinking than garlic.'

### 5.1.2. *Synonym compounds*

Commonly, two or more adjectives are used together, in a pattern typical of the Lao tendency to elaborate parallelism. These often have specific idiomatic meanings:

- (100) (a) *hang1-mii2* [wealthy-have] 'rich'  
 (b) *ñaj1-kuang4* [big-wide] 'expansive'  
 (c) *ñung5-ñaak4* [knotted-difficult] 'complicated'  
 (d) *dii3-ngaam2* [good-beautiful] 'good, proper'  
 (e) *kêng1-kaa4-saa3maat4* [adept-daring-able] 'brave, strong, able'

Such elaborative compounding is not adjective-specific, however. Here are some examples of elaborative compounds consisting of nouns and/or verbs:

- (101) (a) *sùu4-khaaj3* [buy-sell] 'trade, engage in commerce'  
 (b) *khaa5-fan2-lan1-thèèng2* [kill-slice-cut-stab] 'annihilate violently'  
 (c) *kèèw4-vèèng3-ngen2-kham2* [gem-ring-silver-gold] 'valuables'

### 5.2. 'ZERO DERIVATION'

Sometimes a single verb has two meanings, one as an adjective and one as another verb sub-type. For example, the verb *khaw5* 'enter' has a second meaning 'sharp (for cutting)'. In this second meaning, *khaw5* behaves like a PHYSICAL PROPERTY adjective, and accordingly enters into adjective-specific grammatical behaviour, such as the Type A reduplication illustrated in the following example:

- (102) *miit4 khawø-khaw5*  
 knife REDUP-sharp  
 'the/a sharp-ish knife'

The bridging context for such a meaning shift is the co-presence of sharpness of a knife and its 'entering' whatever it cuts (e.g. a piece of meat).

Another example is the transitive verb *mii2* 'have (something)', whose second meaning is intransitive 'wealthy'. These verb–adjective alternations do not show sufficient regularity to allow useful generalizations which would justify the term 'derivation'.

### 5.3. DERIVATIONAL PREFIX *KHI*Ø-

The prefix *khi*Ø- derived from *khi*5 'shit' has a range of derivational functions, including derivation of adjectives.

- (103) *khi*Ø-V → N  
e.g. *khi*Ø-*lak*1 'thief' [*lak*1 'steal']
- (104) *khi*Ø-N → N  
e.g. *khi*Ø-*dang*3 'snot' [*dang*3 'nose']
- (105) *khi*Ø-ADJ → ADJ  
e.g. *khi*Ø-*laaj*4 'ugly' [*laaj*4 'awful']  
*khi*Ø-*thii*1 'stingy' [*thii*1 'closely spaced']

Since these derived expressions are not monosyllabic, they generally do not enter into Type A reduplication. One exception is *khi*Ø-*laj*Ø-*laaj*4 'rather ugly' (derived from *khi*Ø-*laaj*4 'ugly').

### 5.4. DERIVATIONAL CONSTRUCTION *PÊN*3-*TAA*3-V 'BE-EYE-V'

The 'be-eye-V' construction productively derives complex adjectives from verbs. It has the following structure:

- (106) *X pê*3-*taa*3-V 'X be-eye-V' = 'X is such that one would V it (or regard it as V)'

Here are some examples:

- (107) *pê*3-*taa*3-*hak*1 'lovable' [*hak*1 v. tr. 'love']
- (108) *pê*3-*taa*3-*juu*1 'liveable' [*juu*1 v. ambitr. (S=A) 'live somewhere']
- (109) *pê*3-*taa*3-*jik*2 'pinchable' (of small child) [*jik*2 v. tr. 'pinch']

As a sub-type of verbs, adjectives may of course also appear in the 'V' slot in this construction. The result is a derived adjective:

- (110) *pê*3-*taa*3-*sèp*4 'delicious looking' [*sèp*4 'delicious']

The following examples contrast the base and derived forms of an adjective *sèp*4 'delicious':

- (111) (a) *qa*haan3 *nii*4      *sèp*4  
food      DEM.GNL delicious  
'This food is delicious.'

- (b) *qahaan3 nii4*      *pên3-taa3-sèp4*  
 food      DEM.GNL be-eye-delicious  
 'This food looks delicious'

The derived expression commonly appears with an adverbial function, as follows:

- (112) *laaw2 kin3 qahaan3 nii4*      *pên3-taa3-sèp4*  
 3SG eat food      DEM.GNL be-eye-delicious  
 'He's eating this food with gusto' (i.e. it looks like he's finding it delicious)

## 6. Conclusion

The aim of this chapter has been to describe the Lao adjective class, and in particular to catalogue its properties as a sub-type within the class of verbs. The evidence from Lao is sufficient to establish the adjective class as a distinct class, but not as a class distinct from verbs. Table 2, above, lists some relevant properties which establish Lao adjectives first as verbs (as opposed to nouns), second as stative verbs (as opposed to active verbs), and third as a sub-class of their own.

