

ERGATIVITY

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ERGATIVITY

Emerging Issues

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PREFACE

This volume presents a collection of papers on the enticing and complex theme of Ergativity. The papers exemplify theoretical depth applied to a wide range of languages, with the majority of papers based on original fieldwork. Ergativity refers to a grammatical pattern in which the logical subject of intransitive clauses and the logical object of transitive clauses share some grammatical features, and in this respect differ from transitive subjects. The shared features are often case and/or agreement, but a variety of other relevant features have also been isolated in the literature. The ergative pattern contrasts with that found in accusative languages where the subject has the same grammatical marking in intransitive and transitive clauses, while the object has different marking. Ergativity provides us with an ideal testing ground for claims about the range and limits of language variation, and about the degree of elasticity in the morphology-syntax interface. However, because an understanding of ergativity rests on an understanding of other difficult grammatical issues such as grammatical relations, transitivity, aspect, person, case, and agreement, a clear and integrated analysis of the phenomenon has remained elusive.

Since Dixon's (1967/1972) pioneer study of Dyirbal, extensive research has been conducted on a variety of ergative languages over the world from both descriptive, typological, and theoretical perspectives (see *inter alia* Anderson 1976, Silverstein 1976, Comrie 1978, Dixon 1979, 1994, DeLancey 1981, Marantz 1984, Levin & Massam 1985, Johns 1992, Bittner and Hale 1996, to name a few). Despite the rich empirical coverage and interesting insights brought in by previous work, ergativity still raises questions for linguistic theory. Indeed, a basic explanation for the very existence of ergative languages has not been generally adopted, although there have been various attempts to isolate a single Ergativity Parameter. This is not surprising, though, under the view that ergativity is a complex and heterogenous phenomenon, as shown by Bittner and Hale (1996). (See Johns (2000) for a detailed survey.)

Given the emerging understanding of the complexity of the phenomenon, it is clear that detailed investigations are required to understand the systematicity and patterns underlying ergative languages cross-linguistically, especially since many

issues pertaining to ergativity are under-explored within theoretical linguistics, and since many of the languages exhibiting ergativity belong to under-studied language families. Contributors to this volume undertake this investigation and using original field work, examine some of the puzzling properties found in a variety of ergative languages and beyond. New avenues of explanation are explored and new proposals made, all within the Minimalist Program framework.

The volume contains 4 chapters, each containing a number of articles.

Chapter 1 focuses on case. The central issues here are how to account for the core ergative-absolutive pattern, and whether there are equivalence relations between the two main cases in an ergative-absolutive language and those in a nominative-accusative language. This issue arises in almost every paper in the volume. The first paper, by Anand & Nevins, argues from Hindi that ergative cannot be equated with nominative, in spite of previous claims to the contrary. Instead, it is an inherent case licensed by *v*, while absolutive, they argue, has no cross-linguistically stable definition and is not evidenced in Hindi. Support for this proposal comes from quantifier scope contrasts between ergative and nominative subjects. Within her investigation of Niuean, Massam argues that both ergative and absolutive are internal cases licensed by *v*, so that neither case is equivalent to nominative or accusative. In contrast, Bobaljik and Branigan propose a third option, based on the study of the spurious antipassive in Chukchi. They claim that ergative and absolutive are both external cases and both licensed by a single head *T*, with the result that the object is pronounced low. For her part, Otsuka explores the limited range of syntactic ergativity in Tongan relative clauses, arguing that syntactic ergativity arises from morphological ergativity, in case-sensitive operations. She derives the appearance of resumptive pronouns in relative clauses from the weakness of *C*'s pronominal features.

Chapter 2 deals with split ergativity, where the ergative pattern is found only in the environment of certain aspect/tense/mood marking or person features. Ura studies aspectually conditioned split ergativity in Hindi and Georgian. He derives the split from the presence of an aspect-related feature in little *v*, and his ergativity parameter, which allows the external argument to enter a checking relationship in first-merge position. Legate investigates split ergativity in Warlpiri. She provides an account with the innovation of splitting absolutive case into nominative case licensed by *T* when borne by the subject, and accusative case licensed by transitive *v* when borne by the object. Hence, we have a fourth proposal for deriving the ergative-absolutive case system. Laka examines the apparent aspectual case split found in Basque progressive clauses and argues that it is the result of their biclausal syntactic structure in some varieties. In the same vein, Wiltschko derives person and agreement splits in ergativity in Halkomelem Salish from the interaction between argument projection (transitivity) and the syntactic distribution of different kinds of agreement in the three core functional heads *v*, *T*, and *C*. Finally, Carnie & Cash investigate relational hierarchies and the restrictions on the so-called four case way in Nuumiipuutimt (Nez Perce) which they derive, not from semantics, but from the feature checking properties of little *v*.

Chapter 3 is devoted to the antipassive. First, Spreng argues that antipassive in Inuktitut is a verbal head that licenses structural accusative case, thus leading to a

syntactic derivation that is different from ergative and intransitive constructions. Then, Ndayiragije shows that antipassive constructions occur in nominative languages such as Kirundi (Bantu) in configurations where little *v* lacks a structural case feature. Finally, Johns discusses change in the properties of the antipassive construction in western and eastern dialects of Inuktitut. She derives the dialectal difference from the grammaticalization of aspect and its correlate with case marking of objects of antipassives.

The last chapter, Chapter 4, probes the range of ergativity, by looking at languages not generally considered to be ergative. Paul & Travis argue on the basis of Malagasy that ergative properties vary within languages and even within particular constructions, thus raising further doubt as to whether there is a macroparameter of ergativity. Tsedryk explores ergative properties of some constructions in Russian and its northern dialects, and concludes that the ergative pattern is associated with a double *v* configuration.

The overall picture is that ergativity remains a vital and central topic in theoretical linguistics, which is integrated with many aspects of grammar. This volume does not solve all the issues in ergativity. Rather, it reveals new challenges and directions of research as we move to further exploration in this exciting field. We hope the volume will interest both theoreticians and typologists, and be useful to graduate students both for its theoretical input and wide empirical coverage.

Diane Massam, Alana Johns & Juvénal Ndayiragije

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I

THE CASES

THE LOCUS OF ERGATIVE CASE ASSIGNMENT: EVIDENCE FROM SCOPE*

1. IS THE ERGATIVE *REALLY* NOMINATIVE?

The apparently symmetrical patterns of A/S vs. O and A vs. S/O systems of case opposition often tempt an explanation of ergative as a structural (as opposed to inherent) case. In one class of such implementations, agent and object case are determined by distinct, cross-linguistically universal sources (e.g., T(ense) and *v*),¹ and the two types of case opposition result from parameters determining whether case on intransitive subjects aligns with objects or agents. This intuition has been formalized both in terms of global case-realization principles within GB – be it via dependence (Marantz 1991) or competition (Bittner & Hale 1996) – and, within the spirit of the minimalist program, in terms of whether A-case or O-case is obligatory (Bobaljik 1993; Laka 1993, 2000).

Regardless of the formalism recruited, proposals within this class all agree that the ergative is a structural case, differing from nominative only in terms of morphology and whether intransitive subjects align with it. Thus, they all predict that the syntactic behaviour of nominative and ergative subjects should be largely parallel. Indeed, to date, no difference in subjecthood properties – such as control or binding – have been found in “morphologically ergative” languages. Moreover, there is no difference in the A'-status of ergative and nominative subjects (as diagnosed by the non-existence of weak crossover; Bobaljik 1993).² Though the existence of “syntactically ergative” languages might immediately call the ergative-equals-nominative possibility into question, their diagnosis is still controversial, as both Dyirbal (Dixon 1994) and Eskimo (Bobaljik 1993, Bittner 1994) pair agents and subjects identically on tests of anaphora.

An interesting possibility is to look for divergences of syntactic behaviour between ergatives and nominatives *within a single language*, ideally holding the argument structure of the verb and “discourse status” of the object constant; an aspectually-split-ergative language such as Hindi affords us the opportunity to do so.³ If transitive subjects in the two halves of a split-ergative language show different syntactic behaviour, we might call into question the hypothesis that the ergative/nominative distinction is merely a matter of morphological realization.

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In fact, a broad class of proposals maintain that the ergative is not a structural case assigned by T(ense), but rather an lexical case due to thematic role (e.g., Nash 1995, Woolford 1997), or, equivalently, a structural case assigned in theta position (Ura 2000). A descriptive generalization (Marantz 1991) that supports these views comes from the fact that *derived* subjects are never ergative; that is, there is no language that promotes an object to ergative in the passive. The requirement, then, that a noun phrase (henceforth DP) must be a thematic agent in order to bear ergative case leads to the view that it is a natural candidate for inherent case:

Case theory already predicts the existence of a Case whose properties are exactly those of ergative Case. Case theory includes, in addition to its inventory of structural Cases, a series of lexical (also called inherent or quirky) Case that are assigned at D-structure in conjunction with theta-role assignment. Dative case is a lexical Case associated with goals/experiencers and lexical accusative Case is associated with themes. Note, however, that there is a missing Case in this series – the lexical Case associated with agents. (Woolford 1997:182)

In addition to the conceptual gap that ergative as an inherent case may fill, there are empirical advantages as well. The view that ergative is a structural case licensed by T(ense) is at odds to explain the fact that ergative case can, in some instances, occur in non-finite clauses, while structural nominative case cannot, as Legate (2003) demonstrates for Warlpiri. The morphological evidence itself often suggests that ergative is lower in the structure; ergative agreement appears closer to the root in Lummi (Jelinek 1993). In Hindi (Mohan 1994), ergative marking on intransitives such as ‘scream’ varies according to the agency of the subject; similar findings have been reported for many other languages. Finally, as we will discuss in more detail in Section 3, the optionality of objective case in ergative systems (Nez Perce, Hindi) suggests that the ergative cannot be characterized as a structural case licensed only *after* the obligatory discharge of *v* case.

The considerations in the preceding paragraph, however, avoid the direct question that we wish to pose with respect to the ergative (ERG) and nominative (NOM) and whether they are both the same structural case, assigned by the same functional head:

- 1) **Question:** Does ERG differ from NOM with regard to *any* syntactic behaviour?

This question serves as a possible decision criterion between the class of theories for which ERG is structural and those for which it is inherent. As we shall demonstrate in the following section, transitive ERG and NOM subjects in Hindi differ in the possibilities of quantifier scope. Arguing that ERG is an inherent case in Hindi, we will propose that the scopal differences between ERG and NOM subjects are related to the lack of a formal AGREE relation between T(ense) and the ergative subject. In section 3, we present an explicit implementation of ergative-as-inherent case.

begin by revealing a surprising difference in quantifier scope possibilities for active and nominative subjects through the following minimal pair, in which only the scope of the subject (and its conditioning environment) vary. The diagnoses for the active subject scope involve the possibility of an “inverse scope” reading, in which the universally quantified object takes wider scope than the existentially quantified subject, resulting in a “distributive reading”, in which, for example, there need not be a unique agent acting on every object named by the event, but rather, for each object in the universe of discourse, a potentially different agent may have acted upon it. The ambiguous sentence *Someone ate every dessert* illustrates. Configurations of this sort (an \exists subject and a \forall object) turn out to be more useful diagnostics for inverse scope than the reverse (a \forall subject and an \exists object) for two reasons: (i) the \forall reading often truth-conditionally entails the $\exists > \forall$ reading, and (ii) object quantifiers are known to have properties affording them exceptionally wide scope, even out of islands (see Reinhart 1997 for a thorough discussion). The contrast for active subject scope possibilities in Hindi, therefore, must be demonstrated in a structure where the indefinite subject is receiving *narrow* scope with respect to a universally quantified object (*contra* surface ordering). As (2) demonstrates, this logical form is possible for nominative subjects, but not for ergative subjects.⁴

- While (2a) admits an inverse scope reading, (2b) can only be interpreted with surface scope. Why should the ergative show scope freezing? Following Johnson & Tomioka (1997), we will assume that scopal ambiguity between elements across the vP boundary requires reconstruction of the subject. To capture (2), we will propose that reconstruction is restricted to DPs that enter into an AGREE relation with the heads they are reconstructing from.

In the next section, we quickly review preliminaries on case and agreement in Hindi, as well as arguments that ERG and NOM subjects are both raised to [Spec, TP]. We then proceed with an implementation of a reconstruction-based account for scopal freezing in the ergative, including the arguments from Johnson & Tomioka (1997) that reconstruction is necessary for inverse scope. In the final two subsections, we consider possible sources of skepticism about our account for (2).

2.1 Preliminaries on Case, Agreement, and Subjecthood

Like many Indo-Iranian languages, Hindi is split-ergative. In non-perfective paradigms (present, future, subjunctive, past imperfective), transitive and intransitive subjects receive no overt case-marking, and verbal agreement is with the agent/subject. In transitive verbs with perfective aspect,⁵ however, the agent of transitive verbs receives ergative marking, and verbal agreement, when it occurs, is with the object.⁶ Aspect is marked on the verbal participle, which is composed of the stem and one of three aspectual markings (infinitival, perfective, and imperfective). The phi-featural agreement of each verbal element is schematized below.

3) Verbal Morphology/ ϕ Agreement:

STEM+ASP: Number/Gender

AUX+TNS: Person/Number

The NOM and ACC Cases in Hindi are unmarked ('direct'); others show 'oblique' allomorphy (e.g., on determiners, and in final vowels) and are marked by postpositions:

4) Case patterns of 'some good boy':

NOM:	<i>koi acchaa laRkaa</i>	ACC:	<i>koi acchaa laRkaa</i>
ERG:	<i>kisii acche laRke-ne</i>	COM/INST:	<i>kisii acche laRke-se</i>
DAT:	<i>kisii acche laRke-ko</i>	OBJECTV:	<i>kisii acche laRke-ko</i>

Descriptively, verbs agree with the highest c-commanded nominal without oblique case marking. Thus, verbal agreement never occurs with dative or ergative subjects, as these are oblique (i.e. inherent) cases. In the perfective, transitive verbs will agree with their object, except when the object is *objectively* case-marked, a process governed by specificity and animacy. Hindi is thus distinct from some of its Indo-Aryan neighbors (Gujarati, Nepali) and from other ergative languages (Georgian, Warlpiri, Basque) as well, in that verbal agreement cannot occur with inherently-case marked nominals (henceforth, DPs). This is clearly a point of microparametric variation; Georgian and Basque agree with dative arguments, while Icelandic does not. The visibility of inherently-case marked DPs to agreement seems to be independent of case-assignment, structural position, or other syntactic characteristics, and we will henceforth characterize it as such:

5) The Visibility of Inherent-Case to Verbal Agreement (VIVA) Parameter:

A language will differ as to whether the verb can agree with an inherently case-marked DP.

VIVA is clearly set to OFF in Hindi. If the agent is postpositionally marked, the verb agrees with the logical object. If the logical object is marked as well (e.g. OBJECTV or otherwise), agreement defaults to 3SG.M:

- 6) a. aurat baccaa bulaa rahii hai
 woman-NOM child-ACC call PROG-SG.F be-PRES-3SG.F
 ‘The woman is calling a child.’
- b. aurat-ko santare pasand hāi
 woman-DAT oranges-NOM like be-PRES-3PL.M
 ‘The woman likes oranges.’
- c. caachii-ne laRkii-se pyaar kiyaa
 aunt-ERG child-INST love do-PERF-SG.M
 ‘The aunt loved the child.’

Ergative agreement in Hindi thus marks no departure from the independent agreement properties of the language. Transitive agents in the perfective happen to receive *differential subject marking* (the logical converse of the *differential object marking* that Aissen (2000) discusses for a variety of languages), and the agreement system, blind to inherent-case marking *throughout* the language, works as usual.

Short of the fact that case-marking on the agent differs (and as a consequence, verbal agreement does not obtain), we maintain that the clause structure of an ergative and non-ergative version with the same verb and object have identical surface syntactic positions for the lexical items involved. Thus, to allay any fears that the scope contrast in (2) is due to different surface structural positions of an ergative subject and a nominative subject, we adopt a concrete and falsifiable proposal, in which subjecthood (demonstrated here through control and binding) is the result of a particular structural position. Following Ura (2001), we assume these properties are inherited by virtue of being in [Spec, TP]. We turn to three classic tests for subjecthood to show that the Hindi ergative qualifies: binding of the subject-oriented anaphor *apnaa* (shown in (7)), obviation with the pronominal *uskii* (in (8)), and control into participial adjuncts (illustrated in (9)) (Mohan 1994, Mahajan 1990, Kachru 1987):

- 7) a. Salmaa Raam-se Mohan-ko apnii kitaab bhijvaayegii
 Salma-NOM Raam-INST Mohan-DAT self’s book-NOM send-CAUSE-FUT
 ‘Salma_i will get Raam_j to send Mohan_k self’s_{i/*j/*k} book.’
- b. Salmaa-ne Raam-se Mohan-ko apnii kitaab bhijvaayii
 Salma-ERG Raam-INST Mohan-DAT self’s book-NOM send-CAUSE-PERF
 ‘Salma_i got Raam_j to send Mohan_k self’s_{i/*j/*k} book.’
- 8) a. Salmaa Raam-se Mohan-ko uskii kitaab bhijvaayegii
 Salma-NOM Raam-INST Mohan-DAT self’s book-NOM send-CAUSE-FUT
 ‘Salma_i will get Raam_j to send Mohan_k his_{*i/j/k} book.’

- b. Salmaa Raam-se Mohan-ko uskii kitaab bhijvaayii
 Salma-ERG Raam-INST Mohan-DAT self's book-NOM send-CAUSE-PERF
 'Salma_i got Raam_j to send Mohan_k his_{*i/j/k} book.'
- 9) a. Salmaa Raam-se Mohan-ko [PRO adres khoj kar] uskii
 Salma-NOM Raam-INST Mohan-DAT [PRO address search do] self's

 kitaab bhijvaayegii
 book-NOM send-CAUSE-FUT

 'PRO_{i/*j/*k} after searching for the address, Salma_i will get Raam_j to send Mohan_k his_{*i/j/k} book.'
- b. Salmaa Raam-se Mohan-ko [PRO adres khoj kar] uskii
 Salma-ERG Raam-INST Mohan-DAT [PRO address search do] self's

 kitaab bhijvaayii
 book-NOM send-CAUSE-PERF

 'PRO_{i/*j/*k} having searched for the address, Salma_i got Raam_j to send Mohan_k his_{*i/j/k} book.'

Note that these properties, i.e., the ability to control into an adjunct, cannot be reduced to derivational timing or base position of the arguments in question. The ability to control into adjuncts and bind subject-oriented anaphors is a property of Spec, TP, and *not* a property of agents, i.e., items that originate in [Spec, vP], as the promoted object in passives is a 'subject' too:

- 10) a. Mohan apne mūgare-se maaraa gayaa
 Mohan-NOM self's mallet-INST hit-PERF go-PERF
 'Mohan_i was hit with his_i mallet.'
- b. Mohan uske mūgare-se maaraa gayaa
 Mohan-NOM self's mallet-INST hit-PERF go-PERF
 'Mohan_i was hit with his_{*i/j} mallet.'
- c. Mohan [PRO mimiya kar] mūgare-se maaraa gayaa
 Mohan-NOM [PRO bleat do] mallet-INST hit-PERF go-PERF
 'PRO_i having bleated like a goat, Mohan_i was hit with a mallet.'

The behaviour of ergative subjects in Hindi points to the same conclusion that many researchers have found for non-nominative/non-agentive/non-agreeing subjects, e.g. Sigurdsson (2002) for Icelandic. The grammatical function of subjecthood (when taken independently of theta role, case, and agreement) seems entirely determined by the structural position of a DP.

2.2 *Accounting for Scopal Freezing*

Given the identical behaviour of the ERG and NOM with respect to the tests of structural position in the previous discussion, it is unsurprising that the ergative-as-nominative family of proposals has enjoyed the popularity it has; all differences examined to date do seem to be morphological quirks about postpositional marking and agreement. However, the differential scope behaviour of the two subjects (repeated below) suggests that there *must* be a syntactic difference between ERG and NOM.

- 11) a. kisii shaayer-ne har ghazal likhii
 some poet-ERG every song-NOM write.f-PERF
 ‘Some poet wrote every song.’ $(\exists > \forall, * \forall > \exists)$
- b. koi shaayer har ghazal likhtaa hai
 some poet-NOM every song-ACC write.m-IMPF be-PRES
 ‘Some poet writes every song.’ $(\exists > \forall, \forall > \exists)$

We claim that the relevant difference between ergative and nominative subjects responsible for scopal rigidity is the presence or absence of an AGREE relation with T, spelled out as morphological agreement between the verbal complex and the DP. That properties of the *subject*, and not those of the object or perfective aspect, are crucially responsible for scope freezing in the ergative, will be demonstrated in the next subsection.

Indeed, scope-freezing occurs in other contexts where the subject and T are not in an AGREE relation. In English Locative Inversion, the verb does not agree with the subject, although the locative shows subject properties (Bresnan 1994, Collins 1997). Inverse scope readings are not possible (Kuno 1971):

- 12) a. Some actress stood on every stage. $(\exists > \forall, \forall > \exists)$
- b. On some stage stood every actress. $(\exists > \forall, * \forall > \exists)$

Our explanation of this fact is based in part on the quantifier raising (QR) *plus* reconstruction derivation for inverse scope advocated by Hornstein (1995) and Johnson & Tomioka (1997). The latter observed that inverse scope is not obtained when reconstruction is impossible. Consider the following ambiguous sentence:

- 13) Some student or other has answered many of the questions on the exam.
 (many $> \exists$, $\exists > \text{many}$)

Recall that English *some* is a positive polarity item (PPI) and cannot be in the scope of negation:

- 14) I have not met some student (\neq I haven’t met any student).

When negation is added to sentence (13), inverse scope is impossible, suggesting that reconstruction is necessary.

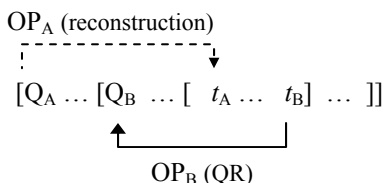
- 13) Some student or other hasn't answered many of the questions on the exam.
 (*many > \exists , \exists > many)

If inverse scope were simply a matter of quantifier-raising of the object, negation should make no difference. However, if reconstruction is required (and blocked in this case, since it would involve placing a PPI in the scope of negation), then we have an explanation for the fact in (14). And, as (15) shows, it is not the case that negation blocks inverse scope altogether, as replacing *some* by a non-PPI again allows inverse scope to obtain.

- 15) Two students haven't answered many of the questions on the exam.
 (many > \exists , \exists > many)

This argument suggests that inverse scope requires *two* operations: reconstruction of the higher QP and raising of the lower QP, as schematized below. The failure of either operation to apply will yield scopal rigidity. (Note that this logic holds regardless of whether OP_B is QR as adjunction, movement of \forall to DistP à la Beghelli (1997), "overt scrambling" à la Johnson & Tomioka (1997), or A-movement à la Hornstein (1995).)

- 16) TWO SHIPS PASSING



Thus, scope-freezing can occur either when Q_B cannot QR above the t_A or when Q_A cannot reconstruct to t_A at LF. In the next subsection, we consider (and dismiss) three other explanations for the scopal contrast in (2): that Hindi is scopally rigid and the apparent scopal ambiguity in imperfective cases is due to generic interpretation; that perfective aspect (and not the ergative nature of the subject) freezes scope; and that object QR cannot target a position above a trace of the subject. We demonstrate that none of these can be right, leaving subject reconstruction as the sole culprit. That is, we are left with the following restriction on reconstruction:

- 17) **Agreement-allows-Reconstruction:** Reconstruction of an XP from a head H is possible iff H AGREES with XP.

Though we lack sufficient space here, in Nevins & Anand (2003), we demonstrate that the agreement-scope relation for subjects holds elsewhere in English, and in Russian and Greek.

2.3 *Hindi Scope Freezing is Due to Inability of Reconstruction*

The skeptical reader may object that it is not actually the case that the ergative (perfective) paradigm has exceptionally frozen scope, but that the shoe is on the other foot – that Hindi simply is a scopally-rigid language, with the exception in the imperfective paradigm. Indeed, it has been noted that imperfective aspects lend themselves more easily to generic interpretations; moreover, Fox & Sauerland (1995) noticed that normally scopally rigid sentences may show an ‘illusive’ inverse scope reading when read generically:

- 18) a. Yesterday, a guide ensured that every tour to the Louvre was fun.
 $(\exists > \forall, * \forall > \exists)$
- b. In general, a guide ensures that every tour to the Louvre is fun.
 $(\exists > \forall, \forall > \exists)$

Fox & Sauerland suggest that generic situations have an additional layer of quantification that allows for the illusion of inverse scope in (2a). This cannot be a general explanation of scopal *freedom* in Hindi, as wide-scope readings for the ambiguous Hindi cases remain after controlling for genericity, either by changing to progressive aspect (19a) or by forcing obligatory episodic interpretation of the predicate (19b):

- 19) a. koi shaayer har ghazal likh rahaa hai
 some poet every song write PROG be-PRES
 ‘Some poet is writing every song.’ $(\exists > \forall, \forall > \exists)$
- b. kal raat koi bacca har kitaab paRhega
 tomorrow night some child every book read-FUT
 ‘Tomorrow night, some child will read every book.’ $(\exists > \forall, \forall > \exists)$

We thus put aside the possibility that what we are actually witnessing in (2a) is a case of illusive scopal freedom in an otherwise scopally-rigid language. However, as ergativity is conditioned by perfective aspect, it is possible that scopal freezing is a result of perfective aspect, and has nothing to do with case. There are several responses to this possible skepticism. First, there is no cross-linguistic evidence for a constraint on inverse scope in the perfective. In addition, it is unclear *what* about perfective aspect would explain this scopal freezing, especially given that even in Hindi the imperfective, another aspect requiring event-framing, admits inverse scope readings.

Most compelling though, is the existence of inverse scope readings in the perfective outside of ergative constructions. We illustrate inverse scope between: an intransitive subject and adjunct (20), the subject and object of verb that is (exceptionally) nominative-accusative in the perfective (21), and a restructuring verb and embedded clause object (22).

- 20) koi caukidaar har mandir-ke samne jhukaa
 some watchman-NOM every temple in-front-of crouch-PERF
 ‘Some guard crouched in front of every temple.’ ($\exists > \forall, \forall > \exists$)
- 21) koi aadmii har kitaab laayaa
 some man-NOM every book-ACC bring-PERF
 ‘Some man brought every book.’ ($\exists > \forall, \forall > \exists$)
- 22) Sumita saare darvaaze kholnaa bhuul gayii
 Sumita-NOM all doors-ACC open-INF forget go-PERF
 ‘Sumita forgot to open all the doors.’ (forget $> \forall, \forall > \text{forget}$)

The possibility of inverse scope in the perfective when the subject *does* agree with the verb suggests that the distinguishing factor between scopally free and frozen sentences is that when the subject does not bear ergative case in the perfective, it *can* take narrow scope.

It is important to recap that quantifier-raising of the object is not being blocked in the perfective. Recall that under the TWO SHIPS PASSING approach to inverse scope, scopal freezing can occur when either the higher quantifier cannot reconstruct or the lower quantifier cannot raise high enough. The latter explanation is unlikely given example (21), in which the object *can* QR high enough for inverse scope with the subject. Instead, it must be case that the ergative subject itself cannot reconstruct, a fact which the Agreement-allows-Reconstruction account captures.

2.4 Discussion of Other Relevant Scope Phenomena

For the sake of a complete account, we raise (and answer) two potential problems for a reconstruction-based explanation for Hindi scope freezing. First, Hindi sentences with dative subjects admit inverse scope readings, even though the subject and verb do not agree. Second, sentences with ergative subjects admit both sentential and predication negation readings, a fact which usually (e.g. in English) is accounted for by recourse to reconstruction.

First, we note that Hindi has a dative experiencer construction, in which the experiencer, marked with the DAT postposition *-ko*, shows subject-oriented behaviour (default word order, control into adjuncts; Hook 1990), but the verb agrees with the NOM-marked theme:

- 23) Ram-ko bhuuk lagii
 Ram-DAT hunger-NOM.F attach-PERF.F
 ‘Ram felt hungry. (lit. Hunger attached to Ram)’

Hence, DAT-subjects, like ERG-subjects, do not enter into an AGREE relation with T. If reconstruction-enabled-by-agreement is the right characterization for scopal freezing in the ergative, dative-experiencer constructions should also show scopal rigidity, as per (17). They do not:

- 24) kisii bacce-ko har kitaab milii
 some child-DAT every book-NOM.F meet-PERF.F
 ‘Some child received every book.’ ($\exists > \forall, \forall > \exists$)

However, the dative-nominative construction is structurally ambiguous -- it is possible for the DAT DP to bind into the NOM DP, or vice versa (Hook 1990):

- 25) mujhe_i [apne_i sab rishtedaar] pasand hai lekin mai_i [apne_i
 I-DAT [self’s all relative] like be-PRES.3PL, but I-NOM [self’s
 sab rishtedaar]-ko pasand nahii huu
 all relatives]-DAT like NEG be-PRES.1SG

‘I like all of my relatives, but all my relatives do not like me.’

Given the two different structural possibilities for DAT-NOM order, inverse scope in the dative-nominative configuration is not a case that requires reconstruction, and falls outside the scope of our discussion⁷.

The next phenomenon of interest is relative scope with respect to negation. That is, if the ERG-subject cannot reconstruct, we might expect it to be obligatorily above negation. But it can scope below; in particular, NPI ergative subjects are grammatical:

- 26) kisii vidyarthii bhii-ne ye kitaab nahii paRhii
 some student even-ERG this book NEG read-PERF
 ‘No student read this book.’ ($\neg > \exists > \forall, * \neg > \forall > \exists$)

However, negation in Hindi does not seem to be a unique head with a fixed structural position. Even when negation scopes over an ergative subject, the subject is still rigidly above the object suggesting that subject reconstruction and sentential negation are not related:⁸

- 27) har vidyarthii-ne koi kitaab nahii paRhii
 every student-ERG some book NEG read-PERF
 ‘Every student didn’t read some book.’ ($\neg > \forall > \exists, * \neg > \exists > \forall$)

There is also some evidence that NEG can license items it has never c-commanded. Present tense auxiliaries can optionally drop in sentences with negation, and negation in an infinitival can both license auxiliary drop and an NPI:

- 28) a. *maj̥ dillii-mə nah̥i rahtaa* (hũũ)
 I Delhi-LOC NEG live-IMPF (be-PRES)
 ‘I don’t live in Delhi.’
- b. *ek bhii laRka [dillii nah̥i jaanaa] cahtaa* (hai)
 one even boy-NOM [Delhi NEG go-INF] want-IMPF be-PRES
 ‘Not one boy wants to go to Delhi.’

The explanation that ultimately captures the aux-drop facts in (28b) - be it in terms of neg-raising or multiple merge positions for negation (see, for example, the evidence for multiple scope positions of NEG that can be found in the literature for English (Boeckx 2001, Ladd 1981, Buring and Gunlogson 2000) and German (von Stechow & Penka 2003)) - will also be able to account for the NPI facts. But it will not be able to explain the rigidity of sentential subjects and objects even when both are in the scope of negation, and this is precisely what (17) accounts for.

3. THE COMPUTATION OF CASE AND AGREEMENT IN HINDI

Before turning to the syntactic implementation of the possible case and agreement configurations in Hindi, it is important to point out that perfective transitives in Hindi do not show a so-called “ergative-absolutive” pattern. There is little reason to postulate the existence of absolutive case in Hindi, as it does not seem like the language maintains a “dual” to oppose ergative. Rather, we propose that ergative case is a differential subject marking, and that the rest of the clause is assigned case as usual. The importance of these remarks should not go understated, as Hindi is taken to be an example of a language where subjects of intransitives and objects of transitives receive the same marking. For instance, Dixon (1994: 191), in a reference book on ergativity, claims (without data) that Hindi S and O are marked identically in the perfective. This is false in both directions. First, as many have noted (Mohanen 1994 in most detail), certain intransitives in Hindi *allow* ergative marking, which is never possible on transitive objects. True, proponents of the “absolutive hypothesis” could dismiss these as lexical exceptions or appeal to notions such as discourse salience or the presence of covert objects. But the second half of the falsification is impossible to reconcile with the hypothesis that languages fundamentally align themselves in either S/A or A/O pivots. As is well known (see, for example Mahajan 1992, Bhatt & Anagnostopoulou 1996), Hindi allows direct objects to be marked by *-ko* (which we call objective case, adopting Woolford’s (1997) term) as an indicator of specificity and/or animacy, conditions governed by similar considerations to those described by Enc (1991) for Turkish. Crucially, *-ko* marking is possible in the ergative as well as the nominative paradigm:

- 29) Raam-ne rotii khaayii
 Ram-ERG bread eat-PAST.FEM
 ‘Ram ate bread.’
- 30) Raam-ne rotii-ko khaayaa
 Ram-ERG bread-OBJTCV eat-PAST.DEF
 ‘Ram ate the (specific) bread.’

However, *-ko* is never marked on an intransitive subject.⁹ It is thus requisite to distinguish at least three cases in Hindi: ergative, objective, and unmarked. Application of the term “absolutive” both obscures these facts and forces the invocation of “split absolutivity” along specific/non-specific lines, which recapitulates a distinction needed outside of the ergative paradigm.

Indeed, when the typological literature is examined more closely, we can make the same criticism about the term absolutive in general -- it has no cross-linguistically stable definition. For example, in Basque, it looks like ABS=ACC (Laka 1993), while in Dyirbal, Hindi, and Lummi, ABS=NOM. Legate (this volume) argues that what is called absolutive is an epiphenomenon in Warlpiri, and covers *both* NOM and ACC. The fact that “absolutive” is zero in many languages, few of which have enjoyed the careful tests of structural position that Warlpiri has, suggests that Legate’s conclusion is more general. In Nez Perce, it looks like ABS (actually, objective) is assigned somewhere external to vP. Yimas presents an even odder possibility, where absolutive is an “EPP-case” (assigned to highest XP when there are no adverbs in spec, T) – an unexpected Case, to be sure, but distinct from accusative, which also exists (Phillips 1993). Thus, absolutive is not only a useless term, but dangerous, as it encourages unification where it shouldn’t occur. Ergative, on the other hand, maintains a coherent definition, as it is always a form of differential subject marking on agents, often with the same syntactic source: inherent case from transitive *v*, except in Basque (and perhaps elsewhere).

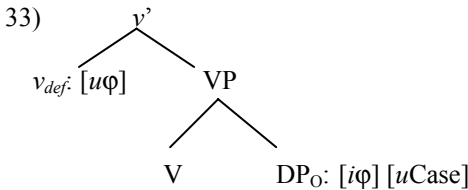
Before proceeding, we will offer a brief remark on what we have called “unmarked case” in Hindi in the preceding paragraphs. For concreteness, we will call an unmarked DP that controls agreement “nominative” and one that does not “accusative.” Though this latter term could be substituted with others (“caseless”, pseudo-incorporated), we have a concrete theory of accusative case, integrable with what is known about the marking of patients cross-linguistically, so we will retain it here. Thus, there are four cases that we will discuss: ergative, nominative, accusative, and objective.¹⁰

We will discuss the derivations of the ERG-OBJTCV and ERG-NOM systems found in perfective transitives. Before running through the derivations, it is helpful to understand the broad overview. Recall that we assume that ergative case is differential subject marking, or a lexical case, associated with the theta-role of agent. Its appearance in the perfective is a result of the fact that the perfective participle (31) *is* the passive participle (32) and hence has a *v*_{def} that cannot assign ACC case (Cowper 1989, Mahajan 2000, among others):

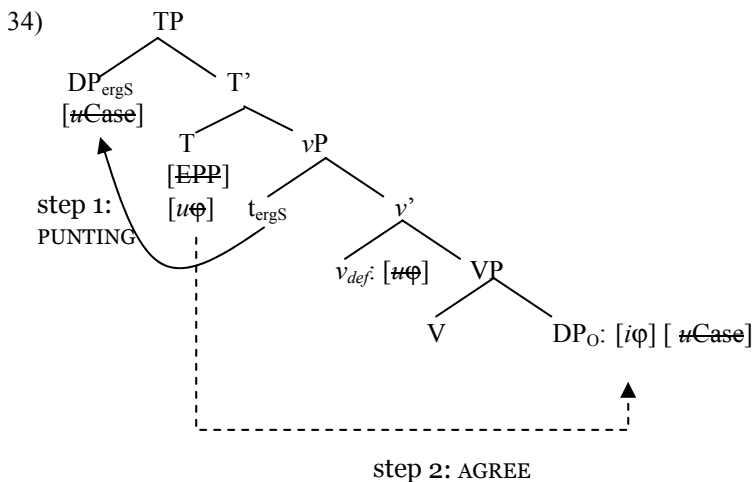
- 31) aadmii-ne rotii khayii thii
 man-ERG bread-NOM eat-PERF be-PAST
 ‘The man had eaten the bread.’
- 32) rotii khaayii gayii
 bread-NOM eat-PERF go-PERF
 ‘The bread was eaten.’

Because v is defective, T is the only case-assigner in the clause. However, both the object, which a complement of V, and the subject, MERGED in [Spec, vP], require case, so the derivation will crash unless one of the DPs has its case requirement satisfied by some other method. Lexical ERG case absorbs the case requirement of the subject DP, rendering it inactive (and opaque to verbal agreement); hence the ergative subject is not assigned case by T, and there is no AGREE relation between the subject and T. As demonstrated in section 2.1 the ERG-marked subject *does* move to [Spec, TP] for EPP reasons. As traces are invisible to the minimal link condition, the effect of moving the subject out of the c-command domain of T is an instance of derivational PUNTING of an inactive goal out of the way of an AGREE relation between T and the object DP.

When the object DP is not marked with OBJECTV case, T establishes an AGREE relation with it and assigns it NOM case, thus accounting for the agreement of the verbal complex and the object in ergative clauses. This yields the **Erg-Nom** pattern. Let us sketch a derivation in more detail. The initial numeration is $\{DP_{\text{ERG}}, DP_O, V, v_{\text{def}}, T, C\}$. MERGE applies until the insertion of v_{def} , as in (33):



The probe v_{def} enters into AGREE with the object DP and values its own ϕ features, but as v is defective, the DP's uninterpretable Case feature is not checked. The ergative subject is then MERGED in [Spec, vP] with its Case feature assigned inherently. T is then MERGED, and probes down for a goal to value its ϕ features. The inactive ergative subject should produce an intervention effect. However, recall that T also has an EPP requirement (i.e. it requires an element in its specifier). As a Probe with multiple features will attempt to value any of them upon encountering a goal in its search space, the ergative DP can undergo MOVE to check T's EPP feature.



This movement in turn ameliorates a potential intervention effect,¹¹ as it allows a “clear search space” (i.e., free of c-commanding interveners) between T and the object. T enters into AGREE with the object DP, valuing its own ϕ features and assigning the object NOM case.

Having illustrated how the derivation of ERG-NOM results from case-marking of the ergative in-situ (Woolford 1997, Ura 2000), followed by EPP movement of the ergative, and subsequent T-agreement with the object, we turn to the derivation for the ERG-OBJECTV case, which introduces one interesting wrinkle. As exemplified in (30), in this construction, both DPs are overtly case-marked and the verbal complex shows masculine, 3rd singular agreement. We should note that the ERG-OBJECTV possibility in Hindi (and Nez Perce) is difficult to explain under the kinds of structural ERG analysis proposed by e.g., Bobaljik (1993), Laka (1993), in which assignment of the ERG is dependent on assignment of ABS (as implemented through the obligatory case assignment by the lower agreement projection in the derivation). In cases such as (30), the transitive object is marked with OBJECTV, not ABS, rendering the appearance of ERG on the subject somewhat surprising if ERG is dependent on ABS. It is possible to amend a story in terms of the Obligatory Case Parameter to deal with these facts by stipulating that ABS case, otherwise unmarked in Hindi, is actually assigned to the OBJECTV-marked DP, and that this case-marked DP has 3SG.M ϕ features (thus accounting for what appears to be default agreement). However, such a story must then explain why objective case is a differential *object* marker; namely, why is it impossible on intransitive subjects, which, if the account is to achieve what it intends, must bear ABS case as well. For the purposes of discussion, we will assume that objective case in Hindi and Nez Perce is due to a functional projection distinct from *v* (see also Woolford 1997), henceforth referred to as ENCP. The effects of ENCP are to enable a specific interpretation of the object, as discussed by Enc (1991) and, as a side effect in Hindi, to disqualify the object for verbal agreement.

From a pre-theoretical perspective, it must be the case that AGREEMENT in Hindi is maximized, but not obligatory. When there are no DPs that can enter into a ϕ feature-checking relation with a core functional category H, H's ϕ -features are valued with default 3SG.M. This property of the system marks the instantiation of parametric variation resulting from the non-obligatoriness of case assignment by functional heads in Hindi:

- 35) **Obligatory ν case Parameter:** ν must assign a case (inherent or structural)
Obligatory T case Parameter: T must assign a case

The Obligatory ν case Parameter is set to OFF in Hindi, as NOM-OBJCTV patterns instantiate subject case assignment by T , and object case assignment by EncP. Nez Perce, on the other hand, clearly has an ON setting for Obligatory ν Case, as NOM-OBJCTV is banned. Basque, of course, has Obligatory ν ON as well.

The importance of relativizing the obligatoriness of case assignment to each functional head becomes important when their settings are independent. In addition to having the Obligatory ν case parameter OFF, Hindi also has the Obligatory T case parameter set to OFF. This latter setting can be seen by the existence of ERG-OBJCTV patterns, in which the subject is assigned case by ν , and the object is assigned case by EncP. We summarize the possibilities for derivation:

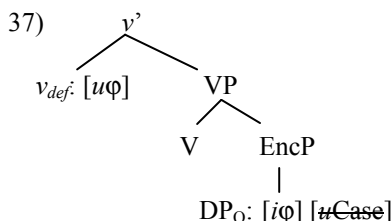
- 36) a. Obligatory T case OFF, Obligatory ν case ON: unaccusatives marked with ACC (Basque); ERG-OBJCTV banned (Nez Perce).
 b. Obligatory T case OFF, Obligatory ν case OFF: ERG-OBJCTV, ERG-ACC, NOM- ACC, NOM-OBJCTV all possible (Hindi).
 c. Obligatory T case ON, Obligatory ν case OFF: unaccusatives marked with NOM (English, other well-behaved nominative-accusative languages).
 d. Obligatory T case ON, Obligatory ν case ON: A language with only transitive verbs (unattested).

The independence of the case assignment properties of each functional head is within the spirit of microparameterization: crosslinguistic variation is not due to global properties of a phrase marker, but rather results from the interaction of variation on individual functional heads in the course of a derivation. Narrowing our attention specifically to ergativity, this parametric formulation is within the spirit of Johns (1992), who suggested that ergative systems result from independent properties of the language at hand. Bittner & Hale's intuition that ergative systems are a heterogeneous class was indeed correct: it seems that *all* they share is differential agent marking.

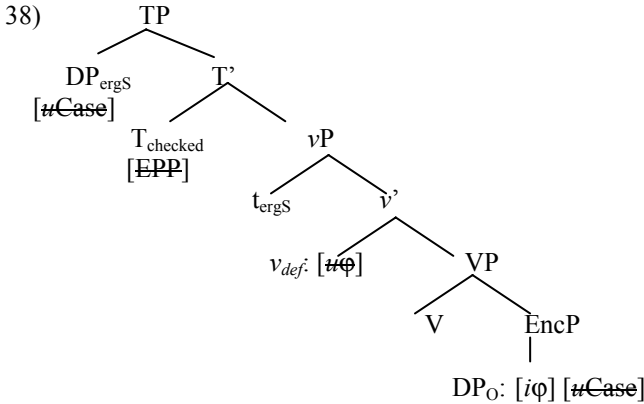
Returning to the Hindi facts which motivated the OFF setting of both obligatory case specifications, recall that in instances of ERG-OBJCTV case-marking, the

objectively-marked DP and T do not enter into any ϕ feature checking relation, just as the subject and T do not. The status of default-agreement within the minimalist program has remained largely undiscussed, perhaps because a central hypothesis, that agreement is an uninterpretable feature that *must* be checked, cannot extend to cases where agreement simply seems to go unchecked. However, rather than abandon the notion that agreement is, in the normal state of affairs, uninterpretable, we maintain that this view is correct, unless the numeration contains T_{checked} . Lavine and Freidin (2001) make a similar proposal for default agreement in Russian accusative-instrumental configurations, where there is no nominative, and default agreement. T_{checked} is simply the functional category Tense that is devoid of uninterpretable features, and is instead valued for 3rd person, masculine, singular morphosyntax.¹²

We offer a derivational outline of case and agreement in Hindi ERG-OBJCTV configurations. Recall that OBJCTV DPs have their case assigned by EncP, and subsequently cannot check T's ϕ features, due to the parametric invisibility of inherent case for agreement. Hindi stands in contrast to Nez Perce, in which the same ERG-OBJCTV configuration enables portmanteau verbal agreement with both arguments. Short of the setting for agreement visibility, much of the logic given above for the ERG-NOM construction applies. Again, v_{def} does not assign an accusative case. However, in this instance, EncP is merged with the object DP, and AGREEMENT assigns it OBJCTV case.



At this point, the subject and T_{checked} are MERGED. The subject MOVES to satisfy the EPP feature of T. Recall that T_{checked} bears no uninterpretable features, and does not require agreement.



Of course, the selection of $T_{checked}$, a head which does not require agreement and does not value case, is crucial to the convergence of the derivation with two inherently case-marked DPs. There have been many recent discussions in minimalist literature as to whether convergent derivations are the result of just the right selection of functional heads from the inventory, or alternatively, whether anything can be chosen, but those derivations will crash and we will never know about them, or alternatively, whether there are local principles that can ensure convergence. As there have been very few empirical phenomena which distinguish these views of syntactic computation, we will not take a definitive stance. We ought to note that our specific implementation of the ERG-OBJCTV pattern in Hindi essentially hard-codes correct selection of the correct heads, and that alternative formulations (in particular, in terms of the Agreement Maximization Principle of Schutze (1997), which optimizes agreement, but is violable) are possible.

Under the story above, “absolute,” “accusative,” and “specific” objects are all MERGED as complements of the verb, and all receive case *in situ*, below the subject. However, Mahajan (1990) presents evidence from weak-crossover suggesting that the A-positions of absolute and specific objects are above the subject. Specifically, he argues that scrambled accusative objects do induce weak-crossover effects unless marked by the specificity marker *-ko* (39a vs. 39b), while absolute objects do not (39c):¹³

- 39) a. *konse laRke-ko apnii māā ghar-se nikaal degii?* ACC+KO
 which boy-OBJCTV self mother house-from throw give-FUT
 ‘Which boy_i will his_i mother throw out of the house?’
- b. *??konsaa laRkaa apnii māā ghar-se nikaal degii?* ACC
 which boy self mother house-from throw give-FUT
 ‘Which boy_i will his_i mother throw out of the house?’

- c. konsaa laRkaa apnii mãa-ne ghar-se nikaal diyaa? *ABS*
 which boy self mother house-from throw give-PERF
 ‘Which boy_i did his_i mother throw out of the house?’

However, this may not be a fact about binding, as the speakers we have consulted who agree with the judgments in (39) have the exactly the same judgments when the anaphor *apnii* is replaced by *merii* ‘my’:

- 40) a. konse laRke-ko merii mãa ghar-se nikaal degii?
 which boy-OBJCTV my mother house-from throw give-FUT
 ‘Which boy will my mother throw out of the house?’
- b. ??konsaa laRkaa merii mãa ghar-se nikaal degii?
 which boy my mother house-from throw give-FUT
 ‘Which boy will my mother throw out of the house?’
- c. konsaa laRkaa merii mãa-ne ghar-se nikaal diyaa?
 which boy my mother house-from throw give-PERF
 ‘Which boy did my mother throw out of the house?’

The contrast in (39) is thus does not appear to be about weak-crossover behaviour of absolutive vs. accusative objects, but rather seems to be about the licensing conditions of *-ko*, which is generally taken to be obligatory for animate objects (for discussion, see Bhatt and Anagnostopoulou 1996). It can be demonstrated that this is about the relation of *-ko* and aspect, and not *-ko* and case, by replicating the facts in (39-40) with the verb *laanaa* (the same strategy we used to distinguish the source of scopal freezing in section 2.3).¹⁴

- 41) a. konse laRke-ko Sita paartii-me laayegii?
 which boy-OBJCTV Sita party-in bring-FUT
 ‘Which boy will Sita bring to the party?’
- b. ??konsaa laRkaa Sita paartii-me laayegii?
 which boy Sita party-in bring-FUT
 ‘Which boy will Sita bring to the party?’
- c. konsaa laRkaa Sita paartii-me laayii?
 which boy Sita party-in bring-PERF
 ‘Which boy did Sita bring to the party?’

We take (41) as evidence that the contrast in (39) is about how perfectivity and *-ko* interact. Providing an explanatory theory for these facts is beyond the scope of this paper, but descriptively it appears that perfectivity induces a default specific reading, rendering the requirement for *-ko* on animates optional.¹⁵

In summary, we attribute the contrasts in (39) to the fact that *-ko* marking is generally obligatory for scrambled objects, but may be alleviated/omitted in

perfective contexts. Should this be the correct statement of the facts, then the weak-crossover contexts are not a source of evidence for differential behaviour of objects in ergative and non-ergative contexts.

Before concluding, we would like to reiterate the four most crucial aspects of our proposal:

- 42) a. The Hindi ergative subject is not assigned case by and does not agree with T.
- b. Ergative subjects are in the specifier of TP.
- c. Control into adjuncts and subject-oriented anaphor binding are properties of surface position in [Spec, T].
- d. Narrow quantifier scope with respect to the object is a property of non-agreement.

Through the empirical discoveries and conceptual reformulations that mark the inevitable progress of syntactic theory, the details of the derivations above (in particular, the labels, which have the shortest half-life) will no doubt change. The generalizations in (42), however, will hopefully have interesting consequences for future researchers of scope in ergative languages.

4. CONCLUSIONS

Many ergativists formulate theories based on morphology and subject-tests alone, that, while internally consistent, postulate movements and checking relations that have consequences for the syntax beyond case and agreement. Starting with the surprising fact that scope freezes in the ergative half of a single language, we've provided a way to tell the some of these proposals apart – only inherent-case proposals (or, perhaps more generally, those that assume ergative case is assigned low, whether through inherent or structural means) can account for the difference in quantifier scope possibilities in two halves of a split ergative language. We situated the locus of the difference in whether or not the subject agreed with the head of which it is a specifier, suggesting that when this is the case, reconstruction is impossible. The Agreement-allows-Reconstruction generalization is intriguing, and seems to make correct predictions beyond ergative languages, e.g., in English, Russian, and Greek. A detailed look at other ergative languages in which there is actual agreement with the ergative (Warlpiri, Georgian, Basque; any language in which *VIVA* is on) can tell us whether the scope restriction is in fact due to non-agreement, or inherent case.¹⁶

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¹ The theories we discuss (including our own) crucially depend on two functional heads related to case assignment; they do not depend on whether these are Tense and *v* as opposed to Agr1 and Agr2, or any other pair of projections that have distinct structural loci.

² Mahajan (1990) *does* in fact argue for a WCO asymmetry between the ergative and nominative. See the end of section 3 for skepticism about this view.

³ All subsequent instances of and remarks about "Hindi" can be substituted with "Urdu;" the distinction is solely political and orthographic, and we happen to have spent more time with native speakers who call their language Hindi.

⁴ These judgements apply only for unscrambled SOV sentences. Scopal freedom in OSV sentences is observed even for those Hindi speakers who report scopal rigidity in canonical SOV sentences. We refer the reader to Kidwai (2001) for a discussion of proposals to account for the effects of scrambling on scope interaction.

⁵ Perfective participles can be accompanied by auxiliaries, in which case they are understood as perfect, or without them, in which case they are understood as simple past. For a discussion of the distinction between perfective (an indicator of completedness) and perfect (a time-span in which an event holds), see Iatridou, Anagnostopoulou and Izvorski (2001).

⁶ There are a handful of lexical exceptions: transitives without ERG in PERF (e.g. *bhuulna* 'forget,' *laanaa* 'bring'), intransitives with it (e.g. *chitkna*: 'sneeze,'), and verbs that show optionality (e.g. *samajhnaa* 'understand'). We return to their scopal behaviour below.

⁷ Masha Polinsky informs us that many Caucasian languages seem to allow mutual c-command between dative subjects and nominatives, but not between ergative subjects and nominatives. An intriguing possibility, not pursued in detail here, is that dative-nominative constructions are within more local base positions (e.g. within an applicative domain), allowing equidistance for movement and binding, while ergatives are separated from the object by a distinct *v* domain.

⁸ The predicational negation reading, with negation below the subject, is also possible.

⁹ Dative subjects of psych verbs (which take an object) are marked by *-ko*, and are found throughout Hindi, not limited to the ergative paradigm.

- ¹⁰ Dative is a case as well, though it is homophonous with objective case. It may be that objective case is an instance of dative-promotion (as discussed for Romance by Gonzalez, 2003) or that the two are simply morphologically syncretic, since, as Bhatt & Anagnostopoulou discuss, they can both appear in a single ditransitive clause. Note that the similarity to the four-way case system of Nez Perce is revealing, but that, contra the published version, Ellen Woolford (p.c.) informs us that dative *-px* and objective case *-na* are **not** syncretic in Nez Perce.
- ¹¹ The reader is referred to Anagnostopoulou (2003) for similar arguments that movement of experiencer interveners for the EPP feeds AGREE with lower DPs.
- ¹² These features are all the least-marked within their respective ϕ -category in Hindi. Though the least-markedness of 3rd within Person and singular within Number are fairly common crosslinguistically, gender markedness may vary, particular when the system contains neuter as well (e.g. in Russian).
- ¹³ Thanks to Lisa Travis for reminding us of this puzzle.
- ¹⁴ In standard Hindi 'bring someone' requires the postposition *-se* 'from, with' on the object. We report data for dialects in which the use of *-se* is optional.
- ¹⁵ Rajesh Bhatt (p.c.) points out that perfectivity is compatible with non-specific readings as long as the context makes it salient that the non-specific reading is desired. Hence, if (i) is uttered in a context where the question under discussion is '*Who did some necklace-stealing?*', there does not appear to be any specific necklace the speaker needs to have in mind:

- (i) haar Mona-ne uThaayaa
 necklace Mona-ERG lift-PERF
 'Mona did some necklace-stealing.'

Note, however, that the non-specific reading of (i) really requires a salient question under discussion targeting the non-specific reading; the same is not the case for (i) in the imperfective. Thus, it appears that the perfective's induced specificity is *defeasible* by context.

- ¹⁶ Some suggestive data comes from Artiagoita (2001), who discusses the behaviour of a peculiar class of epistemic modal verbs in Basque that assign ergative-case to their subjects, which can apparently raise from finite clauses. In (iia), when the subject is *in situ* in the embedded clause, only the surface scope of the modal and indefinite subject is possible. However, when the subject raises, both the surface and inverse scopes are possible, suggesting that reconstruction is allowed. Significantly, verbs in Basque show agreement with ergative subjects, and hence reconstruction should be possible under the agreement-allows-reconstruction generalization in (17).

- (i) a. jokalariren bat Rojorekin minduta dagoela ematen d-u
 player-GEN one Rojo-with hurt is-that seem AUX-3ERG
 'It seems that some player is upset with Rojo.' (seems > \exists , * \exists > seems)
- b. jokalariren batek Rojorekin minduta dagoela ematen d-u
 player some-ERG Rojo-with hurt is-that seem AUX-3ERG
 'Some player seems upset with Rojo.' (seems > \exists , \exists > seems)

Regrettably, parallel examples cannot be tested in Hindi because it lacks raising-to-ergative predicates.

DIANE MASSAM

NEITHER ABSOLUTIVE NOR ERGATIVE IS NOMINATIVE OR ACCUSATIVE*

Arguments From Niuean

1. INTRODUCTION

In this paper I examine the properties of two cases, absolutive and ergative, in Niuean, a Polynesian language of the Tongic subgroup. I look mainly at one issue: whether clear equivalence relations can be set up between the two main cases in an ergative-absolutive (E/A) system and those in a nominative-accusative (N/A) system. The emphasis will be on the relation between absolutive and nominative case because this is the equivalence that is most often assumed.

Many theories of ergativity address such equivalences to a greater or lesser degree (e.g. Bittner and Hale 1996a,b; Bobaljik 1992, 1993; Marantz 1984; Anand and Nevins, this volume; and Ura, this volume), with the most common view being that either one or the other of absolutive or ergative case is equivalent to nominative in being an external case associated with an external head, while the other is, like accusative, an internal case. I will argue that at least in Niuean, such equivalences are not possible in any straightforward way because the two cases display hybrid characteristics when compared to the cases in an N/A system. Instead, in Niuean, both ergative and absolutive are best analyzed as internal cases. (Ura, this volume, also explores this idea.)

Before we begin discussion of the theoretical issues at hand, I present some Niuean examples to show the ergative case system of the language. In order to understand the ergativity of the system, it is important to note that the pre-nominal case morphemes are portmanteau morphemes, which show both the case of the nominal phrase and the status of the phrase with respect to a proper/common (P/C) parameter.¹ Pronouns and proper nouns thus receive different case markers than do common nouns.²

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- 1) a. Ne tohitohi a Sione.
 PST writing ABSP Sione
 ‘Sione was writing.’
- b. Kua egaega e kau kauvehe
 PERF rosy ABS C PL cheek
 ‘The cheeks are rosy.’ (Sp.55)
- c. Koe tele e Sione a Sefa.
 PRES kick ERGP Sione ABS P Sefa.
 ‘Sione is kicking Sefa.’ (S.73d:29)
- d. Ne kai he pusi ia e moa.
 PST eat ERGC cat that ABS C bird.
 ‘That cat ate the chicken.’ (S.73a:29)

In (1a) we see an intransitive clause with an absolutive proper noun, and in (1b), an intransitive clause with an absolutive common noun. In (1c) we see an ergative and an absolutive proper noun, and in (1d) we see an ergative and an absolutive common noun. The paradigm is presented below, based on Seiter (1980).³

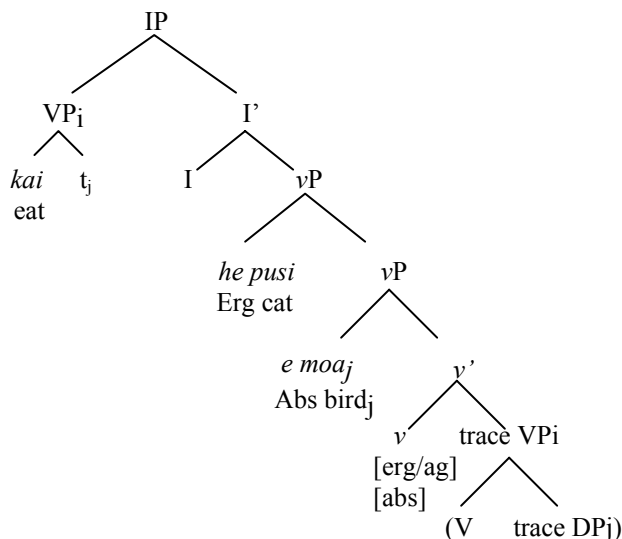
2) Niuean Case Marking:

	ERG	ABS
Proper/Pronoun:	<i>e</i>	<i>a</i>
Common:	<i>he</i>	<i>e</i>

The reasoning for considering both cases to be internal in Niuean is outlined here, with a more detailed discussion to follow in Sections 3 and 4. Ergative exhibits signs of being a direct inherent case (Section 3), in that the ergative argument acts like a term in every way, but ergative case is necessarily associated with a particular thematic role (agent of a transitive verb).⁴ Based on this, I have claimed in previous papers (Massam 1994, 1998, 2001b, 2002a) that ergative is an inherent case assigned to the external thematic argument within the verbal extension (see also Woolford, 1997, 2004; Ura 1998, among others).⁵ Since the absolutive DP is c-commanded by the ergative DP (based on binding, weak crossover, etc.), the default assumption for absolutive would therefore be that it is also an internal case, associated with a verbal head such as the light verb (*v*). This view is clearly incompatible with the view that absolutive is an external case, associated with an IP or CP head, akin to nominative. In Section 4, I examine the nature of absolutive case arguing that there are no compelling reasons why it should be housed in INFL, on a parallelism with nominative case. The main point I would like to make in this paper is that in Niuean, both ergative and absolutive are best viewed as internal cases. (See Ura, this volume, for similar ideas; Branigan and Bobaljik, this volume; and Bittner and Hale 1996a,b, who argue that both cases are on external heads; and Legate, this volume, who argues that the locus of a case can be variable.) In order to provide a particular instantiation of this, I present the clause structure I assume for Niuean

transitive clauses in (3), though there are other possible structures that would also be compatible with my main claim. In (3) (argued for in Massam 2001b, and other papers), the theme argument moves to specifier of v , below the ergative argument, where it establishes an absolutive case relation with v . The ergative argument receives both case and theta role from v in the higher specifier of v . To achieve predicate initial order, I assume long remnant VP fronting (see Massam 2000, 2001a,b).⁶

3) Niuean Transitive Clause (See (1d))



Having provided some background, we can move on to the main theoretical issue. In the next section I will very briefly categorize some theories of ergative case systems with respect to whether they consider absolutive or ergative to be the case associated with an external head (most commonly INFL or COMP) or with an internal head (usually either V or v). In the following two sections I will examine the properties of ergative and absolutive case in Niuean, and argue that neither can be lined up cross-systematically with nominative or accusative. In the conclusion I will briefly discuss the implications of these findings for general theories of case systems. In particular I propose that similar features can appear on different heads in different languages (Béjar 2003).

2. VIEWS OF ERGATIVE AND ABSOLUTIVE CASE

There are many different analyses of ergative case systems in the generative literature. Overviews are provided in Manning (1994) and Johns (1996, 2000), among others, while Dixon (1994) provides an overview of the phenomenon as a whole. Here I will not attempt anything approaching a comprehensive coverage of

all the literature on this topic, but instead will focus on how a handful of the proposed analyses treat the relation between absolutive/ergative case and nominative/accusative case. Although the richness of the many analyses makes them difficult to classify in a simple way, we can isolate three relevant types of proposals, as shown in (4). The first two treat absolutive as equivalent to nominative in being associated with a high external functional head, and consider ergative to be on a lower head, usually one which is internal to VP or *v*P. The two types of analyses vary, though, as to whether ergative is a direct (Ia) or an oblique/inherent (Ib) case. Note that in one analysis, that of Bittner and Hale (1996a,b), ergative is housed on I so that both cases are external, but ergative is parallel to accusative for them in being the lower, marked, structural case. The second type of analysis (II) treats ergative as equivalent to nominative in being an external case, and considers absolutive to be like accusative in being internal. Johns (2000) provides a more complete discussion of the relations between functional heads and cases across various analyses.

4) Commonly Proposed Case Equivalences:

Ia. ABS=NOM (I or C)
ERG=ACC (V or *v* or I)

Ib. ABS=NOM (I or C)
ERG=OBL/INH (V or *v*)

II. ERG=NOM (I)
ABS=ACC (V or *v*)

Within the first two groups (Ia and Ib) the proposed equivalence between absolutive and nominative case is usually related to the fact that absolutive and nominative tend to be the unmarked case and the ‘obligatory’ or primary case, cross-linguistically. In some analyses (e.g. Bittner and Hale 1996a,b) the equivalence between absolutive and nominative is seen to be so strong that both case-types are uniformly referred to as nominative, with a concomitant assumption that it is situated on the most external head. The companion parallelism in (Ia) between ergative and accusative cases is not so frequent in the literature, but in some analyses this equivalence has also been proposed (e.g., Bittner and Hale 1996a,b to some extent; Levin 1983; and Marantz 1984) while others liken ergative to an internal inherent or oblique case rather than to accusative. Variations of this idea can be found in many works such as Bok-Bennema (1991), Chung and Seiter (1980), Hale (1968, 1970), Hohepa (1969), Sperlich (1994), Ura (1998), and Woolford (1997, 2004).

On the other hand, there are (fewer) analyses in which ergative and nominative are argued to pattern similarly in being external, and absolutive and accusative to pattern similarly in being an internal case (e.g., Bobaljik 1992, 1993; Levin and Massam 1985; Marantz 1984; and cf. Anand and Nevins, this volume).

Most of the analyses above, while making parallels between the cases in E/A systems and those in N/A systems, recognize the fact that these parallels are not

absolute. Some of them structurally encode the idea that in E/A languages, the clean association of the two cases with internal and external heads is not as easily accomplished as it is with accusative and nominative cases. For example, while Levin and Massam (1985) consider absolutive case to be the internal case associated with V, it is assigned externally by INFL in intransitive clauses, by means of percolation up to INFL just in case there is no internal argument at S-structure. And ergative, for them and for Bittner and Hale (1996a,b), while external and associated with INFL, is like accusative in being a secondary case, hence optional. Bobaljik (1992, 1993) also captures this property of ergative systems, in that for him, absolutive is the lower case, but in intransitive sentences, by being the only case present, it becomes the highest case. Legate (this volume) considers that ergative is internal to *v*P, while absolutive can be internal, on *v*, or external, on T. In many systems (e.g. Bittner and Hale 1996a,b; Bok-Bennema and Groos 1984; Bok-Bennema 1991; Campana 1992; Johns 1992; and Murasugi 1992) absolutive is a case associated with an external head, but it is assigned to the object, which undergoes movement up to check the case. Bittner and Hale's system is the one most overtly insistent on the absolutive=nominative hypothesis, but it also encodes the hybrid nature of cases in E/A systems, in that while absolutive for them equals nominative, it is, like accusative, assigned to an internal argument, and ergative is associated with an external head (INFL). In their view, syntactically ergative languages (those where the absolutive acts as higher than ergative) are those where the object externalizes for the case, whereas morphologically ergative languages (those where the ergative acts as higher than absolutive), are those where the object remains in situ and receives case from an external head because of the transparency of VP.

Most analyses of E/A systems have in common the underlying assumption that languages have two structural cases, at least one of which is external, associated with INFL (or T, AgrS, COMP or some other external head). For most (though not all), the other case is internal to the verbal projection, associated with the verb (or the light verb, or AgrO). If this assumption is valid cross-linguistically, it would be interesting to determine why case is distributed thus, but in the meantime it would also be important to line up the structural cases found in a given language with these two case-types. But it is not clear that the assumption is valid. It is not easy to establish a necessary relation between case and an external head. Certainly in morphologically ergative languages this assumption leads to complexities in the system. For Bittner and Hale, the association of absolutive with COMP leads to the necessity for long-distance case assignment and a parameterized VP transparency. In Section 4, I argue that in Niuean, there is no obvious reason to associate absolutive with an external head position, and that it is a valid alternative to consider absolutive to be an internal case.

Each of the two cases in Niuean has a set of properties distinct from the properties of the cases in N/A languages. We will begin with a brief examination of ergative case, showing that it shares some properties with nominative (it is the highest case) and some with accusative (it is the secondary case) and that it also patterns with inherent case markers (it is theta-specific), so that no simple equivalence pattern emerges. We will then turn to absolutive, showing that

absolutive shares some properties with nominative (it is unmarked and primary) and others with accusative (it is internal). Hence the cases in Niuean demonstrate complex behaviours that are unique to an E/A system. The analysis proposed to accommodate these facts is one where both cases are internal to *v*P and there is no case associated with an external head in Niuean. Implications of this analysis are discussed in the conclusion.

3. PROPERTIES OF ERGATIVE CASE ARGUMENTS IN NIUEAN

The ergative case marked DP in Niuean is clearly a ‘term’ and not an oblique argument, contra Biggs (1974), and Sperlich (1994) who argue the ergative is like a by-phrase in a passive construction.⁷ This is seen in Seiter (1980), where he shows that ergative arguments, like absolutive arguments and unlike indirect and oblique arguments, can undergo various operations such as relativization by deletion, quantifier float, raising, and so on. While the ergative argument is a term, ergative has definite inherent properties in Niuean, tied inextricably to two features: agentivity (or volitionality) and transitivity as argued for in Massam (1998). The generalization is in (5).

- 5) Iff argument *x* is an agent and the sentence is transitive (contains at least one absolutive argument), then *x* will be ergative.

Both parts of the generalization are necessary. An argument cannot be ergative unless it is an agent, even if there is already an absolutive argument in the sentence, and an argument cannot be ergative even if it is an agent, unless there is another absolutive argument in the sentence. This can be seen by valency increasing operations such as locative advancement and instrumental advancement.

First, we can see that an agent is not ergative unless the sentence is transitive. Unergative sentences with volitional arguments such as (6a,b), express this single direct argument in the absolutive case.⁸

- 6) a. Kua hopo a ia i luga he kaupā
 PERF jump ABSP he LOCP top of verandah
 ‘He jumped onto the verandah.’ (Sp.125)

- b. Ne mohe a ia he kaupā
 PST sleep ABSP he LOCC verandah
 ‘He slept on the verandah.’ (Sp.148)

However, if a locative argument is ‘promoted’ to direct object, the clause becomes transitive, and the agent or volitional argument is expressed in the ergative case, in compliance with the generalization in (5).

- 7) Kua mohe e ia e timeni
 PERF sleep ERGP he ABSC floor
 'He has slept on the floor' (S.63)

Another alternation which creates direct objects is instrumental advancement, as shown in (8-9). (See Seiter 1980; Massam 1998.) Examine first an intransitive agentive sentence with no patient (an unergative sentence), such as (8) with an instrument as prepositional argument, expressed within a PP with the instrumental preposition *aki*.

- 8) Ne tohitohi a Sione aki e pene
 PST writing ABSP Sione with ABSC pen
 'Sione was writing with a pen.'

Alternatively, the instrumental morpheme *aki* can appear as an applicative within the verbal particle complex, and the intransitive verb is then able to take the instrument argument as a direct argument, becoming a transitive verb. This is seen in (9). Compare (8) with (9). The agent is absolutive in the intransitive clause, but is ergative in the transitive applicative clause.

- 9) Ne tohitohi aki e/*a Sione e pene
 PST writing with ERGP/*ABSP Sione ABSC pen
 'Sione was writing with a pen.'

In case of a transitive verb, adding the instrumental applicative particle allows the verb to take a second direct argument, becoming a ditransitive verb (Seiter 1980). In such a case, the agent is ergative and the two internal arguments are absolutive as in (10).

- 10) Ne folo aki e ia e akau e kulī
 PST beat with ERGP she ABSC stick ABSC dog
 'She beat the dog with a stick.'

However, if the proposed base sentence is syntactically intransitive in that the agent is not expressed (an unaccusative sentence), the resulting applicative construction will contain two arguments, neither of which is an agent. In this case, the two arguments will both be expressed in the absolutive case, again, in accordance with (5). Neither of them is expressed as ergative. This is seen in (11a,b).⁹

- 11) a. Ne fakakofu aki e vaka e tau lauakau
 PST cause-cover with ABSC canoe ABSC PL leaf
 'The canoe was covered with leaves.'

- b. Fakamafana aki e poko e hita.
 Cause-warm with ABSC room ABSC heater
 'The room is warm with the heater.'

The data above, in addition to the fact that ergative case is never found on non-thematic arguments, via raising for example (Marantz, 1991), argue that ergative is a secondary inherent case, associated with the transitive agentive theta role. I take this theta-relatedness to indicate that the ergative case is assigned in situ, in conjunction with the volitional or agent theta role, to the specifier of a transitive vP. Given that there are no grammatical (as opposed to thematic) subject/object asymmetries in Niuean (Massam 2001b), there is no reason to consider that the ergative DP externalizes from its thematic position in Niuean. Instead, it remains in situ, while the verb (or remnant verb phrase) externalizes to yield predicate initial word order.

The ergative DP in Niuean clearly c-commands the absolutive. This is seen by weak crossover facts, by the fact that in a transitive clause, only the ergative can be controlled, and by the fact that it is the absolutive object that can be marked with the emphatic marker to show coreferentiality with the ergative argument, and not the other way round (Seiter 1980).¹⁰ In (12) we see an example of weak crossover, which demonstrates that the ergative argument c-commands the absolutive argument. For further illustration of arguments for this c-command relation, see Seiter (1980) and Massam (2001b).

- 12)* Ko hai_i ne fakahakehake he faiohoa haana_i nī
 PREDP who_i NFUT praise ERGC teacher his_i EMPH
 ('Who_i did his_i own teacher praise?')

If the ergative DP has not been externalized to the specifier of a functional projection, and the absolutive is below the ergative, then the absolutive DP is also internal to the extended verbal projection. This is consistent with various syntactic facts of the language, and it characterizes Niuean as a morphologically ergative language (see Chung 1978; Seiter 1980) in the terms of most researchers. In the system of Bittner and Hale, therefore, Niuean, like the related language Samoan in their paper, is a VP transparent language, in which absolutive case is assigned from COMP to the object, in situ. In the next section we examine further the properties of absolutive case in Niuean, arguing that it should not be so aligned with an external nominative case in N/A languages.

4. PROPERTIES OF ABSOLUTIVE CASE IN NIEUAN.

4.1 *Absolutive as an internal case in Niuean*

There are reasons why absolutive case could be seen as equivalent to nominative in Niuean. First, as discussed by Sperlich (1994) and Biggs (1974), virtually every sentence must contain an argument in the absolutive case.¹¹ In the analyses of

Bittner and Hale (1996a,b), Bobaljik (1992, 1993), Levin and Massam (1985), and Otsuka (this volume), for example, absolutive, like nominative, is the primary case. Secondly, depending on how the pre-nominal morphemes in Niuean are analyzed, it is possible to see absolutive as the morphologically unmarked case. (This is not reflected in (2) but see Clark 1976.)

However, in other ways absolutive case marked nominals do not behave like nominative case marked nominals. As discussed in the previous section, it is clear that absolutive arguments are lower in the phrase than ergative arguments. However, in theories of morphological ergativity such as Bittner and Hale 1996a,b, this is not a problem, as it is possible for the external case to be assigned to an internal argument in situ, due to the transparency of VP in such systems. Note, however, that the hierarchical facts are also straightforwardly explained in a system in which absolutive is not associated with INFL, but rather, with an internal head, at least one specifier of which (the absolutive argument) is lower than the ergative argument.

There are other ways in which absolutive does not behave like nominative, but rather like accusative in N/A languages. Nominals appearing after prepositions such as the benefactive, the comitative and the instrumental, appear with the pre-nominal marking found in absolutive DPs. (Others, such as goal and source, appear with the locative marker.) This is seen below for the preposition *aki* 'with', where *huki* 'fork' is preceded by the marker which appears with absolutive common DPs, *e*.

- 13) Ne kai e Sione e tau talo aki e huki
 PST eat ERGP Sione ABSC PL taro with ABSC fork
 'Sione ate the taros with a fork.'

It is extremely uncommon, as far as I am aware, for prepositions to assign nominative case. Rather, as verb-like heads, they assign an internal case, commonly either accusative or dative. This strongly suggests that absolutive in Niuean is not akin to nominative, but rather, to an internal case.

Further indication that absolutive in Niuean is an internal case is found in the case of instrumental applicative constructions also discussed above in Section 3. In such constructions, a morpheme is added to the verbal complex, and the verb acquires a new direct object, expressing a participant that would normally be expressed as an oblique or indirect argument. One example is shown in (10), another example is shown in (14). (See Seiter 1980, and Massam 1998.)

- 14) Ne ahu aki e ia e akau e tau toa
 PST slay with ERGP he ABSC club ABSC PL hero
 'He slayed the heroes with a club.'

This can be contrasted with (15), where the applied morpheme *aki* appears instead as a preposition.

- 15) Ne ahu e ia e tau toa aki e akau
 PST slay ERGP he ABSC PL hero with ABSC stick
 'He slayed the heroes with a club.'

In the applicative construction (14), the instrument argument is not the object of a preposition, but instead appears as a direct absolutive argument, normally (but not necessarily) before the theme, which also appears in the absolutive.

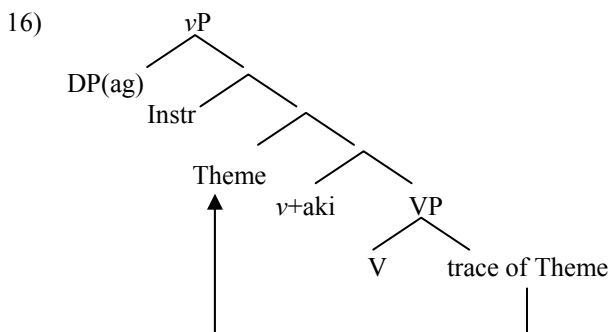
Applicative constructions generally divide into two types. First are those like Niuean, termed symmetrical, or in more recent terms, high applicatives. In these applicatives the applied argument and the original object both act as direct objects in the applicative construction. The second type consists of those termed asymmetrical or low applicatives, where the applied argument acts as a direct object, but the original object acts as an oblique. (For the development of the concepts of high and low applicatives, see Pykkänen 2001, 2002; also Marantz 1993.) Since the Niuean applicative is symmetrical, as argued by Seiter (1980), or high, we will consider only this type here.

Of importance here is the observation that in all the N/A languages discussed in the literature, the case of the applied argument is an internal, usually accusative or dative case, and not the external or nominative case. Since the applied case in Niuean is absolutive, this is a clear situation where absolutive case in Niuean patterns descriptively with accusative and not with nominative case in N/A languages. It might be, of course, that this patterning is just an extension of the fact that absolutive is the case that is assigned to internal arguments in E/A languages. As such, absolutive, although an external case, patterns with accusative in always being assigned to direct internal arguments across the board, even if their direct status is due to the presence of an applicative morpheme. The applicative case might thus be expected to be absolutive, even though multiple nominative constructions as found in Japanese and Korean are quite distinct from applicative (multiple accusative) constructions.¹² At this point it becomes important to examine the sources of case assignment in applicative constructions.

While there are several treatments of applicative constructions in the literature, many of them do not outline the details of case assignment or checking. It seems desirable for any analysis to make a connection between the applicative marker on the verb and the fact that an additional direct argument is case-licensed. For traditional and GB treatments this connection is made in most analyses by having the [V+applicative] complex responsible for case assignment. For example, in Baker (1988), the applicative marker has case, and it undergoes preposition incorporation into the verb: the resulting complex assigns two cases to the arguments. Since the complex is verbal, it assigns two internal cases. A slightly different view (Massam 1985) is that the applied marker licenses the verb to assign its case twice, which even more strongly ties the applicative case to the verbal internal case. In such analyses, it falls out that it is the case assigned by the verb that is now multiplied, as a direct result of affixation or incorporation. It would be very complex in such systems to explain why an affixation operation on the verb should license an external head to assign two cases.

In recent treatments (e.g. McGinnis 2001; Pykkänen 2001, 2002; Paul 1999, Rackowski to appear), the analysis is different, and the connection between the case assigned by the verb and the case added by the applicative element is loosened somewhat, since the applicative marker is treated as an independent head and case

assigner, rather than as a dependent on the verb. Massam (2002b) presents an analysis for Niuean based on these treatments, but with a multiple specifier approach, as in (16), which captures the symmetry of the two objects in Niuean applicative constructions discussed by Seiter (1980). In this view, the applicative marker is affixed to the light verb, and as well as assigning an instrument theta role to a specifier, it provides the light verb with the ability to assign or check absolutive case more than once. Note that it does not provide an extra case feature, otherwise it would be necessary for all applicative constructions to have two absolutive arguments, whereas in fact it is possible for there to be only one, as in (9). The *aki* marker on the verb is similar to the transitive feature in that it assigns a theta role to an argument in specifier position.¹³



We can observe that the addition of the applicative marker on the verb is directly responsible for the licensing of the second object. It is unclear how this connection can be made in a system where absolutive is considered an external case. In fact, it seems that a system such as Bittner and Hale's (1996a,b) might predict that the applied argument should appear with ergative case, since the absolutive argument might be a case competitor for the instrument argument as well as the ergative, and the instrument and the agent might be considered to be both local to INFL (Milan Rezac, p.c.).¹⁴ Either way, the system needs to be manipulated to allow for applicative constructions.

We can see then, that absolutive case in Niuean patterns with nominative in some respects and with accusative in others. It patterns with nominative in being (nearly) essential (i.e. primary) and in being unmarked, and it patterns with accusative in being assigned to an internal argument, and in its behaviour in prepositional phrases and applicative constructions. It seems important that prepositions and applicative markers, related as they are to verbs, should exhibit internal case features that are parallel to those associated with verbs rather than with an external head. But the question remaining is whether the properties of being primary and unmarked are necessarily linked to the external nature of nominative. If they are, then it appears that absolutive must be associated with an external head. In the next section, however, I argue that the properties of being primary and unmarked are not necessarily linked to being associated with an external head.

4.2 *Primary Case and INFL*

The first question to be addressed in this section is why is nominative case primary and unmarked? In the literature in general, it is often assumed that there is an answer to this question in that the primary and unmarked properties of nominative case are crucially connected to this case being associated with INFL.¹⁵ Cowper (2003) discusses the history of the connection between nominative and INFL, showing that nominative case often has been considered to be tied to finiteness and/or agreement (see Chomsky 1981, 2000; Hornstein 1995; Pesetsky and Torrego 2001; Schutze 1997, among others). In other analyses, the nominative is tied to the EPP feature on INFL, which in turn has been related to predication (Rothstein 1983). In Chomsky (1995), for example, nominative is a free rider on the EPP feature [D], on INFL. The general idea developed in many papers is that, because sentences need subjects, or more specifically, because finitely inflected clauses necessarily have agreement/nominative case, the obligatoriness (and by extension the unmarkedness) of nominative case is explained.

But the generalizations outlined briefly above, even if successful for other languages, do not extend to Niuean. There is no agreement in Niuean, so absolutive case cannot be argued to be tied to agreement as in Schutze (1997).¹⁶ Further, it has been argued that there is no EPP [D] feature in the language and that the arguments remain within the extended verbal projection, with any predication requirements being taken care of by predicate fronting (Massam and Smallwood 1996; Massam 2001b), so absolutive cannot be tied to an EPP [D] feature as in Chomsky (1995). Finally, the assignment of absolutive case is not tied to finiteness in this language in any demonstrable way, as I will illustrate below. (Interestingly, this point is made by Bobaljik 1993 for absolutive case in Inuktitut, in his argument that ergative is the case most parallel to nominative in some ergative systems.)

The closest potential non-finite clauses in Niuean are clauses with the complementizer *ke*, which have been termed subjunctive in Niuean. *Ke*-clauses are used in embedded clauses in unrealized or hypothetical complements, in purpose clauses, and with control and raising matrix verbs (whether or not control or raising occurs). If we consider that control sentences are necessarily non-finite, then we can see that non-finite clauses can appear with absolutive case, as can be seen in (17).

- 17) Fia loto a ia [ke tā e fāloku]
 want ABSP he SBJV play ABSC flute
 ‘He wants to play the flute.’ (S.128a:136)

In addition, in cases where the controlled nominal is an antecedent of a reflexive, the controlled nominal can optionally appear as an overt pronoun, in absolutive case (Seiter 1980). This shows that it is not just absolutive O (object of transitive) that can appear in control sentences, but that absolutive S (intransitive subject) can also.

- 18) a. Kua amaamanaki e nā tama [ke fe-tohitohi-aki
 PERF hope ABSC pair boy SBJV RECPR-write-RECPR
 hololoa (a laua)]
 frequently ABSP they

‘The two boys are hoping to write to each other frequently.’

- b. Kua lali e tagata nā [ke nākai mā (a ia)
 PERF try ABSC man that SBJV not ashamed ABSP he
 i a ia nī
 because of him EMPH

‘That man is trying not to be ashamed of himself’ (S.134.139)

From this we can see that clauses assumed to be non-finite can appear with absolutive case. On the other hand, if we consider that the clauses in (17) and (18) are finite, it is also clear that absolutive case is not inextricably tied to finiteness, since it is possible for absolutive not to appear, as in (18). This optionality of absolutive case in *ke*-clauses is also seen in raising examples, where a lower subject can remain in situ within a *ke*-clause (19), or can be raised (20).

- 19) Maeke [ke nofo a Pita i Tuapa]
 Possible SBJV stay ABSP Pita at Tuapa
 ‘Pita can stay at Tuapa.’
- 20) Maeke a Pita [ke nofo ____ i Tuapa]
 Possible ABSP Pita SBJV stay ____ at Tuapa
 ‘Pita can stay at Tuapa.’

A final argument that case in Niuean is not tied to finiteness is that the same degree of optionality exhibited by an absolutive argument within a *ke* clause is exhibited equally by an ergative argument. In (21) and (22) we see that the ergative argument also can appear in the embedded clause, or be raised to the matrix clause, where it receives absolutive case. Note that in both sentences, an absolutive argument appears in the embedded *ke* clause.

- 21) Kua kamata [ke hala he tama e akau]
 PERF begin SBJV cut ERGC child ABSC tree
 ‘The child has begun to cut down the tree.’

- 22) Kua kamata e tama [ke hala ____ e akau]
 PERF begin ABSC child SBJV cut ABSC tree
 'The child has begun to cut down the tree.'

Thus, the appearance of an absolutive (nor ergative) case marked argument does not correspond with a finite clause-type.

Although it has no EPP or finiteness features, Niuean still has one case that is unmarked and primary, just like N/A languages where case has been argued to be tied to finiteness. But in the context of the discussion above, it appears that there is no necessary connection between being an obligatory, unmarked case, and being associated with any particular feature in INFL, although it might be that this is the usual situation in languages with finiteness/case connections and/or with an EPP [D] feature on INFL. The existence of a primary, or an obligatory case is thus perhaps an independent requirement of grammar (Bobaljik 1992, 1993; Levin and Massam 1985) connected only to internal properties of the case module, or it may be tied to some other subsystem of language which we have not yet uncovered.¹⁷ At any rate, the fact that absolutive is primary and unmarked is not an argument for it to be necessarily associated with an external head such as INFL.

4.3 *Another problem for the nominative=absolutive view*

The most articulated version of case theory in which absolutive is held to be nominative is that of Bittner and Hale (1996a,b). We will briefly review their system below, then we will show that there are further problems for this view if extended to Niuean.

Bittner and Hale analyze Samoan as a morphologically ergative language in which ergative is assigned by the verbal trace in I to the subject of the vP in situ, and absolutive is licensed by COMP, to the object in situ, due to the transparency of VP, which is the result of head movement of V to INFL then to COMP.¹⁸

It is not clear that Niuean verbs actually raise as high as COMP (Massam, 2000), but putting that problem aside, there is another obstacle to applying this analysis to Niuean, namely that there is evidence in Niuean that absolutive objects are not in situ in their theta positions.

The evidence that absolutive arguments are not in their merged, thematic positions comes from raising constructions. As mentioned above, in Niuean, we find both raising to subject and raising to object constructions (extensively discussed in Seiter 1980; Massam, 1985). Note however, that both involve raising to absolutive. Raising is possible from object position as well as from subject position, but here, to simplify, we will consider only raising from subject position.