Grammatical analysis can be done at several levels of grain, and if pushed to the extreme, combinatoric behaviour can, theoretically, be used to establish a separate grammatical class for every morpheme in the language (Gross 1979). This would, of course, defeat the grammarian's purpose, namely to make useful generalizations about the combinatoric productivity of the lexicon. A list of significant properties identify Lao adjectives such as *dèng3* 'red', *ñaj1* 'big', and *diì3* 'good' as members of a higher level class of verbs, along with words with rather different meanings such as *tiì3* 'hit', *lèè1* 'run', and *huu4* 'know' (and to the exclusion of words such as *khon2* 'person', *khaa3* 'leg', and *muu3* 'pig'). There are differences between verb sub-classes, but none are in significant opposition to all the rest together. To treat the adjective class as separate to the verb class in Lao would not only miss an important set of generalizations, but would misrepresent the structure of the Lao lexicon. I conclude, therefore, that Lao provides no evidence against the suggestion that a morphosyntactically defined class of adjectives can be found to be distinct in every language, but that it does provide evidence against the suggestion that this class will always be distinct from the class of verbs.

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## Adjective Classes: What can we Conclude?

*John Hajek*

### 1. Introduction<sup>1</sup>

To many linguists, the claim made by Dixon in Chapter 1 that all languages will have three major word classes (noun, verb, adjective) is challenging and provocative. Cross-linguistically, it is generally considered that the distinction between noun and verb is, with rare exceptions, a robust one and relatively easy to establish, according to basic grammatical functions. Nouns prototypically head noun phrases which function as core arguments and appear in copula complements (or verbless clauses), whilst verbs prototypically function as heads of (in)transitive predicates which also bear all tense, aspect, and mood (hereafter TAM) marking. Our ability to distinguish adjectives has long been known to be more difficult across languages (e.g. Dixon 1982a, Bhat 1994, Wetzer 1992, 1996), since none of these basic grammatical functions are associated only with adjectives, as opposed to either nouns or verbs. Grammatical differences that allow for adjectives to be distinguished, when they occur, are often much more subtle and diffuse. As a result, and as Dixon points out, many linguists are reluctant to recognize the existence of an independent adjective class in a language they are describing.<sup>2</sup>

Whilst it may sometimes appear difficult to find evidence that allows us to distinguish adjectives from other word types, Dixon, in Chapter 1, claims that such a task should still be possible with more subtle testing, as the cited evidence from Yir-Yoront (Alpher 1991) and Chinese (Xu 1988) suggest. The distinction between

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<sup>2</sup> There is increasing cross-linguistic evidence that the basic grammatical criteria used to distinguish nouns and verbs may be fuzzier than is generally thought. Dixon in Chapter 1 points to the well-known case of Nootka where more subtle testing is required, but where a distinction exists nevertheless. Anward et al. (1997) refers to more recent problematic cases, such as Tongan. Nordlinger and Sadler (2004) provide substantial evidence to show that TAM marking is not as prototypically verbal as thought: many languages in fact allow such marking on nouns—in verbless predicates and in noun phrases.

noun and verb classes is not in doubt in any of the thirteen languages described in this volume. However, a number of authors choose not to recognize the existence of an independent adjective class in their language. As we shall see, in each such case, adjectives are assigned to the verb class, as a result of shared verb-like predicative behaviour (with associated TAM marking). It remains true, nevertheless, that in all cases authors are able to identify criteria, sometimes very subtle, that allow for adjectives and verbs (and nouns) to be distinguished, as Dixon predicts. The same authors do not always, however, feel that such differences have sufficient weight to establish independent status for adjectives, or even sub-class status specifically as adjectives within a larger class. The reasons for this will be addressed below.

In the sections that follow I consider the cross-linguistic patterning of a number of different grammatical criteria with respect to the behaviour of potential adjectives, and assess how useful each is in allowing us to distinguish adjectives from both nouns and verbs. I also make a number of typological observations about the systems described, and discuss other issues such as the weight of descriptive traditions, and the possible relationship between head- vs. dependent-marking and the behaviour of adjectives. The chapter ends with a discussion of adjective-like elements which are restricted to attributive function only, and which may plausibly form an independent adjective class in some of the languages described in this volume.

## **2. Eurocentrism, and descriptive tradition in the Asia-Pacific region**

The frequent hesitation amongst linguists in recognizing the existence of a separate adjective class in languages they are describing appears to be strongly reflective both of the specific descriptive traditions of different language areas, and of a wider, long-standing tendency to deny independent status to adjectives across languages. Within the European grammatical tradition, adjectives were subsumed for centuries within the category of noun, given the frequently shared features of number, gender, and case marking. Recognition of a separate adjective class is a relatively recent phenomenon that has taken centuries to develop in Europe, and often in the face of considerable resistance. Whilst the first (partial) separation of nouns and adjectives only occurred in the fourteenth century when Thomas of Erfurt established a separate nominal sub-class of adjectives (*nominem adiectivum*) alongside normal nouns (*nominem substantivum*), the first reference to adjective as an independent class in European languages is relatively recent. It occurred only in the eighteenth century for French (Girard 1747), and almost a century later (Vanzòn 1834) for Italian, with full acceptance only achieved in the twentieth century in each case (Scarano 1999).