- 23) Ne toka e Maka ke fano kehe a au
 PST let ERGP Maka SBJV go away ABS I
 'Maka let me leave.'

- 24) Ne toka e Maka a au ke fano kehe ____
 PST let ERGP Maka ABS me SBJV go away
 ‘Maka let me leave’

It is clear that the embedded subject has moved from its original position to a position higher than the embedded clause, but lower than the matrix ergative subject. Since ergative arguments are merged in, and remain in, specifier of *vP*, the position into which the embedded subject raises must be a specifier of the matrix *v*, below the outermost specifier, which contains the agent argument. This is the position that regular thematic absolutive objects have been argued to move to, as in the derivation outlined in (3) above. This is entirely consistent with the claim that absolutive is an internal case, associated with *v*, but it is not consistent with the claim that absolutive is an external case, assigned through VP to the object in situ. If absolutive is associated with COMP, the analysis would have to be modified, so that there would be one Move relation between the matrix *v* and the embedded subject (*a au* ‘me’ in (24)) which causes it to move to the specifier of matrix *v* (for no particular reason), and another completely unrelated Case/Agree relation between the matrix COMP and the embedded subject after it has moved. If absolutive is associated with *v*, on the other hand, the Case/Agree relation and the Move relation both hold between *v* and the embedded subject, in fact they can be considered a single instance of Agree/Move.

In fact, there is evidence in Niuean that movement to specifier of *vP* is always associated with the assignment of absolutive case. If an object remains in situ, and does not move to specifier of *v*, it does not receive absolutive case, but instead undergoes fronting with the verb. This phenomenon, termed pseudo noun incorporation, is discussed in Massam (2000a), and is exemplified below. In (25b), the bare object undergoes fronting with the verb, and does not check absolutive case.

- 25) a. Takafaga tūmau nī e ia e tau ika
 hunt always EMPH ERGP he ABSC PL fish
 ‘He is always fishing.’ (S.183a:69)
- b. Takafaga ika tūmau nī a ia
 hunt fish always EMPH ABSP he
 ‘He is always fishing.’ (S.184a:69)

Thus, Niuean absolutive objects clearly do not remain in situ, but move to a specifier of the light verb. An analysis which locates absolutive case on the light verb can explain this movement in a straightforward way, by assuming that absolutive case is associated with an internal predication feature, unlike an analysis in which absolutive is located on an external head.

5. CONCLUSION

I have argued in this paper, first, that ergative case is not equivalent to nominative nor to accusative case in N/A languages in that it is direct, inherent, and assigned internally to vP to the external agent argument. I have also argued that absolutive case does not pattern purely with accusative nor with nominative case but that rather it should be seen as hybrid in that it is internal, but has the characteristic of being the primary unmarked case in the language. This requires that the primary unmarked character of a particular case is not tied inextricably to INFL by means of features such as finiteness, EPP, or agreement, and this was shown to be empirically true in Niuean.

This paper argues against the position of Bittner and Hale (1996a,b), and others, who argue that absolutive case in E/A languages is equivalent to nominative case in N/A languages, in being associated with the most external case head, though it is like nominative in being primary and unmarked. Of course, Bittner and Hale (1996a,b) present a detailed and impressive theory of case in general, whereas this paper aims only to show that in Niuean, cases cannot be treated as fully parallel to cases in N/A languages. Although this paper has a modest goal, it does suggest a new direction for the study of parameterization of case systems: one in which case features can differ not only in their inherent properties, but also by virtue of appearing on different heads. An approach of this nature is argued for at length in Béjar (2003) for agreement features such as person and number. Béjar claims that such phi features can be distributed differently across functional heads in different languages, and she shows that complex variations in agreement systems (including ergative agreement patterns) fall out quite naturally from this claim. The present paper suggests that such an approach could readily be developed for case also, to account for cross-linguistic variation in case systems.

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¹ Other features may also be relevant: a full semantic/featural analysis of these particles remains to be undertaken.

² Data sources are: M = McEwen 1970, S = Seiter 1980, Sp = Sperlich 1997. Unmarked examples are from my own field notes. Abbreviations are: Ag 'agent', Abs 'absolute', C 'common', Emph 'emphatic', Erg 'ergative', Instr 'instrument', Lig 'ligature', Loc 'locative', Nfut 'nonfuture (embedded)', P 'proper', Perf 'perfect', Pl 'plural', Pred 'predicate marker', Pres 'present', Pst 'past', Ques 'question particle', Recpr 'reciprocal', Sbjv 'subjunctive'.

³ It is tempting to consider that the *e* marker used for ergative proper and absolute common is a single syncretic morpheme, but this in fact is difficult to argue for systematically, and it goes against the historical evidence discussed in Clark 1976. We thus consider these two to be different morphemes.

⁴ Interestingly, not all agents receive ergative case, but only those with a transitive verb. Hence, this case has properties of an inherent, or theta-related case, but there is more to this case than simply theta-relatedness, unless transitive agents are seen as bearing different theta roles from intransitive agents. See further discussion in Sections 3 and 4.

⁵ In this paper I attempt to maintain a fairly neutral theoretical tone, so I freely use both terms, case assignment and case checking, with the understanding that they could cover a range of mechanics for establishing case relations.

⁶ For unaccusatives, the derivation is the same except the *v* is intransitive, with [abs] but no [erg/ag] feature in *v*, thus no external argument. For unergatives, the same intransitive *v* is merged, but with an external theta role (if we assume the Unaccusative Hypothesis), and the single argument is merged in specifier of *v* where it receives its theta role and absolute case. Various particles appear after the verb, but I put them aside in this paper.

⁷ See Dukes 2000, and Otsuka 2000 for a discussion of properties of ergatives in Tongan, Niuean's sister language.

⁸ Certain Niuean nouns of location take proper case marking, such as *luga* 'top' in (6a).

⁹ It is interesting that in both (11a) and (11b), the verbs are prefixed with the causative *faka*. This suggests that there might be a null ergative agent argument in the sentence, which would of course immediately explain why the other two arguments cannot be ergative. However, the following example cannot plausibly be considered to involve an agent, demonstrating that an ergative agent is not necessary in applicative sentences with *faka*. (Note that in (i) the applied instrument has been extracted by relativization, leaving the verb superficially with a single absolute argument.) See Massam 1998 for more discussion.

- (i) Ko e matapatu ne fakavē aki e motu nai liga ko e maka-uli he mouga vela
 PredC foundation Nfut secure with AbsC island this likely PredC rock-black of mountain hot
 'The foundation that this island is secured with is probably a black volcanic stone...'
 (from Niue: A History of the Island, The Government of Niue, 1982 p.1)

¹⁰ These facts led Seiter 1980 and Chung 1978 to consider Niuean a morphologically ergative language rather than a syntactically ergative language, but Massam (2001b) argues that these operations refer to merge positions, and that Niuean syntax is, on the surface, neither accusatively nor ergatively organized. See also Hooper 2000.

¹¹ There are exceptions to this statement though, in equative sentences (i) and existential sentences with the obligatorily noun incorporating verb *fai* (ii), it is possible for there to be no sentential argument marked with absolute case, as seen below.

- (i) Ko e hāna a nofoaga ko Houma
 PredC his Lig dwelling=place PredP Houma
 'His dwelling place was Houma.' (M.131)

- (ii) ...poke fai uga nakai
 ... if be crab Ques
 'if there were any crabs.' (Sp.113)

¹² These constructions have been widely discussed, see for example Heycock 1993, Takahashi 1994, and recently, Akiyama 2004.

¹³This analysis, with *aki* affixed to *v*, also allows for derivation of the right order for verbal particles, as discussed in Massam 2002b.

¹⁴It is not easy to determine exactly what would be predicted, since the structure assumed here is different from that discussed in Bittner and Hale 1996a,b.

¹⁵For Bittner and Hale 1996a,b, nominative is associated with COMP, not INFL, but we will refer only to INFL in this discussion, with the understanding that the discussion could extend to COMP, in the Bittner and Hale system.

¹⁶Of course, it is possible to posit abstract agreement in Niuean and to tie case to it, but this seems counter-intuitive in an isolating language with absolutely no evidence of phi activity, but with a rich case system.

¹⁷One possibility is that it is indeed tied to some concept of predication (Chomsky 1995), but that this predication can be a requirement of IP or of vP, depending on the language.

¹⁸The system of case in Bittner and Hale 1996a,b is technically quite complex, and I do not attempt to do it justice in detail here, but instead my discussion will remain general.

ECCENTRIC AGREEMENT AND MULTIPLE CASE CHECKING^{*}

1. THE PUZZLE

Among the exciting issues raised by the study of ergative systems is the extent to which they pose a challenge to claims made about Universal Grammar which are based on the study of non-ergative languages. In this paper, we investigate a particularly puzzling construction—the spurious antipassive (hereafter, SAP)—in Chukchi, a language that differs from many more well-studied languages not only in having an ergative case system but in a number of other ways as well. This particular construction illustrates well the familiar tension between descriptive and explanatory adequacy—the theory of morphology and syntax must be flexible enough to allow for the existence of such a construction, yet at the same time rigid enough to derive non-trivial predictions about possible and impossible systems. At first glance, the properties of the Chukchi SAP suggest that languages may differ quite radically, if not arbitrarily, in how they map syntactic representations onto sound and meaning structures. We will take it as our goal to defend instead the view that UG is quite narrow in the range of possible variation, and that the key ingredients of an analysis of the Chukchi SAP are all readily available in recent assumptions about morphology, syntax and the relation between the two. In developing our analysis, we will show not only how the SAP is possible within a constrained theory of UG, but also (to a large extent) why the SAP takes the particular form it does, how it is related to other properties of Chukchi morphosyntax, and to other constructions in more familiar languages, and what our proposed theory excludes as impossible constructions. The paper is laid out as follows. In section 2 we present a basic sketch of the SAP, followed by a thumbnail sketch of our analysis. In section 4, we begin fleshing out the ingredients of the analysis, defending a particular take on the morphosyntax of ergative systems and a theory of agreement. The analysis is tentative in parts, though we have attempted throughout to indicate further testable consequences of our proposals where these arise. Section 5 draws parallels between the Chukchi ergative system and the superficially similar case pattern in French causative constructions, providing some measure of independent support for our assumptions. We then return to Chukchi,

[†] University of Connecticut

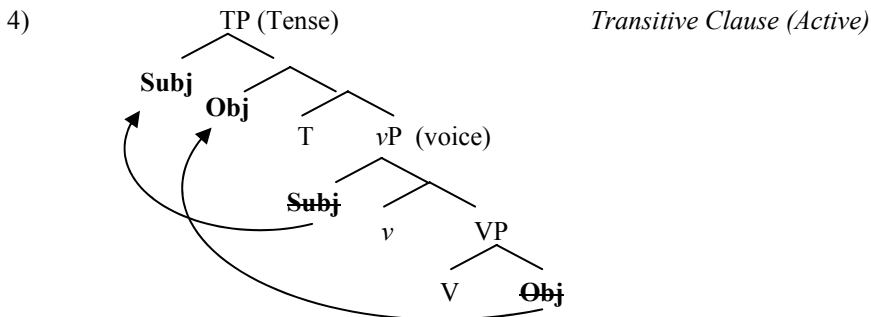
[‡] Memorial University of Newfoundland

- 2) a. ʔaaček-a kimitʔ-ən ne-nʔetət-ən
youth-ERG load-ABS 3PL.SUB-carry-3SG.OBJ
'(The) young men carried away the load'

- To this point, the Chukchi facts are unremarkable and illustrate a fairly typical ergative system. As it happens, the basic transitive morphosyntax in (1a), (2a) is not available to all combinations of subject and object. Certain person-number combinations—a subset of the “inverse” combinations in which the object outranks the subject on a person-number hierarchy—are not expressible in the expected form. Instead, for these combinations, intransitive antipassive morphology is used on the verb, while external to the verb, clausal morphosyntax remains transitive (as evidenced by an ergative-absolutive case array). This construction is dubbed the “spurious antipassive” by Ken Hale in Halle and Hale (1997) and Hale (2002) in virtue of the fact that the antipassive morphology seems to have no effect on the syntax or semantics of the clause, yet it is obligatory in this construction.

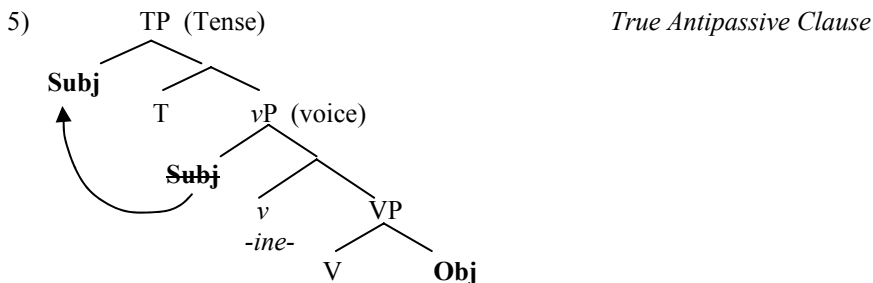
- In addition to the mismatch between the transitivity of the clause on the one hand (case) and the verb on the other (agreement), two further remarks are in order about the agreement morphology in the SAP. First, the intransitive agreement morphology on the verb is governed by the ergative argument. This is otherwise impossible; intransitive agreement morphology is always controlled by an absolutive argument. Conversely, the absolutive argument fails to govern any agreement on the verb. Again, this is not possible elsewhere in Chuckhi. In other words, agreement on the verb continues to treat the ergative argument as the subject of the clause, even though the case array is inappropriate for the particular agreement morphemes used.

At this point, we will outline our analysis and key assumptions. The presentation in this section will be quite sketchy, but is offered at this time so that our endpoint will be clear as we flesh out the motivation for these assumptions in the coming sections. We start with the analysis of a simple transitive clause, shown in (4).



This derivation incorporates the premise that the relationship of syntactic configurations to argument structure is universal, and that ergative languages do not vary from nominative ones in this regard (see section 4.1 below). In current terms, this means that the internal argument is merged in VP and the external argument is introduced in the specifier of a functional projection, vP . The difference among case systems thus lies in the functional projections. We propose that the basic property that differentiates the ergative system in Chukchi from more familiar nominative-accusative systems is that in Chukchi, the v head cannot check/license object case, as proposed for other ergative systems by Bok-Bennema (1991) and Nash (1995).³ We claim as well that a single head may check case on two arguments, if necessary for convergence. Since v in Chukchi cannot check object case, both subject and object raise to the domain of T° for checking.⁴ This multiple-checking by T , we will argue, leads both to an Ergative case pattern and to the possibility of portmanteau morphology on the agreeing head T° . (There is an additional head involved in agreement, namely C° , a point to which we will return.)

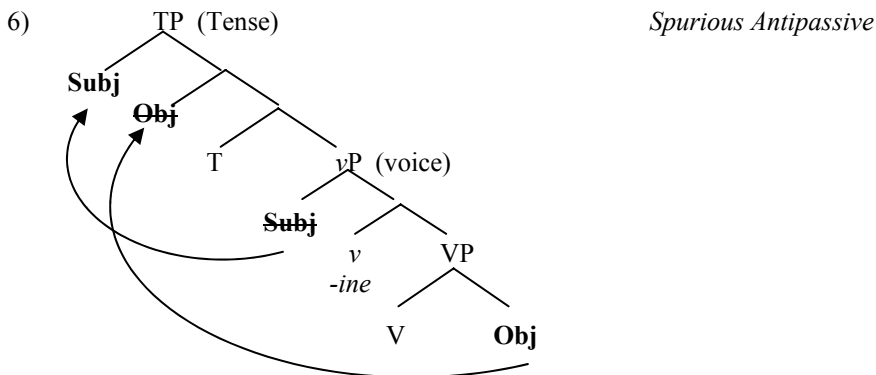
An intransitive clause lacks an object, and thus there is only one instance of case-checking with T° . A special case of an intransitive derivation is the Antipassive, shown in (2b), in which the object does not raise out of the VP/ vP into the functional domain, as shown in (5).



It is important to our account that morphology is post-syntactic and realizational, as in Distributed Morphology (Halle and Marantz, 1993). The overt antipassive morpheme *-ine-* does not cause the syntactic configuration in (5), rather the morpheme is introduced as a reflection of the antipassive syntax. One may think of *-ine-* as the *exponent* or *spell out* of the v head when there is an object in its local

domain, the head being spelled out as \emptyset otherwise (e.g., when there is no object or when the object has raised out).

At this point, most of the pieces are in place for our analysis of the SAP, which we sketch in (6).



In our view, the SAP is a normal transitive clause syntactically. Thus, it has a normal transitive derivation, as the arrows indicate: both subject and object raise to T for case-checking, as in (4). What “goes wrong” is in the morphological interpretation of such a clause. As pointed out above, the SAP is obligatory with a subset of inverse constructions, defined as instances in which the object outranks the subject on a person-number hierarchy. We propose that such inverse contexts are computed locally, i.e., when the two arguments are in a checking relationship with the same functional head. The offending configuration is resolved, in the mapping to the morphological component, by deleting the features of one of the arguments (the lower one) at the checking head. This is indicated by strikethrough of the top copy of the object in (6). This accounts for the intransitive agreement morphology at the T head.

Now, recent work in the syntax of chains has shown that the automatic consequence of the deletion of a higher copy in a chain is the exceptional activation of a lower copy. This results, for example, in arguments appearing to be pronounced in unexpectedly low positions, in response to morpho-phonological conditions on the high position (see below). In the current context, this means that the deletion of the object features at T° in the morphology predicts the “spurious” activation of those features in a lower position of the object feature chain. This in turn makes the vP look like an antipassive—defined as in (6) as a construction in which the object remains low; the context for the insertion of the antipassive morpheme is thus met and the verb will surface in its antipassive form.

In the remainder of the paper we will set about fleshing out this analysis and motivating the component assumptions. Some of the benefits of this analysis are that it relates the SAP directly to other properties of Chukchi morphosyntax, and in particular, that it gives a clear reason why it is the antipassive morphology that is used spuriously, as opposed to, say, a spurious causative or a spurious iterative. The

analysis also has the advantage that it is constrained, making fairly clear predictions about systems that cannot arise. In this last point, our treatment of the Chukchi SAP differs from the previous treatment of this construction in Spencer (2000) which invokes a rule of referral, in effect, directly stating the description of the construction as its analysis.

4. BASIC CHUKCHI MORPHOSYNTAX

Before developing the account of the SAP, there are a number of properties of Chukchi morphosyntax which any theory must capture. We have listed six of these properties in (7) as a descriptive adequacy checklist.

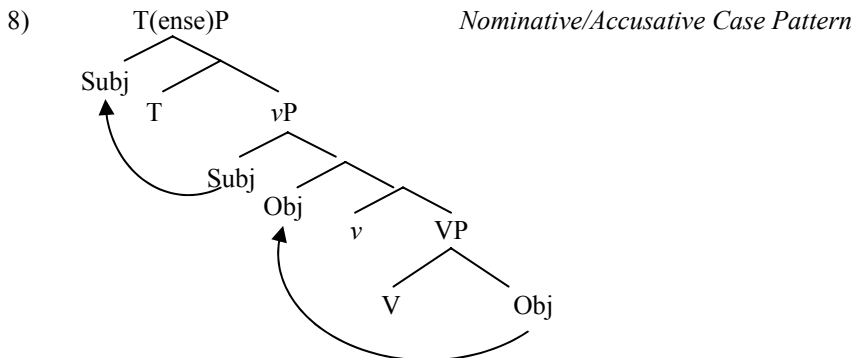
7) Descriptive Adequacy Checklist:

- a. Ergative-Absolutive Case-Marking (Ergative is marked)
- b. Subject > Object (all prominence tests)
- c. Complex Agreement (Prefix and Suffix; Subject and Object agreement)
- d. Intransitive verbs have “double agreement”, subject agrees twice
- e. Suffixes (not prefixes) have portmanteau morphology
- f. Antipassives are marked, derived intransitives

It is our contention that the minimal assumptions needed to capture the properties in (7) will bring us very close to having in place the assumptions needed for the analysis of the SAP.

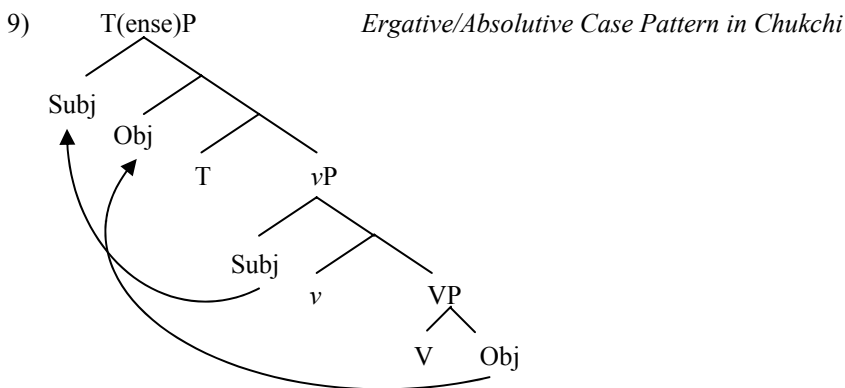
4.1 *Ergativity*

We assume as a point of departure the commonly accepted view of the mapping from argument structure to syntax and of case/licensing relations in a nominative-accusative system presented in (8).



In this structure, the internal argument is base-generated as the complement of the verb. A higher head, *v*, is responsible for both the assignment of an external theta-role to the subject and for the checking of the object's case, in a now familiar manner (e.g., Chomsky, 1995). The subject in turn raises to check case with *T*.

Since (8) is, by hypothesis, the mechanism that underlies a nominative-accusative case array, something must be different in an ergative-absolutive array. It is not our intent to provide a general theory of ergativity (we suspect, with Johns, 1996, that ergativity may be no more a single syntactic phenomenon than is, say, verb-initialness), but we must nevertheless make some assumption about ergative case assignment in Chukchi. We propose that the minimal difference from (8) is that the head *v* in ergative languages is unable to check accusative case. As a consequence, in a transitive clause, the object will have to raise higher in an ergative language for case reasons. We propose that this raising targets *T*^o, the only other case-related head in the structure, as shown in (9).



Note that we follow Richards (2001) in assuming a “Tucking in” derivation—a locality principle such as Attract Closest ensures that the first argument attracted to *T*^o is the highest unchecked argument in *T*'s c-command domain (the subject); subsequently attracted arguments are merged as close as possible to the checking head.⁵ This preserves underlying hierarchical relations, ensuring that the subject

c-commands the object in its case position, as we know to be the case from familiar diagnostics such as binding.⁶

Positing that *v* lacks an accusative case feature in ergative languages forces the object to check case with the next higher head, namely T. This provides an initial account of the basic property of an ergative system, namely the fact that the object bears the same case as the sole argument of an intransitive clause. Both check case against the same head. But this is clearly not the whole story, since the transitive subject also checks case against the same head, and (9) does not yield a double-nominative array. We propose that the ability of a single head to check distinct cases on multiple arguments is permitted by UG, but only as a marked option, when necessary for convergence. More specifically, we propose that the higher case (the first one checked) in such configurations will always be the more marked case (though this need not be visible on the surface).⁷ In the system under investigation, this will be the ergative—below we will extend this proposal to certain dative-accusative configurations in Romance which we take also to instantiate a configuration like (9).

That the ergative case is more marked than the absolutive is clearly true for the Chukchi pronouns in (1), the ergative bears a suffix and the absolutive is zero-marked. According to Dixon (1994, p.58) this is one of few valid implicational universals surrounding ergativity, specifically, that “absolutive is always unmarked with respect to ergative.”⁸ There are according to Dixon no attested counter-examples where a language has bare ergative and non-zero marking for absolutive. There is no corresponding generalization for nominative systems—systems where the accusative is unmarked and nominative marked are “quite adequately attested” according to Dixon. Within the theory presented above, we may conjecture that this difference between systems arises as a consequence of multiple case-checking at a single head being invoked only for the ergative array. We will pick this conjecture up again in Section 5.

Our approach to ergativity in terms of the absence of accusative case on *v* is thus similar to the family of unaccusative approaches to ergativity, as exemplified by Bok-Bennema (1991) and Nash (1995). Nash proposes that ergative systems lack *v*P altogether, and that the ergative case is an inherent or lexical case (see also Mahajan, 1993 on Hindi). In our view, it is possible—indeed preferable—to maintain a view under which ergative is a structural case and in which linking theory is not subject to parametrization in this regard. For Chukchi, at least, arguments in favour of treating the ergative as a structural case come from the fact that the ergative argument is an intimate part of the agreement system, and from evidence that the ergative is not tied to thematic roles or lexical properties of verb roots (contrast Quirky Case in Icelandic). Case in Chukchi is controlled by transitivity, not by theta-roles, and the external argument is a full participant in the system of case alternations in verbal diathesis in the language (see especially, Nedjalkov, 1976). Thus, agents in Chukchi (unlike Basque and Hindi) are obligatorily absolutive (not ergative) when there is no object requiring structural case. This can be seen in unergatives (Polinsky 1990), antipassives, unspecified object verbs such as *eat*, and noun-incorporation structures. Additionally, non-agent subjects such as (instruments, experiencers, causers, etc.) productively alternate in case, being marked ergative when they end up as the

subject of a transitive clause.⁹ The example in (10) illustrates one such alternation—as in English, instrumental causers may be expressed as an oblique (10a) or as an ergative subject (10b).¹⁰

- 10) a. əʔtvʔet jərʔet-ʔi mimt-e
 boat-ABS fill-3SG water-INSTR
 ‘The boat filled with water.’

- b. əʔtvʔet jərʔen-nin mimt-e
 boat-ABS fill-3SG>3SG water-ERG
 ‘Water filled the boat.’

(Nedjalkov, 1976:195)

Experiencers also alternate productively between an intransitive verbal construction and a transitive light verb or auxiliary construction, in which case the experiencer bears ergative case. This alternation is illustrated in (11) (see also Dunn, 1999, pp. 322 ff.).¹¹

- 11) a. ətʔəʔən (pečʔ-etə) koryav-ərkən
 father.ABS food-DAT delight.in-PROG.3SG
 ‘Father is happy about the food.’

- b. ətʔəʔ-e pičʔə-pič koryo ʔəŋ-ərkən-en
 father-ERG food-ABS.SG delight AUX-PROG-3SG>3SG
 ‘Father is happy about the food.’

(Nedjalkov, 1976:194)

To sum up, we have suggested a view of ergativity (property (7a)), as it plays out in Chukchi at least, which differs from a nominative derivation only minimally, specifically in the inability of *v* to check accusative case. We maintain a cross-linguistically uniform linking theory, where external arguments are introduced in the same position across systems, and we avoid positing lexical or inherent ergative for the reasons noted above. Nothing special needs to be said to account for the familiar hierarchical asymmetries between subjects and objects, as Tucking In preserves the underlying hierarchical relations in the case positions (property (7b)). Our system, as noted, has the potential to shed light on markedness asymmetries which arise only in ergative systems, and as we will see in the next section permits a straightforward integration with the morphological agreement facts of Chukchi. There is, however, one remaining systematic difference between ergative and nominative systems on which we have not yet commented, and that is in the absolute height of the case-checking position of the object. The case-position of an object in an ergative language, while lower than the subject, is nevertheless higher than the case position of the object in an accusative language. As it turns out, there is in fact evidence to support this view in the literature (see especially Bittner, 1994) and we will return to this in the discussion of antipassives in Section 6.

4.2 Agreement

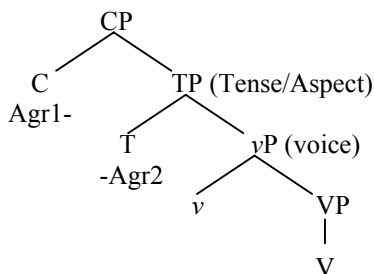
While the Chukchi case system is unambiguously ergative-absolutive in alignment, the agreement morphology is much more complex (see Bobaljik, 1998, and on related Itelmen, Bobaljik and Wurmbrand, 2002).¹² The first observation to be made is that agreement is reflected by combinations of prefixes and suffixes. The prefixes are always controlled by the subject argument, regardless of transitivity (and thus case). The suffixes are more complex. In intransitive verbs, the suffix is controlled by the subject (this leads to the characteristic property of Chukotko-Kamchatkan agreement systems that the verb agrees twice with an intransitive subject, once at the prefix and again at the suffix). When the verb is transitive, the suffix reflects the object or a combination of subject and object features. For example, the suffixes for third person singular transitive objects are as in (12):

12) Portmanteau marking for object agreement:

- a. Subj [3SG] / Obj [3(PL)] *-nin(et)*
- b. Subj [2PL] / Obj [3SG] *-tke*
- c. Other Subj / Obj [3SG] *-(y?e)n*

Independent properties of Chukchi morphology suggest that the prefixes are associated with a C-like head while the suffixes are associated with the Tense/Aspect morphology. That is, the prefixes are adjacent to (and sometimes coalesce with) a morpheme which reflects the features indicative, conditional and irrealis/hortative. The morpheme which immediately precedes the suffixes reflects a distinction between progressive and neutral (with allomorphy for future).¹³ Thus, we agree with Spencer (2000) (contra Hale, 2002) in positing a structure in which the prefixes are hierarchically superior to the suffixes.¹⁴

13) The place of agreement morphemes:



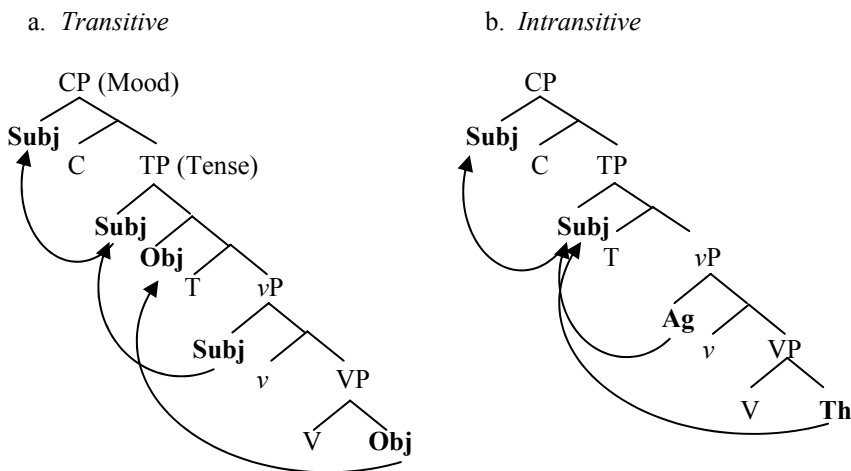
Let us consider now how the structure suggested by the distribution of agreement morphology meshes with the analysis of Chukchi syntax (case) presented in Section

4.1. To begin with, the role of C was not considered in that section. The fact that both C-agreement and T-agreement reflect the features of the subject in intransitive clauses can be implemented by adding a CP to the top of the tree in (9) and stipulating that C must check features with the closest argument. This will force an intransitive subject to raise to T and then on to C, checking agreement features twice. For the transitive derivation we have proposed, both subject and object check case at T—tucking in leaves the subject as the highest argument and it will then be attracted by C. From this perspective, the Chukchi finite verb construction looks somewhat less exotic, patterning perhaps with the complementizer agreement phenomenon doubling subject agreement in some varieties of German, for example. An example from Bavarian is given in (14).

- 14) ob-st noch Minga kumm-st
 whether-2SG to M. come-2SG
 ‘whether you’re coming to M.’ [pronoun = du/Ø] (Bayer, 1984)

The derivations for Chukchi are given in (15). (The structure in (15b) conflates the derivations for intransitive and unaccusative structures.)

- 15) Chukchi clause structure and agreement/checking relations (= (9) + CP)



In addition to providing an account of the double agreement (7d), our proposal yields the result that both subject and object are implicated in agreement at T, while only the subject moves on to C. This converges with the observation that only T has portmanteau agreement morphology, while C always agrees with the subject (7e). We take this convergence between the distribution of agreement morphology motivated on morphological considerations and the distribution of arguments based on syntactic configurations to be further support for the general approach advocated here. We note, though, that this convergence rests on tying portmanteau morphology

at a head (in this case T) to multiple case-checking at that head. While perhaps not implausible, pursuing this assumption on a broader scale constitutes a clear avenue for future research.

5. THE ERGATIVE PATTERN IN FRENCH CAUSATIVES

Let us open a parenthesis at this point. One claim which is central to our treatment of Chukchi ergativity is that T checks case twice, as a marked option, with a marked case (ergative) being checked prior to the unmarked (absolutive) case. If Universal Grammar provides this double Case-checking mechanism as an option, then we would expect to see its effects in other languages, and perhaps even in non-ergative languages, as well. And in fact, the same mechanism does seem to be found quite widely. In many structures in which dative case is used, it is necessary to posit a marked dative/accusative checking mechanism which is entirely parallel to the ergative/absolutive one. This phenomenon is most clearly visible in causative complements, such as the French (16).

- 16) a. Luc a fait acheter un livre aux étudiants.
 L. has made buy a book (ACC) to.the students (DAT)
 ‘Luc made the students buy a book.’
- b. Luc a fait travailler les étudiants
 L. has made work.INF the students (ACC)
 ‘Luc made the students work.’

An analysis of this type of causative construction must answer several questions. The Case properties of the downstairs arguments are unlike those of arguments in simple clauses. The position of enclitic pronouns is also different from that seen in other infinitival complements. And the word order is peculiar in the complement clause. We will show that all three factors reflect, at least in part, the way the matrix verb checks Case features within the complement clause.

We restrict our focus to the core “V-incorporating” type of causatives, for which the downstairs verb can be shown to raise into the matrix clause (den Dikken, 1995, Guasti, 1993). (The “ergative” pattern does not arise in non-V-incorporating causative structures, as Guasti shows.) In such structures, a matrix quantifier may appear to the right of the raised infinitive:

- 17) Mes amis feront manger tous de la salade à ce garçon.
 My friends will.make eat all of the salad to this boy
 ‘All my friends will make this boy eat salad.’

Guasti’s conclusion, which we accept here, is that the verb of the complement clause has raised into the matrix clause altogether, presumably as an incorporating operation which unites causative *faire* with the lower verb as a single complex

causative verbal unit. (This unit may later be disrupted by movement of *faire* to a higher position, stranding the downstairs verb inside the matrix VP.)

As Guasti shows, the verb does not raise as high in causative complements involving reflexive *se*, or negation or auxiliary verbs. In such non-incorporating complements, moreover, the data is somewhat more delicate, and dative subjects do not appear to be possible. We may safely set them aside as peripheral on both counts.

As has been clear since Kayne (1975) and Rouveret and Vergnaud (1980), the object in a transitive complement like (16a) has Case features checked by the matrix verb, as does the subject in an intransitive complement like (16b). Less clear has been the status of the *à*-marked dative DP. Kayne and Rouveret and Vergnaud both posit a special transformation to “check” dative Case, but such a transformation is too powerful and too language-specific to be admitted into current (minimalist) models. But the more recent literature offers no convincing alternatives, either. Burzio (1986) essentially adopts Kayne’s rule, revising it to suit his own structures. Baker (1988) and Reed (1996) do the same, with a special P-insertion rule and a special dative Case rule, respectively. In each case, the solution is essentially stipulatory. (To be fair, the authors’ primary concerns are elsewhere in these works, and their solutions to the dative Case problem are presented as a small part of an explicit theoretical package.) Baker, in fact, acknowledges that his solution is incomplete (Baker, 1988, p. 461, fn. 25), because there is no particular reason why it should be the object which is accusative and the subject, dative, rather than the reverse. Baker’s observation is generally applicable to theories of this family.

The only other approach developed in the literature is presented, in slightly different forms, by Rochette (1988) and Guasti (1993), who maintain that the dative Case for subjects is inherent Case, assigned by the matrix complex verb in combination with a particular theta-role. (It remains unclear why such an inherent Case would be available only with transitive complement clauses.)

One problem in coming to understand how the dative DP is licensed is that the surface word order is misleading. Since a full dative *à*-phrase always follows any accusative DP, it is natural to suppose that the accusative is closer to the matrix verb, and is structurally higher in the complement clause. But the intervention effects found in clitic placement indicate that the reverse is true.

First, note that clitic-climbing from the infinitival complement may be blocked by non-clitic subjects, where the clitic is argumental *y* or *en* (Rouveret and Vergnaud, 1980).

- 18) a. Jean fera comparer cette sonatine à Paul à une symphonie
 J. will.make compare.INF this sonata to P. to a symphony
 ‘Jean will make Paul compare this sonata to a symphony.’
 b.*Jean y fera comparer cette sonatine à Paul.
 J. to.it will.make compare.INF this sonata to P.
 ‘Jean will make Paul compare this sonata to it.’

- c. Jean lui y fera comparer cette sonatine.
 J. to.him to.it will.make compare.INF this sonata
 'Jean will make him compare this sonata to it.'
- 19) a. Jean a fait mettre ce livre à Pierre sur l'étagère.
 Jean has made put this book to Pierre on the shelf
 'Jean made Pierre put this book on the shelf.'
- b.*Jean y fera mettre ce livre à Pierre.
 J. there will.make put this book to P.
 'Jean will make Pierre put this book there.'
- c. Jean lui y fera mettre ce livre.
 J. to.him there will.make put.INF this book
 'Jean will make him put this book there.'
- 20) a. Jean a fait obtenir un permis à ses amis de cette administration.
 Jean has made get a permit to his friends of this department
 'Jean made his friends get a permit from this department.'
- b.*Jean en a fait obtenir un permis à ses amis.
 Jean of.it has made get a permit to his friends
 'Jean made his friends get a permit from it.'
- c. Jean leur en a fait obtenir un permis.
 Jean to.them of.it has made get a permit
 'Jean made them get a permit from it.'

The pattern holds equally for dative subjects and for accusative subjects:

- 21) a.*Celà y a fait toucher les rideaux.
 This to.it has made touch.INF the curtains
 'This has made the curtains touch it.'
- b. Celà les y a fait toucher
 This them to.it has made touch.INF
 'This has made them touch it.'

Despite the superficial resemblance between accusative subjects and accusative objects in the complement clause, a cliticised object from the complement clause does not license *y* or *en* to raise as well:

- 22) *Jean l' y fera comparer à Paul.
 J. it to.it will.make compare.INF to P.
 'Jean will make Paul compare it to it.'

Essentially the same constraint is seen with dative clitics, in (23).

- 23) Paul lui fera porter ces livres à sa femme.
 Paul to.him will.make carry these books to his wife
 'Paul will make him carry these books to his wife.'
 not: 'Paul will make his wife carry these books to him.'

Although grammatical, this sentence lacks one interpretation which it might be supposed to have. The dative clitic *lui* can only be interpreted as the subject of the infinitive *porter*, and not as the indirect object. The excluded interpretation would be possible, however, if an indirect object could raise into the matrix clause past the (dative) subject via cliticisation.

In short, despite the superficial location of the accusative object at the left edge of the complement clause (with the incorporated downstairs verb situated in the matrix clause), it behaves as if it were lower than the dative subject of the complement clause. We take this split personality of the accusative object as evidence that a prior A-bar movement operation has displaced the accusative object from a lower A-position, and that the lower A-position is what counts for constraining clitic-climbing into the matrix clause.

Under this interpretation of the facts, the structure of (18) will be (24), where π is a phase category of some sort, presumably CP or vP, and where the head of π has attracted the accusative direct object to its left edge, which counts as an A-bar position:

- 24) Jean fera comparer [π cette sonatine_i à Paul t_V t_i à une symphonie].

The derived A-bar status of the accusative object is confirmed by examining its behaviour in participle agreement. Normally, a specific direct object which is raised by clitic placement or *wh*-movement may trigger agreement on its associated past participle. But movement of the accusative object in a causative complement can never trigger agreement with participial *fait(e)(s)* (Kayne, 1975).

- 25) a. la table qu' il a fait(*e) repeindre à Marc
 the table that he has made repaint to Marc
 'the table that he made Marc repaint'
 b. Cette table, on l' a fait(*e) repeindre à Marc
 this table, we it have made repaint to Marc
 'This table, we made Marc repaint.'

In this respect, the accusative argument patterns with *wh*-phrases which have undergone successive cyclic *wh*-movement, such as (26).

- 26) la lettre qu' il a dit(*e) que Claire lui a envoyée
 the letter that he has said that Claire to.him has sent
 'the letter that he said that Claire sent to him'

Once movement takes a *wh*-phrase into an A-bar position, subsequent movement towards a higher verb cannot trigger participle agreement. If the accusative DP in a causative complement occupies an A-bar position, then both cases fall together as structures in which the A-bar status of a DP prevents it from triggering agreement.

Matrix participle agreement is also lacking when the accusative subject of an intransitive complement to *faire* undergoes movement into the matrix clause:

- 27) a.*la petite fille qu' il a fait(*e) rire
 the little girl that he has made laugh
 'the little girl that he made laugh'
- b.*Cette petite fille, Paul l' a fait(*e) rire.
 this little girl, Paul her has made laugh
 'This little girl, Paul made her laugh.'

Once again, the data indicates that the accusative DP from the complement clause must be attracted to an A-bar position at the left edge of the phasal complement clause. Apparently this operation is equally obligatory for accusative subjects and accusative objects in the complement to *faire*. (It does not apply, however, to oblique DPs, including dative subjects.) Thus, the structure of (28) includes both the accusative subject *cette petite fille* in an A-bar position at the edge of π , and its trace in an A position further down in the complement clause.

- 28) Paul a fait rire [π cette petite fille_i *t_i t_V*]

An important second consequence of the movement of accusative DPs—both subjects and objects—to an A-bar position at the left edge of the complement clause is that direct object clitics will be exempt from the intervention effects of non-clitic subjects. Unlike argumental *y* and *en*, which must raise past the subject to cliticize onto the matrix verb, a direct object is already in a higher position. In a sentence like (29), for example, the clitic object *les* raises directly from Spec-CP to its position in front of the matrix auxiliary.

- 29) Pauline les a fait lire aux étudiants.
 Pauline them has made read to-the students
 'Pauline made the students read them.'

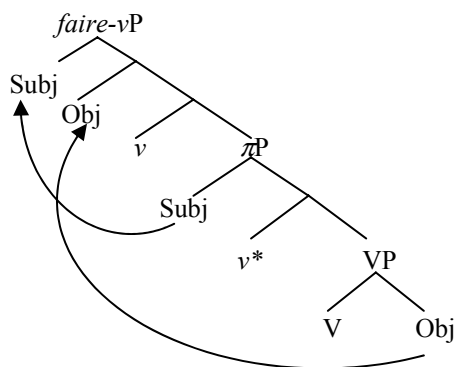
So it is not necessary to stipulate any special exemptions for the direct object clitics. The generalisation concerning the intervention effects of the subject in *faire* complements is simply that non-clitic subjects block clitic-climbing of *all* argumental clitics.

Now that we have provided an account of the (misleading) surface position of accusative objects in the causative construction, we return to the central issue of Case checking in *faire* complements.

The constraint on argumental clitic-climbing seen in (18)–(20) is clearly sensitive to the grammatical function of the downstairs subject (as Rouveret and Vergnaud emphasize). Assuming that grammatical functions are defined by positions in a phrase marker, then both dative subjects and accusative subjects must occupy the same position in complements to *faire*. Stated rather more precisely, the trace of an accusative subject must occupy the same position as a dative subject occupies, given the fact that accusative subjects undergo an A-bar movement from which dative subjects are exempt. Several possibilities can be contemplated: if the complement to *faire* is CP, then both dative subjects and (the trace of) accusative subjects may occupy the Spec-TP position. If the complement to *faire* is no larger than vP, then dative and accusative subjects might simply remain in the Spec-vP position from which they derive their θ -role. The exact details of the structure are not important for the present discussion. What is important is the relationship between structure and Case-checking. How can dative subjects and accusative subjects occupy the same position if they have distinct Case properties?

Our answer is that a matrix *faire* sometimes checks accusative Case alone on an accessible subject, while other times, it checks dative Case, and then accusative Case. If we abstract away from the A-bar movement which raises accusative objects, then the structure of the complement clause for transitive complements will be (30), where the arrows indicate the case-checking operations (via Move or Agree). Compare (30) to the ergative pattern proposed for Chukchi in (9). (The trace of accusative phrases will be the only component of the accusative DP chain which participates in Case-checking, since A-bar positions cannot be involved in such checking operations in general.)

- 30) ...*faire*+infinitive [_{π} DP¹ ... DP² ... (oblique DPs and PPs)]
(DP¹ is the subject of the complement clause and DP² is the object.)



Incorporation of the downstairs infinitive into matrix *faire* has two consequences: the incorporated infinitive must be a verbal form which lacks independent Case properties, because otherwise incorporation would be impossible (Baker, 1988). Secondly, by virtue of incorporating the infinitive, *faire* gains access to material in the complement clause which would otherwise be inaccessible. (This follows the general pattern embodied in Baker's *Government Transparency Corollary* (GTC). While the theoretical basis for the GTC is a matter of some dispute, the empirical basis for the generalisation is overwhelming. Although the GTC may ultimately be shown to follow from deeper principles, such as perhaps the *Principle of Minimal Compliance* (Richards, 1998), we assume that the proper formulation will not undermine our use of the GTC in the present work.) The matrix *faire* should then be able to interact with material located beyond the π phase boundary of the complement clause.

Since the infinitive cannot check Case features on either the subject or the object of the complement clause, the derivation will fail unless another Case checker is available for both. (If there is a T head contained in the complement clause, it must also be unable to check accusative or dative Case, being infinitival or otherwise defective. (A substantive T would block incorporation of the verb by *faire*.)

Since *faire* can check material within π , it can check Case features on the downstairs subject. Suppose now that *faire* may check both structural dative and structural accusative Case features, as a marked option. Double Case-checking will be avoided if the derivation will converge without it, but is available to avoid a crash. What is more, the dative Case, as the more marked one, is always checked before accusative Case, when both are to be checked, exactly parallel to the ergative-then-absolutive checking discussed in Section 4.1. Then *faire* may check dative Case on the subject of the complement clause, and then it may check accusative Case on any more distant DP accessible to it. Since both the subject and the object are accessible to *faire* under the GTC, *faire* can check the accusative features of the object as its second Case-checking operation.¹⁵

When *faire* takes an intransitive complement clause, there is only a single downstairs DP which will need to have Case features checked by *faire*: the subject. Consider example (31):

- 31) Marie a fait aller [$_{\pi}$ Jean_{*i*} *t_i* à Rome]]]

Again the infinitive raises from the downstairs clause to incorporate into *faire*. The accusative subject—being non-oblique—undergoes A-bar movement to the edge of π , and its trace remains with Case-features to be checked. Incorporation of the infinitive ensures that *faire* can check Case features on the subject of the complement clause, so it checks accusative features on the subject *Jean*.

Nothing in the structure of (31) ensures that *faire* will check accusative Case instead of dative Case. Both are structural Cases which can be checked in this configuration. But the choice of the marked dative is permitted only when the derivation requires that double Case-checking take place. In (31), there is only the subject which needs Case checked by *faire*, so the marked option is excluded.

The same mechanism now can be seen to apply in Chukchi and French “ergative” structures. In both cases, something blocks checking of accusative Case features on a direct object by its verb. In Chukchi, this is because the setting of a parameter deprives all verbs from checking accusative Case; in French, the incorporation of the infinitive in *faire*-causatives ensures that it does not check anything. In both cases, the lack of accusative Case checking by the closest verb requires the object to have its Case features checked by the next higher head. In Chukchi, the object raises to Spec-TP (perhaps via Spec-vP if the latter is a phase—see note 5), where the subject also checks case; in French, incorporation of the downstairs verb extends the domain of the higher Case-checking head, so that the object will be accessible to it. Finally, in both cases, a checking head external to vP (T/*faire*) exploits a marked option made available by Universal Grammar, in which it checks Case twice, with a more marked Case (ergative/dative) checked first on the closest DP, and a less marked Case (nominative/accusative) checked on the more distant DP. The double checking option is permitted only when there are two DPs in the domain of the checking head, so that the marked Case (ergative/dative) is never used to check the subject in an intransitive clause.

6. VOICE: THE ANTIPASSIVE

In the preceding sections, we have developed a theory of ergative patterns, which we applied both to Chukchi active clauses and to the ergative-like pattern in French causatives. The core of the analysis is that these are both cases in which *v* fails to reflect Burzio’s generalization, in the sense that this head assigns the external theta role, but fails to license object case. For the ergative array in Chukchi, we take this as a parametric property; for French, we take this as a consequence of verb incorporation. We have argued above that the remainder of the patterns follow from this move, coupled with the assumptions about double-checking of a marked case mentioned in the previous paragraph. At this point, we turn to another instance in which *v* licenses an external argument, yet does not check accusative case, specifically, the antipassive in Chukchi, a derived intransitive voice.

An example of the antipassive alternation was given in (2), above, repeated here.

- 32) a. ?aaček-a kimitʔ-ən ne-nʔʔetet-ən
 youth-ERG load-ABS 3PL.SUB-carry-3SG.OBJ
 ‘(The) young men carried away the load.’
- b. ?aaček-ə t ine-nʔʔetet-ʔʔet kimitʔ-e
 youth-PL(ABS) AP-carry-3PL.SUBJ load-INTR
 ‘(The) young men carried away a load’ (Kozinsky et al, 1988:652)

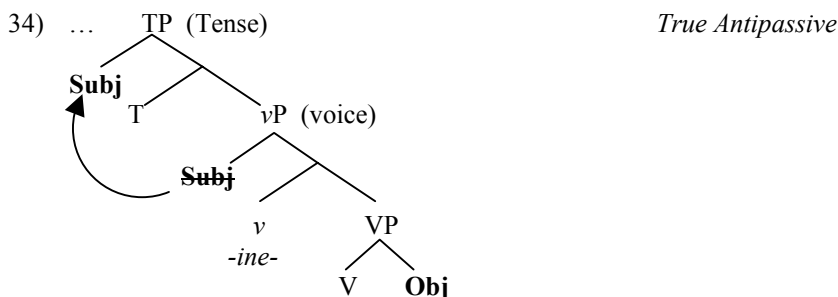
The Chukchi antipassive bears the familiar characteristics of antipassives (see Dixon 1994). The antipassive is a derived intransitive (a derived unergative, to be precise). The antipassive morpheme (prefix *ine-*, or under certain conditions, suffix *-tku*) is added to the active verb root, internal to tense/aspect, mood, and agreement

morphemes (as expected for a voice head in the structure in (13)). Morpheme order is obscured in (32) since the third person subject prefix is \emptyset in intransitives, but the order of the prefixes is clear in (33).

- 33) $\gamma\text{əm}$ $\text{t-ine-tejk-}\text{ərkən}$ $\text{orw-}\text{əte}$
 1SG.ABS 1SG.SUB-AP-make-PRES sled-ALL
 ‘I am making a sled.’ (Skorik, 1977:117)

Both verbal morphology and the case array indicate that the antipassives are intransitive (though they can be further transitivized by, e.g., causative formation or applicativization). The external argument bears absolutive case and governs agreement at both prefix and suffix positions on the verb, and the internal argument (if expressed) is demoted to an oblique.

Following relatively standard views of antipassives generally (see, esp. Bittner, 1994, Wharram, 2003), we assume that the logical object remains low, within the vP or VP throughout the derivation, and importantly, does not participate in the structural case checking in the clause. As illustrated in (34) (=5, above), this yields a derivation which is intransitive in having only a single DP in the functional domain, namely, the subject.¹⁶



Note that it is important for us that the properties of the antipassive do not arise from the morpheme *ine-* as identified solely by its phonological form. Instead, they arise from the properties of a particular choice of the head *v*. This head may be realised as *ine-* or as *-tku* (as mentioned above), but the head is more abstract, the phonological form assigned via a post-syntactic vocabulary insertion rule, spelling out the head as *ine-* when the object remains in the domain of *v*. The assumption that vocabulary insertion is post-syntactic, as in Distributed Morphology, plays an important role in the next section.¹⁷

Before proceeding to discussion of the spurious antipassive, one further remark is in order, returning to a point that arose in our discussion of ergativity in Section 4.1. In the antipassive, we treat the object as remaining “low” throughout the derivation. This leads to the expectation that it will have a “low” semantics, scoping under operators in the functional domain of the clause, such as negation. The absolutive objects of transitive clauses, though, occupy “high” positions, in fact, positions that are higher than their accusative-marked counterparts in nominative-

35) taqqialu-up tuktu taku-lau-ŋjit-t-a-(ŋ)a
T.-ERG caribou.ABS see-PAST-NEG-MOOD-TRANS-3SG>3SG
‘Taqqialuk didn’t see a (single) caribou.’
‘There is a (certain) caribou and Taqqialuk didn’t see it.’
(Wharram, 2003:39)

36) miali kappiasuj-*niaq-t-u-q* arvi-up qajaq katja-kpagu
 M.ABSbe.frightened-NFUT-MOOD-INTR-3SG whale-ERG kayak.ABS hit-COND.3SG>3SG
 # ‘Miali will be frightened if the bowhead hits any kayak.’
 ‘There is a kayak and Miali will be frightened if a particular bowhead hits
 it.’ (Wharram, 2003:113)

To account for this, Wharram proposes that indefinites in Inuktitut are always non-quantificational, the apparent scope properties arising from a choice-function interpretation assigned to them. If Wharram is correct, then the scope properties of indefinites *per se* does not bear directly on the question at issue. Whether or not absolutes differ from accusatives in any systematic way in their scope properties thus remains an important topic for further research for Chukchi and for the study of ergativity in general. In the meantime, all available evidence is consistent with the structure we have posited. The antipassive object remains low, and the antipassive allomorph of the *v* head reflects this position of the object.

7. THE SPURIOUS ANTIPASSIVE, REPRISE

To this point, we have provided analyses for basic Chukchi morphosyntax, accounting for the ergative-absolutive case array and for the structure of the true antipassive. Interestingly, “regular” transitive morphology is unavailable in certain inverse environments. A clause is in general said to be *inverse* if the object outranks the subject on the hierarchy $1 > 2 > 3$. In Chukchi, a subset of inverse configurations require the SAP. For the core (non-participial) tenses, these environments are given in (37).²⁰

37) Illicit subject-object agreement combinations (core tenses = non-participial)

a. * 3 SG > 1 SG

b. * 2 > 1

Although the relevant agreement morphology for these environments is available independently, the expected transitive agreement morphology fails to surface and instead an antipassive verb form is used, while the verb-external morphosyntax remains transitive, as in (38) repeated from section 2.

- | | |
|---|---|
| 38) ə-nan ɣəm Ø-ine-ɬʔu-ɣʔi
he-ERG I (ABS) 3SG.SUB-AP-see-3SG.SUBJ
‘He saw me.’ | <i>Spurious AP</i>

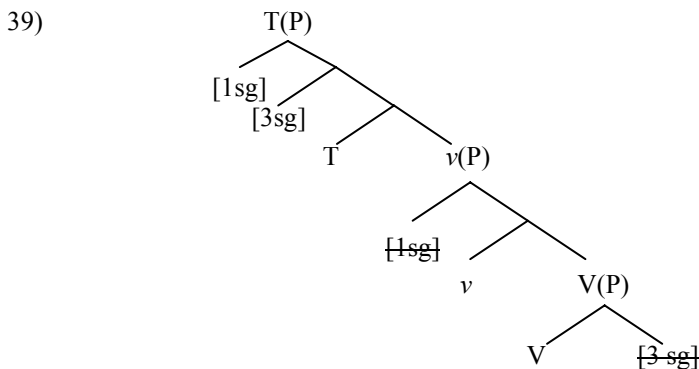
(Skorik, 1977:44) |
|---|---|

We lay aside here any discussion of why it is only this particular subset of inverse configurations (and not all inverse environments) that triggers the SAP. Especially given that there is dialect variation and variation according to mood, this appears to us be an irreducible language particular property. We argue, though, that it is only the filters in (37) which need be stipulated for Chukchi (and hence learned directly). In this, we reject the claim of Spencer (2000) that the Chukchi SAP requires the power of *Rules of Referral*, after Stump (1993), Zwicky (1985)—language particular stipulations of identity relating any two arbitrary forms. Thus, he states: “it is difficult to see any alternative to an account which simply states [the syncretism] baldly: the inverse forms are homophonous with the corresponding antipassive” (p.217). The essential part of Spencer’s argument is the premise that a theory (such as Distributed Morphology) which restricts syntax-morphology mismatches to feature-deletion (Impoverishment) cannot accommodate spurious morphology, other than defaults, and thus that a feature deletion account could not take a transitive, active morphosyntactic structure as input and yield an antipassive form as output. In the remainder of this section we aim to provide exactly such an account, whereby feature deletion, interacting with independently attested principles, yields the SAP in this context. Importantly, we show that many of the properties of the SAP arise for principled, rather than arbitrary, reasons and in particular that there

is a principled basis for the use of the antipassive morphology; a spurious imperative or conditional could not arise with the same distribution and other properties as the Chukchi SAP. Hence, where Spencer claims it as a virtue of Stump's framework that "anything goes" (in this domain), we claim that the challenge to a more restrictive framework is thus far misplaced.

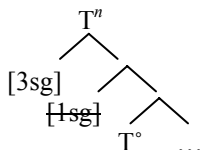
7.1 *Conflict resolution via deletion*

The first step of the analysis is straightforward. As noted above, we have assumed throughout a realizational theory of grammar, in which the morphology interprets the prior structures created by syntactic derivations. One part of the mapping to morphology is to resolve the sequences of copies that constitute chains, typically in favour of the deactivation (deletion) of all but one of the copies. A general assumption that suffices for present purposes is that it is normally the highest copy in a chain that is pronounced. For the chains of argument features entering into agreement relations with T in Chukchi, the normal case, for example, with a [1SG] subject and [3SG] object is illustrated in (39). Our concern here is with the chains of features entering into the agreement relations and not with the lexical arguments themselves, perhaps along the lines of some version of the pronominal argument hypothesis, though we refrain from working this out here.²¹



Now, exchanging the feature values for subject and object that were given in (39) would yield an inverse configuration known to be illicit in Chukchi. How is this resolved? We suggest that language-particular feature conflicts at a single head are resolved by deletion. Unlike the Impoverishment rules of Distributed Morphology, however, we take deletion here to apply to the entire bundle of features that constitutes the object (more properly, the head of the object's agreement feature chain). This is shown in the partial structure in (40).

40)



This deletion resolves the conflict at the head T . We conjecture that such deletion is confined to heads which are involved in multiple checking. This will allow an assimilation of our account to accounts of restrictions on particular combinations of clitics known from a variety of languages, for example, the Person-Case Constraints which restrict combinations of Dative and Accusative clitics in a wide variety of languages (see Bonet, 1994). Such constraints systematically apply to combinations of argumental Dative and Accusative clitics, but not to Nominative and Accusative combinations. This had led authors such as Anagnostopoulou (2002) and Béjar and Rezac (to appear) to conclude that such effects are confined to instances of multiple agreement/checking with a single functional head, and that Dative and Accusative (but not Nominative) are checked at the same head. This converges quite neatly with our conclusion in section 5 that the Dative and Accusative in French causatives are checked at the same head.

The deletion of the object agreement features, post-syntactically, leaves the head T reflecting a configuration that looks intransitive, according with the facts at that head. We note that we must take this operation to apply only to the agreement features at T , and not to the actual object DP/pronoun, which participates in normal transitive syntax, including case-marking. Notice also that although no known principle of grammar would force the object features to be deleted instead of the subject features in a multiple-checking configuration, the subject in the Chukchi SAP will always have raised to Spec-CP before feature deletion takes place, so that only the object features will remain as the head of a feature chain at T , an asymmetry which may perhaps be exploitable in accounting for this difference.

7.2 *The consequences of deletion*

In the preceding paragraph, we suggested that feature conflicts of the type illustrated in (37) and in the PCC environments in other languages are resolved by deletion of one copy of an agreement feature bundle. This has the local consequence (at the agreeing head) of resolving the conflict and yielding an intransitive-looking T° . The object agreement features are, though, considered to be a part of a chain—a sequence of copies of the relevant syntactic entity, in this case the agreement feature bundle. In the normal case, it is the higher copy of this chain that is morphosyntactically active, the lower copies being automatically deleted in the mapping to morphological form. In this, the agreement parallels instances of movement as analysed within the framework of a copy theory of movement. This is important for present concerns, since there is an emerging understanding regarding the consequences of late (post-syntactic) deletion of a normally-pronounced high copy. Late deletion of a high copy automatically triggers the spurious activation

(i.e., pronunciation) of a lower copy which would otherwise remain inactive. This activation is spurious in the same sense as the Chukchi SAP is—the clause behaves syntactically and semantically for all intents and purposes as if the higher copy were indeed active, it is simply a morphological quirk that the element in question shows up in an unexpected position.²² This conclusion has been reached on a variety of grounds in investigations of restrictions on Object Shift in Germanic (Bobaljik, 1995, 2002), on *wh-in situ* in English multiple questions (Pesetsky, 1998), on “low” clitics in Slavic (Franks, 1998), and on exceptions to multiple *wh*-fronting in Slavic (Bošković, 2002). The last of these is perhaps the most straightforward, so we illustrate with that analysis here.

In certain Slavic languages, there is a syntactic requirement that all *wh*-words in a multiple question must front, as in (41). Failure to do so yields unacceptability, except perhaps under certain special interpretations such as echo questions. All examples are Serbo-Croatian, from Bošković (2002).

- 41). a. Ko šta_i kupuje t_i?
 who what buys
 ‘Who buys what?’

- b. ?*Ko kupuje šta?
 who buys what
 ‘Who buys what?’

(p. 355)

The requirement that all *wh*-words front appears to be relaxed just in case the fronting would yield a sequence of homophonous *wh*-words, as in (42). In exactly this environment, the lower *wh*-word is pronounced *in situ*.

- 42) a. *šta šta_i uslovljava t_i?
 what what conditions
 ‘What conditions what?’

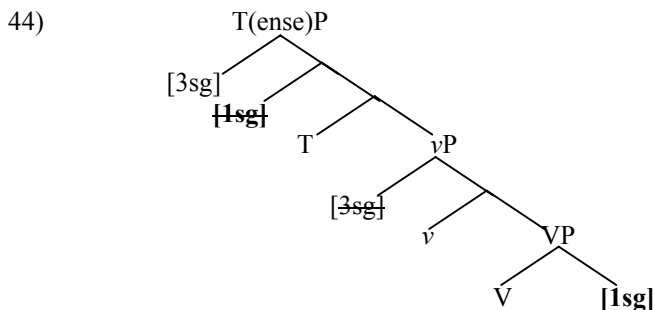
- b. šta uslovljava šta?
 what conditions what
 ‘What conditions what?’

(p. 364)

Bošković’s account with subject traces/copies suppressed is given in (43). In a normal clause, all *wh*-words front, creating chains that are sequences of copies of the moved item. In the normal case, all but the highest of these copies are deleted as in (43a), yielding the surface order in (41). The interpretation of (42b) as a regular multiple-question indicates that the representation which feeds semantic interpretation is that arising from movement. Post-syntactically, then, where highest-copy pronunciation is expected, a morphological anti-homophony filter applies, blocking pronunciation of the highest copy, and automatically triggering the pronunciation of the next lower copy, as in (43b).

- 43) a. Ko šta_i kupuje šta_i *Normal case: lower copy deleted*
 who what buys what
 ‘Who buys what?’
- b. šta šta_i uslovljava šta?_i *Anti-homophony: higher copy deleted*
 what what conditions what
 ‘What conditions what?’

Key to this analysis is the observation that to the extent that *wh*-words can remain in situ with special effects (echo questions), such special effects are conspicuously absent *just when* the anti-homophony constraint forces the lower pronunciation. This characterises quite neatly, in our view, the Chukchi SAP. The syntactic and semantic effects of true antipassivization are conspicuously absent, implicating the effects of a post-syntactic morphological filter. We have suggested that the relevant filter applies at the head T° , deleting the head of the object feature chain. Putting this together with the previous paragraphs, we predict that the consequence of the deletion of the top copy of the object features—in the morphology—will be the spurious activation of a lower copy of those features—again, in the morphology only. What is predicted by deletion, then, is not just the abbreviated structure in (40), but rather the fuller structure in (44).



8. CONCLUSION

We have focused our attention in this paper on an initially peculiar construction in a non-familiar language. The Chukchi SAP shows quite clearly that there are mismatches between morphology and syntax, and sets the accommodation of these within a restrictive theory of the syntax-morphology interface as a clear challenge. We hope to have shown that many of the initially peculiar properties of the SAP in Chukchi follow from a combination of well-motivated principles of UG, together with assumptions about Chukchi morphosyntax that posit the minimal assumptions needed to capture the basic descriptive adequacy checklist framed in (7). In particular, the fact that the SAP implicates spurious antipassive morphology as opposed to any other morphological form, turns out to fall out as an automatic consequence of the deletion of the top copy of the object agreement chain, set against an independently motivated understanding of the consequence of deletion in chains, and with a relatively common structure for antipassives (though crucially, within a theory that is realizational, and not lexicalist). The deletion, in turn, rests on the assumption that feature conflicts arise and are resolved (in the morphology) only in configurations of multiple checking at a single head, as in analyses the Person-Case Constraint (discussed only briefly in section 7.1). That subject and object check against a single head arises as a consequence of our analysis of ergativity in Chukchi, and receives support from the distribution of portmanteau morphology in the language.

To be sure, there are promissory notes and conjectures among our assumptions. However, the intricate interactions among our assumptions that conspire to yield the properties of the Chukchi SAP are the more interesting precisely because they yield a variety of predictions about impossible situations. The kind of surface retreat to a “marked” form that the SAP instantiates can arise only when the interaction is across heads, and moreover arises only when the particular spurious morpheme is plausibly tied to the special activation of a lower copy. There can be no spurious conditional, for example. Likewise, morphology-syntax mismatches of this sort can be triggered by illicit combinations of phi-features of more than one argument only when those arguments undergo multiple checking at a single head. For ergative languages, this is possible between subject and object, but in nominative-accusative systems such effects will be restricted to interactions with datives, correctly, it seems. Note importantly that this does not preclude transitivity mismatches in nominative-accusative languages—these are well attested, for example, in the *deponent* verbs of Latin and Greek with active syntax and case-marking, but passive morphology on the verb (see Embick, 2000, for discussion in a model compatible with ours). What we predict though is that Latin could not have deponence triggered by subject-object feature interactions, and indeed, it does not. Finally, we expect that the repair strategies used to avoid illicit feature combinations should be deducible from the mechanism of activation of a lower copy. The full force of this prediction, especially within the well-studied area of PCC effects, remains to be exploited, a task we must leave for future work.

9. REFERENCES

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¹ Only pronouns have a morphologically distinct ergative case; other nouns use either the instrumental or locative suffixes in this function. Nevertheless all nouns distinguish the transitive subject (marked) from the absolutive function (unmarked). Word order is reported to be free and although we report examples as given in the sources, we take surface order in Chukchi to be unenlightening. Abbreviations used in the examples are ERGative, ABSolutive, INSTRumental, ALLative, ACCusative,

DATIVE, SG = singular, PL = plural, SUB/OBJ = subject/object (for agreement affixes), AP = antipassive, PROG = progressive aspect.

- ² It is more accurate to say that an antipassive verb is detransitivized—in clauses with three arguments (either basic or derived by applicative formation) an antipassive verb will be formally transitive having (3-1=) 2 arguments. See Kozinsky et al. (1988), Dunn (1999) for examples and discussion.
- ³ We will use the term “case-checking” to refer to whatever feature checking or licensing relationship obtains between a DP and an appropriate functional head.
- ⁴ The schematization in (3) represents feature chains, either of feature movement or feature-copying via agree. We take no stand on how this relates to phrasal movement, but it is important that the lower members of the (feature-)chains be inactive at LF, which we have indicated with strikethrough.
- ⁵ We lay aside here the question of whether or not *v*P is a phase (Chomsky, 2000) when it assigns an external theta-role but has no case. The analysis would be unaffected if *v*P is a phase in this configuration, except that the object would have to move successive cyclically through a specifier of *v*P.
- ⁶ We depart from Richards in that we take multiple-case-checking by a single head to underlie ergative systems (and dative-accusative interactions, see below), but for nominative-accusative arrays we maintain that case checking occurs in separate heads. So far as we can see, the relevant data in Richards (2002) is compatible with this position.
- ⁷ The presentation in the text suggests a syntactic implementation of the requirement that the more marked feature be checked first. For example, while case checking heads are canonically associated with a single uninterpretable feature, they may be assigned an “additional case” feature as necessary for convergence—if features on heads have structure, this additional feature will always be peripheral to the “regular” case feature: [[[T]case]extra-case]. If feature checking proceeds from the outside in, as suggested in Chomsky (1993, p.28), this will ensure that the marked case will be checked first. That the marked case is not checked when only one DP checks case arises since the internal (“regular”) case feature would then remain unchecked, causing the derivation to crash. The markedness asymmetry may also be expressed in other views of case, for example in a morphological system like that put forward in Marantz (1991); the generalization would be that locally dependent cases are always “dependent down” in his terms.
- ⁸ It is perhaps safer to state this as an implication: if one of the two direct cases is unmarked in an ergative system, it is always the absolutive.
- ⁹ As we understand the literature, in some languages, such as Hindi, ergative does appear to be more lexical (see Anand and Nevins, this volume). In Hindi, ergative arguments do not participate in the agreement system, are more restricted in the thematic roles they can be associated with (experiencers are not ergative) and can occur with the agents of agentive intransitive (i.e., unergative) verbs. This is one reason why we feel that a unified account of ergative systems should not cover both Hindi and Chukchi.
- ¹⁰ As mentioned in note 1, the instrumental case is syncretic with the ergative for common nouns—that the clause is transitive is unambiguously indicated by the agreement morphology on the verb in this example.
- ¹¹ In Inuit languages as well, the applicative affix *-uti-* adds an internal argument to otherwise intransitive verbs, promoting the original sole argument to transitive subject status where it receives Ergative case (cf. Fortescue, 1984, p.89 - the following example is from M. Fortescue, personal communication, 6/2003):

- | | | | |
|-----|------------------------------------|---------|----------------------------|
| (i) | Arna-p | angut | kama-ap-p-aa |
| | woman-ERG | man.ABS | be.angry-APPL-MOOD-3SG>3SG |
| | ‘The woman is angry with the man.’ | | |

Contrast this with the Niuean examples discussed by Massam (this volume) where adding an applicative to a non-agentive intransitive yields a construction with two absolutes.

- ¹² We will treat in this chapter only the verbal tense-aspect combinations. Certain tense-aspect combinations are expressed by participial forms of the verb. The SAP arises in those conjugations as well, with a slightly different distribution. We see no reason why our account will not extend to those conjugations directly.

- ¹³ There is an additional prefix occurring between what we are calling C and the verb root which marks future tense. It is therefore perhaps more accurate to refer to the suffix as Aspect alone, and thus the head it is associated with should be Asp, not T. For the analysis to be presented here, this affects nothing other than labelling, though the cross-linguistic consequences for the theory of case have not been worked out.
- ¹⁴ Additional phonological evidence to support this structure for the related language Itelmen is given in Bobaljik and Wurmbrand (2001). Hale (see also Halle and Hale, 1997) associates the suffix with C°, though the motivation for this label is entirely internal to the theory of ergativity presented in Bittner and Hale (1996), under which “C” is responsible for nominative case assignment. Since the suffixes agree with the subject of an intransitive verb and with the object of a transitive verb, Hale treats the suffixes as a reflection of absolutive agreement.
- ¹⁵ The claims we make about dative Case are limited. We do not believe that all uses of dative Case are to be analysed in this way, as reflecting double Case-checking operations. It is not clear whether these proposals should extend to normal double object verbs, for example (but see section 7.1).
- ¹⁶ As in fn. 5, it is of no consequence at this point if vP should be a phase—the antipassive logical object may raise to the Spec,vP position, perhaps for some feature checking with the head v (cf. Wharram, 2003). The important point for our concerns is that the object raises no further than vP and does not participate in the case-checking at T.
- ¹⁷ If the antipassive oblique logical object undergoes short movement to Spec,vP as suggested in note 16, then the contextual allomorphy of v may be expressed as a form of Spec-Head agreement, though this is not necessary.
- ¹⁸ For example, an unexpressed logical object of a transitive clause is obligatorily referential or specific, while that of an antipassive clause is existential (see Kozinsky et al., 1988, p. 669).
- ¹⁹ The qualification “possible” is required since bound variables within an indefinite can force lower readings. See Wharram (2003) for discussion.
- ²⁰ In the participial tenses, the following combinations are excluded in addition to those listed above: *1>2, *1,2>3, *3SG>3. In the Xatyrka/Vaegi dialect, which lacks the *-tku* antipassive, the combination 2>1PL does not trigger the SAP but is instead syncretic with 3>1PL.
- ²¹ Chukchi is one of the languages considered to be *polysynthetic* in this sense in Baker (1996).
- ²² The activation of a lower copy in the morphology, triggered by a violation of a morphological constraint finds a parallel in covert syntax, as well. Lin (2001) shows that an A-movement violation of the Coordinate Structure constraint can be rescued by replacing the violating DP in the lower position from which it had moved, a syntactic process which mirrors the morphological re-activation of a lower position in the Chukchi spurious anti-passive.
- ²³ Once again, the results are unchanged if vP is a phase, with appropriate modifications made. The copy of the object that is spuriously activated would then be an intermediate copy in Spec,vP. Note that the choice of antipassive morpheme in the SAP does depend to some degree on the features of the object, a [1PL] object requires the use of the *-tku* allomorph of v, while all others take the *ine-* allomorph.

SYNTACTIC ERGATIVITY IN TONGAN^{*}

Resumptive Pronouns Revisited

1. INTRODUCTION

A language is said to be syntactically ergative when it shows an ergative pattern at the syntactic level. As is well known, only a subset of so-called ergative languages is syntactically ergative. In other words, morphological ergativity does not necessarily induce syntactic ergativity. For this reason, syntactic ergativity has long been regarded as a phenomenon independent of morphological ergativity. Two facts should not be overlooked, however. First, we do not know of a language with accusative Case morphology that shows syntactic ergativity. Second, even when a language does show syntactic ergativity, an ergative pattern is often restricted to certain construction types. These facts suggest a) that syntactic ergativity and morphological ergativity are correlated; and b) that syntactic ergativity may not be a homogeneous phenomenon. I propose that an ergative pattern may arise under various circumstances and that the only common factor among different instances of syntactic ergativity is that the relevant operation happens to be Case-sensitive in one way or another. In other words, I argue that syntactic ergativity should be understood as a consequence of morphological ergativity. The objective of this study is to show that at least one type of syntactic ergativity, i.e., that involving relativization, arises due to morphological ergativity.

Among the phenomena concerning syntactic ergativity, relativisation seems to show a fairly consistent pattern crosslinguistically. That is, syntactically ergative languages generally show an ergative pattern with respect to relativization: while absolutive (ABS) arguments can undergo normal relativisation (i.e., the gap strategy), ergative (ERG) arguments cannot. This restriction is manifested in two ways: a) relativization of ERG arguments is strictly prohibited and therefore, the structure must be first antipassivized in order to undergo relativization (e.g., Dyirbal); or b) relativization of ERG arguments requires a resumptive pronoun (e.g., Tongan).

Such an ergative pattern is intriguing both typologically and theoretically. Typologically, those languages that demonstrate an ergative pattern with respect to relativization are problematic exceptions to Keenan and Comrie's (1977)

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accessibility hierarchy, in which subjects are located higher than direct objects. In ergative languages, the category “subject” divides into two subcategories, ERG and ABS. ERG subjects are apparently less accessible than direct objects in terms of relativization.

Theoretically, the use of resumptive pronouns raises an interesting question with regard to *wh*-movement in general. Why is relativization of ERG arguments prohibited in languages like Tongan? Why is it that the presence of a resumptive pronoun rescues the situation, which would otherwise result in ungrammaticality? And finally, why is a similar resumptive pronoun strategy unavailable in other syntactically ergative languages such as Dyirbal?

In this chapter, I address these questions and provide an account for syntactic ergativity within the framework of the Minimalist Program (Chomsky 1995, 2000, 2001). Specifically, I argue that the distribution of gap and resumptive pronouns can be explained in terms of C’s features, following the proposals of Shlonsky (1992) and Suñer (1998). The chapter is organized as follows. Section 2 provides an overview of syntactic ergativity with respect to relativization. In Section 3 Keenan and Comrie’s (1977) accessibility hierarchy is discussed. In Section 4 we discuss a minimalist analysis of morphological ergativity. The current study assumes that ABS and ERG are both structural and checked by *v* and T, respectively. In Section 5 we consider some previous analyses of the Tongan-type resumptive pronouns. In Section 6, an alternative analysis is proposed, which argues that the distribution of resumptive pronouns in Tongan can be accounted for in terms of C’s features. Section 7 discusses the extension of the current analysis to other languages such as Irish, Dyirbal, Spanish, Niuean, and English, in which the distribution of resumptive pronouns shows different patterns. Altogether the current analysis provides a uniform account of the various patterns of relativization found in both accusative and ergative languages. In Section 8, we discuss the Highest Subject Constraint. Section 9 concludes the chapter.

2. ERGATIVE PATTERNS OF RELATIVIZATION

Some languages with ergative Case marking exhibit an ergative pattern with respect to relativization. Dyirbal, for example, allows only ABS arguments to undergo relativization. In order to relativize the subject of a transitive verb, the structure must be first antipassivised so that the relevant argument appears in ABS rather than ERG. See (1) below¹ (data from Dixon, 1972, 101 and Dixon 1994, 169-170):

- 1) a. Bangu yugu-ŋgu [gunba-ŋu-ru banguŋul yara-ŋgu] ŋaygu-na birri-ju balga-n.
 DEM tree-ERG cut-REL-ERG DEM man-ERG 1.S-ACC almost hit-NFUT
 ‘The tree which the man had cut nearly fell on me.’
- b. ŋuma-Ø [banaga-ŋu-Ø] yabu-ŋgu bura-n.
 father-ABS return-REL-ABS mother-ERG see-NFUT
 ‘Mother saw father, who was returning.’

- c. Yabu-Ø [bural-ŋa-ŋu-Ø ŋuma-gu] banaga-n^yu.
 mother-ABS [see-APASS- REL-ABS father-DAT] return- PST
 ‘Mother, who saw father, was returning.’

There are other languages that show an ergative pattern in a slightly different fashion. In these languages, only ABS arguments may undergo normal relativization (i.e., the gap strategy) and ERG relatives require a resumptive pronoun. Consider the Tongan example in (2) below.

- 2) a. e fefine [na’e tangi]
 DEF woman PST cry
 ‘the woman (who) cried’
- b. e fefine [na’e fili ‘e Sione]
 DEF woman PST choose ERG Sione
 ‘the woman (who) Sione chose’
- c.*e fefine [na’e fili ‘a Sione]
 DEF woman PST choose ABS Sione
 ‘the woman (who) chose Sione’
- d. e fefine [na’a ne fili ‘a Sione]
 DEF woman PST 3.S choose ABS Sione
 ‘the woman (who) chose Sione’ (same as (2c))

As illustrated in (2c) and (2d), the relative clause must contain a pronoun that is coreferential with the head noun if the relativized argument is the subject of a transitive verb. Failure to do so would result in ungrammaticality. Furthermore, the use of such a pronoun is prohibited in ABS relatives, as shown in (3) below.²

- 3) a.*e fefine [na’a ne tangi]
 DEF woman PST 3.S cry
 ‘the woman (who) cried’
- b.*e fefine [na’e fili ia ‘e Sione]
 DEF woman PST choose 3.S ERG Sione
 ‘the woman (who) Sione chose’

Note that not all morphologically ergative languages show syntactic ergativity. Some well-known examples are Warlpiri (Bittner and Hale 1996a, b, Dixon 1979, Legate this volume) and Niuean (Chung 1978, Levin and Massam 1984, Seiter 1980). Thus, it is not the morphological ergativity per se that gives rise to the ergative patterns shown above. Such a division within ergative languages is generally understood in terms of parametric variations: a language that is [+morphologically ergative] can be either [+syntactically ergative] or [–syntactically ergative]. Note that it is implicitly assumed that morphological ergativity and

syntactic ergativity involve two separate parameters. Bittner and Hale (1996a, b), for example, propose the following parametric approach to account for the split. They argue that the difference is essentially whether VP is transparent or opaque to government from C. To grossly simplify, they argue that ABS arguments are K-less and therefore must be governed by C.³ This condition can be met either by raising the K-less nominal to [Spec, IP] or by rendering VP transparent by V-to-I-to-C movement. If VP is opaque, ABS arguments must raise to [Spec, IP]. In effect, ABS-marked arguments are always in [Spec, IP], forming a natural class that gives rise to syntactic ergativity. In contrast, if VP is transparent, ABS arguments can be governed by C in situ. As a result, ERG-marked arguments are higher than ABS-marked arguments. ABS-arguments do not form a natural class, which accounts for the lack of syntactic ergativity. In short, syntactic ergativity arises in raising ergative languages, in which ABS arguments are higher than ERG arguments as a result of raising to [Spec, IP]. While this analysis explains why an ergative pattern arises, a question remains as to why the resumptive pronoun strategy is required for ERG relatives in a subgroup of syntactically ergative languages.⁴

The approach proposed in this paper disagrees with the conventional view in two respects. First, I propose that there is no need to postulate a separate parameter to account for syntactic ergativity. Second, I argue that syntactic ergativity is a heterogeneous phenomenon and therefore, cannot be accounted for in terms of a single parameter. Rather, I argue that syntactic ergativity should be understood simply as a consequence of morphological ergativity. According to this alternative view, an ergative pattern arises at the level of syntax when the relevant operation is subject to rules that are Case-sensitive. In Section 6, we will discuss how this alternative approach accounts for an instance of syntactic ergativity concerning relativization.

3. ACCESSIBILITY HIERARCHY

Based on their typological study, Keenan and Comrie (1977) propose the accessibility hierarchy provided below.

4) **Accessibility Hierarchy** (Keenan and Comrie 1977):

Subject > Direct Object > Indirect Object > Oblique > Genitive

According to Keenan and Comrie (1977), if a language permits relativization of NPs of a particular type, say indirect object, then those NPs of the type that is located higher in the hierarchy (in this case direct object and subject) may also undergo relativization. If a language has more than one relativization strategy, the hierarchy predicts the following: if a relativization strategy is used for NPs of a particular type, the same strategy may be used for those NPs of the type that is located higher in the hierarchy. Admittedly descriptive as it is, this generalization holds fairly well crosslinguistically as far as accusative languages are concerned. This fairly strong generalization collapses, however, when the data from ergative languages are taken

into consideration. As far as syntactically ergative languages are concerned, the accessibility hierarchy should be modified as in (5) below.

- 5) Intransitive subject } > Transitive subject > Oblique
 Direct object }

The alleged universal nature of Keenan and Comrie's accessibility hierarchy faces a serious problem here.

Hawkins (1999) argues that the accessibility hierarchy can be explained in terms of sentence processing. He shows that the accessibility hierarchy involves increasingly complex domains for relativization: that is, the subject gaps are easier to process than direct object gaps, which in turn are easier to process than those of indirect objects. In a nutshell, gaps that are structurally higher are easier to process than those in lower positions, because the latter involve more nodes between the filler and the gap. Given the principle that the speaker prefers a structure that takes less time to process than one that takes more time and effort, Keenan and Comrie's accessibility hierarchy can be understood as a manifestation of such preference. Notice that Hawkins's study only concerns the data from accusative languages.

Assuming that Hawkins's claim is correct, given the accessibility hierarchy in ergative languages (5), we would expect that ABS gaps are easier to process than ERG gaps. Not only has there been no empirical evidence for this hypothesis, but also such a hypothesis fails to explain why some ERG gaps, i.e., those in syntactically accusative languages, are as easy to process as ABS gaps. On the other hand, Bittner and Hale (1996a, b) claim that ABS is higher than ERG in raising ergative languages, while ERG is higher than ABS in transparent ergative languages. If this is true, it explains why some ERG gaps (i.e., those in raising ergative languages) are more difficult to process than ABS gaps and supports Hawkins's proposal that the accessibility hierarchy (5) reflects relative ease of processing. Given Bittner and Hale's analysis of transparent ergative languages, however, we would expect ABS-marked objects to be more difficult to process than ABS-marked subjects and ERG-marked subjects. Yet, there does not seem to be a language in which Case marking is ergative and only the subjects, but not direct objects, can undergo relativization. When a morphologically ergative language does not show syntactic ergativity with respect to relativization, it is not that it shows an accusative pattern. Rather, it simply does not distinguish ABS from ERG and allows the gap strategy to apply to both subjects (ABS or ERG) and objects.

On a different note, Chomsky (1993: 10) observes that less-marked Case is higher on the extractability hierarchy. In (4) NOM is higher in the hierarchy than ACC, the latter being the marked Case in the system. Similarly, in (5) ABS is higher than ERG, which is the marked Case in the system. It is this observation that the accessibility hierarchy seems to have something to do with Case that I would like to pursue in the following discussion. I propose that the accessibility hierarchy should be stated in terms of Case rather than grammatical relations. What is universal about the accessibility hierarchy is that NPs bearing the unmarked Case are higher than those bearing the marked Case.

6) Unmarked Case (NOM/ABS) > Marked Case (ACC/ERG) > Oblique

The question is, however, why it has to be so.

4. CHECKING ERGATIVE CASE

To reiterate, we are dealing with the following three questions: Firstly, why do some languages prohibit ergative arguments from undergoing relativization? Secondly, why does the resumptive pronoun strategy rescue the otherwise ungrammatical ergative relatives in Tongan? And finally, is there any explanation for the accessibility hierarchy based on Case provided in (6) above? These questions can be answered if we assume that the distribution of resumptive pronouns is governed by C's features and that the difference between accusative and ergative Case morphology is essentially the choice of the marked Case.

There have been a number of proposals as to how ergative Case marking should be understood in the minimalist framework. Approaches to ergative Case marking can be roughly divided into two groups: one that considers ERG an inherent Case (Carnie, this volume; Johns 1992; Legate, this volume; Massam 2000, 2001, 2002; Nash 1995, this volume; Ndayiragije, this volume; Anand and Nevins, this volume; Ura 2000; Woolford 1997) and the other in which ERG is treated as a structural Case (Bittner and Hale 1996a, b; Bobaljik 1993; Laka 1993; Mahajan 1997; Murasugi 1992; Otsuka 2000; Wiltschko 2002). In both approaches, ABS is taken to be a structural Case. However, there is no consensus as to how exactly ABS is checked. Some argue that ABS is associated with T, i.e., equivalent to NOM (Bobaljik and Branigan, this volume; Murasugi 1992; Ura 2000). Some argue that ABS is associated with *v*, i.e., equivalent of ACC (Massam 2000, 2001, 2002; Bobaljik 1993; Laka 1993). Some others argue that ABS is to be regarded as a default structural Case associated with a functional head other than T or *v* (Hale and Bittner 1996a, b; Nash 1995; Ndayiragije, this volume).⁵ Legate (this volume) and Anand and Nevins (this volume) even argue that there is no such Case as ABS and that the label ABS actually covers two different structural Cases, NOM and ACC.