Where adjectives in a language are not noun-like, as they usually are in European languages, Dixon notes in Chapter 1 that they tend to be assigned to the verb class, especially when they show any kind of verb-like behaviour. This observation finds support in the geolinguistic distribution of adjective systems described in



this volume. All four languages spoken in the Americas are reported to have an independent adjective class, as is Russian spoken in Europe. But of the seven languages spoken in the Asia-Pacific region, four (Lao, North-East Ambae, Qiang, Semelai) are described by their respective authors in this volume as having adjectives functioning as a verb sub-class. Korean is reported to have an independent verb-like class of adjective, while Japanese and Manange have split systems, of which at least one primary component is verb-like. The Eurocentric tradition referred to by Dixon is reinforced by a strong tendency, geographically focused on (South-)East Asia, that has much to do with Sinitic and Austronesian linguistic descriptive traditions whereby elements that are verb-like in behaviour are assigned to the verb class.

There is, however, some evidence of a slow change in attitudes towards adjectives under way in Asia, as has already occurred in Europe. Mandarin Chinese is perhaps the best known and most frequently cited example of a language that reportedly does not distinguish verbs and adjectives (e.g. Bhat 1994, Thompson 1988, Schachter 1985). But the existence of an independent adjective class has found support amongst Chinese linguists (e.g. Xu 1988, Deng et al. 1996). As Dixon notes, detailed investigation by Xu (1988) has uncovered a number of morphosyntactic differences that point to a separation of adjectives and verbs in that language. More recent research on Chinese adjectives has also determined the existence of a little-known but relatively large class of non-predicative adjectives in Chinese (with estimates varying from 200 to 400 *per* Deng et al. 1996). Since these adjectives are apparently exclusively attributive and have no verb-like predicative functions, they cannot be classed as verbal and should be recognized, as Deng et al. (1996) and other Chinese linguists do, as adjectival. I return to the important issue of attributive-only adjectival elements towards the end of this chapter.

Attitudes to adjectives also show signs of slow change elsewhere in the wider Sinicized area, including Korean and Japanese: the independent verb-like adjective class in Korean has in the past been called 'verbs', 'descriptive verbs', 'inflecting words [i.e. verbs]' (e.g. Lee 1989, Lee and Ramsey 2000). A similar pattern is observed for Japanese: its verb-like inflected adjectives have also been assigned to the verb class in the past (see Dixon 1982 and Backhouse, Chapter 2, for details).

### 3. Adjectives in languages described in this volume

The characterization of adjectives varies significantly across the sample of thirteen languages described in this volume, with some languages, as already noted, reported not to have an independent class of adjectives, challenging the important claim by Dixon in Chapter 1 that all languages will have three major word classes: noun, verb, and adjective.

Seven languages are reported by authors to have an independent adjective class (or classes). Of these, Jarawara, Mam, and Papatla Totonac all have a single adjective class. Russian and Tariana also have a single class but with significant internal

bifurcation: Russian has a major distinction between noun-like long forms and verb-like short forms. These are for the most part closely intertwined as historically and lexically related, but show significant differences in behaviour. Tariana's small adjective class is unusual in that most members can exhibit both noun-like and verb-like behaviour by appearing in either copula complements or in verbal predicates, as discussed in Chapters 1 and 4. Two languages, Japanese and Manange, are recognized as having multiple independent adjective classes. In the case of the former, there is a verb-like inflected adjective class and a noun-like uninflected class. Manange has, alongside what Genetti and Hildebrandt in Chapter 3 label a simple adjective class (which Dixon suggests could be labelled noun-like in Chapter 1), an additional verb-like adjective class.

Korean has an independent verb-like adjective class. Although Korean adjectives pattern closely with verbs in both predicative and attributive functions, Sohn is able to provide a highly detailed list of differences between the two classes (see Table 1 in Chapter 9). With respect to the remainder (North-East Ambae, Lao, Qiang, Semelai, Wolof), the authors claim that adjectives in these languages are members of the verb class, notwithstanding any evidence that might allow for adjectives and verbs to be distinguished. A number of authors (e.g. Hyslop for North-East Ambae, LaPolla and Huang for Qiang, and Enfield for Lao) are more explicit and further categorize adjectives in their languages as stative verbs or, less commonly, as an adjectival sub-class of stative verbs. The behaviour of adjectives across these languages does not appear to be equally verb-like. Adjectives seem to be most verb-like in Wolof with relatively few identifying criteria to distinguish them. Adjectives share all basic verb properties in Lao, and are extremely verb-like, but Enfield, in Chapter 14, is also able to identify a small number of properties unique to adjectives, such as the comparative and so-called Type A reduplication with approximative effect.

In no language described in this volume are adjectives assigned exclusively to the noun class, although a strong tendency to noun-like behaviour is noted for some languages, e.g. Jarawara (where adjectives more accurately pattern with possessed nouns) and Japanese (uninflected adjectives only). Previous descriptions of Papantla Totonac have suggested adjectives in that language are members of the noun class, but Levy, in Chapter 6, argues with substantial evidence that adjectives form an independent class.

#### **4. Intransitive predicate vs. copula (and verbless clauses)**

Languages described in the volume appear to be about evenly split with regard to whether adjectives appear in intransitive predicates or as copula complements (or as verbless clause complements when copulas are absent). The distinction is used by all authors as the primary criterion in establishing word classes, but is not applied in the same fashion with respect to the classification of adjectives. In all cases predicative function is taken to be evidence of strongly verb-like behaviour, and

strongly categorial in favour of assignment of adjectives to the verb class (or more rarely, to an independent verb-like class). The reverse does not apply to adjectives appearing in copula complements: in no case where this occurs are adjectives assigned to the noun class. They are instead always given independent status.

As already noted, languages with exclusively predicative adjectives in major classes are concentrated in the Asia-Pacific region (North-East Ambae, Korean, Lao, Qiang, Semelai, and partially Japanese and Manange). Japanese also has a verb-like inflected class that functions in the predicate, alongside an additional uninflected class that functions as copula complement. In Manange, which also has two adjective classes, verb-like adjectives show mixed behaviour, conditioned by aspect. They are predicative in the perfective, but appear in the copula complement when either imperfective or irrealis is marked. So-called simple adjectives are never predicative, and usually appear with the copula. Both classes share the additional feature of optional copula deletion in some contexts.

In Wolof, spoken in West Africa, adjectives and verbs are prototypically predicative, and nouns appear in copula complements, but the distinction is lost in merged negative constructions which no longer distinguish the two clause types (see Chapter 10). In Tariana, most adjectives are able to function either as predicate heads (with tense aspect marking) or as copula complements. This type of behaviour is cross-linguistically unusual, but is known to occur in a small number of languages, such as Mundari (Wetzer 1992).

In all other languages described in this volume (Jarawara, Mam, Papantla Totonac, Russian), adjectives appear only as copula complements (or in verbless clauses). In Russian the so-called short form is considered to be more verb-like, since it does not share the property that long forms and nouns do of appearing in either nominative or instrumental case when in the copula complement.

Predicative function, where it is reported, is in all cases also associated with verb-like TAM marking. This additional characteristic is always taken to be strong supporting evidence in favour of classifying adjectives as fully verbal (with the partial exceptions of verb-like adjectives in Japanese, Korean, and Manange). Verbs and adjectives correspond most closely with each other in Wolof and Lao with respect to the range of potential marking. No differences are reported in Lao and only a very subtle difference can be described in Wolof, where the imperfective marker tends to have a restricted habitual sense with adjectives but not verbs. However, in all other languages with TAM marking on adjectives, restrictions of one kind or another apply to adjectives that do not apply to verbs, providing a useful distinguishing criteria. In Qiang, for instance, adjectives cannot take the completive, and in Tariana, adjectives, when predicative, cannot take the habitual-impersonal *-kana* nor can they appear in prohibitive constructions.

In those languages in which adjectives appear in copula complements or verbless clauses, TAM marking on adjectives is absent or very rare. In Mam, adjectives may take only the (im)perfective inflection *-taq*. All other TAM marking is restricted to verbs.

## 5. Negation and adjectives

Evidence presented in this volume suggests that languages rarely employ a negation strategy that uniquely distinguishes adjectives from other major word classes at clause level. Where adjectives appear in intransitive predicates, the negating strategy is shared with verbs, e.g. North-East Ambae. Where they appear in copula complements or verbless clauses, there is no difference between adjectives and nouns, e.g. Mam. In some languages, such as Papantla Totonac and Russian, the same strategy is used to negate nouns, verbs, and adjectives. Partial exceptions to this observation can, however, be found. In Japanese, for instance, verb-like inflected adjectives can be distinguished from positive verb forms, but also from negative verb forms which appear with an additional negative affix. In Korean the general negator *an* applies equally to verbs and adjectives but the alternative *mos* 'not/cannot' is normally restricted only to verbs.

## 6. Comparative

All languages described in this volume, with the exception of Jarawara, have some kind of comparative construction. The comparative appears to be a very strong and cross-linguistically reliable diagnostic that allows us to separate adjectives from both verbs and nouns. This is consistent with observations about the usefulness of this criterion made by Dixon in Chapter 1. Only Japanese and Manange, both with multiple, fully independent adjective classes, allow expression of the comparative equally with nouns, verbs, and adjectives. Of the remaining eleven languages in the sample, ten show evidence of some kind of comparative pattern, function, or structure limited to adjectives.