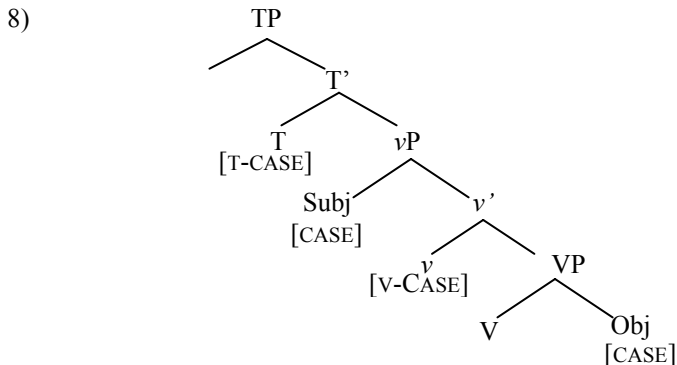
Discussion on the pros and cons of each of these proposals is beyond the scope of this chapter. Suffice it to say that as far as Tongan is concerned, the most preferable analysis is the one which considers both ABS and ERG structural Cases associated with *v* and T, respectively. First, ERG is not always associated with a particular theta-role. The subject of an unergative verb is never marked as ERG although its theta role is AGENT. Furthermore, non-agents, e.g., EXPERIENCER, can be ERG: verbs such as *manatu* 'i 'remember', *fakakaukau* 'i 'think', and *sai* 'ia 'i 'like' take ERG subjects. This argues against the hypothesis that ERG is an inherent Case. Second, assuming that both ERG and ABS are structural, the approach assuming the crossing path is preferred over the one assuming the nested path, as the latter inevitably leads to violation of the Minimal Link Condition (MLC) in the sense of Chomsky (1995).⁶ Furthermore, the fact that ERG is structurally higher than ABS is supported by independent evidence. For example, an ABS-argument

cannot bind a reflexive in an ERG-marked position whereas an ERG argument can bind a reflexive in an ABS-marked position.⁷

- 7) a. Na'e fakalangilangi'i 'e Mele 'a ia pē.
 PST praise ERG Mele ABS 3.S EMPH
 'Mele praised herself.'
- b. Na'e fakalangilangi'i 'e ia pē 'a Mele.
 PST praise ERG 3.PL EMPH ABS Mele
 *'Herself_i praised Mele_i.'
 '(Only) she_i praised Mele_j.'

Tongan data suggest a) that ERG is a structural Case and b) that it is associated with T, as NOM is in an accusative system.

Following Levin and Massam (1984), Bobaljik (1993) and Laka (1993), I argue that the difference between accusative and ergative systems reduces to the choice of "active" Case, i.e., the Case that is activated in intransitive constructions: T-Case in accusative languages and V-Case in ergative languages. In terms of feature checking, the active Case hypothesis can be stated as follows. T bears a Case feature [T-Case], *v* bears a Case feature [V-Case], and NPs bear a Case feature [Case] with its value unspecified. The relevant structure for transitive constructions is illustrated in (8) below.



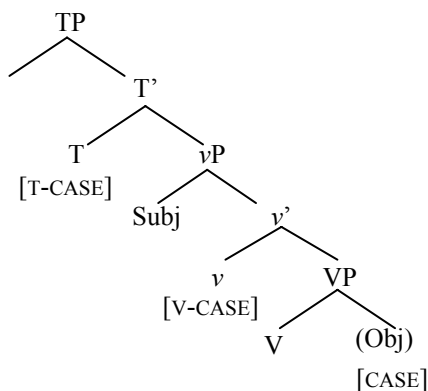
T's Case feature and that of NP in [Spec, vP] check off under Agree. T cannot Agree with the NP in [V, NP], for it would violate the MLC. Similarly, *v*'s Case feature checks off under Agree with that of the NP in [V, NP]. Thus, in a transitive construction, the external argument would bear T Case and the internal argument would have V Case. This much is the same in both accusative and ergative languages.

The difference arises in intransitive constructions. The gist of the active Case hypothesis is that in intransitive constructions one Case becomes inert and therefore, unavailable. In accusative languages, this inert Case is V-Case. Thus, the sole argument of an intransitive verb bears T-Case, the active Case in the system. In

contrast, in ergative languages, it is T-Case that becomes inert. Consequently, the subject of an intransitive verb receives V-Case. In both Bobaljik's (1993) and Laka's (1993) models, Agr is taken to be the medium for feature checking. Thus, the difference between accusative and ergative languages is essentially whether the subject of an intransitive verb checks its Case in AgrS or AgrO, respectively.⁸ Given that Agr is dispensed with in the current minimalist approach, the active Case hypothesis needs to be reinterpreted so as to conform to this assumption.

Following Hale and Keyser (1993), Chomsky (1995) argues that unergative constructions are underlyingly transitive. Thus, unergative constructions are assumed to have the following structure.

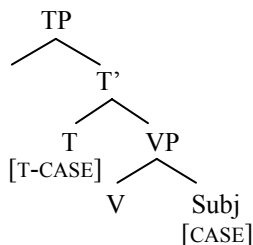
9)



Accusative Case marking is accounted for as follows. V-Case is checked by the covert object, while T-Case Agrees with the subject. As a result, the subject of an unergative verb bears the same Case as the subject of a transitive verb, giving rise to an accusative pattern.⁹ In terms of the active Case hypothesis, we may argue that V-Case is rendered "inert" by the covert object. It is not inert in the strict sense, but nonetheless unavailable for the subject.

As for unaccusative constructions, it is assumed that *v* is lacking.

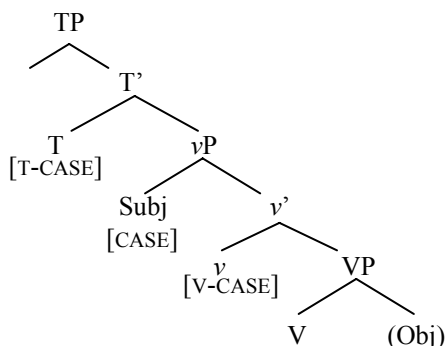
10)



In the active Case approach, this is understood as inertness of V-Case: V-Case is inert in unaccusative constructions, i.e., the relevant functional head *v* is lacking.

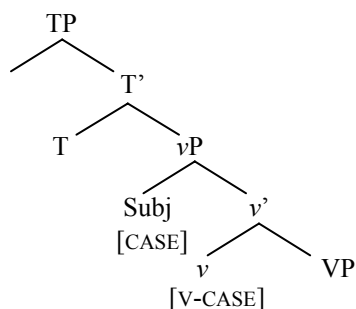
With regard to ergative languages, more drastic modification is necessary. Consider the structure (11) below.

11)



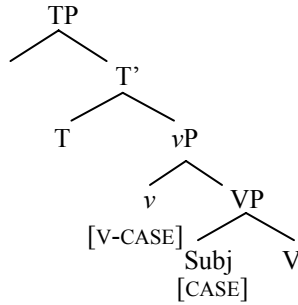
Given the active Case hypothesis, we must somehow render T-Case inert and maintain V-Case available for the subject. This can only be done by assuming a) that T in an intransitive construction lacks a Case feature and b) that the covert object does not delete v 's Case feature. As for the latter, there are two possibilities: either v 's Case feature can enter into multiple checking relations, or the covert object incorporates into V and thereby it does not involve checking of v 's Case feature. Whichever may be the case, it does not matter to the present discussion. Either way, we would have the following structure for unergative constructions in ergative languages.

12)



Here, another technical problem arises. It is generally assumed that the operation Agree applies to a Probe and a Goal, where the Probe is structurally higher than the Goal. In (12), however, the Probe, v is lower than the Goal, the subject NP. Again, we have several possible solutions. First is to say that the structural hierarchy does not matter to the operation Agree. This, however, is highly problematic, for Agree is assumed to license movement of the Goal. If we permit a configuration in which Probe is lower than Goal, we would also have to permit downward movement. A second possibility is to assume that v raises to T and then Agree occurs with the subject. Though it is plausible, this hypothesis would also predict that V-to-T movement is obligatory in ergative languages, which is not an established fact. Finally, we may assume that the subject is generated VP-internally, as illustrated in (13) below.¹⁰

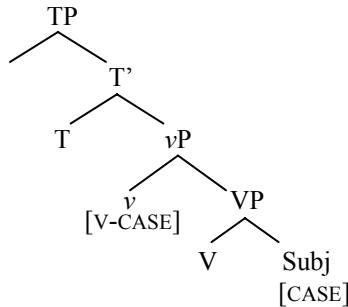
13)



In (13), *v* and Subj can Agree in situ.

Turning to unaccusative constructions, we face an interesting situation. Let us take, as standardly assumed, the subject of an unaccusative verb to be generated as V's complement. According to the active Case hypothesis, we assume that V-Case is active. This means that unaccusative verbs do not exist in ergative languages, as all intransitive verbs must have structural Case. That Burzio's generalization does not hold true of ergative languages has long been noted in the literature (Levin 1983, Levin and Massam, 1986, Mahajan 1997, to name a few). Does this necessarily mean that ergative languages do not distinguish unergatives from unaccusatives? The distinction can still be maintained if we take unaccusatives to be different from unergatives in that their sole argument is generated as their complement rather than Spec.¹¹

14)



To summarize, the difference between accusative languages and ergative languages is captured in the active Case hypothesis as follows. In the former, unaccusative constructions lack *v* and (finite) T always has a Case feature. Ergative languages differ from accusative languages in three respects. First, *v* is present in unaccusative as well as transitive and unergative constructions. Second, there are two kinds of (finite) T, one with a Case feature and the other without. The former is selected in a transitive construction and the latter in an intransitive construction. Third, unergative constructions are different from transitive constructions in that the subject is generated VP-internally in the former. The distribution of the relevant functional heads is summarised in Table 1 below (✓ / – indicate that the relevant item is selected/lacking).

Table 1. Distribution of *v* and *T*

Item	Accusative		Ergative	
	Transitive	Intransitive	Transitive	Intransitive
T [+Case]	√	√	√	-
T [-Case]	N/A	N/A	-	√
<i>v</i> [+Case]	√	-	√	√

In the following discussion, we refer to the Case that is always available in the system as “active” Case: namely, T-Case in accusative languages (i.e., NOM) and V-Case in ergative languages (i.e., ABS).

5. RESUMPTIVE PRONOUNS AND C’S FEATURES

In this section, we discuss the analyses of resumptive pronouns previously proposed in the literature. It should be noted that there are two kinds of resumptive pronouns (Sells 1984): one that is used to overcome island effects and the other that appears even in the absence of islands. A typical example of the former is found in English.

- 15) a. *I always bump into that guy_i that I cannot remember where *t_i* studies.
 b. I always bump into that guy_i that I cannot remember where *he_i* studies.

The second type is found in languages like Irish (McCloskey 1990), Hebrew and Palestinian Arabic (Shlonsky 1992), and Spanish (Suñer 1998). Resumptive pronouns in Tongan belong to this second class. Consider (2c, d) repeated here as (16).

- 16) a. *e fefine [na’e fili *t* ‘a Sione]
 DEF woman PST choose ABS Sione
 ‘the woman (who) chose Sione’
 b. e fefine [na’a *ne* fili ‘a Sione]
 DEF woman PST 3.S choose ABS Sione
 ‘the woman (who) chose Sione’

Island effects are irrelevant in (16). Yet, the resumptive pronoun *ne* is obligatory. What exactly is the condition that requires the resumptive pronoun in sentences like (16a)?

5.1 Three types of complementizers in Irish

The distribution of resumptive pronouns in Irish is governed by two factors: a) types of complementizers and b) types of arguments. There are two complementizers that

are used in relative clauses, which are referred to as *aL* and *aN* in the literature. The former licenses a gap, while the latter licenses a resumptive pronoun. See (17) below (data from McCloskey 1990: 205-6).

- 17) a. an fear a bhuail tú t
 the man *aL* struck you
 'the man that you struck'
- b. an fear ar bhuail tú é
 the man *aN* struck you him
 'the man that you struck (him)'

There is also *go* that licenses neither, occurring, for example, in an embedded declarative clause.

McCloskey attributes the forms and functions of these three complementizers to their respective feature specifications. Specifically, he argues that a complementizer agrees with the element in its Spec. It is assumed that [Spec, C] of a relative clause contains a null operator, which binds either a *wh*-trace or a resumptive pronoun. Each of these elements is endowed with a pair of features, [-pron(ominal), -ana(phor)] and [+pron, -ana], respectively. The operator inherits the features of the element it binds. C agrees with the operator in these features as an instance of Spec-head agreement: *aL* if the relevant features are [-pron, -ana] and *aN* if they are [+pron, -ana]. The other complementizer, *go* appears when there is no element in [Spec, C] to trigger agreement.

Another phenomenon that requires some explanation is that resumptive pronouns may not appear in the highest subject position of the relative clause, a condition known as the Highest Subject Constraint (HSC). On the other hand, resumptive pronouns are permissible in the subject position of the embedded clause headed by the complementizer *go*, which introduces a declarative clause. See (18) below.

- 18) a. *an fear [a raibh sé breoite]
 the man *aN* was he ill
 'the man that (he) was ill'
- b. an fear [ar dhúirt mé [go dtiocfadh sé]]
 the man *aN* said I COMP would-come he
 'the man that I said (he) would come' (McCloskey 1990: 214)

McCloskey argues that it is the syntactic distance that matters. Being [+pron], resumptive pronouns are subject to a disjoint reference condition similar to the Binding Principle B, and therefore, cannot be locally bound. A resumptive pronoun in the subject position of a relative clause is "too close" to the binder.

Sells (1984) proposes the following alternative account of this phenomenon. Contrary to McCloskey's analysis, Sells proposes that *aN* is not a complementizer, but appears in Infl. The HSC is due to the condition that prohibits a resumptive

pronoun from appearing in a position to which the same Infl assigns Case. In other words, a resumptive pronoun cannot occur in a position to which NOM is assigned, namely, [Spec, I]. The pronoun *sé* in (18b) does not violate this condition, since it receives NOM from I of the deeply embedded clause. Leaving aside the validity of Sells' analysis, his proposal that licensing of a resumptive pronoun has to do with Case is worth noting, for this observation can be carried over to ergative languages as we will see shortly.

5.2 *Obligatory resumptive pronouns in Palestinian*

Developing the idea that resumptive pronouns are licensed by a certain type of complementizer, Shlonsky (1992) argues that not only the English-type, but also the Irish-type resumptive pronouns should be taken to be a last resort device: whenever a resumptive pronoun occurs, it is because a certain condition prohibits movement. Shlonsky argues that resumptive pronouns in Palestinian occur only when the complementizer has a property of rendering its Spec an A- rather than \bar{A} -position.

Unlike Irish, Palestinian does not permit a trace and a resumptive pronoun to alternate. Resumptive pronouns are obligatory in the direct object position, the embedded subject position, and the embedded object position. On the other hand, resumptive pronouns cannot occur in the highest subject position of a relative clause, just like in Irish. See (19) below (data from Shlonsky 1992: 445-6).

- 19) a. l-bint ʔilli šufti -(ha)
 the-girl that (you.F) saw- (her)
 'the girl that you saw'
- b. l-bint ʔilli (*hiy) raayha ʔal beet
 the-girl that (she) going to house
 'the girl that is going home'
- c. l-bint ʔilli fakkarti ʔinno Mona habbat-*(ha)
 the-girl that (you.F) thought that Mona loved -(her)
 'the girl that you thought that Mona loved'
- d. l-bint ʔilli fakkarti ʔinno *(hiy) raayha ʔalbeet
 the-girl that (you.F) thought that *(she) going to the house
 'The girl that you thought that (she) is going home'

Shlonsky's account of the distribution of resumptive pronouns in Palestinian goes as follows. As *ʔilli* identifies its Spec as A-position, movement to [Spec, C] is an instance of A-movement and is subject to the Specific Subject Constraint (SSC). In (19a,c-d), in which resumptive pronouns are obligatory, there is a subject which blocks movement from the relevant position to [Spec, C]. In contrast, nothing prohibits movement to [Spec, C] in (19b). A resumptive pronoun cannot occur in the

subject position in (19b) because movement is possible. Insertion of a resumptive pronoun is permissible only as a last resort, i.e., when movement is impossible. The HSC is explained in terms of the economy principle: movement from the subject position is possible, wherefore it must take place.

There arises a question as to how the *ʔilli*-type complementizers can identify their Spec as A-position. Noting that A-positions are generally either θ -positions or Spec of Agr, and adopting Rizzi's (1990) idea of agreement in the domain of C, Shlonsky proposes that complementizers of this type are endowed with agreement features. Strong support for this hypothesis comes from Standard Arabic, in which the complementizer of a relative clause shows agreement with the head noun.

- 20) a. *ʔal-rajul-u ʔlaðii raʔaytu-(hu)*
 the-man-NOM that.MS (I) saw-(him)
 'the man that I saw'
- b. *ʔal-marʔat -u ʔlatii raʔaytu-(ha)*
 the-woman-NOM that.FS (I) saw-(her)
 'the woman that I saw'
- c. *ʔal-ʔawlaad-u ʔlaðiiina raʔaytu-(hum)*
 the-boys-NOM that.MPL (I) saw-(them)
 'the boys that I saw' (Shlonsky 1992: 457)

Shlonsky argues that it is not the head noun, but the operator in [Spec, C] that triggers agreement in these examples. For Shlonsky, agreement features on C render its Spec an A-position. This hypothesis has a critical weakness, however. Assuming an operator is base-generated in [Spec, C], which is an A-position, the resumptive pronoun cannot be \bar{A} -bound by this operator unless the operator further moves to an \bar{A} -position. Thus, Shlonsky speculates a) that the operator undergoes LF movement to an \bar{A} -position, i.e., adjunction to CP; and b) that the trace in A-[Spec, C] will be deleted. This solution, however, sounds rather ad-hoc.

5.3 C's [*+/- pronominal*] feature in Spanish

In light of the Minimalist Program, the idea of resumptive pronouns being a last resort and the hypothesis that the distribution of resumptive pronouns is governed by C's features are welcome. We have observed that there is a correlation between the form of complementizers and the presence of a resumptive pronoun. This observation leads to the hypothesis that C agrees with the operator in its Spec. The relevant features are [\pm pron, \pm ana] for McCloskey (1990) and ϕ -features for Shlonsky (1992). Given the minimalist assumption that derivation is driven by feature checking, it would be preferable if we could state that some feature on C requires the operator to undergo movement, or that some feature on C requires the operator to be base-generated.

Pursuing this possibility, Suñer (1998) argues that it is C's [+pron(ominal)] feature that governs the distribution of resumptive pronoun. Unlike McCloskey (1990) and Shlonsky (1992), Suñer assumes that resumptive pronouns are introduced in PF. Suñer's argument goes as follows. In a relative clause, C has a feature [+pron] and a relative pronoun (relpro) is always base generated. When C's [+pron] feature is strong, it attracts the relative pronoun to [Spec, C], yielding the structure in (21) below.

- 21) [relpro_i [C [..... t_i]]]

If C's [+pron] feature is weak, the relative pronoun remains in situ and a null operator (OP) will be merged. This will result in the structure in (22). OP binds the relative pronoun in the relative clause and links it to the head noun. The relative pronoun will subsequently be spelled out as a resumptive pronoun at PF.

- 22) [OP_i [C [..... relpro_i]]]

It should be noted that in this analysis a resumptive pronoun is in fact a relative pronoun. A relative pronoun, which is generally assumed to be an operator, functions as such only if movement applies. Consider the following examples in Spanish (from Suñer 1998: 346-7).

- 23) a. la mujer [a quien_i Ø [Luis llamó ~~a quien_i~~]]
 the woman A whom Luis called
- b. una mujer [OP_i que [Luis la_i llamó]]
 a woman that Luis her called
 'a woman that Luis called her'

In (23a), C is phonetically null (Ø) and its [+pron] feature is strong. Consequently, the relative pronoun (*a*) *quien* has moved to [Spec, C], leaving a copy that will be deleted at PF. In (23b), C has a phonetic content (*que*) and its [+pron] feature is weak. The relative pronoun remains in situ and will be later pronounced as a resumptive pronoun.

A question arises as to the phonetic form of the raised relative pronoun (i.e., *quien*) and that of the one that remains in situ (i.e., *la*). If they are the same element, how could it have two different phonetic realizations? Suñer argues that the relative pronoun in (23b) is a null relative pronoun, and that it materializes only at PF. Thus, at the point of Spell-Out the structure actually looks like the one in (24) below.

- 24) una mujer [OP_i que [Luis Ø_i llamó]]

The null relative pronoun, however, fails to act as a bound variable due to a language specific condition that a relative pronoun cannot act as a bound variable at the PF interface unless it is in [Spec, C]. Therefore, the relative pronoun must be lexicalised and made into a resumptive pronoun.

To recapitulate, Suñer postulates two kinds of relative pronouns and two kinds of complementizers in Spanish. C can be either overt or null, and its [+pron] feature can be either strong or weak. Relative pronouns can also be overt or null. The attested combinations of these elements are summarized in Table 2 below.

Table 2. Complementizers and Relative Pronouns in Spanish

C	[+pron]	Relpro	Gap or pronoun
<i>que</i>	Weak	Ø	Pronoun
<i>que</i>	Strong	Ø	Gap
Ø	Strong	<i>quien</i>	Gap

The second pattern is illustrated in (25) below (from Suñer 1998: 347):

- 25) una mujer [Ø_i que [Luis llamó Ø_i]]
 a woman that Luis called
 ‘a woman that Luis called’

According to this approach, the distribution of resumptive pronouns in Irish can also be explained in terms of C’s [+pron] feature: *aL*’s [+pron] feature is strong, while that on *aN* is weak. Similarly, we may consider that in Palestinian, ?illi’s [+pron] feature is weak, therefore it licenses resumptive pronouns.

One problem that needs to be accounted for is the HSC, which is observed in Irish and Palestinian, but crucially, not in Spanish. Recall that McCloskey (1990) argues that this constraint is due to the condition similar to the Binding Principle B, which prohibits local binding of a resumptive pronoun. Shlonsky (1992) considers that it is essentially an instance of the SCC, arguing that it is due to C’s ability to identify its Spec as an A-position. In Suñer’s analysis, the HSC can be interpreted as follows: subject relatives cannot select C whose [+pron] feature is strong. This, however, is merely another way of describing the fact. Thus, Suñer follows Shlonsky’s proposal that agreeing C renders its Spec an A-position. She further argues that this possibility is blocked if the null operator is merged in [Spec,C] because OP by definition must be in an \bar{A} -position. Thus, when the relative clause is headed by an agreeing C, it will contain a gap rather than a pronoun. Suñer (1998: 352) proposes that languages that show the HSC “ban the nonagreeing C for subject relatives because they value a gap... more highly than a resumptive pronoun.” However, this does not seem to be a particularly satisfactory solution either. We will return to this point shortly.

6. RESUMPTIVE PRONOUNS AND CASE

Let us take Suñer’s (1998) proposal to be on the right track and assume that the distribution of resumptive pronouns is governed by the strength of C’s [+pron] feature. When C’s [+pron] feature is strong, the relative pronoun must move up to [Spec, C] to check this feature, leaving a gap in the relative clause. When the

relevant feature on C is weak, the null operator OP is merged and the relative pronoun remains in situ and is subsequently spelled out as a pronoun in PF. This hypothesis correctly accounts for the distribution of resumptive pronouns in accusative languages. Can Suñer's argument be extended to account for ergative patterns of relativization?

Let us now consider the Tongan data. In Tongan, only ABS arguments may undergo relativization by the gap strategy and relativization of ERG arguments requires a resumptive pronoun. Consider (2) repeated here as (26).

- 26) a. e fefine [na'e tangi *t*]
 DEF woman PST cry
 'the woman (who) cried'
- b. e fefine [na'e fili 'e Sione *t*]
 DEF woman PST choose ERG Sione
 'the woman (who) Sione chose'
- c. *e fefine [na'e fili *t* 'a Sione]
 DEF woman PST choose ABS Sione
 'the woman (who) chose Sione'
- d. e fefine [na'a *ne* fili 'a Sione]
 DEF woman PST 3.S choose ABS Sione
 same as (26c)

The above data suggest that C is null and that the relative pronoun is also null in Tongan. We must also assume that C's [+pron] feature is strong in (26a,b) and weak in (26c).

Things are not so straightforward, however. As illustrated in (27) below, the resumptive pronoun strategy is not available for ABS argument.

- 27) a.*e fefine [na'a *ne* tangi]
 DEF woman PST 3.S cry
 'the woman (who) she cried'
- b.*e fefine [na'e fili *ia* 'e Sione]
 DEF woman PST choose 3.S ERG Sione
 'the woman (who) Sione chose her'

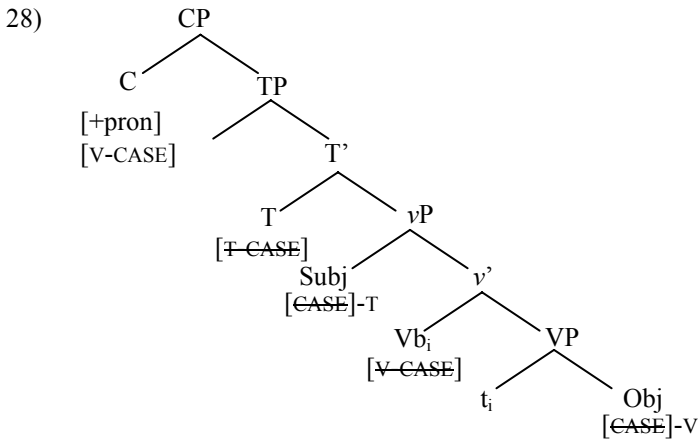
In short, we have the following situation: ABS relatives must select C whose [+pron] feature is strong, while ERG relatives must select C whose [+pron] feature is weak.

Note that this is a situation similar to the one posed by the HSC in the languages discussed above. The choice of complementizer is not arbitrary when the relativized argument has a certain property. Note also that the contrast between the two phenomena is quite intriguing in that they actually have one property in common.

Namely, resumptive pronouns are prohibited in positions to which the unmarked Case is assigned: NOM in Irish and Palestinian, ABS in Tongan. Recall that Sells' (1984) proposal that licensing of resumptive pronouns has something to do with Case. Let us consider how this observation can be incorporated into Suñer's analysis.

The current paper proposes the following. First, agreeing C also bears a Case feature. Second, the value of C's Case feature is the active Case of the system, which is [T-Case] in an accusative language and [V-Case] in an ergative language. This means that C can only Agree with an element which bears the active Case (i.e., NOM in accusative languages and ABS in ergative languages, respectively). This hypothesis in turn requires that (the value of) the Case feature on an NP remains accessible after checking. This goes against the standard minimalist account (Chomsky 1995) in which Case features must be deleted and become inaccessible once checked. However, in the more recent Phase model (Chomsky 2000, 2001) an NP's Case feature is no longer considered a feature with specified value, but rather a by-product of Agree. The value of an NP's Case feature is assigned by virtue of Agree and determined by the element with which it Agrees: e.g., NOM if the relevant element is T, and ACC, if it is *v*. Thus, I assume that the assigned value must somehow be accessible to the computation in order to obtain the required morphology.

The tree diagram in (28) below represents the structure at the point of derivation immediately after the Case features on NPs have been checked.



At this point, C's [+pron] feature needs to be checked. Suppose a relative pronoun is base generated in [Spec, vP]. It cannot Agree with C since it has T-Case, which does not match C's Case feature. Suppose a relative pronoun is base generated in the object position. It has both [+pron] and [V-Case] features. In contrast, in an accusative language, C whose [+pron] feature is strong also bears [T-Case]. Hence, a relative pronoun can Agree with C only if it is in the subject position.

There is more to be said, however. We have only explained why the gap cannot occur in a position which is associated with the marked Case if the selected C's

[+pron] feature is strong. Suppose we select C whose [+pron] feature is weak. This means that this feature will be checked covertly and that consequently, the relative pronoun would remain in situ and subsequently become a resumptive pronoun at PF. In theory, therefore, the relative pronoun can be in either the subject position or the object position. This option, however, is not available for ABS arguments in Tongan, as shown in (27) above. In order to rule out the ABS relatives containing a resumptive pronoun, we need to put forward another hypothesis. That is, C whose [+pron] is weak is also endowed with a Case feature and its value is [–active]. Due to this feature, if a relative pronoun is base generated in the object position, it cannot Agree with C. Consequently, resumptive pronouns are not permitted in this position.

To summarize the discussion so far, there are two types of C that occur in relative clauses in Tongan: one whose [+pron] feature is strong and the other whose [+pron] feature is weak. These features are associated with a Case feature of a particular value: [+active] if it is strong, and [–active] if it is weak. Note that a similar analysis applies to Palestinian. Recall that in Palestinian resumptive pronouns are obligatory in the object position and the gap in the (highest) subject position. We may account for this fact as follows. Palestinian also has two kinds of C, both with the same phonetic realization *ʔilli*: one whose [+pron] is strong and the other whose [+pron] feature is weak. The former is associated with the active Case (i.e., NOM) and the latter with non-active Case (i.e., ACC).

7. TYPOLOGY OF C AND THE DISTRIBUTION OF RESUMPTIVE PRONOUNS

Thus far, we have proposed that C of a relative clause has features [+pron] and [Case]. We have also argued that there is a correlation between the strength of C's [+pron] feature and the value of its Case feature: if C's [+pron] feature is strong, its Case feature is [+active] (NOM or ABS); if C's [+pron] is weak, its Case feature is [–active] (ACC or ERG). This analysis has been shown to account for the distribution of resumptive pronouns in Tongan as well as Palestinian. The inventory of complementizers in these two languages is summarized in Table 3 below.

Table 3. Complementizers in Tongan and Palestinian

Tongan	Palestinian	[+/-pron]	Case	Gap or pronoun
Ø	<i>ʔinno</i>	[–pron]	N/A	N/A
Ø	<i>ʔilli</i>	[+pron] strong	Active	Gap
Ø	<i>ʔilli</i>	[+pron] weak	–Active	Pronoun

In this section, we extend this hypothesis to other languages, in which the distribution of resumptive pronouns shows different patterns.

The current analysis faces a problem when Irish data are taken into consideration. As we have seen, Irish has two complementizers that occur in relative clauses, *aN* and *aL*. The former licenses a resumptive pronoun and the latter a gap.

- 30) conozco a un tipo que **él** me aconseja a mí
know.1.s A a guy that he me advises to me
'I know a guy who advises me.' (Suñer 1998: 342)
- 31) a yid vos **er** iz geven a groyser lamdn un a gvir
a Jew that he is been a big scholar and a rich man
'a guy who (he) was a big scholar and a rich man' (Prince 1990, in Suñer
1998: 343)

This suggests that in Spanish and Yiddish the complementizer whose [+pron] feature is weak lacks the Case feature with a specified value. This is a case analogous to *aL* in Irish. See Table 5 for the inventory of Spanish complementizers.

Table 5. Complementizers in Spanish

	[±pron]	Case	Gap or pronoun	Relpro
<i>que</i>	[−pron]	N/A	N/A	N/A
<i>que</i>	[+pron] strong	Unspecified	Gap	Ø
<i>que</i>	[+pron] weak	Unspecified	Pronoun	Ø
Ø	[+pron] strong	Unspecified	Gap	<i>quien</i>

Spanish, however, demonstrates a peculiar property that does not conform to the current proposal. While resumptive pronouns are permitted in the highest subject position, movement of a relative pronoun (*quien*) out of this position is prohibited. Consider (32) below (from Suñer 1998: 342)

- 32) a. *el científico quien ganó el premio Nobel
 the scientist who won the prize Nobel
 ‘the scientist who won the Nobel prize’
- b. el científico que ganó el premio Nobel
 the scientist that won the prize Nobel
 ‘the scientist that won the Nobel prize’

The relative pronoun *quien* cannot appear in [Spec, C] in (32a), suggesting that the null C whose [+pron] feature is strong fails to Agree with a relative pronoun with NOM Case. This obviously contradicts our hypothesis: C whose [+pron] feature is strong has a Case feature associated with the active Case (i.e., NOM in Spanish).

On the surface, it appears that we need to stipulate that in (32a) the null complementizer’s [+pron] feature is strong and its Case feature is associated with the non-active Case. This, however, would undermine the generalizations that seem to hold true of all the other cases we have discussed so far. If we allowed for the case in which C’s [+pron] feature is strong and its Case feature is [−active], the analysis proposed here would inevitably become indisputably ad hoc. Our solution, then, would be to hypothesize that the prohibition of a gap in the subject position is due to a constraint independent of Case.

I have only a tentative proposal regarding this point. Note that Spanish is a *pro*-drop language. Thus, the subject position is often, almost always, empty if the subject is pronominal. The gap in (32a), therefore, could be in theory a *pro* rather than the gap as a result of the relative pronoun movement.¹²

- 33) *el científico **quien** C *pro* ganó el premio Nobel
 the scientist who C pro won the prize Nobel

(33) is ungrammatical for the same reason why (34) is ungrammatical: a relative pronoun cannot occur in two different positions simultaneously.

- 34) *el científico **quien** C el ganó el premio Nobel
 the scientist who C he won the prize Nobel

A relative pronoun cannot co-occur with a resumptive pronoun in the same sentence because a resumptive pronoun is basically the relative pronoun spelled out in situ. If we take *pro* to be base generated, *quien* cannot be generated inside the relative clause. It is also assumed that *quien* cannot be introduced by *merge* to [Spec, C].

I suspect that the restriction on the subject gap in Spanish has something to do with this structural ambiguity: a phonetically null subject can be either a gap or a *pro*. If C's [+pron] feature is weak, this ambiguity would not arise. Therefore, another complementizer, *que* whose [+pron] feature is weak, is selected to head a subject relative clause. The other option is available for object relatives, since, unlike subjects, relativization of objects does not give rise to such ambiguity.¹³

The current approach, then, seems to provide a fairly consistent account for those languages that permit the Irish-type resumptive pronouns. It is necessary at this point to examine whether the current approach can also account for the lack of resumptive pronouns of this type. Specifically, we are concerned with two types of languages: syntactically ergative languages that permit neither a resumptive pronoun nor a gap in the position associated with ERG (e.g., Dyirbal), and those languages that permit a gap everywhere such as English (accusative), Warlpiri, and Niuean (ergative).¹⁴

Let us consider Dyirbal first. In this language, ERG relativization is strictly prohibited. That is, the resumptive pronoun strategy is not available. The relevant examples are repeated here as (35) (from Dixon 1994: 170):

- 35) Yabu-Ø [bural -ŋa-ŋu -Ø ŋuma-gu] banaga-n^yu.
 mother-ABS [see-APASS-REL-ABS father-DAT return-PST
 'Mother, who saw father, was returning.'

As illustrated in (35), relativization of a transitive subject must be preceded by antipassivization so that the relevant argument should appear in ABS rather than ERG. The fact that resumptive pronouns cannot occur at all suggests that Dyirbal lacks the relevant type of C, i.e., the one whose [+pron] feature is weak. There are only two types of C in Dyirbal, one with a feature [+pron] and the other without, as shown in Table 6.

Table 6. Dyirbal Complementizers

[+/-pron]	Case	Gap or pronoun
Ø [-pron]	N/A	N/A
Ø [+pron] strong	Active Case	Gap

C's Case feature is [+active], conforming to the proposed generalization: strong [+pron] is associated with [+active]. This explains why ERG relativization is impossible in Dyirbal. If a relative pronoun is base generated in [Spec, ν P] of a transitive construction, C's features would not be checked and thereby the derivation would crash.

Finally, there is a group of languages that do not license resumptive pronouns, but allow a gap to occur everywhere. Consider the Niuean examples (from Seiter 1980: 94) below.¹⁵

- 36) a. e tama ne hau (*a ia) i Makefu
 DEF child NFUT come ABS he LOC Makefu
 'the child who (he) comes from Makefu'
- b. ke he tama ka kai (*e ia) e tau pateta
 to DEF child FUT eat ERG he ABS PL potato
 'to the child who (he) is going to eat the potatoes'
- c. mo e tagata ne moto e koe (*a ia)
 with ABS person NFUT punch ERG you ABS him
 'with the person who you punched (him)'

Given the present hypothesis, such a language lacks C whose [+pron] feature is weak. C's [+pron] feature is always strong, forcing the overt movement of a relative pronoun. In addition, the type of C that is available, the one whose [+pron] feature is strong, behaves like its Irish counterpart: its Case feature does not have a specified value, allowing C to agree with a relative pronoun regardless of its Case. See Table 7 below.

Table 7. Complementizers in English and Niuean

English	Niuean	[+/-pron]	Case	Gap or pronoun
<i>that</i>	Ø	[−pron]	N/A	N/A
<i>that/Ø</i>	Ø	[+pron] strong	Active Case	Gap

To summarize, it has been shown that the current proposal accounts for the crosslinguistic variations of the distribution of the Irish-type resumptive pronouns.

8. HIGHEST SUBJECT CONSTRAINT (HSC)

We have shown that the HSC derives from a more general rule: namely, C whose [+pron] feature is weak is associated with the marked Case (if the value of C's Case feature is specified). There is another side to the HSC, however. Namely, resumptive pronouns are permitted in the embedded subject position, as illustrated in (37) for Irish and (38) for Palestinian below.

- 37) an fear [ar dhúirt mé [go dtiocfadh sé]]
 the man aN said I COMP would-come he
 ‘the man that I said (he) would come’ (McCloskey 1990: 214)
- 38) l-bint ʔilli fakkarti ʔinno *(hiy) raayha ʔalbeet
 the-girl that (you.F) thought that *(she) going to the house
 ‘The girl that you thought that (she) is going home’ (Shlonsky 1992: 445)

In these sentences, the relative clause is headed by C whose [+pron] feature is weak and Case feature [–active]: *aN* in Irish and *ʔilli* in Palestinian. The current analysis fails to offer any account of the possibility of the resumptive pronoun in the embedded subject position.

When we consider the following Tongan data, however, a striking parallel emerges.

- 39) a.*e tamaiki [na’a nau ‘alu ki Tonga]
 DEF children PST they go to Tonga
 ‘the children who (they) went to Tonga’
- b. e tamaiki [‘oku ‘ilo ‘e Mele [na’a nau ‘alu ki Tonga]]
 DEF children PRS know ERG Mele PST they go to Tonga
 ‘the children who Mele knows that they went to Tonga’

We have concluded in the previous section that the C whose [+pron] feature is weak (i.e., the one that licenses resumptive pronouns) has a Case feature associated with the non-active Case (i.e., ERG). Thus, as illustrated in (39a), resumptive pronouns cannot occur in a position associated with ABS. However, a resumptive pronoun is permitted in a position associated with ABS in the deeply embedded clause, as illustrated in (39b). As shown in (40) below, the same holds true if the relevant argument is a direct object.

- 40) a.*e tamaiki [na’e ‘ave nautolu ‘e Sione ki Tonga]
 DEF children PST take them ERG Sione to Tonga
 ‘the children who Sione took (them) to Tonga’
- b. e tamaiki [‘oku ‘ilo ‘e Mele [na’e ‘ave nautolu ‘e Sione ki Tonga]]
 DEF children PRS know ERG Mele PST take them ERG Sione to Tonga
 ‘the children who Mele knows that Sione took them to Tonga’

In other words, a condition similar to the HSC exists in Tongan: resumptive pronouns are prohibited in the highest ABS positions.

Note that the grammatical examples in (37)–(40) involve long-distance binding. I propose that the pronoun in the embedded clause is not the kind of resumptive pronouns that has been discussed so far. Rather, it is of the English type: the one used as a last resort to avoid island effects. Let us consider the Irish-type resumptive

pronouns. We have argued that they are relative pronouns that remain in situ and are permitted only if they Agree with C whose [+pron] feature is weak. Since movement is not possible in this case, a null operator is merged to [Spec, C], which binds the relative pronoun in situ. The relevant condition, it seems, is that a relative pronoun in situ must be licensed by virtue of agreement with C.

Turning back to the examples in (37)-(40), based on the preceding discussion, we assume that the complementizer heading the embedded clause (i.e., *go*, *ʔinno*, or *Ø*) is not endowed with [+pron]. This means that [Spec, C] is unavailable for both the relative pronoun (to move to) and the null operator (to be merged). Consequently, the derivation would crash if a relative pronoun were generated in the embedded clause; it would fail to be licensed. Suppose that the pronoun in question is a regular pronoun rather than a relative pronoun. Regular pronouns need not be licensed in the same way as a relative pronoun. On the other hand, they can be bound by a null operator and function as bound variables. The relation between the operator and the pronoun is that of binding in both cases; the difference is that a relative pronoun must be licensed, but a regular pronoun need not. In this view, the difference between the Irish-type resumptive pronouns and the English-type resumptive pronouns is that the former are relative pronouns and the latter are regular pronouns.¹⁶

9. CONCLUSION

In this chapter we have considered some puzzling facts concerning syntactic ergativity. Why do only a subset of ergative languages show syntactic ergativity? What is the condition that prohibits relativization of ergative arguments? Why is it that in Tongan a resumptive pronoun makes ergative relatives grammatical? Why is a similar resumptive strategy unavailable in Dyirbal? Our proposal is that C's features are the key to these puzzles: the distribution of resumptive pronouns is governed by C's features. Specifically, we have argued that the Irish-type resumptive pronouns are actually relative pronouns and as such they must be licensed by an appropriate C.

It is assumed a) that C of a relative clause is endowed with [+pron], which can be strong or weak; and b) that C's [+pron] feature is associated with a Case feature. When C's [+pron] feature is strong, a gap results. When it is weak, movement is impossible and therefore, the relative pronoun remains in situ. A relative pronoun in situ must be licensed by means of agreement with C in features, including the Case feature. With regard to C's Case feature, we have observed the following. First, its value may be unspecified. In this case, C can agree with a relative pronoun regardless of its Case. Second, when it has a specified value, the following generalization holds: C's Case feature is [+active] if its [+pron] feature is strong and [-active] if it is weak. In this case, a gap is permitted only in positions associated with the active Case (i.e., NOM/ABS) and a resumptive pronoun only in positions associated with the non-active Case (ACC/ERG).

We began this chapter by noting that Keenan and Comrie's accessibility hierarchy does not hold true of ergative languages. Based on the observation that the

relevant factor is Case rather than grammatical relation, we propose an alternative hierarchy as shown in (41) below.

41) Active Case > Non-active Case > Oblique

Active Case and non-active Case refer to the unmarked Case (i.e., NOM/ABS) and the marked Case (ACC/ERG), respectively. This hierarchy is based on the data discussed in this chapter: there is a general tendency that C whose [+pron] feature is strong, the one inducing movement, bears a Case feature [+active]. If the value of C's Case feature is unspecified, active Case and non-active Case are treated equally. Then, extraction is possible from positions associated with either Case. Crucially, C's Case feature is never [-active] when its [+pron] feature is strong. In other words, it is never the case that a gap is permitted only in positions associated with non-active Case.¹⁷

In conclusion, in the current approach, syntactic ergativity (at least as far as relativization is concerned) is taken to be a direct consequence of morphological ergativity. This explains why we do not find a language that is morphologically accusative and syntactically ergative. The fact that only a subset of ergative languages show this type of syntactic ergativity is explained in terms of the crosslinguistic variations of complementizers. Syntactic ergativity may not be so puzzling a phenomenon after all.