Eight languages permit comparative constructions exclusively, or almost so, with adjectives. There seems to be no correlation with verb-like or non-verb-like behaviour of adjectives across these languages.

Some languages even have more than one type of comparative. Semelai has two comparative constructions—both restricted to adjectives. The first is morphologically complex, involving the comparative infix *raʔ*, and is limited to the inner closed Class 1 set of eight dimension adjectives, e.g. *jlēʔ* 'short' and *jə<raʔ> lēʔ* 'shorter'. It also has an additional periphrastic construction borrowed from Malay involving *ləbeh* 'more', and applied to the open adjective Class 3 e.g. *ləbeh ʔilək* (lit. more good) 'better'. In Qiang, adjectives are optionally inherently comparative in the absence of an explicit standard of comparison as in (1a). Disambiguation is possible, if required, by expansion, as seen in (1b, c):

- |     |     |                     |     |                     |     |                       |
|-----|-----|---------------------|-----|---------------------|-----|-----------------------|
| (1) | (a) | <i>the: tiwi</i>    | (b) | <i>the: tiwi-wa</i> | (c) | <i>the: a-za tiwi</i> |
|     |     | 3sg tall            |     | 3sg tall-very       |     | 3sg one-CL tall       |
|     |     | 'He is tall/taller' |     | 'He is very tall'   |     | 'He is a bit taller'  |

There is an additional, explicit, morphological comparative when the standard

of comparison is expressed in the same sentence or in preceding discourse. It is restricted to adjectives and some verbs expressing gradient concepts.

Tariana is the only language reported to have different comparative constructions according to word class. In this language, the standard of comparison is typically omitted. Quality expressed by an adjective can be compared by means of the comparative enclitic *=iha*, e.g. *kadite* 'black' and *kadite=iha* 'blacker (than another one)'. Verbs, but not nouns, can also be compared, but require the verb *-yena* 'to pass, to exceed':

- (2) *kiaku di-yena-naka*  
 be.strong 3sg.NONFEM-exceed-PRES.VIS  
 'he exceeds (the other one) in strength; he is stronger than X'

In Wolof, with the most verb-like of all adjectives, verbs and adjectives share the same type of comparative construction involving the verb *gën(a)* 'to be better, to be more, to surpass'. However, the language is unusual in having rare examples of inherently comparative adjectives, seen in (3). These provide some support in favour of distinguishing adjectives in that language.

- (3) (a) *njool* 'tall' *sut* 'to be taller/more competent than'  
*rafet* 'pretty', *baax* 'good' *dàq* 'to be prettier/better at than'  
 (b) *Aamadou moo sut Ibu*  
 Amadou 3sg taller Ibou  
 'Amadou is taller than Ibou'

Authors in this volume are not equally consistent in the diagnostic weight they assign to the comparative in terms of categorizing adjectives. In most cases (Mam, Papantla Totonac, Russian, and Tariana) where the adjective class is recognized as an independent class and the comparative is used as an important distinguishing criterion in its favour, adjectives are typically or optionally non-predicative in major clauses. Korean with its verb-like adjective class is the only exception. But in the cases of North-East Ambae, Lao, Qiang, and Semelai, the existence of a comparative restricted to adjectives is used by their respective authors to delimit, along with other criteria, a specific sub-class of stative or stative-like verbs. It is not considered sufficient to override the strongly verbal nature of adjectives seen in their predicative function. In other languages, the existence of a morphological comparative restricted to a (small) subset of adjectives, as reported in Semelai, is sometimes considered an important criterion in favour of word class status for adjectives.

## 7. Intensifier

At least five languages (Korean, Lao, Qiang, Semelai, and Tariana) have an intensifier that is either uniquely applied to adjectives or has a specific meaning of intensification only with adjectives. This phenomenon occurs in our sample only with

languages in which adjectives are classified as verb-like (Korean, Lao, Qiang, and Semelai) or are optionally verb-like as in Tariana with its unusual mixed system. The reasons for such a correlation observed here and the extent to which it may hold across other languages are not clear but certainly warrant further investigation. It may turn out to be the case that languages will frequently employ an adjective-specific intensifier allowing for adjectives to be distinguished from verbs in otherwise strongly verb-like systems.

## 8. Reduplication

Reduplication with a semantic but not class-changing effect specific to adjectives is an unexpectedly effective criterion that allows for adjectives to be distinguished from other word types. This distinguishing ability occurs in at least seven languages in our sample (North-East Ambae, Korean, Lao, Manange, Qiang, Semelai, Wolof). Unexpectedly, all of these languages have verb-like adjectives (Manange also has an additional so-called simple adjective class). The reason for this correlation is not understood and, like the adjective-specific intensifier, warrants further investigation. Reduplication appears most frequently to mark intensification on adjectives, but less so on verbs, as in Qiang where the effect on verbs usually involves reciprocity.