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¹ Abbreviations used in this chapter are as follows: ABS = absolutive, ACC = accusative, APASS = antipassive, COMP = complementizer, DAT = dative, DEF = definite, DEM = demonstrative, EMPH = emphatic, ERG = ergative, FUT = future, LOC = locative, NFUT = non-future, NOM = nominative, Obj = object, OBL = oblique, PERF = perfect, PL = plural, PRS = present, PST = past, REL = relative, S = singular, Subj = subject, 1 = first person, 2 = second person, 3 = third person.

² It should be noted that Tongan shows an apparent split ergativity in that pronominal arguments show an accusative pattern. Tongan has two sets of pronouns, clitic and independent. Clitic pronouns such as *ne* in (2d) above can only be used as subjects. Pronominal objects can only take the independent form such as *ia*. For the analysis of the morphological split in Tongan, see Otsuka (2000, 2002).

³ ERG, on the other hand, is considered to be the morphological realization of a functional head K, which in turn must be Case-bound by I. I Case-binds K if and only if a) I locally c-commands K and b) I governs a Case competitor for K, namely, a K-less nominal.

⁴ Moreover, languages that show syntactic ergativity do not show an ergative pattern across the board. Rather, such an ergative pattern is often restricted to certain syntactic operations. For example, in Tongan, while relativization and two types of coordination show an ergative pattern, another type of coordination shows an accusative pattern (Dixon 1979, Otsuka 2000).

⁵ For Hale and Bittner, the relevant functional head is C. Nash (1995) and Ndayiragije argue that it is Voice and Focus, respectively.

⁶ However, see Ura (2000) for an argument for the nested path in the checking theory. See also Murasugi (1992).

⁷ Note that Tongan does not have an independent set of reflexive pronouns, but pronouns can also be used as reflexives given an appropriate context. When used as a reflexive, the pronoun is often accompanied by the emphatic *pē* 'only, just'.

⁸ Bobaljik (1993) considers that the active Case is determined by the availability of the relevant Agr. In ergative languages, AgrO is inert in intransitive constructions. For Laka (1993), it is Case itself that can be active or inert.

⁹ In fact, a similar analysis has been proposed to account for the ERG-marked intransitive subjects in ergative languages (Bobaljik 1993 for Basque and Hindi, Laka 1993 for Basque.).

¹⁰ Wiltschko (2002) claims that in Halkomelem intransitive subjects are generated VP-internally while transitive subjects are generated outside VP.

¹¹ Admittedly, given the bare phrase structure (Chomsky 1995), it is impossible to distinguish the two constructions (13) and (14) above. Note, however, that the two constructions can be differentiated, if we assume that the cognate object of the unergative is syntactically present, as proposed by Hale and Keyser (1993).

¹² I assume that this is the case in (32b). That is, the missing subject in the relative clause in (32b) is *pro*, not a trace of relative pronoun.

¹³ Admittedly, a functional account such as this runs into difficulty, for language generally does allow for functionally uneconomical phenomena. Intriguingly, a similar object-only restriction on the distribution of gap exists in English: the *that*-trace effect.

- (i) a*Who do you think [that *t* came]?
- b. Who do you think [that John brought *t*]?

In the extended standard theory, (ia) is ruled out by the ECP: the subject trace is not properly governed. Given that the notion government is not available in MP, the contrast illustrated in (i) needs to be accounted for some other way. I do not have a satisfactory proposal as to what it could be or if it has anything to do with Spanish relativization, however.

¹⁴ Warlpiri relative clauses are not part of DPs, but CPs containing the relative auxiliary-complementizer *kuja* and adjoin to another CP (Hale 1976). Thus, it may be problematic to consider relativization in Warlpiri on a par with relativization in the general sense. However, it is worth noting that formation of relative clauses is not restricted in any way by the type of argument that is relativized (i.e., the one

precedes the relative auxiliary-complimentizer). Consider (i) below (Mary Laughren, personal communication).

- (i) a. wati (yangka) kuja ya-nu-mu.
 man DEM COMP go-PST-hither
 ‘that man that came’ (or “when the man came” or “it’s the man that came”)
- b. wati-ngki (yangka-ngku) kuja karnta nyangu
 man-ERG DEM-ERG COMP woman:ABS saw
 ‘the man who saw the woman’
- c. wati (yangka) kuja karnta-ngku nyangu
 man:ABS DEM COMP woman-ERG saw
 ‘the man whom the woman saw’

¹⁵ It should be noted that Niuean does have resumptive pronouns in oblique and indirect object positions. Resumptive pronouns in these positions are realized uniformly as a clitic *ai* and regular personal pronouns are not permitted in these positions. (Thanks to Diane Massam for raising this point.) This item *ai*, which also occurs in similar distribution in Tongan, is clearly outside of the paradigm of regular personal pronouns and should be treated separately. In this study I focus on subjects and direct objects and do not discuss oblique arguments. I hope to return to this issue in future works.

¹⁶ Aoun, Choueiri, and Hornstein (2001) call the former apparent resumptives and the latter true resumptives. Unlike the current analysis, however, they assume that apparent resumptives involve movement.

¹⁷ Incidentally, Bittner and Hale (1996a,b) also claim the association of C with the active Case on an independent ground. In their system, C assigns NOM (and ABS, which is taken to be the same as NOM). Bittner and Hale’s claim is stronger than that of the current proposal in that C is always associated with the active Case. What we have observed above, however, is the association with the active Case is a property of only a subset of C: those that have a strong [+pron] feature. Given that difference, it is quite intriguing that C’s association with the active Case is postulated in Bittner and Hale’s approach. How their approach can account for the relativization facts discussed in this paper is a question well worth pursuing, which must await future research. I thank an anonymous reviewer for bringing this point to my attention.

II

SPLITS

A PARAMETRIC SYNTAX OF ASPECTUALLY CONDITIONED SPLIT-ERGATIVITY*

1. OUTLINE

In some languages (e.g., Georgian, Hindi, Samoan, Nepali, etc.), where the ergative system coexists with the accusative one, the alternation between ergativity and accusativity is determined by aspectuality (cf. DeLancey 1981, Dixon 1994, and Ura 2000). In this paper, I will explore the syntactic mechanism of the aspectually conditioned split-ergativity and try to explicate the parameter settings which distinguish the languages with the aspectually conditioned split-ergativity from the ergative languages with no such split and from the accusative languages in general.

For the purpose of giving a coherent explanation to some syntactic phenomena found in the languages mentioned above, I will make a Minimalist approach under Chomsky's (1995, 2000) theory of feature-checking, by refining and updating Ura's (2000) hypothesis about the parametric syntax of the ergative system, according to which ergative languages have the parameter that enables the logical subject, base-generated at the Spec of v , to participate in a checking relation directly with v (cf. Massam 2001 for a very similar idea (for some other variations of this idea, see the papers by Carnie, Legate, Massam, Spreng, and Tsedryk in this volume)), which gives rise to a situation where the logical, underlying subject (SUBJ) and the logical, underlying object (OBJ) have their Cases associated with v and Infl, respectively (that is, SUBJ in the ergative system is marked as accusative (= ergative) just like OBJ in the accusative system, and OBJ in the ergative system is marked as nominative (= absolutive) just like SUBJ in the accusative system). Under this hypothesis, SUBJ in the ergative system can move to the Spec of Infl (due to the EPP) after being marked as ergative as a result of its checking of v 's nominal feature, and OBJ in situ can associate its Case with Infl by *Agree* thanks to SUBJ's displacement from the Spec of v to the Spec of Infl. This gives rise to a situation where SUBJ and OBJ in the ergative system occupy the same surface positions as their corresponding positions in the accusative system in spite of the difference in their Case forms.

Because both SUBJ and OBJ in the languages with the aspectually conditioned split-ergativity show the same syntactic behaviours with respect to their grammatical functions regardless of whether the clause involving them is in the ergative system or in the accusative system, the above hypothesis enables us to give a consistent

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account to the syntactic behaviours of SUBJ and OBJ in those languages. Under a theory according to which the syntactic positions of SUBJ and OBJ in the ergative system are different from those in the accusative system, however, it is hard to explain, without additional devices, why SUBJ and OBJ in the ergative system show the same syntactic behaviours as in the accusative system in languages with the aspectually conditioned split-ergativity (see Ura 2001 for more discussion (cf., also, the papers by Laka and Wiltschko in this volume for some relevant discussion on ergativity and aspect)).

Next, I will examine what allows the aspectually conditioned split-ergativity in the aforementioned languages, especially, Hindi and Georgian. Recently many researchers (e.g., Borer 1994, 1998; McClure 1994; Ramchand 1997; van Hout 1998; Ritter & Rosen 1998, 2000; Travis 2000, to mention a few) have hypothesized that there is a functional head (what is sometimes dubbed “Asp(ect)”), which is responsible for the telicity/boundedness/perfection of the event described in a clause, and that this head requires DP at its Spec in overt syntax to check the aspect-related feature that the head possesses. Recasting this hypothesis under Chomsky’s (1995, 2000) Agr-less theory without postulating Asp, I will propose to assume that it is v that possesses the aspect-related feature that is responsible for the telicity/boundedness/perfection of the clause and that v requires DP at its Spec to check off this feature in overt syntax.

Now, if a given language L has the parameter-setting that allows SUBJ (which is base-generated at a Spec of v) to enter into a checking relation at its base-position (what I will hereafter call “ergative parameter”), SUBJ checks v ’s feature without moving from its base-position, resulting in its accusative (= ergative) case marking, when v has the aspect-related feature because the clause is in the perfect aspect, in the past tense, or in the aorist mood. OBJ cannot check off this feature, because OBJ’s movement to one of the multiple Specs of v is less economical than its checking-off by SUBJ from its base-position without movement. As the next step of derivation, SUBJ moves up to the Spec of Infl due to the EPP, and OBJ in situ can enter into a checking relation with Infl by *Agree*, resulting in its nominative (= absolutive) case marking. If the clause is not in the perfect aspect, then v does not require DP to check its aspect-related feature. Consequently, SUBJ moves, without checking v ’s feature, from its base-position (Spec of v) to the Spec of Infl due to the EPP of Infl, resulting in nominative, and OBJ enters into a checking relation with v by *Agree*, resulting in accusative. Therefore, it leads to the conclusion that L is regarded as a language where the SUBJ and OBJ in the ergative system (i.e., in the perfect aspect) occupy the same positions as in the accusative system (in the non-perfect aspect). That is to say, L corresponds to a language with the aspectually conditioned split-ergativity. Hence, this theory enables us to give a natural account of the fact that SUBJ and OBJ in the ergative system in L show the same syntactic behaviours as in the accusative system.

It will be noted, moreover, that our updating extension of Ura’s (2000) hypothesis correctly predicts that, even if a clause is in the perfect aspect, SUBJ at the Spec of v cannot check v ’s feature in the accusative languages, where the ergative parameter does not work (that is, SUBJ cannot enter into any checking relation unless it undergoes movement). In the accusative languages, therefore,

SUBJ at its base-position cannot check v 's feature even if it has the aspect-related feature that requires its checking in overt syntax; as a result, OBJ must move up to one of the multiple Specs of v , or it must undergo *Agree* with v , in order to check off the feature if v requires the deletion of this feature due to the telicity / boundedness/perfection of the event in the clause. This, for example, derives OBJ's overt movement from its base-position (post-verbal position) to the pre-verbal position in Scottish Gaelic, an accusative language, as argued in Ramchand (1997). In any event, we get the desirable result: SUBJ and OBJ in the accusative languages are marked as nominative and accusative, respectively, even if the clause is in the perfect aspect.

Furthermore, I will discuss the issue as to what is going on in the ergative languages without the aspectually conditioned split-ergativity. I will propose to assume that, in addition to the positive value of the ergative parameter, there is some cause that forces v in those languages to have a checking relation in overt syntax with DP at v 's Spec regardless of the aspectuality of the clause. This parameter-setting derives the structure in which SUBJ always checks off some feature of v and OBJ agrees with Infl; whence, SUBJ and OBJ are always in ergative (= accusative) and absolutive (= nominative), respectively, as required in those languages without split-ergativity.

In the rest of this paper, I will try to demonstrate several empirical arguments for the parameter-settings of each type of languages classified in the way described above.

2. INTRODUCTION: VARIETIES OF ERGATIVITY

2.1 *Syntactic/Morphological Ergativity*

To be very brief, the ergative Case-marking pattern is summarized as in the following fashion: SUBJ in an active transitive clause (most typically, Agent) has a Case-marker different morphologically from SUBJ in an (active) intransitive clause, which has the same Case-marker as OBJ (typically, Patient or Theme) in an active transitive clause. The morphological Case-marking for Agent (or Actor) in an active transitive clause is called *ERGATIVE*, and the one for the subject in an intransitive clause and Patient in an active transitive clause *ABSOLUTIVE*. The following examples are taken from Archi (Van Valin 1981: 363), a Daghestan language spoken in the Caucasus area.

- | | | | | | |
|----|----|-------------------------------|----------------|------------------|---------------------|
| 1) | a. | Buwa-Ø | d-irɣin. | | <i>Intransitive</i> |
| | | mother(II)-ABS | II SG-work | | |
| | | 'Mother works.' | | | |
| | b. | Buwa-mu | yalli-Ø | b-ar-ši | b-i. |
| | | mother(II)-ERG | bread(III)-ABS | III SG-bake-PROG | III SG-AUX |
| | | 'Mother is baking the bread.' | | | <i>Transitive</i> |

It has been revealed in the literature on the morphosyntax of ergativity (among many others, Anderson 1976, Comrie 1978, Dixon 1979, 1994, Marantz 1984, and Bittner & Hale 1996) that ergative languages can be divided largely into two types: Morphologically ergative languages and syntactically ergative ones. The former type of languages have the so-called ergative Case system for the morphological marking on nominals, but some of them have their syntactic properties common to those of the canonical accusative languages like English or Japanese.

In syntactically pure ergative languages like Dyirbal, on the other hand, DPs have in common a certain set of grammatical functions (hereafter, GFs), most of which are believed to be possessed by a DP with the grammatical relation (GR) as SUBJECT in ordinary accusative languages, if they are marked as absolutive (Dixon 1979, 1994). Consider the examples in (2) (from Dixon 1994: 10)

- 2) a. η uma- \emptyset banaga-n^yu. *Intransitive*
 father-ABS return-NONFUT
 ‘Father returned.’
- b. η uma- \emptyset yabu- η gu bura-n. *Transitive*
 father-ABS mother-ERG see-NONFUT
 ‘Mother saw father. (*Father saw mother.)’

As is evident from the examples in (2), the logical, underlying subject of an intransitive predicate (hereafter, SUBJ(I)) and OBJ are marked as absolutive, and the logical, underlying subject of a transitive predicate (hereafter, SUBJ(T)) is marked as ergative. In addition to the fact that SUBJ(I) and OBJ behave the same in the morphological respect, they also behave the same in syntactic respects in Dyirbal; therefore, SUBJ(T) behaves differently from SUBJ(I) and OBJ in syntactic as well as morphological respects in Dyirbal.

The most quoted evidence for the syntactic ergativity of Dyirbal is the fact concerning argument-omission involved in coordination. Argument-omission is a phenomenon found in the situation where two coordinated clauses share a DP, and the common DP can be omitted from the second clause. In syntactically accusative languages like English, argument-omission in coordination is possible only if the common DP functions as SUBJECT in the first clause, as the English examples in (3) illustrate.¹

- 3) a. [John_k returned] and [Δ_k laughed].
- b. [John_k saw Mary_j] and [Δ_k /*_j laughed].

These English examples show that OBJ cannot control the argument omitted in the second clause. Note, moreover, that only SUBJ in the first clause, irrespective of whether it is SUBJ(T) or SUBJ(I), has the ability to control the missing SUBJ in the second conjunct clause. It is therefore concluded that in syntactically accusative

languages like English, SUBJ(T) and SUBJ(I), excluding OBJ, behave the same in terms of argument-omission in coordination.

In contrast, SUBJ(I) and OBJ, excluding SUBJ(T), behave the same in terms of argument-omission in coordination in Dyirbal, as shown in (4) (from Dixon 1994:161):

- 4) a. [ɲuma-Ø_k banaga-n^yu], [Δ_k miyanda-n^yu].
 father-ABS return-NONFUT laugh-NONFUT
 ‘[Father_k returned] and [Δ_k laughed].’
- b. [ɲuma-Ø_k yabu-ɲgu_j bura-n], [Δ_{k/*j} banaga-n^yu].
 father-ABS mother-ERG see-NONFUT return-NONFUT
 ‘[Mother_j saw father_k] and [Δ_{k/*j} returned].’

In (4b), *mother* (=SUBJ(T)) cannot control the omitted argument in the second intransitive clause, but *father* (=OBJ) can. Since SUBJ(I) can control the omitted argument in the second clause as shown in (4a), SUBJ(I) and OBJ behave the same in terms of argument-omission in coordination.

It has been commonly held in the literature that the ability to control the missing argument in a subordinate-adjunct clause is indicative of subjecthood (e.g., Perlmutter 1982, Palmer 1994, Dixon 1994, etc.). In syntactically accusative languages, this ability is typically possessed by SUBJ, but not by OBJ, as the following English examples show:

- 5) a. John_k left here (together with Mary_j) [without PRO_{*j/k} speaking about *herself_j/himself_k].
- b. They_k hired John_j [without PRO_{*j/k} having to commit themselves_k/*himself_j to that salary].

In English, the missing subject of *without*-clause can be controlled only by SUBJ. That is, SUBJ(T) and SUBJ(I) in syntactically accusative languages behave the same in that they have the ability to control.

In Dyirbal, on the other hand, the ability to control the missing argument in a subordinate-adjunct clause can be possessed by SUBJ(I) and OBJ, but not by SUBJ(T). According to Dixon (1994: 168), the purposive inflection *-ygu* is attached to the verb in the second conjunct clause and forms the purposive complement construction in Dyirbal (from Dixon 1994: 168-169):

- 6) a. ɲuma-Ø_k banaga-n^yu [PRO_k bural-ɲa-ygu yabu-gu].
 father-ABS return-NONFUT see-ANT-PURP mother-DAT
 ‘Father_k returned [for the purpose of PRO_k seeing mother].’

- b. yabu-Ø_I ŋuma-ŋgu_k giga-n [PRO*_{k/I} bural-ŋa-ygu jaja-gu].
 mother-ABS father-ERG tell-NONFUT see-ANT-PURP child-DAT
 'Father_k told mother_I [for the purpose of PRO*_{k/I} seeing child].'

In the intransitive clause in (6a), SUBJ(I) has the ability to control the missing argument of *ygu*-clause. Interestingly enough, the same ability is possessed by OBJ, but not SUBJ(T) in the transitive clause in (6b), contrary to the case in English, where SUBJ(T) has that ability in a transitive clause. The conclusion is that in Dyirbal, SUBJ(I) and OBJ, but not SUBJ(T), have the ability to control the missing argument in a subordinate-adjunct clause.

In languages with only morphological ergativity like Walmatjari (Dixon 1994), Chukchee (Comrie 1979), and Enga (Van Valin 1981), on the other hand, the ergative-marked DP in an active transitive clause and the absolutive-marked DP in an intransitive clause share the same set of GFs that are supposed to be associated with the GR SUBJECT (such as the ability to control, to be a victim of omission, to be relativized, etc.), despite the evident fact that they are differently encoded in the morphological point of view. It is therefore interesting to note that SUBJ(I) syntactically behaves on a par not with OBJ, but with SUBJ(T) in shallowly ergative languages (= morphologically ergative languages that show no syntactic ergativity (cf. Anderson 1976)). Warlpiri, a language spoken in Central Australia, counts as a morphologically ergative language, as is evident from its case-marking pattern illustrated by the examples in (7) (from Levin 1983: 141-142)

- 7) a. ngarrka-Ø ka wangka-mi. *Intransitive*
 man-ABS PRES speak-NONFUT
 'The man is speaking.'
- b. ngarrka-ngku ka marlu-Ø panti-mi. *Transitive*
 man-ERG PRES kangaroo-ABS spear-NONFUT
 'The man is spearing the kangaroo.'

In spite of its morphological ergativity, Warlpiri shows syntactic accusativity (see Levin 1983, Bittner & Hale 1996, and Legate (this volume)). This can be seen from the fact that the missing argument in a clause with the same-subject marker -*karra* can be controlled only by SUBJ (see Bittner & Hale 1996 for more detail). Consider the following (from Bittner & Hale 1996: 594-596):

- 8) a. ngarrka-Ø_k ka wirnpirli-mi [PRO_k karli-Ø jarnti-rninja-karra]
 man-ABS PRES whistle-NONFUT boomerang-ABS trim-INF-SS
 'The man_k is whistling [while PRO_k trimming a boomerang].'
- b. ngarrka-ngku_k karnta-Ø_j nya-ngu [PRO_{k/*j} yuka-nja-karra-rlu].
 man-ERG woman-ABS see-PAST enter-INF-SS-ERG
 'Lit. The man_k saw the woman_j [while PRO_{k/*j} entering].'

Compare the Warlpiri example in (8b) with the Dyirbal one in (6b). Whereas OBJ has the ability to control the missing argument in a subordinate-adjunct clause in syntactically ergative languages (e.g., Dyirbal), OBJ in shallowly ergative ones (e.g., Warlpiri) does not; rather, SUBJ has the ability to control in those languages irrespective of the transitive/intransitive distinction of the clause. Put differently, in shallowly ergative languages, SUBJ(I) behaves the same as SUBJ(T), differing from OBJ, in syntactic respects, though SUBJ(I) behaves the same as OBJ, differing from SUBJ(T), in the morphological respect (cf. Legate (this volume) for more discussion).

2.2 *Split Ergativity*

When a language *L* shows some mixed properties of ergativity and accusativity in a certain respect *R*, *L* is said to be split-ergative with respect to *R* (cf. Comrie 1978, Dixon 1979, and DeLancey 1981). In a broader sense it may be plausible that *L* is said to be split-ergative if *L* shows ergativity in some respect *R*₁ but shows accusativity in another respect *R*₂. In this regard shallowly ergative languages are split-ergative; for, they are ergative in the morphological respect, but accusative in syntactic respects.

In a variety of languages split-ergativity is found in their systems of morphological coding such as nominal case-marking and verb agreement. The following examples come from Bidjara (from Blake 1976:282), where split-ergativity manifests itself in terms of the distinction between pronoun and full DP.

9) a. FULL DP (FULL NOMINAL)

- | | | | | |
|-----|----------------------|-------------|---------------------|-------------------|
| i. | ɲura-Ø | wanguli-la. | <i>Intransitive</i> | |
| | dog-ABS | bark-PAST | | |
| | 'A dog barked.' | | | |
| ii. | ɲura-ɲu | munda-Ø | bada-la. | <i>Transitive</i> |
| | dog-ERG | snake-ABS | bite-PAST | |
| | 'A dog bit a snake.' | | | |

b. PRONOMINAL

- | | | | | |
|-----|--------------|-----------|---------------------|-------------------|
| i. | ɲaya-Ø | barri-la. | <i>Intransitive</i> | |
| | I-NOM | cry-PAST | | |
| | 'I cried.' | | | |
| ii. | ɲaya-Ø | nupɲu-na | bada-la | <i>Transitive</i> |
| | I-NOM | him-ACC | bite-PAST | |
| | 'I bit him.' | | | |

Likewise, the split-ergativity due to the tense/aspect specification of the clause is found in some other languages. Georgian is well-known for its split-ergativity of this type. In Georgian the aorist tense system demands ergativity and the present tense system demands accusativity (data from Comrie 1978 351-352):²

10) a. AORIST

- | | | | | |
|-----|---------------------------------|------------|---------------------|-------------------|
| i. | Student-i | mivida. | <i>Intransitive</i> | |
| | student-ABS | go(AOR) | | |
| | 'The student went.' | | | |
| ii. | Student-ma | ceril-i | dacera. | <i>Transitive</i> |
| | student-ERG | letter-ABS | write(AOR) | |
| | 'The student wrote the letter.' | | | |

b. PRESENT

- | | | | | |
|-----|----------------------------------|------------|---------------------|-------------------|
| i. | Student-i | midis. | <i>Intransitive</i> | |
| | student-NOM | go(PRES) | | |
| | 'The student goes.' | | | |
| ii. | Student-i | ceril-s | cers | <i>Transitive</i> |
| | student-NOM | letter-ACC | write(PRES) | |
| | 'The student writes the letter.' | | | |

Besides Georgian, Hindi and many other Indo-Aryan languages, Burushaski, Tibetan, Nepali, Samoan, etc. show similar split-ergativity due to the tense/aspect specification of the clause (see Comrie 1978, Dixon 1979, 1994, and Palmer 1994 for a list of such languages).

As to split-ergativity, I will, in what follows in this paper, concentrate my attention solely on the split due to the tense/aspect specification of the clause. (In section 4.1, we will return directly to the issue as to what characteristic of the tense/aspect specification distinguishes exactly between the ergative and the accusative system of these languages with the aspectually conditioned split-ergativity.)

3. A MINIMALIST APPROACH TO ERGATIVE MORPHOSYNTAX

In the literature within the generative school, many proposals have been made for a proper syntactic treatment of ergativity and/or split-ergativity. After briefly reviewing the problems immanent in any GB-type Case theory, I will present my approach to ergativity under Chomsky's (1995, 2000, 2001) Minimalist framework.

3.1 *Ergativity and Case Theory*

Under the traditional hypothesis in generative grammar (cf. Chomsky 1965, 1981; Marantz 1984), it has widely been believed that the GR (grammatical relation) of a given DP is determined by its syntactic position in S-structure. Thus, it must be the case, under this hypothesis, that two elements are located in the same structural position at S-structure if they share the same GFs (grammatical functions) in common. For, their sharing of those GFs means that both of them bear the same GR; as a consequence, they must be located in the same structural position.

Now that they are located in the same position at S-structure, the GB-type Case theory demands that they must be marked as the same type of Case, because Case is always assigned to a DP according to its structural position at S-structure under the GB-type Case theory. Put differently, no matter which type of Case, ergative or absolutive, in ergative languages may correspond with nominative in accusative languages, the theory of Case demands that they must be uniformly marked as either ergative or absolutive regardless of whether the clause in which they function as SUBJECT is transitive or intransitive. Therefore, the fact that the ergative-marked DP in an active transitive clause and the absolutive-marked DP in an intransitive clause assume the same GFs seriously challenges the GB-type Case theory on empirical grounds (see Ura 2001 and Anand & Nevins (this volume) for more discussions on grammatical relations in ergative languages).

Hence, the mystery concerning the Case-marking pattern in ergative languages comes from the fact that SUBJ in an active transitive clause differs from SUBJ in an (active) intransitive clause in terms of its Case in spite of the fact that they show the same syntactic behaviours (i.e., they have the same GFs linked with the GR SUBJECT). As pointed out in the above, the fact that both assume the same GFs means, under the GB-type Case theory, that they occupy the same syntactic position at S-structure. Paradoxically, however, the fact that they differ from each other in their case form means that they differ from each other in their syntactic position in S-structure.

Several proposals, therefore, have been made in order to tackle this mystery under the post-GB framework (e.g., Marantz 1991, Murasugi 1992, Bobaljik 1993, Bittner & Hale 1996, to mention only a few). In this paper, I will make my proposals basically under the framework of Chomsky (2000, 2001); more specifically, I will propose a Minimalist approach to ergativity by building the technical foundation basically on the idea about the ergative parameter proposed, independently, by Ura (2000) and by Massam (2001), but extending it under more updated version of the Minimalist syntax (for other possible approaches to ergativity, see other papers in this volume).

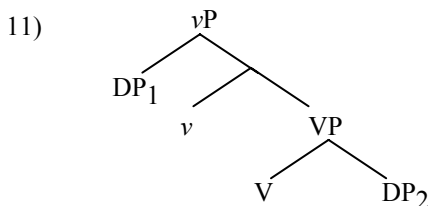
3.2 *Ergative Parameter*

Now the question is: How is it possible to implement a technical mechanics to derive the Case-marking pattern in ergative languages? Contrary to Chomsky's (1995) stipulation about the ban on the checking of an elements at its θ -position, Ura

(2000) and Massam (2001), independently, propose the hypothesis that elements can undergo feature-checking in their θ -positions in some languages, while they cannot in the other languages. To put it differently, the hypothesis demands that Chomsky's (1995) stipulation that elements introduced (base-generated) by *Merge* in its θ -position cannot undergo feature-checking should be parameterized. More specifically about the distinction between ergative and accusative languages, Ura (2000) goes further on to claim that elements can undergo feature-checking at their θ -positions in ergative languages, while they cannot in accusative languages.

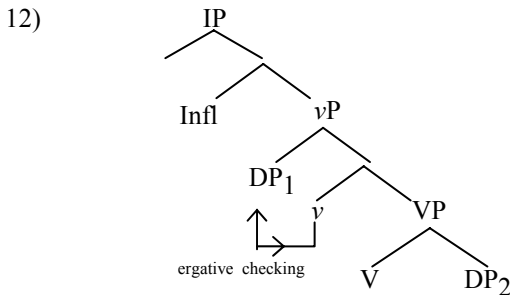
3.2.1 Shallow Ergativity

To make the story more concrete, let us see how this hypothesis works by looking at the derivation of a simple active transitive clause and that of a simple active intransitive clause in an ergative language *LI*. (11) represents the core structure of a simple transitive verb (cf. Hale & Keyser 1993).

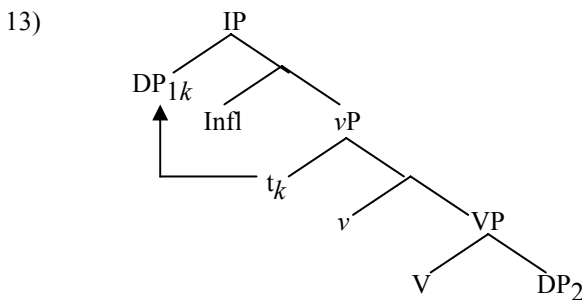


Given that *LI* has the parameter in ergative languages which allows an element to enter into a checking relation at its θ -position, SUBJ of a transitive verb (DP_1 at the Spec of v in (11)) can enter into a checking relation with v at the Spec of v without moving anywhere. Suppose, along with Johns (1992), Murasugi (1992), Ura (2000), and Massam (2001) (pace Marantz 1991, Laka 1993, Bobaljik 1993, and the papers by Bobaljik & Branigan and Otsuka in this volume), that ergative is the name of the Case that is provided by v in ergative languages and, hence, corresponds to accusative in accusative languages, and absolutive is the name of Case that is provided by Infl in ergative languages (which corresponds to nominative in accusative languages). Then, in (11), DP_1 at the Spec of v gets the ergative Case as a result of its checking of v 's feature.³

As the next step of the derivation, finite Infl is introduced by *Merge*, deriving (12):



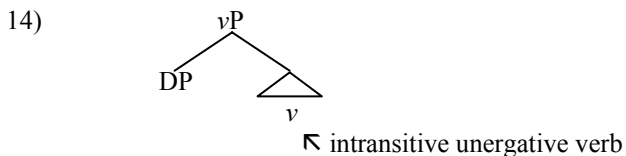
Because of the EPP, the Spec of Infl in (12) must be filled with something nominal. Since DP_1 is closer to the Spec of Infl than DP_2 is, DP_1 is attracted to the Spec of Infl. This process derives (13) from (12):



It is important to note that, even though DP_1 in (13) occupies the Spec of Infl, the nominative Case never appears on it, because it has had its Case (= ergative) evaluated when it stayed at the Spec of v . DP_2 at the complement of v in (13), on the other hand, is eligible to bear the absolutive (= nominative) Case by entering into a ϕ -feature checking relation with Infl through *Agree*, because it has never entered any nominal feature checking relation before the stage illustrated in (13). Thus, DP_2 enters into a ϕ -feature checking relation with Infl by *Agree* without moving anywhere, resulting in the absolutive Case morphology on DP_2 .

Now (13) illustrates the final stage of derivation in overt syntax. Because the logical, underlying subject (SUBJ) of the verb in (13) (i.e., DP_1), which shows the ergative-marking, is in the Spec of Infl, it is natural that DP_1 should syntactically behave as SUBJECT in this clause. On the other hand, the logical, underlying object (OBJ) of the verb in (13) (i.e., DP_2) is not in the Spec of Infl; consequently, it cannot syntactically behave as SUBJECT in spite of the fact that it is morphologically marked as absolutive (= nominative). As we observed in section 2.1, this indeed happens in a shallowly ergative language, which is a morphologically ergative language that shows no syntactic ergativity.

Next let us consider how a simple intransitive clause is derived in *L1*. According to Hale & Keyser (1993), the structure of an unergative verb looks like:



That is, the sole argument of an intransitive unergative verb (i.e., the logical, underlying subject of such a verb) is introduced at the Spec of *v*, the locus of an ergative/accusative Case-feature. Then, just as in the case of the logical, underlying subject (SUBJ) of a simple active transitive clause, the sole argument of an intransitive unergative verb, too, is capable of entering into a nominal feature checking relation with *v* without moving anywhere, resulting in its ergative marking if it indeed checks off the feature of *v*. But, when finite Infl is introduced later in this derivation, a problem arises: What element bears the absolutive (= nominative) Case that would result from a feature checking relation with Infl?

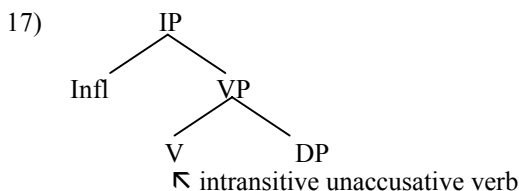
It is possible that there are two options: In some ergative languages, SUBJ of an intransitive unergative verb enters into the checking relation of absolutive (= nominative) with Infl by moving to the Spec of Infl without checking off the nominal feature of *v* when it stays at the Spec of *v*. It is important to note, here, that the ergative parameter allows, but not forces, DP base-generated at *v*'s Spec to enter into a checking relation with *v*. Given the well-known fact that intransitive unergative verbs can provide Case optionally,⁴ DP in (14) can safely move up to the Spec of Infl from its base position without any checking relation with *v*.

On the other hand, it is also possible that there happens a case where DP in (14) enters into a checking relation with *v*, resulting in the ergative Case on DP. When this happens, Infl's Case (absolutive) is left suppressed, leading to the crash of the derivation. According to Ura (2000), however, there are some languages in which Infl's Case need not manifest itself in syntax, and those languages correspond to the so-called null subject languages. Given this, then if *L1* is a language that allows a null subject, the derivation can lead to converge even when DP in (14) enters into a feature checking relation with *v* with Infl's Case being not manifest in syntax.

From the above discussion, we can predict that SUBJ of an intransitive unergative verb in *L1* can be marked either as ergative or as absolutive if *L1* allows a null subject, while it is always marked as absolutive if *L1* disallows a null subject. This prediction is, indeed, borne out. In languages such as Hindi (15) and Georgian (16), which are both null subject languages (see J. Singh 1994 for Hindi and Harris 1981 for Georgian),⁵ SUBJ of an intransitive unergative verb can be marked either as ergative or as absolutive (Hindi from Mahajan 1996:46; Georgian from Lyle 1997:144).

- 15) a. Kuttō-ne bhōkaa.
 dogs-ERG bark(PERF)
 ‘The dogs barked.’
- b. Kutte-Ø bhōkee.
 dogs-ABS bark(PERF)
 ‘The dogs barked.’
- 16) a. ʒayl-ma iqepa.
 dog-ERG bark(AOR)
 ‘The dog barked.’
- b. ʒayl-i qeps.
 dog-ABS bark(PRES)
 ‘The dog barks.’

Now let us turn to intransitive unaccusative verbs. According to Hale & Keyser (1993), there is no *v* in an intransitive unaccusative clause, the core structure of which looks like:



Since V has no Case-feature, there is no way for DP in (17) to get ergative (= accusative) Case from *v*. Thus, it always enters into a checking relation with Infl, leading to its absolutive marking; otherwise, the Case of DP is left unevaluated, resulting in crash. This is the reason why SUBJ of an intransitive unaccusative verb is always marked as absolutive in every ergative language, regardless of whether it allows a null subject or not (see Marantz 1991, Laka 1993, and Bobaljik 1993). Even in Hindi and Georgian, for example, SUBJ of an intransitive unaccusative verb is always marked as absolutive regardless of whether the clause is perfect/aorist or not, despite the fact that SUBJ of an intransitive unergative verb can be marked as ergative when the clause is perfect/aorist in these languages. Compare the Hindi (18) and Georgian (19) with (15a) and (16a) above.

- 18) Raam-Ø/*-ne gir ɡoyaa.
 Ram-ABS/-ERG fall(PERF)
 ‘Ram fell down.’

(Mahajan 1996:46)

- 19) deda-Ø/*-m iyleba.
 mother-ABS/-ERG get tired(AOR)
 ‘Mother got tired.’ (King 1994:93)

3.2.2 Deep Ergativity

The previous subsection discussed the syntactic derivations of the transitive /intransitive clauses in shallowly ergative languages. In this subsection, we will look at what happens in syntactically (deeply) ergative languages like Dyirbal (cf. section 2.1 above).

First, I would like to propose that languages with deep ergativity, in addition to the ergative parameter, has the parameter according to which v 's nominal feature is inert in the sense of McGinnis (1998): Inert Case is such that DP with inert Case is invisible in terms of search of a probe from its above position. This means, under Chomsky's (2001) framework, that DP with inert Case does not block any A-movement over it and that DP with inert Case can never undergo A-movement (see McGinnis 1998 for details). According to McGinnis (1998), for example, the English verb *strike* provides an inert Case to its object DP. Hence, the Experiencer argument (EXP) of *strike* does not block the movement of the subject in the embedded non-tensed clause over it to the Spec of the matrix Infl, though the EXP c-commands everything within the embedded clause, which means that the EXP is structurally closer to the matrix Infl than anything within the embedded clause.

- 20) a. Mary_k strikes John [as t_k intelligent].
 b. *John_k strikes t_k [as Mary intelligent].

With the above hypothesis about the parameter-settings of deep ergativity in mind, let us consider how transitive clauses are derived in *L2*, a language with deep ergativity. As a result of the parameter-settings, SUBJ at the Spec of v checks off the nominal feature of v , but it cannot move anywhere after it checks it off, because its checking of v 's nominal feature results in its inert Case, which makes it invisible to any search of a probe from its above position. Then, OBJ can safely be attracted to the Spec of Infl to check the EPP in addition to the other features of Infl. This results in the absolutive marking on OBJ. Furthermore, now that OBJ occupies the Spec of Infl, it naturally follows that OBJ with absolutive marking is in possession of the GR SUBJECT in *L2*. This is highly contrastive with the situation of an active transitive clause in the languages with shallow ergativity: As we observed in the previous subsection, absolutive-marked OBJ does not have the GR SUBJECT; rather, ergative-marked SUBJ assumes the GR SUBJECT in those shallowly ergative languages, because SUBJ occupies the Spec of Infl in those languages.

3.3 Summary

To recapitulate this section, it was proposed that the syntactic derivation of a transitive clause in ergative languages is made in the following fashion: First, the step of the derivation for a transitive clause originates from (21).

- (21) [_{VP} SUBJ(T) *v* [_{VP} V OBJ]] (linear order irrelevant)

Suppose that (21) emerges in a language *L* which has the ergative parameter; that is to say, *L* allows DP base-generated at the Spec of *v* to check *v*'s feature. Then, SUBJ(T) always checks off *v*'s nominal feature, resulting in its ergative morphology. As the next step, Infl is introduced by *Merge*, deriving (22) from (21):

- (22) [_{IP} Infl [_{VP} SUBJ(T) *v* [_{VP} V OBJ]]]
<ergative>

In (22), the EPP of Infl must be checked. Since SUBJ(T), which is marked as ergative, is the DP closest to Infl in (22), SUBJ(T), but not OBJ, is attracted to the Spec of Infl to delete the EPP of Infl. This process derives (23) from (22).

- (23) [_{IP} SUBJ(T)_{*k*} Infl [_{VP} *t_k* *v* [_{VP} V OBJ]]]
<ergative>

After the movement of SUBJ(T) from the Spec of *v* to the Spec of Infl, OBJ can undergo *Agree* with Infl thanks to the nonexistence of any intervening element that prevents *Agree* between Infl and OBJ in (23). This results in OBJ's marking as absolutive, as shown in (24).

- (24) [_{IP} SUBJ(T)_{*k*} Infl [_{VP} *t_k* *v* [_{VP} V OBJ]]]
<ergative> <absolutive>
GR:SUBJECT

In (24), the final stage of the derivation, SUBJ(T) occupies the Spec of Infl; consequently, it assumes the GR SUBJECT. Since this corresponds exactly to what happens in a transitive clause of a shallowly ergative language, *L* counts as a shallowly ergative language.

Suppose, on the other hand, that the nominal feature of *v* in *L* is inert in the sense of McGinnis (1998). Then, the derivation from (21) through (22) happens in the same way. But (25), instead of (23), is derived from (22) if the nominal feature of *v* in *L* is inert.

- (25) [_{IP} OBJ_{*k*} Infl [_{VP} SUBJ(T) *v* [_{VP} V *t_k*]]]
<ergative>

4. SYNTAX OF ASPECTUALLY CONDITIONED SPLIT-ERGATIVITY

4.1 *Two Types of Aspectuality and the Syntax of Aspect*

Before entering into the discussion on the syntax of split-ergativity, it is necessary to clarify how varieties of aspectuality affect syntax. First, following Lyle (1997) and Olsen (1997), I would like to introduce the distinction between inner (or lexical) aspect and outer (or grammatical) aspect: Consider the following English examples.

30) a. John is drawing a circle.

b. John has drawn a circle.

31) a. John is drawing circles.

b. John has drawn circles.

(30) differs from (31) in terms of the telicity of the event involved in the clause: Thanks to the semantic characteristics of the objects involved (cf. Tenny 1994 and references cited therein), it is concluded that, while the former denotes a telic event, the latter does not. Telicity results partly from a semantic property of verbs and partly from properties of the verb's argument (as the above examples show) or from adverbial modification. Following Lyle (1997), I call this kind of telicity due to lexical properties of the verb (plus its internal argument or modifiers) "lexical aspect." On the other hand, the (a)-examples in (30)–(31) differ from the (b)-examples in (30)–(31) in terms of speech time: While the event the former examples denote is not completed at the speech time, the event the latter denote has been completed prior to the speech time. Following Olsen (1997), I will call the temporal boundedness of an event in relation with speech time "grammatical aspect."

The next question is, how are these two types of aspect encoded in syntax? Recently, many researchers (e.g., Borer 1994, 1998; McClure 1994; Ramchand 1997; van Hout 1998; Ritter & Rosen 1998, 2000; Travis 2000, to mention only a few) have proposed the hypothesis that there is a functional head (what is sometimes dubbed "Asp(ect)"), which is responsible for the telicity/boundedness/perfection of the event described in a clause, and that this head requires DP at its Spec in overt syntax to check the aspect-related feature that the head possesses. Here I would like to make my proposal by recasting the above hypothesis under Chomsky's (1995, 2000) Agr-less theory: Instead of postulating a new functional head like Asp, I propose to hypothesize that it is *v* that possesses the aspect-related feature that is responsible for the telicity/boundedness/delimitation due to the lexical/grammatical aspect involved in the clause.⁷ Furthermore, I propose to hypothesize that there is a parameter concerning the determinant of the type of aspect that introduces the aspectual feature of *v*: Languages differ as to which type of aspect, lexical or grammatical, induces the aspect feature on *v*.