In Semelai reduplication has major morphosyntactic effects in addition to semantic ones, all of which can be used to distinguish adjectives from verbs. Reduplicated adjectives have intensified meaning and can function in unrestricted fashion as predicate, noun modifier, and adverb. Reduplicated intransitives and transitives are exclusively predicative, and with very different semantic values: in addition to a general continuative sense, aimlessness is implied with intransitives and attentiveness with transitives. Non-adjectival statives also have intensified sense when reduplicated, but like all other verbs, are restricted to predicative function.

Lao has two types of reduplication: Type A is restricted to monosyllabic adjectives, has a semantic approximative effect, e.g. *suung*3 'tall' > *sung*∅-*suung*3 'tallish', and occurs most frequently in attributive position. Type B reduplication is open to verbs and adjectives, regardless of phonological shape, and has an intensifying or emphatic effect.

In North-East Ambae, adjectives, otherwise verb-like in most circumstances, exhibit the most non-verb-like behaviour in reduplication, as is made clear in the very useful summary in Table 5 in Chapter 11. In addition to different class-changing derivational effects in this language, an intensifying effect is shared by adjectives and verbs, but reduplication marks reciprocity, habitualness, and plurality only on verbs.

## 9. Adjectives functioning as head of noun phrase

Adjectives are rarely reported to function as head of the noun phrase. Such a criterion is therefore extremely useful in distinguishing between adjectives and

nouns, as already indicated by Dixon in Chapter 1. The phenomenon of adjectival NP head is restricted to three languages (Mam, Russian, Tariana) described in this volume. In Russian only the noun-like long form can be an NP head, in contrast to the verb-like short form. Restrictions also apply in Mam where an adjectival head is always anaphoric (see examples 62–3 in Chapter 5).

In Russian and Mam the adjectives in question are clearly non-verb-like, and can never function as a verbal predicate. In Tariana most adjectives are optionally verb-like (predicative) or noun-like (post-copular). However, in no case where adjectives are reported to be strongly verb-like, appearing only in verbal predicates, do they also have the noun-like ability to function directly as NP heads.

## 10. Noun phrase modification

All languages allow adjectival modification of nouns in noun phrases, but there are very substantial cross-linguistic differences in observed patterns of behaviour. In languages where adjectives are verb-like in the predicate, the behaviour of attributive adjectives in the noun phrase also tends to be strongly verb-like. This is most evident with respect to relativization in the noun phrase. In Korean and Wolof, adjectives, like verbs, are always relativized when modifying a noun. However, adjectives and verbs can be distinguished in Wolof by subtle word order differences that occur in simple, so-called unaugmented relative clauses. Where augmentation occurs through the addition of such things as tense and aspect marking, all differences then disappear, and word order becomes the same (see Chapter 10 for discussion).

In Lao relativization is optional with verbs and adjectives, both of which can otherwise directly modify the noun. However, nouns functioning attributively are obligatorily relativized. In Japanese, the reverse is true: whilst verbs and verb-like inflected adjectives are able directly to modify the noun, nouns and noun-like uninflected adjectives appear in a special adnominal construction. In Qiang, complex adjectives typically appear in verb-like relative clauses before the noun, but simple adjectives typically appear in one of two constructions: they are most clearly adjectival and non-verbal when placed directly after a noun without any kind of marking. But in the same position, they are also optionally noun-like when they appear, for emphatic or contrastive effect, with a nominalizing suffix. LaPolla and Huang (Chapter 13) argue that this nominalized form behaves as an independent noun phrase, given that the order of modified noun and the nominalized adjective can be reversed without any apparent effect.

In most other languages, verbs and adjectives can be distinguished by the absence of relativization on adjectives, e.g. Mam, Papantla Totonac, North-East Ambae, Tariana, Jarawara. Adjectives, unlike verbs, are able directly to modify a noun. In Russian, the verb-like short adjective form no longer appears in the noun phrase, except in set phrases, and only the noun-like long form is today productively attributive. In Manange, verbs are obligatorily relativized by a nominalizing suffix in pre-head position, whilst so-called simple adjectives directly modify the

noun in post-head position. Manange verb-like adjectives share properties with both categories: they are post-posed like simple adjectives, but appear with the same nominalizing suffix as verbs. All of these languages, with the exception of North-East Ambae, are described by their respective authors in this volume as having independent Adjective classes.

In a number of languages, with respect to general morphological processes, the attributive adjective is treated in a manner similar to nouns in the noun phrase. This similarity may appear as the absence, for instance, of inflectional morphology, as in North-East Ambae, Japanese (noun-like adjectives only), Jarawara, Manange (simple adjectives only), and Qiang (post-posed bare adjectives only). In other languages, nouns and adjectives share similar complex morphological properties in the noun phrase, such as Russian (long-form only, case, gender, and number marking) and Tariana (e.g. number marking). In both cases, however, adjectives can still be distinguished by differences in form, the need for adjectival number and gender agreement with the modified noun, and the inability of nouns, with few exceptions, directly to modify another noun. In other languages, adjectives are even less noun-like (and verb-like) in form and function in the noun phrase: in Mam and Papantla Totonac only adjectives are able directly to modify nouns and show no attributive marking of any kind.

## 11. Size and openness of adjective (sub-)classes

Of the languages described in this volume, Jarawara has the smallest set with only fourteen underived members and a small number of derived adjectives. If one includes derived forms, Korean and Russian have by far the largest adjective classes with many thousands of members, as a result of highly productive derivational processes and borrowing.

It appears that in almost all languages, adjectives do not form a closed set, although restrictions are noted in some cases. In Manange, for instance, the simple adjective class with some thirty members is largely closed with limited scope for expansion through occasional borrowing from Nepali. But its verb-like adjective class is open and productive.

In addition to expansion through derivation, the borrowing of adjectives is extremely common around the world, and can impact significantly on the nature of adjective systems. There is evidence of extensive borrowing from Chinese into Korean, Japanese, and Qiang. In each case, Chinese words, regardless of source category, are treated as nominal. They are therefore assigned automatically to the noun-like uninflected adjective class in Japanese and are subject to secondary derivation in Korean and Qiang in order to function adjectivally. In Semelai, Malay loans are the principal source of new adjectives, while this language's periphrastic comparative is also Malay in origin. Spanish adjectives are frequently borrowed into Mam and Papantla Totonac, whilst in Wolof the primary source today is French.



## 12. Head- vs. dependent-marking and correlation with adjective type

Dixon presents in Chapter 1 the hypothesis that a cross-linguistic correlation may exist between morphosyntactic type (head- vs. dependent-marking) and the (non-)verb-like behaviour of adjectives. It is suggested that in head-marking languages, adjectives will tend to be verb-like whilst in dependent-marking languages they will tend to be non-verb-like. Languages which are neither head- nor dependent-marking will tend to have verb-like adjectives. Apparent discrepancies, such as dependent-marking Japanese, with its class of verb-like inflected adjectives, may tentatively be explained by careful inspection of historical changes to show that changes in adjective type lag behind a change in the overall system of grammatical relations.

The thirteen languages described in detail in this volume provide cautious support for the hypothesized distribution, but with a number of apparent exceptions. Marking types fall into at least four categories in our sample. Of the head-marking languages, North-East Ambae and Wolof have verb-like adjectives as predicted, but in Jarawara and Mam adjectives are clearly non-verbal. However, Jarawara shows some traces of dependent-marking from an earlier phase of its history. With respect to mixed head-/dependent-marking languages, adjectives in Qiang and Semelai show verb-like behaviour, but in Papantla Totonac they are definitely not verb-like. Tariana and Manange have mixed adjective systems which may reflect to some degree the mixed marking systems they have. Of the three dependent-marking languages, Russian has a fundamentally non-verb-like system. With respect to Japanese, Dixon is able to explain cogently the existence of an older verb-like class alongside a newer noun-like class. But Korean with its verb-like adjectives is recognized as a clear exception. The verb-like nature of adjectives in Lao is consistent with the absence of head- and dependent-marking in that language. Overall, it can be stated that there is a tendency for languages with verb-like adjectives (as part of a single or mixed system) to be either fully or at least partially head-marking.

## 13. Adjectives by any other name? Evidence for an independent class of attributive-only adjectives

Authors describing adjectives in this volume have focused on the description and analysis of adjectives that function as both modifier in the noun phrase and as either intransitive predicate head or copula complement at clause level. Dixon in Chapter 1 notes, however, that adjectives may be restricted in their functions in some languages.

Evidence in our language sample of adjectives with exclusively non-attributive behaviour is largely restricted to verb-like short form adjectives in Russian. These no longer productively modify nouns, and are today losing ground in copula complements to noun-like long forms.

Adjectives that are exclusively attributive provide the best evidence in favour of a fully independent adjective class in languages where this may otherwise be in doubt, as appears to be the case for Chinese for instance. If adjectives cannot function directly as NP heads (noun-like), nor as predicates (verb-like) or copula complements (noun-like), and have exclusively attributive function (adjective-like), then they are plausibly assigned to an independent adjective class, as they are in languages such as Hua (see Chapter 1 and Wetzer 1992). As already discussed in §2 above, the existence of what appears to be a large class of attributive-only adjectives (some 200–400 members) has recently been reported in Chinese.<sup>3</sup>

Evidence of what appear to be adjective-like attributive-only forms is found in a number of languages in this volume, including Japanese, Korean, Mam, Manange, North-East Ambae, and Qiang. In most cases, only rare examples can be found. In Manange a small set of negated verb-like adjectives, e.g. *a-kye* 'unpleasant/ugly', are attributive-only. No such restrictions apply to their positive counterparts, e.g. *kye* 'pretty/nice' (see Chapter 3). In Wolof, the common borrowed form *piir* 'pure' (< French *pur*) is unlike all other adjectives in showing no verb-like behaviour: it is exclusively attributive and directly modifies the noun without relativization.