Recall, here, that we argued in the preceding section that, in ergative languages (namely, languages with the ergative parameter), the DP base-generated at *v*'s Spec checks off the feature of *v*, without clarifying exactly what this feature is (cf. footnote 3 above). Now our hypothesis introduced here states that it is the aspectual feature of *v* that is checked off by the DP base-generated at *v*'s Spec in ergative languages. It should be also noted, here, that we continue to assume that the checking of *v*'s aspectual feature by a DP results in the ergative (= accusative) marking on the DP.⁸ With these mechanics of aspect checking in mind, let us make syntactic analysis of aspectually conditioned split-ergativity in the subsections that follow.

4.2 *Syntactic Derivations of Aspectually Conditioned Ergativity in Intransitive Clauses*

Now let us consider how the split ergativity due to the tense/aspect specification is explained under the mechanism of ergativity proposed thus far in this paper. As observed in section 2.2, the morphological split between ergativity and accusativity is found in many shallowly ergative languages (cf. DeLancey 1981, Dixon 1994, and Ura 2000 for a list of such languages).⁹ In order to detect what characteristics of aspectuality causes the aspectually conditioned ergativity, let us consider the Hindi (intransitive) unergative examples in (32) (from Mahajan 1996: 46).

- 32) a. Kuttō-ne bhākaa.
 dogs-ERG bark(PERF)
 'The dogs barked.'
- b. Kuttē-Ø bhākee.
 dogs-ABS bark(PERF)
 'The dogs barked.'

As observed in section 3.2.1, the empirical fact is that unergative verbs, unlike unaccusative ones, lexically permit their SUBJ to be marked either as ergative or as absolutive in Hindi. Note, also, that the examples in (32) have the perfect as their grammatical aspect.

First, let us consider what characteristics unergative verbs have with respect to the capability of Case. It has often been reported in the literature that a verb's ability to assign Case is dependent on the agentivity/volitionality/intentionality it bears as its lexical meaning (see Rosen 1984, Palmer 1994, Van Valin & LaPolla 1997, and references cited therein). Moreover, it has occasionally been pointed out (e.g., Verhaars 1990, Van Valin & LaPolla 1997, and, especially, Palmer 1994) that languages vary with respect to how agentivity is lexicalized in verbs: For example, English seems to have unergative verbs which take non-agentive animate arguments, whereas few Japanese unergative verbs can take non-agentive animate arguments.¹⁰ Now, let us hypothesize that Hindi, like English, is a language that each of the

unergative verbs has its own way to take the agentive argument: Some always take it, some others always do not take it, and yet others are underspecified with respect to agentivity (that is, they may or may not take the agentive argument). To put this under Case theory, it follows, from the aforementioned observation about the correlation between Case and agentivity, that whether a given unergative verb provides Case or not in Hindi depends solely on the lexical property of the verb.

As for the parameter setting concerning the aspectual feature-checking of *v* in Hindi, let us suppose that the temporal boundedness of the grammatical aspect, instead of the telicity of the lexical aspect, induces the aspectual feature of *v*. Under our theory of aspect checking introduced above, it then follows that *v* has the aspectual feature in (32), which involves an unergative verb. When *v* has the aspectual feature, SUBJ base-generated at the Spec of *v* is required to check it off. But whether this aspectual checking results in the ergative marking on SUBJ or not depends solely on the existence of Case in *v*, because *v* is the source of ergative/accusative Case. As hypothesized above, however, unergative verbs in Hindi may or may not have Case, depending on their lexical properties. Suppose that the unergative verb in (32) is underspecified with respect to agentivity. Then, it means that *v* in (32) may or may not provide Case. Consequently, SUBJ's aspectual feature checking of *v* in (32) may or may not result in the ergative marking on SUBJ.

When *v* has Case, the ergative marking appears on SUBJ as a result of its aspect checking of *v* with ergative Case. Since the formal features of Infl can be left unchecked in Hindi because it is a null subject language, this derivation, which corresponds to that of (32a), converges. When *v* happens to lack Case, SUBJ base-generated at the Spec of *v* enters into a aspectual feature-checking relation with *v*, without having its Case evaluated by *v* because of *v*'s lack of Case. But nothing prevents it from entering into a ϕ -feature checking relation with Infl. This results in the absolutive marking on SUBJ, because Infl is a possessor of absolutive/nominative Case. This derivation leads to (32b). Thus, we get the appropriate derivations for (32a) and (32b), as required, under our parametric theory of aspect checking.

As is often pointed out in literature, some factors can affect the agentivity involved in a predicate. Consider the following examples (from Mohanan 1994: 71–72).

- 33) a. Raam-Ø/-ne jor-se cillaayaa.
 Raam-ABS/-ERG loudly shout(PERF)
 ‘Ram shouted loudly.’
- b. Raam*-Ø/-ne jaan buujkar cillaayaa.
 Raam-ABS/-ERG deliberately shout(PERF)
 ‘Ram shouted deliberately.’

Why is it that the ergative marking on SUBJ in (33b) is ruled out? The minimal difference of (33b) from (33a), where the ergative marking on SUBJ is ruled in just like in (32a), lies in the volitionality of SUBJ owing to the adverbial modification by the intentional adverb *jaan buujkar* ‘deliberately’ in (33b).¹¹ Thus, the unergative

verb in (33b) is forced to have an agentive argument in order to accommodate itself interpretationally with the intentional adverb (cf. Jackendoff 1972). It follows that the unergative verb in (33b) obligatorily provides Case; consequently, SUBJ's checking of the aspect feature of *v* results unavoidably in the ergative marking on it. In (33a), on the other hand, no agentive argument of the unergative verb is required; as a result, the unergative verb may or may not provide Case just as in (32a,b). This explains the optionality of SUBJ's Case in (33a).

Another interesting example is shown in (34) (from J. Singh 1994: 134).

- 34) laRke-Ø/*-ne haase the
 boys-NOM/-ERG laugh(PERF) AUX
 'The boys had laughed.'

As Kachru (1981) points out, many unergative verbs disallow the ergative marking on SUBJ even in the perfect clause. This fact is explained, under our theory, by postulating that those unergative verbs in Hindi may not take the agent argument as their lexical properties. The lack of the agentivity in a given unergative verb means, under our theory, that it lacks Case. Consequently, SUBJ's checking of the aspect feature of *v* within the verbal projection of such an unergative verb results in no case marking on SUBJ.¹²

Supporting evidence for our claim that the temporal boundedness of the grammatical aspect, instead of the telicity of the lexical aspect, induces the aspectual feature of *v* in Hindi comes from the following examples in which the clauses are in the imperfect (data from Comrie 1984: 858).

- 35) a. *laRkii-ne sootii hai
 girl-ERG sleep(IMP) AUX
 'The girl is sleeping.'
- b. laRkii-Ø sootii hai
 girl-ABS sleep(IMP) AUX
 'The girl is sleeping.'

It is worth comparing (35a,b), in which the ergative SUBJ is excluded, with (32a,b) where ergative as well as absolutive is acceptable. As Kachru (1980) and Lee (2002) point out, even unergative verbs that allow the ergative marking on SUBJ in the perfect clause disallows it in the imperfect/future clause, as shown in (35). Given our hypothesis that the grammatical perfect induces the aspectual feature of *v* in Hindi, *v* in (35a,b) has no aspect feature because the clauses are in the imperfect. Accordingly, SUBJ at *v*'s Spec is not forced to have a checking relation with *v*. Thus, there is no way to encode the ergative marking on SUBJ in (35a,b), irrespective of whether the unergative verb has Case or not. This accounts for the ill-formedness of (35a). In (35b), on the other, SUBJ enters into a ϕ -feature checking relation with Infl, resulting in its absolutive Case. Note that the contrast between (32) and (35) is given a consistent account under the hypothesis that the grammatical

aspect determines the aspect feature of *v* in Hindi. This contrast, therefore, lends strong support to our parametric theory of aspect checking.

Next, it is interesting to compare the Georgian aorist examples in (36) below with the Hindi perfect ones in (32) above (data from Holisky 1980: 163).

- 36) a. *Lekv-ma itoka.*
 puppy-ERG jerk(AOR)
 ‘The puppy jerked.’

- b. **Lekv-i Jetokada*
 puppy-ABS jerk(AOR)
 ‘The puppy jerked.’

Suppose that the grammatical aspect in Georgian, just like in Hindi, determines the aspectual feature of *v*. Then, the grammatical aspect as the aorist in (36) induces the aspectual feature of *v*. Thus, it follows, from our theory of aspect checking, that SUBJ at *v*’s Spec is required to check off the aspectual feature of *v* in the aorist clause in Georgian, just as in the Hindi examples in (32). In the Hindi examples, however, the absolutive marking on SUBJ as well as the ergative one is allowed in the perfect intransitive unergative clause. Why is it that the absolutive marking on SUBJ is not allowed in the aorist unergative intransitive clause in Georgian?

Recall that there is a parametric difference with respect to how agentivity is lexicalized in unergative verbs. It was argued that each unergative verb in Hindi has its own way to take the agent argument. Let us suppose that in Georgian, unlike in Hindi and English, all the unergative verbs take agent arguments, just as in Japanese, if they are animate.¹³ Then, from our theory of aspect checking, we can draw the correct conclusion that SUBJ’s checking of the aspectual feature of *v* within the verbal projection of any unergative verb with an animate argument results in the ergative marking on SUBJ if the clause is in the aorist. This also explains the ill-formedness of (36b), where the impossible absolutive marking appears erroneously on SUBJ.¹⁴ This reasoning leads also to the prediction that SUBJ of an unergative verb that takes an inanimate argument must be marked exclusively as absolutive even in the aorist clause because it lacks agentivity. This prediction is, indeed, borne out (cf. Holisky 1980) (data from Holisky 1980: 163–164).

- 37) a. **Saxl-ma itoka.*
 house-ERG jerk(AOR)
 ‘The house jerked.’

- b. *Saxl-i Jetokada.*
 house-ABS jerk(AOR)
 ‘The house jerked.’

Just as in the Hindi imperfect clauses, however, even the SUBJ of an unergative verb with an animate argument is marked as absolutive, but never as ergative, in

Georgian, when the clause is in the present (see Holisky 1980 and Lyle 1997 for Georgian examples). Given that the aorist induces the aspectual feature of *v* in Georgian, *v* in the present clause has no aspect feature because the present clauses are temporally unbounded in Georgian (Holisky 1980 and Lyle 1997). Accordingly, SUBJ at *v*'s Spec is not forced to have a checking relation with *v*. Thus, there is no way to encode the ergative marking on SUBJ in the Georgian present clause, irrespective of whether the unergative verb has agentivity or not. The fact, therefore, is explained that SUBJ of an unergative verb, irrespective of its agentivity, is always marked as absolutive in the present clause in Georgian.

Now let us touch, again, on the issue as to what happens in a Hindi and Georgian intransitive unaccusative clause. As we argued in section 3.2.1, SUBJ of an unaccusative clause both in Hindi and in Georgian, is marked invariantly as absolutive, regardless of whether the clause is in the perfect or in the imperfect in the case of Hindi (Kachru 1980), or whether it is in the aorist or in the present in the case of Georgian (Holisky 1980).¹⁵ Given the well-known assumption that it holds universally true that all the unaccusative verbs have no agentivity, the above fact concerning case marking found in the Hindi and Georgian unaccusative clause naturally follows, because our theory of aspect checking correctly predicts that there is no way for the ergative Case to appear in the unaccusative clause universally: For, unaccusative verbs, due to their lack of agentivity, cannot provide ergative Case any way.

Thus far, we have observed the languages where it is the grammatical aspect that determines the aspectual feature of *v*. Recall that our theory is that the aspectual feature of *v* is determined either by the grammatical aspect or by the lexical aspect. It is, then, natural to expect to find cases where the aspectually conditioned split-ergativity is due solely to the aspectual feature of *v* that is determined by the lexical aspect. Indeed, we can find Guaraní as such a language. In Guaraní Case is distinguished by pronominal prefixes on verbs. Interestingly, there are two types of intransitive verb in Guaraní: While intransitive verbs of one type require the prefix *a-* for their SUBJ, which is the same prefix for SUBJ of transitive verbs, the other intransitive verbs require the prefix *še-* for their SUBJ, which is the same prefix that appears for OBJ of transitive verb (see Mithun 1991 for details). According to Mithun (1991), all the intransitive verbs with agentivity belong to the former type. Moreover, the grammatical aspect has no effect on the selection of the pronominal prefix on a given verb. Thus, it is natural to conclude, as Mithun (1991) does, that the primary feature underlying the Case selection in Guaraní intransitive clauses is the lexical aspect. Furthermore, Dixon (1994) reports that there are not a few languages in which the Case-marking on SUBJ of an intransitive (unergative) verb is determined solely by the lexical aspect of the verb (cf., also, DeLancey 1981, Kibrik 1985, and Palmer 1994).

4.3 *Transitive Clauses and Their Syntactic Derivations*

Now let us examine how our theory of aspect checking works in explaining the split-ergativity due to the tense/aspect specification found in transitive clauses. Both in

Hindi and in Georgian, as we observed in section 3.2.1, SUBJ and OBJ in the perfect/aorist clause are marked with ergative and absolutive, respectively, and SUBJ and OBJ in the imperfect/present are marked with nominative and accusative, respectively.¹⁶

- 38) a. Sheer-ne aadmii-Ø khaayaa. *Perfect*
 lion-ERG man-ABS eat(PERF)
 ‘The lion ate the man.’
- b. Sheer-Ø aadmii-ko khaataa hai. *Imperfect*
 lion-NOM man-ACC eat(IMP) AUX
 ‘The lion eats the man.’ (J. Singh 1994: 93–94)
- 39) a. Student-ma ceril-i dacera. *Aorist*
 student-ERG letter-ABS write(AOR)
 ‘The student wrote the letter.’
- b. Student-i ceril-s cers. *Present*
 student-NOM letter-ACC write(PRES)
 ‘The student writes the letter.’ (Comrie 1978:351-352)

Our theory is that the grammatical aspect determines the aspectual feature of v in both languages. Thus, in the perfect/aorist clause, SUBJ, which is base-generated at v , is forced to check off the aspectual feature of v , resulting in SUBJ’s ergative (= accusative) marking. Although SUBJ’s Case can be available no longer, it can satisfy the EPP of Infl because it is a DP that is closest to Infl. But the ϕ -feature of Infl is left unchecked yet, so that OBJ within VP undergoes *Agree* to check it off. This results in OBJ’s absolutive (= nominative) marking. These processes derive (38a) and (39a).

In the imperfect/present clause, on the other hand, v lacks the aspectual feature because of the temporal unboundedness of the grammatical aspect. This leads to the derivation in which SUBJ moves from the Spec of v without checking any feature of v to the Spec of Infl to satisfy the EPP of Infl. At the Spec of Infl, SUBJ gets nominative Case from Infl, because it has not yet have its Case evaluated. Although v lacks the aspectual feature in the imperfect/present clause, a transitive verb usually has the capacity of Case (except for psych-verbs and some peculiar transitive statives). Thus, OBJ checks the ϕ -feature of v through *Agree*, and it results in OBJ’s accusative marking. These processes derive (38b) and (39b).

5. CONSEQUENCES AND RELATED ISSUES

5.1 *Consequences*

In this section some consequences of our theory of aspect checking will be explored and some issues relevant to aspectually conditioned split-ergativity will be examined under the theory.

First, let us consider why none of the deeply ergative languages shows any split due to aspectuality? It seems likely that the aspectually conditioned split-ergativity is not found in any language with deep ergativity (cf. DeLancey 1981 and Dixon 1994). Recall our assumption about the parameter settings for deep ergativity: In addition to the ergative parameter, languages with deep ergativity have the parameter according to which *v*'s feature is inert in the sense of McGinnis (1998). As a result of these parameter-settings, SUBJ at the Spec of *v* checks off the feature of *v*, but it cannot move anywhere after it checks it off, because its checking of *v*'s nominal feature results in its inert Case, which makes it invisible to any search of a probe from its above position. It should be noticed, here, that the inert feature of a head H, like inherent Case, is assigned to/checked by the specifier of H. In the languages with these parameter-settings (= deeply ergative languages), SUBJ in a clause, regardless of whether its predicate is intransitive (unergative or unaccusative) or transitive, or regardless of whether the predicate has agentivity or not, or regardless of whether *v* has the aspectual feature due to the telicity/boundedness or not, is forced to check the inert Case of *v*. This checking results in the ergative marking on SUBJ. Since SUBJ is invariantly marked as ergative in these languages irrespective of the type of the predicate in the transitive clause or irrespective of the type of the grammatical/lexical aspect of the clause, the fact naturally follows that the aspectually conditioned split-ergativity is not found in the deeply ergative languages.

Next, let us touch on the issue concerning OBJ's case marking in Hindi. As pointed out in footnote 16, it is often reported that OBJ's case marking in the perfect clause is affected by the specificity of OBJ in Hindi (e.g., Mahajan 1992, Mohanan 1994, M. Singh 1994). More specifically, when OBJ is marked with accusative, it must be interpreted as specific, as shown in (40) (Mohanan 1994: 90).¹⁷

- 40) a. *Ilaa-ne rotii-Ø utaaii.*
 Ila-ERG bread-ABS lift(PERF.F)
 'Ila picked up the/a bread.'
- b. *Ilaa-ne rotii-ko utaayaa.*
 Ila-ERG bread-ACC lift(PERF.M)
 'Ila picked up the/*a bread.'

The phenomenon that the specific/definite object of a transitive verb *Vt* is case-marked differently from the non-specific/indefinite object of *Vt* is abundant in not a

few languages such as Turkish, Finnish, and so forth (see De Hoop 1996 for extensive discussion), and it is, therefore, not limited to ergative languages.

Following the spirit of Mahajan (1992) and Ramchand (1997), I assume that OBJ, if specific/definite, must move overtly to the Spec of v , and I further assume, following De Hoop (1996), that the specific/definite nature of OBJ's interpretation forces it to move to the Spec of v . I propose to hypothesize that, just like the aspect checking, the checking for specificity/definiteness is executed between v and its Spec. Given these mechanics, what does our theory of ergativity predict when OBJ moves up to the Spec of v in the Hindi perfect clause? OBJ moves to the (inner) Spec of v to execute the checking for specificity/definiteness, resulting in its accusative marking because it enters into a checking relation with v , the locus of accusative (= ergative) Case. On the other hand, SUBJ is base-generated at the outer Spec of v (cf. Richard 2002). At v 's outer Spec, SUBJ is forced to check off v 's aspect feature due to the grammatical aspect as perfect, and this results in SUBJ's ergative (= accusative) marking. Later SUBJ moves to the Spec of Infl to satisfy the EPP of Infl, deriving (40b) correctly.

5.2 *Residual Problems*

Thus far in this paper we have established our theory of ergativity and aspect checking on the basis of the facts concerning case-marking on nominals, ignoring the facts concerning agreement.

The first question that arises soon is, how can our theory work in explaining the aspectually conditioned split-ergativity found in the agreement system? In fact, both Hindi and Georgian show complicated but interesting agreement patterns that differ depending on the grammatical aspect and/or semantic nature of nominals (see Mahajan 1990, Mohanan 1994, and J. Singh 1994 for Hindi; and Harris 1981 and Lyle 1997 for Georgian).

Under our theory, ergative and absolutive correspond to accusative and nominative, respectively, and ergative/accusative and absolutive/nominative come exclusively from checking of v and checking of Infl, respectively. Given the standard assumption that the object agreement is mediated by v and the subject agreement is mediated by Infl, our theory therefore predicts the following: (I) When SUBJ bears the ergative marking in the perfect/aorist clause, it induces the object agreement; (II) when SUBJ bears the absolutive marking in the perfect/aorist clause, it induces the subject agreement; (III) when SUBJ bears the nominative marking in the imperfect/present clause, it induces the subject agreement; (IV) when OBJ bears absolutive in the perfect/aorist clause, it induces the subject agreement; (V) when OBJ exceptionally bears accusative in the perfect/aorist clause (as in (40b)), it induces the object agreement; and (VI) when OBJ bears accusative in the imperfect/present clause, it induces the object agreement. As a subcase of (I), when SUBJ of an intransitive verb bears the ergative marking in the perfect/aorist clause, it induces no agreement (consequently, the default agreement appears), because the object agreement is impossible in the intransitive clause.

Basic facts concerning agreement in Hindi are exemplified by the following examples ((a)&(b) from Mohanan 1994; (c)&(d) from Mahajan 1989).

- 41) a. Niinaa-ne kelaa-Ø khaayaa. *Perfect*
 Nina(F)-ERG banana(M)-ABS eat(PERF.M)
 ‘Nina ate a banana.’
- b. Niinaa-Ø baalak-ko utaaegii *Imperfect*
 Nina(F)-NOM boy(M)-ACC lift up(FUT.F)
 ‘Nina will lift up the boy.’
- c. KuttoN-Ø bhoNke. *Perfect*
 dogs(M.PL)-ABS barked(PERF.M.PL)
 ‘The dogs barked.’
- d. KuttoN-ne bhoNkaa *Perfect*
 dogs(M.PL)-ERG barked(PERF.M.SG(default))
 ‘The dogs barked.’
- e. LaRkii-Ø sootii hai. *Imperfect*
 girl(F)-ABS sleep(IMP.F) AUX(SG)
 ‘The girl is sleeping.’ (Comrie 1984: 858)

Basic facts concerning the relation between Case and agreement in Georgian are illustrated in the following tables, which are cited from Lyle (1997: 149) with a slight modification on terminology:

- 42) a. PRESENT
- | | |
|-----------------------|--------------------------------|
| SUBJ in transitive: | Nominative + subject agreement |
| SUBJ in unergative: | Nominative + subject agreement |
| SUBJ in unaccusative: | Nominative + subject agreement |
| OBJ in transitive: | Accusative + object agreement |
- b. AORIST
- | | |
|-----------------------|--------------------------------|
| SUBJ in transitive: | Ergative + subject agreement |
| SUBJ in unergative: | Ergative + subject agreement |
| SUBJ in unaccusative: | Absolutive + subject agreement |
| OBJ in transitive: | Absolutive + object agreement |

As is evident from the above facts about Hindi,¹⁸ it is safe to conclude, as far as these basic examples are concerned, that the prediction of our theory is almost correct. However, there are not a few intricate examples in Hindi to which our theory can hardly give a consistent account without any proviso. Much more difficulties for our theory lie in the facts found in Georgian aorist clauses (cf. (42b)). Although it is a well-known fact that agreement in Georgian is extraordinarily puzzling and highly resistant to a systematic explanation, our theory, at the moment,

has no way to capture it in a consistent way, either. I will leave it to future research to pursue a coherent explanation of those exceptional examples under the theory of ergativity and aspect checking proposed in this paper.

Finally, a comment on other types of split-ergativity is in order. According to Dixon (1994), case marking may differ between matrix and subordinate clauses in some languages. Yet another type of split ergativity, which is due to the pronominal/full nominal distinction, has been detected in the literature, which is exemplified by the Bidjara examples in (43) (from Blake 1976:282).

43) a. INTRANSITIVE

- | | | |
|-----|--|-------------------------------|
| i. | Ñura-Ø wanguli-la.
dog-ABS bark-PAST
'A dog barked.' | <i>Full DP (Full Nominal)</i> |
| ii. | Ñaya-Ø barri-la
I-NOM cry-PAST
'I cried.' | <i>Pronominal</i> |

b. TRANSITIVE

- | | | |
|-----|---|-------------------------------|
| i. | Ñura-Ñu munda-Ø bada-la.
dog-ERG snake-ABS bite-PAST
'A dog bit a snake.' | <i>Full DP (Full Nominal)</i> |
| ii. | Ñaya-Ø nuÑu-na bada-la
I-NOM him-ACC bite-PAST
'I bit him.' | <i>Pronominal</i> |

According to DeLancey (1981), Dixon (1994), and Palmer (1994), there are many languages with this type of split-ergativity (see the above references for a list of such languages).

It is a rather tough but highly interesting problem as to how to deal with these phenomena under the theory of ergativity presented in this paper. At present, however, I have no conclusive solution to this problem. I would like to leave it to future research to explore this rather big problem. (But see Ura 2000 for an approach to this problem under a theory akin to the one presented here.)

6. CONCLUSION

The aim of this paper was to elucidate the syntactic mechanism of aspectually conditioned split-ergativity under the theory of feature checking recently developed by Chomsky (1995, 2000, 2001). It was, first, argued that the distinction between accusative languages and ergative ones can be given a coherent explanation if Ura's (2000) idea about the ergative parameter, which hypothesizes that SUBJ at the Spec

of *v* can enter into a checking relation directly with *v* without movement (see Massam 2001 for a similar idea), is appropriately revised and updated along the line of Chomsky's (2000, 2001) theory of *Agree* and Case. Next, the theory of aspect checking, which has its root from the recent proposal by Borer (1994, 1998), Ramchand (1997), van Hout (1998), Ritter & Rosen (1998, 2000), and Travis (2000), was introduced with a Minimalist modification concerning the non-use of the new functional category, Asp or the like. With the proviso that the lexical aspect and the grammatical aspect are two determinants for the aspectual feature to be checked in syntax, it was hypothesized that the aspectual feature appears on *v* when the telicity due to the lexical aspect and/or the temporal boundedness due to the grammatical aspect is involved in the clause. By examining data mainly from Hindi and Georgian, both of which are languages with aspectually conditioned split-ergativity, it was demonstrated that, given both the theory of the ergative parameter (which distinguishes ergative languages from accusative ones) and the theory of aspect checking, the case marking patterns found in intransitive and transitive clauses in those languages can be given a natural and consistent explanation. Moreover, it was pointed out that, besides some technical problems with our theory of aspect checking, several big problems remain unsolved such as the issue as to how to deal with other types of split-ergativity.

Since ergativity itself and many syntactic/morphological phenomena due to ergativity have raised numerous issues in the literature, most of which are very significant in any linguistic theory that aims at explicating the universal characteristics of human language, it is needless to say that many important issues are left untouched in this paper. Unfortunately, however, they are too large and too enormous to tackle in this small article. I wish to apply the theory presented here to these issues in the future research.

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¹ Δ represents a morphophonologically null argument in a coordinate/subordinate clause.

² Following Comrie (1978), I tentatively refer to *-i* as nominative when it appears in the present clause and as absolutive when it appears in the aorist clause.

³ Throughout this paper, I assume Chomsky's (2001) proposal that Case should be evaluated along with feature checking: When a DP has entered into a feature checking relation with *v*, then the accusative (= ergative) Case is evaluated, resulting in the accusative/ergative marking on the DP, and the nominative (= absolutive) Case is evaluated, resulting in the nominative/absolutive marking on the DP when it has entered into a feature checking relation with Infl. Here I am consciously unspecific about what is the feature of *v* that DP at the Spec of *v* checks off. In the next section I will explicate it in examining concrete examples of split ergativity.

⁴ Take, for example, *dance*, an English intransitive unergative verb. It usually assigns no Case, as in (i), but it sometimes assigns Case as the well-formedness of (ii) shows.

(i) John danced.

(ii) John danced himself tired.

Without assuming that *himself* is assigned Case by *dance*, the well-formedness of (ii) is hard to explain. The ill-formedness of (iii) reinforces this conclusion.

(iii) *John arrived himself tired.

According to Burzio's generalization, intransitive unaccusative verbs like *arrive* can never have Case, whence the ill-formedness of (iii) follows.

⁵ For some extensive discussions on the relation between null subjects and the syntactic manifestation of Infl's Case, see Safir (1985) and Ura (1994, 2000).

⁶ Here I am assuming, following Richards (2002), that movement into one of the multiple Specs of a head is always inward (see, also, Chomsky 2001).

⁷ As an anonymous reviewer pointed out, it might be possible to assume, instead, that it is Infl that possesses the aspect-related feature that is responsible for the telicity/boundedness/perfection. But, because it is an empirical fact that the verbal head in a clause is responsible principally for the telicity/boundedness/perfection in the clause (cf. Tenny 1994), I maintain, without any further argument, that the head relevant here is not Infl, but *v*.

⁸ This statement might be liable to sound as if it restates the empirical fact that the perfect aspect is associated closely with ergative case. It is not the case, however. Note that the hypothesis we are assuming here has been motivated, independently from ergativity, by many studies such as Borer (1994, 1998), Ramchand (1997), and Travis (2000). If our extension of this hypothesis under Chomsky's (1995) Agr-less theory is correct with the proviso that the functional head in question corresponds to *v*, but not to Infl, it follows plausibly from Ura's (2000) theory of ergative parameter that there is a theoretically rational reason why ergative Case-checking is associated with *v*.

⁹ According to the description presented in Dixon (1994), it seems highly likely that the aspectually conditioned split-ergativity is not found in any language with deep ergativity (cf., also, DeLancey 1981). We will touch on this issue in section 5.1.

¹⁰ For example, the Japanese counterparts to the following English degraded sentences sound perfectly acceptable; '*Mary sobbed deliberately.'/*Sob! (as an imperative).' and '*Mary died intentionally.'/*Die! (as an imperative).'

¹¹ See M. Singh (1994: 76–77) for direct discussion on the Hindi intentional adverb *jaan buujkar* and its relevance to the event interpretation.

¹² It is noteworthy, here, that the core argument presented here is not the restatement of the empirical fact that agentivity is associated closely with ergative case. Rather, given the independently motivated hypothesis (e.g., Hale & Keyser 1993 and Chomsky 1995) that *v* is the source of agentivity, it follows from Ura's (2000) theory of ergative checking that there is a theoretically rational reason why ergative Case-checking is associated with agentivity.

¹³ According to Holisky's (1981) rather extensive study on the semantic characteristics of Georgian unergative verbs, it seems to be true that all unergative verbs involve agentivity in Georgian if they take animate arguments.

¹⁴ Recall that Infl's formal features can be left unchecked even in Georgian, because Georgian is a null subject language.

¹⁵ In Georgian there is yet another type of tense/aspect available in a clause, where SUBJ and OBJ, if any, are Case-marked differently both from the aorist clause and from the present clause (see Harris 1981 and Lyle 1997). I will leave it to future research to pursue the issue as to how the Case-marking in the perfect clause in Georgian is captured under the theory presented here.

¹⁶ As will be argued in section 5.1, OBJ's case marking may, indeed, vary in Hindi, depending on its semantic/referential nature, though. I will ignore it in this section.

¹⁷ As a matter of fact, things become more complicated if we look into details. See Mohanan (1994) and M. Singh (1994) for relevant discussion (cf., also, Anand & Nevins (this volume)).

¹⁸ In Hindi the object agreement is phonologically null.

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SPLIT ABSOLUTIVE^{*}

1. INTRODUCTION

This paper has two goals. The first is to provide an analysis of split ergativity in Warlpiri using standard mechanisms of structural case and agreement licensing. The task is of theoretical interest, both due to the nature of the split (ergative-absolutive case marking, nominative-accusative agreement), and due to the implications for the non-configurationality debate. While Warlpiri split ergativity has been taken as evidence for a non-configurational syntactic structure (Jelinek 1984), recent work has argued that Warlpiri is in fact configurational (Legate 2002b). This paper supports the latter position by demonstrating that even the split ergative pattern is best analysed through configurational means.

The second goal is to clarify the possible roles of the “absolutive” in case systems, towards the elimination of absolutive as a distinct case. It is now recognized that for a sub-class of ergative-absolutive languages, including Warlpiri, this is far more problematic. I demonstrate that absolutive case in Warlpiri must be reduced to both nominative case (on intransitive subjects) and accusative case (on transitive objects). This is required on empirical grounds, and allows for a restrictive typology of possible ergative case systems.

The paper is organized as follows. Section 2 introduces the split ergative pattern in Warlpiri. Section 3 examines the grammatical subject position in Warlpiri, and demonstrates that it is occupied by the highest argument in the clause. Section 4 presents evidence that morphological absolutive case in Warlpiri masks structural nominative and accusative case. Section 5 considers the implication of the analysis for Warlpiri non-configurationality, and section 6 considers the implications for the phenomenon of ergativity cross-linguistically.

2. WARLPIRI SPLIT ERGATIVITY

We begin this section by considering the nature of the split ergative system in Warlpiri. Warlpiri exhibits a pattern whereby agreement clitics supplete according to a nominative-accusative pattern, whereas independent pronouns and DPs inflect according to an ergative-absolutive pattern.

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- 1) a. **Ngajulu-rlu-rna-ngku** nyuntu nya-ngu
 1-ERG-1SG-2SG.OBJ 2.ABS see-NPAST
 'I saw you'
- b. **Ngaju-rna** parnka-ja
 1.ABS-1SG run-PAST
 'I ran'
- c. Nyuntuluh-rlu-npa-**ju** **ngaju** nya-ngu
 2-ERG-2SG-1SG.OBJ 1.ABS see-NPAST
 'You saw me'

This pattern is taken by Jelinek (1984) as a reflection of the non-configurational structure of Warlpiri whereby, according to her analysis, the agreement clitics function as the arguments of the verb, while the overt DPs are sentential adjuncts related to the clitics by language-specific case-compatibility rules.

In this paper, I provide a configurational analysis of the Warlpiri split-ergative pattern. The literature on ergativity is exceptionally rich (see Levin 1983, Marantz 1984, Levin & Massam 1985, Bok-Bennema 1991, Johns 1992, Murasugi 1992, Bobaljik 1993, Jelinek 1993, Philips 1993, Dixon 1994, Mahajan 1994, Bittner & Hale 1996a,b, among others), as is the cross-linguistic variation shown by ergative languages. Here, I begin with an examination of the Warlpiri case, an instance of morphological ergativity, and subsequently consider the implications for the phenomenon of ergativity cross-linguistically.

To begin, I examine the nature of the external subject position in Warlpiri.

3. THE EXTERNAL SUBJECT POSITION

A controversial and crucial question when considering ergative case systems is whether the ergative or the absolutive functions as the subject.¹ We take the now standard approach in assuming that the answer differs from language to language; that is, there does not exist a single model of ergativity applicable to all ergative case systems. Furthermore, we take subjecthood to consist of two distinct notions—(i) an underlying or thematic subject, to be identified with the DP generated in the specifier of *v*P and receiving the external theta-role (agent/experiencer/causer); and (ii) a grammatical subject, to be identified with the DP appearing in a designated A-position outside of the verb phrase, which we refer to as the specifier of TP (see for example McCloskey 1997 for discussion). It has indeed been proposed (notably in Marantz 1984) that ergative case systems differ from nominative in the thematic subject position, that is, ergative agents appear as the complement to the verb. I assume that such a radical difference between languages is not provided for by universal grammar, noting when appropriate data from Warlpiri that argue against this type of “deep ergative” hypothesis. I am thus concerned in this section with the second notion of subjecthood—is it the ergative or the absolutive that fills the specifier of TP in Warlpiri? I argue that the highest argument fills the specifier of

TP, that is the ergative thematic subject in a transitive clause, and the single (absolutive) argument of an intransitive clause.

The question of subjecthood is partially related to a second controversial and crucial question related to ergative case systems—what is the source of ergative and absolutive case? Thus, a common analysis of ergativity maintains that absolutive case is nominative case associated with finite T (see *inter alia* Murasugi 1992, Bittner 1994, Ura 2001). Such an analysis requires an agreement relationship be established between finite T and the nominative object. If this relationship is established through overt movement of the object to the specifier of TP, then we may expect the object to exhibit grammatical subject properties. If this relationship is established through covert movement of the object of the specifier of TP, then we expect the object to only exhibit those grammatical subject properties that diagnose syntactic positioning at LF. Finally, following recent work by Chomsky (2000, 2001), if the relationship is established in situ (through the *Agree* operation), with no movement of the object, then we expect the object not to exhibit grammatical subject properties. Thus, although the questions of grammatical subjecthood and source of absolutive case are partially interrelated, they are distinct questions, and so I treat them separately. This section concerns the question of grammatical subjecthood, and the following section examines the question of case source.

To begin the discussion of the grammatical subject position in Warlpiri, I present two tests which demonstrate that the ergative DP behaves as though it asymmetrically c-commands the absolutive DP in transitive clauses. These data speak in support of an analysis whereby the ergative occupies the grammatical subject position, rather than the absolutive.

First, the ergative subject in Warlpiri behaves as though it asymmetrically c-commands the absolutive object for the purposes of Condition A. Thus, a reflexive/reciprocal object may be bound by the ergative subject, but not vice versa:

- 2) a. Purlka-jarra-rlu ka-pala-nyanu nya-nyi
 old.man-DUAL-ERG PRESIMPF-3DUAL-ANAPH see-NPAST
 ‘The two old men are looking at each other’ (Simpson 1991:163)
- b. *Purlka-jarra ka-nyanu-palangu nya-nyi
 old.man-DUAL PRESIMPF-ANAPH-3DUALOBJ see-NPAST
 Lit: ‘Each other are looking at the old men.’ (Legate 2002b)

It is important to realize that these data cannot be explained by claiming the reflexive/reciprocal is formed by detransitivization in Warlpiri. A number of considerations demonstrate that reflexive/reciprocal sentences in Warlpiri are transitive, as noted by Hale (1983:24 fn 10, 1983:43): (i) the subject receives ergative case; (ii) the object switch reference marker *-kurra* is licensed, indicating control of the embedded subject by the matrix object (see below for discussion of the switch reference system); (iii) an overt body-part noun related to the object may be present. To this we may add, (iv), the fact that a secondary predicate related to the object may be present. These properties are illustrated in the following examples (note that *jurru* ‘head’ and *wati* ‘man’ appear in the unmarked absolutive case,

3) a. Wati-ngki-nyanu paka-rnu jurru
man-ERG-ANAPH hit-PAST head
'The man hit himself (on) the head'

(Hale et al 1995:1441)

c. Kurdu-ngku ka-nyanu nya-nyi, karri-nja-kurra
 child-ERG PRESIMPF-ANAPH see-PAST stand-INFIN-*OBJ.C*
 'The child sees himself standing' (Hale 1982:295)

Second, the ergative subject also behaves as though it asymmetrically c-commands the absolutive object for the purposes of Condition C:²

4) a. Purlka-jarra-rlu ka-pala-nyanu nya-nyi
old.man-DUAL-ERG PRESIMPF-3DUAL-ANAPH see-NPAST
'The two old men are looking at each other' (Simpson 1991:163)

b.*Purlka-jarra ka-pala-nyanu nya-nyi
old.man-DUAL PRESIMPF-3DUAL-ANAPH see-NPAST
'They_i (two) are looking at the old men.'
(Legate 2002b)

In (4a), the overt R-expression is marked with ergative case, as the thematic subject; whereas in (4b) the overt R-expression is in the (unmarked) absolutive case, as the transitive object. The grammaticality of (4a) as opposed to the ungrammaticality of (4b), then, may be explained in terms of Condition C. In (4a), the ergative R-expression occupies the grammatical subject position and thus c-commands the coreferent anaphoric *pro* in object position, resulting in no Condition C violation. In (4b), on the other hand, the absolutive R-expression is c-commanded by the coreferent ergative *pro* in the grammatical subject position and the sentence is ungrammatical as a Condition C violation.³

One additional point about (4b) should be mentioned. Consider the alternative analysis whereby the absolutive is generated in object position and then raises to the grammatical subject position. In its merged position within the verb phrase, the absolutive R-expression is c-commanded by the coreferent pronominal thematic

subject. Could this be the source of the Condition C violation in (4b)? The answer is clearly no. It is now well established that A-movement repairs Condition C violations (see Mahajan 1990, Saito 1992, Lebeaux 1995, Fox 1999, *inter alia*). This phenomenon is illustrated below with data from English:

- 5) a. John's_i mother seems to him_i *t_i* to be wonderful.
 (*It seems to him_i that John's_i mother is wonderful.)
 (Lebeaux 1995:[91b, 92b])
- b. John's_i picture struck him_i *t_i* as a good likeness. (Saito 1992:90)

Indeed, Legate (2002b) argues from independent data that Condition C violations are also repaired through A-movement in Warlpiri. Therefore, the ungrammaticality of (4b) cannot be explained by the existence of a configuration before A-movement that would violate Condition C. Rather, (4b) shows us that the thematic subject c-commands the object after A-movement, which then results in the Condition C violation.

Next, I turn to three tests that demonstrate that the ergative subject of a transitive and the absolutive subject of an intransitive pattern together on tests of grammatical subjecthood, to the exclusion of absolutive objects. Furthermore, I demonstrate that this is equally true of intransitive absolutive subjects that, on thematic and cross-linguistic grounds, are plausibly generated as the object of an (unaccusative) intransitive predicate.

First, as mentioned above, ergative and absolutive subjects trigger subject agreement morphology, as distinct from object agreement:

- 6) a. Nya-ngu-rna-ngku
 see-PAST-1SG-2SGOBJ
 'I saw you'
- b. Parnka-ja-rna
 run-PAST-1SG
 'I ran'
- c. Mata-jarri-ja-lku nganta-rna
 tired-INCH-PAST-NOW supposedly-1SG
 'I seem to be tired' (Warlpiri Dictionary Project 1993)
- d. Nya-ngu-npa-ju
 see-PAST-2SG-1SGOBJ
 'You saw me'

Second, ergative and absolutive subjects are treated as a natural class for switch reference morphology. Warlpiri displays a system of switch reference morphology on nonfinite clauses: *-karra* indicates control of the embedded PRO by the matrix subject,⁴ *-kurra* indicates control of the embedded PRO by the matrix object, and

7) a. Karnta_i ka-ju wangka-mi [PRO_i yarla karla-nja-karra]
woman PRESIMPF-1SGOBJ speak-NPAST [PRO yam dig-INFIN-SUBJC]
'The woman is speaking to me while digging yams' (Hale 1983:21)

b. Purda-nya-nyi ka-rna-ngku_i [PRO_i wangka-nja-kurra]
aural-perceive-NPAST PRESIMPF-1SG-2SGOBJ [PRO speak-INFIN-OBJC]
'I hear you speaking' (Hale 1983:20)

c. Wati-rla jurnta-ya-nu karnta-ku_i [PRO_i jarda-nguna-nja-rlarni]
man-3DAT away-go-PAST woman-DAT [PRO sleep-lie-INFIN-OBVC]
'The man went away from the woman while she was sleeping'
(Hale et al 1995:1442)

(Warlpiri Dictionary Project 1993)

Analysis of the range of uses of the switch reference morphology must be left to future work. The crucial point for our purposes is that the subject switch reference marker *-karra* is used for the ergative argument, the absolutive argument of an unergative verb, and the absolutive argument of an unaccusative predicate, as illustrated in (9).

- 9) a. Ngarrka-ngku ka karli jarnti-rni, wangka-nja-karra-rlu
 man-ERG PRESIMPF boomerang trim-NPAST, speak-INFIN-SUBJC-ERG
 'The man is trimming a boomerang while speaking.'
- b. Ngarrka ka wangka-mi, karli jarnti-rninja-karra
 man PRESIMPF speak-NPAST, boomerang trim-INFIN-SUBJC
 'The man is speaking while trimming a boomerang.'
 (Granites et al 1976)
- c. Nyangurla-karra-rlipa rdakurlpa-rra pi-nyi?
 when-SUBJC-1PLINCL enclosed.space-HITHER VF-NPAST
 (rdakurl(pa)-pi-nyi 'arrive, enter')
 'When will we get there?' (Warlpiri Dictionary Project 1993)

Thus, the switch reference morphology treats subjects—ergative, absolutive unergative, and absolutive unaccusative, as a natural class.

Third, these subjects are also treated as a natural class by control. Only grammatical subjects may be controlled PRO in a nonfinite clause. This is illustrated by (10), where the interpretation involving control of the object is impossible.