The existence of a small set of forms that are attributive-only with clear adjectival function has long been recognized in Japanese and Korean grammatical description. Backhouse (Chapter 2) notes that such adjectives, e.g. *roku (na)* '(no) good', (and demonstratives) have been called 'adnouns' in the past (e.g. Martin 1975) and behave very much like noun-like uninflected adjectives in the noun phrase.

Sohn also refers briefly (fn. 3, Chapter 9) to the existence of a small Specifier or pre-noun class of adjective-like terms (e.g. *mat* 'oldest', *say* 'new'), demonstratives, and numerals. He does not wish to treat any of these items as adjectives since they do not share the verbal properties of inflection and predicative function that the large independent class of verb-like adjectives otherwise has in that language. Lee and Ramsey (2000) also refer to this class as pre-noun, but, significantly, Lee (1989) places adjective-like members in their own small adjective class. There is good syntactic evidence in favour of Lee's (1989) decision to distinguish these uninflected adjectives from demonstratives and other members of his suggested specifier/pre-noun class. The word order of adjectives is rigid and they always appear directly before the modified noun. The order of demonstratives is not fixed and can be scrambled with other pre-nominal modifiers such as possessives and relative clauses. None of these elements can ever, however, intervene between pre-nominal adjective and noun. Hence *ce nay chayk* (lit. that my book) and *nay ce chayk* (lit. my that book) 'that book of mine' are acceptable, but there is no alternative to *ce say cheyk* (lit. that new book) 'that new book' (Sohn 1994: 224–5).

LaPolla and Huang in their description of adverbial phrases in Chapter 13 briefly discuss the existence of an unnamed class of words used mainly with adverbial func-

<sup>3</sup> Thai also appears to have attributive-only adjectival elements, albeit apparently few in number. Sookgasem (1996) treats these as adjectives, although more information is required. See Prasi-thratsint (2000) for an alternative view of adjectives in Thai.

tion in Qiang. It appears plausible to suggest that these words may indeed constitute a class of attributive-only adjectives. Semantically adjectival, this set of words (e.g. *ata* ‘fast’, *hama* ‘stealthy’) cannot function as predicate (unlike verbs), but is able to modify nouns directly (unlike adverbs, verbs, and most preposed adjectives). They also share a number of features with Qiang’s otherwise verb-like adjectives, which help to distinguish both types from verbs. These include: (1) the ability adverbially to modify verbs and similar patterns of adverbial derivation; (2) nominalization through juxtaposition with (in)definite markers; and (3) the use of the excessive *tsan* ‘too (much)’ as well as the intensifiers *-wa*, *kən*, and *quəla* ‘very’. *Wa* and *kən* appear mostly with adjectives whilst *quəla* almost exclusively so. Word order also appears more flexible with attributive-only forms than with most verb-like adjectives. The former are able to precede or follow the directly modified noun, although pre-nominal position is relatively rare. Examples of each are given in (4a,b):

- (4) (a) *kən hama mi le:*  
 INTENS stealthy person DEF:one:CL  
 ‘the very evasive man’  
 (b) *kən mi hama le:*  
 INTENS person stealthy DEF:one:CL  
 ‘the very evasive man’

Most verb-like adjectives described by LaPolla and Huang are only able to modify directly the noun in post-nominal position. They are otherwise obligatorily relativized in pre-nominal position. However, a small number of verb-like adjectives also have the ability directly to modify the noun in pre-nominal position, as in (5).

- (5) *qədzi tɕymi le:*  
 naughty child DEF:one:CL  
 ‘the naughty child’

Unlike verb-like adjectives, attributive-only adjectives cannot be marked for the excessive (‘too much’) with the suffix */-s/*, nor appear in comparative constructions. The latter omission appears to be syntactically conditioned, since the comparative construction in Qiang described in Chapter 13 focuses on the adjectival quality located in the predicate. Attributive-only forms can, on the other hand, appear in superlative forms with prefix */tɕi-/*, like all other adjectives, as in (6).

- (6) *mi tɕi-hama le:*  
 person most-stealthy DEF:one:CL  
 ‘the most evasive man’

It was the absence of verb-like qualities that lead Sohn (for Korean) and LaPolla and Huang (for Qiang) to avoid giving adjectival status to exclusively attributive forms. However it is precisely this feature that strengthens the case for the existence of an independent adjective class in these and other languages—in particular

Chinese, where the existence of adjectives has most notably been doubted. This feature also provides support in favour of Dixon's initial claim that all languages will have an adjective class.

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