- 10) Ngana-kurra-npa Jakamarra-kurlangu maliki nya-ngu [paji-rninja-kurra]?
 who-OBJC-2SG Jakamarra-POSS dog see-PAST [bite-INFIN-OBJC]
 'Who_i did you see Jakamarra's dog_j PRO_i _{t_i} biting?'
 * 'Who did you see Jakamarra's dog being bitten by?'
 = who_i you see Jakamarra's dog_j _{t_i} PRO_j biting

As illustrated below, ergative and absolutive subjects may all be controlled PRO:

- 11) a. Yurnturru-lu-rla yirra-ka panu-kari-rli, ngaju yi-rna
 surround-3PL-3DAT put-IMPERATIV many-other-ERG I RELC-1SG
 kurlarda-rlu panti-rni [PRO ngapa-kurra-juku nga-rninja-kurra.]
 spear-ERG spear-NPAST [PRO water-OBJC-STILL drink-INFIN-OBJC]
 'You others surround it so I can spear him while (he's) still drinking the water.'
- b. Luurnpa-jarra-lpa-pala-rla ngarlarri-ja kalwa-ku
 kingfisher-DUAL-PASTIMPF-3DUAL-3DAT laugh-PAST heron-DAT
 [PRO wirntinja-kurra-ku.]
 [PRO dance-INFIN-OBJC-DAT]
 'The two kingfishers laughed at the heron while (the latter was) dancing.'

c. Yapa-kari ka-rla yapa-ku yaarlpa-nyina
 person-other PRESIMPF-3DAT person-DAT on.top-sit.NPAST

kankarla-rni-nginti miyalu-rla marda pawiyi-rla marda
 above-HITHER-side belly-LOC maybe back-LOC maybe

– [PRO nguna-nja-kurra-ku.]
 [PRO lie-INFIN-OBJC-DAT]

‘Another person sits on top of someone—either on the belly, or on the back—as (he is) lying down.’ (Warlpiri Dictionary Project 1993)

To summarize, we have seen that the ergative thematic subject behaves as though it asymmetrically c-commands the absolutive object for Condition A and Condition C, indicating that the absolutive object does not raise over the ergative thematic subject to the specifier of TP. We have also seen that ergative and absolutive subjects are treated as a natural class for agreement, switch reference morphology, and control, to the exclusion of the absolutive object. These data are naturally accounted for if the grammatical subject position in Warlpiri hosts the highest argument, be it ergative or absolutive.

This result, important independently, also impacts on the source of absolutive case in Warlpiri. Thus, the data discussed to this point are compatible with an analysis whereby absolutive case in Warlpiri is licensed by finite T, but only if this licensing relationship is not accomplished through (or accompanied by) movement of the absolutive to the specifier of TP. In the following section, I examine the issue of case source in detail.

4. SPLIT ABSOLUTIVE

In this section, I examine the source of absolutive case licensing in Warlpiri, and argue for a distinction between absolutive case borne by intransitive subjects and absolutive case borne by transitive objects. In doing so, I also provide analyses of ergative case source and nominative-accusative agreement patterns. Throughout, I contrast the analysis with an alternative whereby absolutive case is uniformly licensed by a high functional head, be it finite T (*inter alia* Murasugi 1992, Bittner 1994, Ura 2001) or C (*inter alia* Bittner & Hale 1996a,b). I begin by outlining my proposal, and then provide supporting arguments.

The core of my proposal is that absolutive case is non-uniform in Warlpiri. Absolutive case on the subject is structural nominative case licensed by finite T. Absolutive case on the object, on the other hand, is structural accusative case licensed by *v*. Morphological realization of both nominative and accusative case as absolutive is due to the status of the absolutive as the morphological default. The absolutive as a default is supported on cross-linguistic grounds (see Dixon 1994), and is supported internally to Warlpiri by the absolutive appearing as the

morphologically unmarked citation form. To illustrate, a partial case paradigm is provided for the subsection name *Nungarrayi* below.

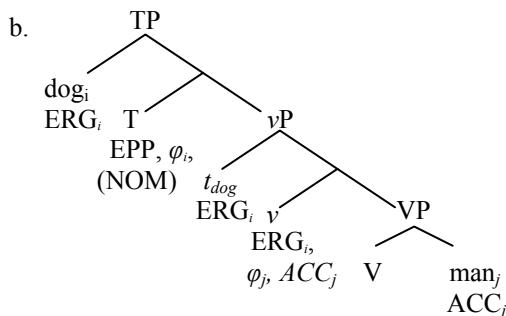
- | | | | |
|-----|------------------|-------------------|-----------------|
| 12) | Nungarrayi-rli | Nungarrayi-ki | Nungarrayi-rla |
| | Nungarrayi-ERG | Nungarrayi-DAT | Nungarrayi-LOC |
| | Nungarrayi-kirra | Nungarrayi-ngirli | Nungarrayi |
| | Nungarrayi-ALL | Nungarrayi-EL | Nungarray (ABS) |

Thus, whereas all other cases are morphologically represented as a suffix, the absolutive consists solely of the bare stem. It is important to note that my claim is that the absolutive in Warlpiri is the morphological default, used when no suffix expressing the specific case is available, as distinct from the syntactic default case, assigned when no appropriate syntactic case licenser is available.⁵ Although morphemes have been proposed that have a zero phonological realization but do not correspond to the morphological default (e.g. Halle & Marantz 1993, Sauerland 1995), morphemes with zero phonological realization are typically defaults, and indeed the zero default may be universally available (Halle & Marantz 1993: 133-134). Thus, the Warlpiri absolutive is highly plausible as a morphological default.⁶

Turning to ergative case, I analyse this as inherent case licensed by the light verb that introduces the external argument in a transitive clause. A detailed defence of ergative as inherent case is articulated in Woolford (1997); in this volume, Anand & Nevins provides support for this position in Hindi, and Massam for Niuean. Arguments from the Warlpiri data for this position and against alternative conceptions of ergative case licensing are noted when appropriate.

To exemplify how this case licensing system works, and its interaction with agreement, consider the derivation of a transitive sentence.⁷

- 13) a. Maliki-rli ngarrka yarlku-rnu
 dog-ERG man bite-PAST
 ‘A dog bit a man’



The object ‘man’ undergoes ϕ -feature agreement with transitive v , resulting in object agreement and the licensing of accusative case. This object agreement will later raise

as a second position clitic.⁸ Since Warlpiri lacks an accusative case suffix, the accusative case will be morphologically realized as the default unmarked absolutive. Transitive *v* also assigns inherent ergative case to the subject 'dog'. Subsequently, T undergoes ϕ -feature agreement with the highest DP, here the thematic subject 'dog', and the EPP feature of T attracts this DP to the specifier of TP. Nominative case is not licensed on 'dog', as 'dog' already bears inherent ergative case.

In an intransitive clause, neither structural accusative case nor inherent ergative case is assigned. The single argument (be it a thematic object or the thematic subject) undergoes ϕ -feature agreement with T, has its nominative case licensed by T, and is attracted to the specifier of TP to satisfy the EPP feature of T. Since Warlpiri lacks a nominative case suffix, the nominative case will be realized as the default unmarked absolutive.

Thus, nominative case is licensed in intransitive clauses but not transitive clauses. The status of nominative case in transitive clauses bears further comment: if nominative case is an obligatory uninterpretable feature on T, failure to check nominative case should cause the derivation to crash. This issue is not unique to my analysis of Warlpiri, but also arises in languages like Faroese with inherent dative subjects and accusative objects, see section 6.

A possible resolution is that nominative case is an uninterpretable feature, but this feature is not present on T in convergent transitive clauses. The absence of the nominative case feature on T in intransitive clauses may result from this feature being *optionally* added to finite T on entering the workspace, or from the presence of two finite Ts in Warlpiri, one with the nominative case feature and one without. In either case, the optionality is unproblematic, since for transitive clauses, only derivations without the nominative case feature on T will converge, and for intransitive clauses, only derivations with the nominative case feature on T will converge.

Another possible resolution is that nominative case on T is not an uninterpretable feature. Structural case is a theoretical anomaly in involving uninterpretable features on both the probe and the goal. The claim that nominative case on T is not an uninterpretable feature is compatible with a return to earlier conceptions of case as involving assignment rather than feature checking (e.g. Chomsky 1981). It is also compatible with recent work that reinterprets case as an uninterpretable feature on DP checked by an interpretable feature on a functional head (see Pesetsky & Torrego 2001, Svenonius 2001, Johns, this volume): nominative case being interpretable tense on T and uninterpretable tense on DP.

The choice between these explanations of the status of nominative case in transitive clauses thus depends on the mechanics of the structural case system. I leave the choice open for now.

To summarize, my account places the ergative case property of Warlpiri into the lexical entry of the light verb. I have (to this point) proposed two distinct light verbs in Warlpiri:

- 14) a. v_{TRANS} :
 -assigns a θ -role to the thematic subject
 -assigns inherent ergative case to the thematic subject
 -licenses structural accusative case
 -has unvalued ϕ -features
 -combines with a transitive verb
- b. $v_{INTRANS}$:
 -assigns a θ -role to the thematic subject
 -combines with an intransitive verb

The crucial innovation of my analysis is the splitting of absolutive case into nominative case licensed by finite T and accusative case licensed by transitive v . In what follows, I provide empirical motivation for this innovation.

4.1 Nonfinite Clauses

In this section, I examine the case patterns found in nonfinite clauses in Warlpiri. These patterns are crucial in that they clearly demonstrate a split between absolutive case on intransitive subjects and absolutive case on transitive objects. Nonfinite clauses in Warlpiri appear to be gerunds (see Simpson 1991, who argues that they are nominalized). For example, they undergo both the verbal reduplication pattern (reduplication of the first two syllables):

- 15) a. Lulju ka-lu yurrampi-rli **kiji-kiji-rninja-parnka**
 dirt PRESIMPF-3PL ant-ERG **REDUPL**-throw-INFIN-run.NPAST
 ‘The honey ants run back and forth dumping their clods of dirt’
- b. Pirli ka **parnta-parntarri-nja-mpa-ya-ni**
 hill PRESIMPF **REDUPL**-crouch-INFIN-by-go-NPAST
 ‘The mountain extends in a series of humps’ (Nash 1986:137)

and the nominal reduplication pattern (reduplication of entire stem):

- 16) a. **wapa-nja-ngu-wapa-nja-ngu-rna** wirliya-ju wanka-ju pardi-ja
REDUPL-walk-INFIN-RESULT-1SG foot-TOP raw-TOP rise-PAST
 ‘From walking around a lot my feet got raw’
- b. **wangka-nja-rla-wangka-nja-rla** ka-rna-ju jurru paji-ni
REDUPL-speak-INFIN-SEQ PRESIMPF-1SG-1SG.OBJhead cutNPAST
 ‘As I was talking, I cut my head’ (Nash 1986:133-134)

Furthermore, word order in nonfinite clauses is fixed. Following Legate (2002b), I assume that word order variations in Warlpiri are determined by: (i) A-scrambling, and (ii) movement to the left periphery motivated by information structure. Thus,

fixed word order in nonfinite clauses indicates that the functional categories above the verb phrase targeted by scrambling and movement to the left periphery are absent. This again supports the status of nonfinite clauses as gerunds, lacking higher functional material.

Consider now the case patterns of nominals within these nonfinite clauses. Transitive subjects may bear either ergative case or dative case:

- 17) a. Kurdu-lpa manyu-karri-ja, [ngati-nyanu-**rlu** karla-nja-rlarni.]
 child-PASTIMPF play-stand-PAST [mother-POSS-**ERG** dig-INFIN-OBVC]
 ‘The child was playing, while his mother was digging (for something).’
 (Laughren 1989:[44a])

- b. Nyalali-rli ka warlu yarrpi-rni [karnta-**ku** kurdu-ku
 girl-ERG PRESIMPF fire.ABS kindle-PAST[woman-**DAT** child-DAT
 miyi yi-nja-rlarni.]
 food.ABS give-INFIN-OBVC]

‘The girl is building a fire, while the woman is giving food to the baby.’
 (Hale 1982:296)

The presence of dative case on the subject of these nonfinite clauses also supports the gerundive status of these nonfinite clauses. The possessive subjects of nominals may bear the possessive suffix *-kurlangu*, or they may bear dative case:

- 18) Nangala-ku jaja-nyanu
 Nangala-DAT maternal.grandmother-ANAPH
 ‘Nangala’s granny’ (Warlpiri Dictionary Project 1993)

In corpus data, intransitive subjects are only rarely found bearing absolutive case, and such examples are routinely judged ungrammatical (Simpson 1991:107).⁹ Instead, intransitive subjects must bear dative case:

- 19) Kurdu ngaju-nyangu-lu paka-rnu, [ngaju-**ku** jarda-nguna-nja-rlarni.]
 child 1SG-POSS-3PL hit-PAST [I-**DAT** sleep-lie-INFIN-OBVC]
 ‘They hit my child, while I was asleep.’

Transitive objects, on the other hand, uniformly bear absolutive case in non-finite clauses and may not bear dative case:

- 20) Ngarrka-patu-rlu ka-lu-jana puluku turnu-ma-ni,
 man-PAUC-ERG PRESIMPF-3PL-3PLOBJ bullock muster-NPAST
- [karnta-patu-rlu miyi/*miyi-ku purra-nja-puru.]
 [woman-PAUC-ERG food.ABS/*food-DAT cook-INFIN-TEMPC]

‘The men are mustering cattle while the women are cooking the food.’

To summarize, ergative case is available in nonfinite clauses, absolutive case for intransitive subjects is not available (see footnote 9), whereas absolutive case for transitive objects is available. In addition, dative case is available for transitive and intransitive subjects.

The first point to notice about this pattern of data is that it reveals two distinct sources of absolutive case—one for intransitive subjects and a second for transitive objects, since the latter is licensed in nonfinite clauses whereas the former is not. Second, this pattern of data demonstrates that the source of absolutive case on intransitive subjects is dependent on finiteness, or at minimum dependent on a functional head above the verb phrase; the source of absolutive case on transitive objects, on the other hand, is independent of finiteness and functional projections above the verb phrase. This pattern is thus exactly as predicted on the present analysis whereby absolutive case on the intransitive subject is nominative case, whereas absolutive case on the transitive object is accusative case. On the alternative whereby absolutive case is uniformly nominative, the pattern is simply puzzling.

This pattern of data is also partially revealing of the source of ergative case in Warlpiri. Absolutive case on intransitive subjects and ergative case on transitive subjects must have a distinct source, since the former is licensed in nonfinite clauses and the latter is not. This rules out an alternative analysis whereby both ergative case and absolutive case on subjects are licensed by finite T, with the distinction in case marking being a purely morphological fact. See Bobaljik & Branigan (2002, this volume) for such an analysis of ergativity in Chukchi. More generally, ergative case licensing in Warlpiri must be accomplished independently of finite T and functional projections above the verb phrase, since it is available in gerundive nonfinite clauses. The proposed analysis, whereby ergative case is licensed within the verb phrase by a transitive light verb, meets these criteria.¹⁰

In conclusion, the case patterns in nonfinite clauses provide strong support for the proposed analysis, indicating distinct sources for absolutive case on intransitive subjects, ergative case on transitive subjects, and absolutive case on transitive objects. Furthermore, they reveal that only absolutive case on intransitive subjects is dependent on finiteness or functional projections above the verb phrase.

The following two sections identify two additional pieces of empirical evidence for the proposed analysis.

4.2 Person-based Split

This section provides an additional argument for two distinct sources for absolutive case in Warlpiri. The argument comes from a person-based ergative split in Warlpiri. The split consists of the pronouns *ngaju* ‘I’ and *nyuntu* ‘you (singular)’ when used as thematic subjects optionally appearing without ergative case marking:

- 21) Ngaju ka-rna yankirri nya-nyi.
 I.ABS PRESIMPF-1SG emu.ABS see-NPAST
 ‘I see an emu.’

This type of split is common in ergative languages (see for example Dixon 1994). What is interesting about the Warlpiri instantiation is the resulting case pattern. As can be observed in (21), the split results in two DPs bearing absolutive case in a single clause.

Person-based splits are often attributed to functional concerns—first and second person make ‘good’ thematic subjects and so do not need explicit marking as such, see Dixon (1994). Independent of any functional explanation, the split necessarily involves the failure of ergative case to be assigned to first and second person thematic subjects. Again, this may be encoded in the features of the light verb heads.¹¹

On the proposed analysis, nothing more need be said about the split. The object receives accusative case as usual, morphologically realized as absolutive because Warlpiri lacks an accusative case suffix. Finite T licenses nominative case on *ngaju/nyuntu*; nominative case licensing by finite T is always an option, as required for intransitive subjects. Again, since Warlpiri lacks a nominative case suffix, the nominative case on *ngaju/nyuntu* is morphologically realized in the unmarked absolutive case.

On an alternative analysis, whereby absolutive case is uniformly nominative case licensed by finite T (or C), the split must involve more than simply the failure of ergative case assignment to *ngaju/nyuntu*. In addition, and concomitantly, the higher functional projection that licenses absolutive case, finite T or C, must be able to license two occurrences of absolutive case, and this only when the thematic subject is *ngaju* or *nyuntu* and the lexical verb is transitive.¹²

I conclude that the person-based split is more plausibly explained on the present split absolutive analysis.

4.3 Dative Objects

In this section, I focus on the source of absolutive case on the transitive object. A clear feature of my proposal, whereby the object bears accusative case, in contrast to the alternative whereby the object bears nominative case, is that on my proposal the case borne by the object is determined within the verb phrase. Section 4.1 supported this aspect of the proposal by demonstrating that absolutive case on the object

remains available in gerundive nonfinite clauses. Here I provide additional evidence from selectional restrictions.

The majority of transitive verbs in Warlpiri take absolutive objects; a few examples of such verbs are given in (22).

- 22) *nyurlami* ‘knead’, *purami* ‘follow’, *purrami* ‘burn’, *turlkami* ‘pinch’, *kijirni* ‘throw’, *mardarni* ‘hold’, *parntarni* ‘withdraw from fire’, *pakarni* ‘hit’, *wardirni* ‘straighten’, *yilyiwirrpirrni* ‘slurp up’, *yurrrarni* ‘grind.’

However, a class of verbs in Warlpiri select for a dative object; examples of such verbs are provided in (23).¹³

- 23) *warrirni* ‘seek’, *kurriyi-mani* ‘entrap, ambush’, *riwarri-mani* ‘consume completely’, *wurru-mardarni* ‘ambush’, *ngurru-ngarni* ‘desire strongly’, *pun-pun-ngarrirni* ‘advise’, *lawa-nyanyi* ‘fail to see’, *wapal-nyanyi* ‘search for’, *yarnta-yarntarlu-nyanyi* ‘stare angrily at with an intent to harm’, *wapalpa-pangirni* ‘search by digging’, *pulka-pinyi* ‘praise’, *pututu-pinyi* ‘warn’, ...

These datives behave as objects rather than prepositional phrases with respect to the standard tests for objecthood in Warlpiri; thus they trigger object switch reference morphology and object agreement.¹⁴

- 24) Kurdu-ku kapu-rna-**rl** warri-rninji-ni pirnki-ngka
child-DAT FUTC-1SG-3DAT seek-ASSOC.MOTION-NPAST cave-LOC

warru-wapa-nja-**kurra**-ku
around-go-INFIN-**OBJ.C**-DAT

‘I’ll go and look for the child while he’s walking around in the cave.’

(Simpson 1991:327)

The analysis proposed here may be naturally extended to account for these data, by positing an additional light verb:

- 25) *v_{TRANS-DAT}*:
-assigns a θ -role to the thematic subject
-assigns inherent ergative case to the thematic subject
-licenses structural dative case
-has unvalued ϕ -features
-combines with a transitive verb from the class exemplified in (23)

On an analysis whereby absolutive case on the object is nominative, on the other hand, such data are problematic. First, the dative case cannot be licensed identically to the absolutive by finite T (or C); the verb is not in a selectional relationship with finite T (or C), and so cannot ensure that these objects are correctly assigned dative

rather than absolutive case. Second, if the dative case on objects were licensed by V or *v*, while the absolutive case on objects is licensed by finite T (or C), we would expect the two classes of objects to exhibit differences in behaviour. However, as noted above, both types of object trigger object switch reference morphology and object agreement. In addition, both retain their case marking in nonfinite clauses: objects that are dative in finite clauses must also appear as dative in nonfinite clauses, and objects that are absolutive in nonfinite clauses must also appear as absolutive in nonfinite clauses. Indeed, no distinction between the two classes of objects has been found.

To summarize, case on the dative objects must be determined in the verb phrase; since dative objects and absolutive objects behave identically, case on the absolutive objects must be determined in the verb phrase as well.

4.4 *Conclusions*

In this section, I have presented an analysis of the case licensing and agreement patterns in Warlpiri. I have argued for a split absolutive analysis, whereby absolutive case in Warlpiri is a morphological default, masking structural nominative and structure accusative cases, and ergative case is inherent case licensed by the light verb that introduces the external argument. I presented evidence from the case patterns in nonfinite clauses, as well as evidence from selectional restrictions and a person-based split. In the following section, I discuss the implications of the analysis of Warlpiri split ergativity developed in this paper to the issue of non-configurationality.

5. IMPLICATIONS FOR A NON-CONFIGURATIONAL ANALYSIS

In this section, I consider the implications of my analysis for Warlpiri non-configurationality. Most obviously, split ergativity in Warlpiri no longer need be considered indicative of a non-configurational syntax. However, we may push the point further. Not only is a configurational analysis adequate, the previous non-configurational analysis of Warlpiri split ergativity, Jelinek (1984), can be shown to be inadequate. According to Jelinek, the agreement clitics in Warlpiri, which show a nominative-accusative paradigm, are the true arguments of the predicate. The ergative-absolutive DPs, on the other hand, are optional adjuncts, which receive semantic case suffixes and are linked to the clitics through case compatibility rules. These rules are as follows (Jelinek 1984:53):¹⁵

- 26) a. NOM is compatible with ABS in an intransitive sentence, and with ERG in a transitive sentence.
- b. ACC is compatible with ABS in a transitive sentence, and with DAT in a ditransitive sentence (for first and second person clitics).
- c. DAT is compatible with DAT (for third person clitics).

One obvious difficulty with this approach is that nonfinite clauses have no agreement clitics to serve as the arguments of the verb and to license the adjuncts through the rules in (26). A number of possibilities arise. One is that the overt DPs are arguments of the verb in nonfinite clauses but not in finite clauses. This seems unattractive. Under such an account, in finite clauses nominative-accusative case would be licensed on arguments, whereas in nonfinite clauses ergative/dative-absolutive case would be licensed on arguments. Furthermore, the fact that overt DPs interpreted as the subject appear in ergative case and overt DPs interpreted as the object appear in absolutive case (or dative case, for the class of dative object verbs) in both finite and nonfinite clauses would be accidental.

More generally, Jelinek's claim that overt DPs are adjuncts in Warlpiri is designed to account for all four core non-configurational properties: split ergativity, free word order, discontinuous constituents, and free pro-drop of all arguments. By claiming that Warlpiri DPs are arguments in nonfinite clauses, Jelinek could thus account for the lack of discontinuous DPs and fixed word order in nonfinite clauses, but not the fact that pro-drop is still available:

- 27) Purra-nja-rla nga-rnu
 cook-INFIN-PRIORC eat-PAST
 'Having cooked (it), (he/she/it) ate (it).' (Laughren 1989:326)

The other option is that overt DPs remain adjuncts in nonfinite clauses, and that there are null clitics filling the argument positions. Regarding the core non-configurational properties, such a proposal would have the inverse problem from above. The lack of discontinuous DPs and the fixed word order would be surprising and unexplained. This is a general problem with any analysis of Warlpiri non-configurationality that links the core non-configurational properties to a single source: one of the four (pro-drop) is maintained in nonfinite clauses, two others (free word order and discontinuous constituents) are not, and the fourth is only partially maintained (split ergative case-agreement patterns); this clearly indicates that these must have a distinct source.¹⁶

Regarding the case patterns, the case compatibility rules for objects could be maintained, under the assumption that nonfinite clauses contained unpronounced clitics.

- 28) a. ACC is compatible with ABS in a transitive sentence, and with DAT in a ditransitive sentence (for first and second person clitics).
 b. DAT is compatible with DAT (for third person clitics).

However, in the rules for finite clauses, ergative case and absolutive case on the subject are licensed identically, by compatibility with nominative. Since in a nonfinite clause, absolutive is not licensed but ergative (optionally) is, we must posit a new rule, perhaps the following:

- 29) NOM¹⁷ is compatible with DAT in a nonfinite intransitive sentence, and with ERG or DAT in a nonfinite transitive sentence.

Although this rule is adequate, it leaves a number of issues unexplained. First, since the overt DPs are adjuncts rather than arguments, there seems to be no motivation for their case patterns to differ between finite and nonfinite clauses at all. Second, there is no explanation for why the case patterns would change in this manner, i.e. why the ergative may be (optionally) present on adjuncts in nonfinite clauses, whereas the absolutive may not. Recall that ergative and absolutive have the same status in Jelinek's theory, being cases reserved for adjuncts, and being licensed though compatibility with nominative. These considerations in fact point to an overall difficulty with Jelinek's system. The case compatibility rules are language specific, and unconstrained. Thus, although adequate rules may be written to describe the observed patterns, adequate rules could also be written to describe unattested alternative patterns (see Baker 1996:96 for a related point). The system does not seem to make any predictions about possible case-agreement patterns cross-linguistically. This is despite the fact that Jelinek intended her analysis to rule out a language with ergative-absolutive case marking on arguments and nominative-accusative case marking on adjuncts, in other words, nominative-accusative case marking and ergative-absolutive agreement. Such a pattern appears unattested cross-linguistically:

Both case marking and cross-referencing affixes can be accusative, or both can be ergative; but if there is a split, then bound forms will be accusative and free forms ergative (as in Murinypata)—never the other way around. (Dixon 1994:93)

However, Jelinek explicitly allows for languages with ergative-absolutive case marking on arguments (1984:6970) and for languages with nominative-accusative case marking on adjuncts (1984:6970). Furthermore, case compatibility rules relating the two are easily formulated:

- 30) a. ERG is compatible with NOM.
- b. ABS is compatible with NOM in an intransitive sentence, and with ACC in a transitive sentence.

Therefore, the desired restriction on possible case-agreement patterns is not made under her system.

Under the current proposal, the desired restriction does seem to be predicted. In order to derive an ergative-absolutive agreement pattern on the current system, the morphological realization of subject agreement must be sensitive to the case features of the DP; that is agreement with an ergative DP triggers a distinct set of agreement morphemes. Such morphological sensitivity is theoretically unremarkable, and is in fact empirically attested in Warlpiri. As mentioned in footnote 15, third person singular object agreement morphology is sensitive to the case borne by the object, appearing as $-\emptyset$ if the object is accusative, and as $-rla$ if the object is dative.¹⁸ Therefore, in a system with nominative-accusative case morphology, ergative

agreement cannot arise; in such a system, there is no case distinction between transitive and intransitive subjects for the agreement morphology to be sensitive to. Therefore, in a nominative-accusative case system, any agreement morphology must follow a nominative-accusative pattern.¹⁹

I conclude that the case-agreement patterns in Warlpiri split ergativity are most appropriately analysed in a configurational rather than non-configurational structure.²⁰

6. ERGATIVITY

The previous section demonstrated that the analysis of Warlpiri split ergativity presented here accounts for the Warlpiri pattern better than an account based on non-configurationality. An additional benefit of a configurational analysis of Warlpiri is that it allows Warlpiri to be placed within a broader typology of case-agreement systems. Also, by claiming that ergative case is inherent case borne by thematic subjects, we place ergativity within the broader context of non-nominative subjects. This section outlines a partial typology of ergative languages.

One manner in which ergative languages differ, which I do not discuss, is in the licensing conditions for ergative case. Thus, in some languages, the light verb assigns ergative case only to certain types of DPs (cf section 4.2 above); or only in the presence of certain tenses/aspects. These restrictions may be simply encoded in the relevant *v* heads, or may have a deeper explanation. In particular, the relationship between case assignment and aspect maybe synchronically related to *v*P-internal aspectual features, selectional restrictions, or, as argued by Laka (2002, this volume) for Basque, they may be the result of distinct syntactic structures among the aspectual constructions. (See also Ura 2002, this volume for discussion of aspect-based ergative splits.)

Perhaps the most significant point of variation among ergative languages, and among non-nominative subject languages in general, is in the behaviour of the object. In some non-nominative subject languages, most famously Icelandic, when the subject bears non-nominative case the object bears nominative case and triggers (partial) subject agreement (see *inter alia* Andrews 1976, Thráinsson 1979, Zaenenetal 1985, Sigurdsson 1989, 2002; Holmberg & Hróarsdóttir 2003). In other languages, when the subject bears non-nominative case the object bears accusative case and cannot trigger subject agreement.²¹

31) *Nominative object*

- | | | | |
|----|--------------------------------------|-------------------------------------|------------------|
| a. | Mér finnst tölvurnar | ljótar | Icelandic |
| | me.DAT find.PL the.computers.NOM | ugly.NOM | |
| | ‘I find the computers ugly.’ | (Holmberg & Hróarsdóttir 2003) | |
| b. | Kumaar-ukku cila ninaivu-kal-Ø | va-nt-ana | Tamil |
| | Kumar-DAT a.few memory-PL-NOM | come-PAST-3PL.N | |
| | ‘Kumar got some memories’ | (Ura 1996:355, citing Lehmann 1993) | |

- c. Siitaa-ko laRke pasand the **Hindi**
 Sita-DAT boys.NOM like be.PAST.MASC.PL
 ‘Sita likes the boys’ (Mahajan 1990:[7])

- d. Saše nrvajtsja knigi **Russian**
 Sasha.DAT like.3PL book.PL
 ‘Sasha likes books’ (Bailyn 1991:81)

32) *Accusative object*

- a. Kumaar-ukku raajaav-aip pitikk-um **Tamil**
 Kumar-DAT Raja-ACC like-3SG.N
 ‘Kumar likes Raja’ (Ura 1996:352, citing Lehmann 1993)
- b. Maer likar henda filmin **Faroese**
 me.DAT likes this film.ACC (*NOM)
 ‘I like this film’ (Woolford 2003, citing Barnes 1986:[12])

This variation is replicated in ergative languages. The class of languages in which objects bear accusative case when the subject is non-nominative, is instantiated by so called “three-way” case systems, showing ergative-nominative-accusative case pattern. Dixon (1994) catalogues a number of such systems, including Dyirbal, Kuku Yalanji, Ngiyambaa, Waga-Waga, Warrgamay, Yidin^y (all Australian), and Cashinawa (Panoan from Peru). Bittner (1994:1314) also discusses such languages, citing Nez Perce (see discussion below), Kham (West Tibetan), and Hindi (with human/specific-animate/definite-inanimate objects).

- 33) a. no-e nga-lay cyu:-na-ke-o **Kham**
 he-ERG me-ACC watch-1SG-PAST-3SG
 ‘He watched me’ (Bittner 1994:13, citing Watters 1973)
- b. niinaa-ne kuttoN-ko khariid-aa hai **Hindi**
 Nina-ERG dogs-ACC buy-PERF.SG.M be.3SG
 ‘Nina has bought the dogs’ (Bittner 1994:13)

Woolford (1997) considers the four-way case systems of Nez Perce, including a second case for objects. Subsequent work by Carnie & Cash (this volume) argues that Nez Perce is in fact a three-way system—ergative-nominative-accusative, but that like Turkish non-specific objects may fail to trigger agreement and appear unmarked for case, possibly due to pseudo-noun incorporation into the verb (see Massam 2001 on pseudo-noun incorporation in Niuean; pseudo-noun incorporation differs from standard noun incorporation in involving phrasal objects). Crucial for our purposes is that again we find ergative and accusative co-occurring and overtly marked with distinct morphemes.²²

- 34) a. Háama-**nm** péé-’wi-ye wewúkiye-**ne** **Nez Perce**
 man-ERG 3/3-shoot-ASP elk-ACC
 ‘The man shot the elk’
- cf. b. Háama hi-’wi-ye wewúkiye **Nez Perce**
 man 3-shoot-ASP elk
 ‘A man shot an elk’ (Carnie 2002)

Further, Woolford discusses the Australian language Thangu (based on the data in Schebeck 1976), which shows a three-way system with co-occurrence of ergative and accusative case marking:²³:

- 35) a. Yūlngu-Tu taykka-Na puyan **Thangu**
 man-ERG woman-ACC hit
 ‘Man hit woman’
- cf. b. Taykka rakkun^yTin **Thangu**
 woman (NOM) died
 ‘Woman died’ (Woolford 1997:214, citing Schebeck 1976)

Indeed, I have argued in this paper that Warlpiri instantiates a three-way case system, although accusative case is not morphologically marked.

One important point to take from these cases is that we cannot claim that ergative is equivalent to accusative case and posit a parameter whereby ergative-absolutive languages differ from nominative-accusative by (something akin to) directionality of accusative case assignment, contra Marantz (1991), Ura (2001), *inter alia*. Indeed, to maintain the ergative = accusative hypothesis would require both allowing multiple case checking of accusative in all languages that allow co-occurrence of ergative and accusative, and differential morphological realization of this accusative case based on the θ -role borne by the DP. I thus consider the hypothesis untenable.

The pattern of nominative objects in the presence of a non-nominative subject is also instantiated in the ergative languages. In Hindi, ergative subjects may co-occur with nominative objects, the nominative triggering subject agreement:

- 36) Raam-ne roTii khaayii thii. **Hindi**
 Ram-ERG bread.FEM.NOM eat.PERF.FEM be.PAST.FEM
 ‘Ram ate bread’ (Mahajan 1990:73)

Bittner (1994:14-16) also discusses ergative-nominative patterns, including Archi (Northeast Caucasian), in which the nominative object triggers subject agreement:²⁴

- 37) dija-mu xoalli b-ar-si b-I **Archi**
 father(I)-ERG bread(III) III.SG-bake-GER III.SG-AUX
 'Father is baking the bread' (Bittner 1994:15, citing Kibrik 1979)

The case borne on the object–nominative or accusative, is thus a crucial point of variation among ergative case systems.²⁵

A point in which ergative case systems perhaps do not vary is in the source of ergative case as inherent case licensed by a light verb.²⁶ To date, no convincing example of structural ergative case has been identified. One relevant attempt is Bobaljik (1993) (following earlier proposals by Levin & Massam 1985) who claims that ergative is nominative case. On this theory ergative-absolutive languages differ from nominative-accusative in which case is obligatorily assigned. In ergative-absolutive languages accusative case must be assigned, and so is borne by the argument of an intransitive, whereas in nominative-accusative languages nominative case must be assigned, and so is borne by the argument of an intransitive.

Bobaljik (1993) presents two arguments for this proposal. The first argument is based on data illustrating that the ergative c-commands the absolutive in Basque, Abkhaz (Caucasian), and Inuit languages. Section 3 above illustrated that Warlpiri fits this pattern as well. However, this type of evidence demonstrates only that the thematic subject raises to TP to satisfy the EPP feature of T; it is not revealing about the source of case licensing.

Bobaljik's second argument comes from nonfinite clauses in Inuit languages. By claiming that ergative case is nominative and absolutive case is accusative, he predicts that ergative case should be unavailable in nonfinite clauses, while absolutive case should be available. As confirmation of this prediction, he shows that ergative agreement disappears in nonfinite clauses, while absolutive agreement remains:

- 38) a. Miiqqat [Junna ikiu-ssa-llu-gu] niriursui-pput **WG**
 children Junna help-FUT-INFIN-3SG.ABS promise-IND.3PL.ABS
 'The children promised to help Junna.' (Bobaljik 1993:64)
- b. [taku-tlu-gu] tusâ-laut-tagâ **LI**
 see-INFIN-3SG.ABS hear-PAST-PART.1SG/3SG
 'While I saw it, I heard it.' (Johns & Smallwood 1999:[5a])

We should not conclude, however, that the prediction is thus borne out. Overt thematic subjects of nonfinite clauses do bear ergative case (Johns & Smallwood 1999).²⁷

- 39) a. **Alana-up** ujakâ atja-tlu-gu ani-vuk **LI**
Alana-ERG rock(ABS) carry-INFIN-3SG.ABS go.out-INDIC.3SG.ABS
 'While Alana was carrying the rock, she went out.'

- b. **arna-p** atisassat irrur-lu-gitirinarsur-puq **LI**
woman-ERG clothes wash-INFIN-3SG.ABS-INDIC.3SG.ABS
 ‘While the woman was washing the clothes...’
 (Johns & Smallwood 1999:[8a,b])

Furthermore, Johns & Smallwood observe that ergative agreement is not simply unavailable in Inuit languages, but rather the languages differ as to the extent of ergative agreement allowed (some indeed disallowing it altogether). For example, West Greenlandic allows 1/2 person ergative agreement with 3 person absolutive (Fortescue 1984), and Labrador Inuttut allows 3 person reflexive ergative agreement with the full range of absolutive arguments.

- 40) atja-tlu-**ni**-nga kata-vânga **LI**
 carry-INFIN-3SG.ERG.REFLEX-1SG drop-INDIC.3SG.ERG/1SG
 ‘While he was carrying me, he dropped me.’
 (Johns & Smallwood 1999:[9])

Therefore, Inuit nonfinite clauses do not provide evidence for equating ergative with nominative. Indeed, these clauses seem particularly unrevealing about case source. All cases are available, including absolutive case on the intransitive subject:

- 41) [arnaq irinarsur-lu-ni] atisassat
 [woman(ABS) sing-INFIN-3SG.REFL] clothes(ABS)
 irrur-p-a-i
 wash-INDIC-TRANS-3SG.ERG/3PL.ABS

‘While the woman was singing, she washed the clothes’ (Bittner 1994:18)

These clauses in Inuit thus appear to allow nominative case assignment independent of finite tense, in this way patterning with European Portuguese:

- 42) será difícil [eles aprovarem a proposta] **EP**
 be.FUT difficult they approve.INFIN.3PL the proposal
 ‘It will be difficult for them to approve the proposal’ (Raposo 1987)

In sum, ergative case systems form part of a larger typological class of non-nominative subject constructions. Apart from the specific case of variation in the conditions of availability of inherent ergative case, variation among ergative languages is to be traced to variation among the larger class of non-nominative subject constructions, for example whether the object bears nominative or accusative case, and variation in the morphological realization of case and agreement found in all languages. Other macroparametric variation specific to ergative languages is not posited.

7. CONCLUSIONS

In this paper I analysed Warlpiri split ergativity in terms of structural case-agreement mechanisms. First, I demonstrated that the grammatical subject position in Warlpiri is occupied by the highest argument in the verb phrase, regardless of case. Next, I developed and motivated an analysis whereby ergative case in Warlpiri is inherent case licensed by a light verb, whereas absolutive case is a morphological default, corresponding to structural nominative (on intransitive subjects), and structural accusative (on transitive objects). I discussed that the proposed analysis compares favourably to the non-configurational approach of Jelinek (1984). Finally, I considered the broader typology of ergative languages, arguing that they form a subset of non-nominative subject languages. I noted that Warlpiri exemplifies the case of the object bearing accusative case in the presence of a non-nominative subject, patterning with the nominative-accusative language Faroese in this sense, in contrast with languages in which the object bears nominative case in the presence of a non-nominative subject. Further research is needed to determine how many other ergative-absolutive languages are actually hidden ergative-nominative-accusative languages like Warlpiri.

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¹The issue is in fact broader, arising for non-nominative subject constructions in general; see for example Andrews 1976, Thráinsson 1979, Zaenen et al 1985, Sigurdsson 1989, 2002; Holmberg & Hróarsdóttir 2003, and references therein.

²The reflexive/reciprocal agreement clitic *-nyanu* is used in (4b) to force the coreferent interpretation. If the clitic is replaced by the 3rd dual object agreement clitic *-jana*, the sentence remains ungrammatical on the coreferent interpretation, but becomes grammatical on a noncoreferent interpretation. As is, (4b) is grammatical on the irrelevant interpretation whereby *purlka-jarra* "two old men" is a secondary predicate rather than the object—"They (two) see each other as two old men", cf (3b) above.

³Note that in (4b) the ergative *pro* is pronominal rather than anaphoric, as indicated by the 3rd dual subject agreement *-pala* rather than the reflexive/reciprocal agreement *-nyanu*. Therefore Condition A is not implicated. See (2b) and footnote 2.

⁴For some speakers, *-karra* has an additional use whereby it co-occurs with *-rlarni*, to mark the nonfinite clause as contemporaneous with the matrix clause. This use is illustrated in (i):

- i) Manu yangka wurna-rlangu yinga-lu ya-n imunga-puru-rlarni-karra-ju.
or go-NPAST that.one travel-ALSO REL.C-3PL night-during-OBV.C-while-TOP
'Or like when people travel to another place while it's still dark.'

This suggests an alternative analysis for these speakers whereby the subject control marker is \emptyset , *-karra* being used to signal contemporaneity in subject control environments as well. The object control *-kurra* thus would be a portemanteau morpheme signaling both contemporaneity and object control. This more precise picture does not affect the argument in the text, in that we still find a morphological distinction between subject control, (\emptyset), object control, (*-kurra*), and the default (*-rlarni*) for adjunct control or no control. For simplicity's sake, I continue to refer to *-karra* as the subject control marker. I would like to thank Mary Laughren for pointing out this additional use of *-karra*.

⁵Indeed, I do not have clear data bearing on the issue of the default syntactic case in Warlpiri.

⁶Massam 2002, this volume, argues that in Niuean absolutive case in clauses with ergative subjects is accusative case (in her terms an "internal case"); in addition she suggests that absolutive may be a default case in Niuean. Although she also considers absolutive in intransitive clauses to be an "internal case", it is natural from our perspective to consider Niuean a possible split absolutive language like Warlpiri.

⁷The tree in (13) ignores irrelevant details, including the possible head-final nature of the Warlpiri verb phrase. The tree also assumes that Warlpiri has a hierarchical verb phrase; see Legate 2002b for supporting evidence.

⁸Morpho-syntactic mechanisms of second position clitic placement in Warlpiri compatible with the current analysis are developed in Legate 2004.

⁹The existence of rare examples in which an intransitive subject does bear absolutive case may be due to speech error, or may be related to the status of absolutive as the default case, see above.

- ¹⁶See Legate 2002b for configurational analyses of the non-configurational properties of Warlpiri.
- ¹⁷Alternatively, the null clitic could bear dative rather than nominative morphology, given the above discussion that nonfinite clauses are gerunds, thus nominalized, and that the subjects of nominals may be dative. However, this alternative raises difficulties when taken with the case compatibility rules for objects, which also involve a dative clitic. Thus, ergative case should optionally appear on dative objects in nonfinite clauses, contrary to fact. In addition, the discussion in the text largely carries over to this option.
- ¹⁸This pattern does not refute my previous claim that dative DPs behave as objects with respect to object agreement. Note that object agreement morphology is indeed triggered by third person singular datives, although it is morphologically distinct from third person singular accusatives. In addition, first and second person dative objects trigger identical agreement morphology to first and second person accusative objects.
- ¹⁹This raises a question regarding the analysis of languages with ergative-absolutive agreement, but no overt case marking. One possibility of course is inherent ergative case unexpressed morphophonologically, although this would require empirical support. Another possibility is that such systems in fact do not exist. Woolford (1999) argues that the type of ergative agreement patterns found in languages with no overt case marking are observationally distinct from true ergative agreement patterns, and have a distinct syntactic source, which is independent of case. See that work for details.
- ²⁰Notice that the criticisms leveled in the text apply to any account whereby the split ergative pattern in Warlpiri is taken as evidence for a non-configurational syntactic structure, in which the agreement morphemes are arguments and the overt DPs are adjuncts. On an alternative non-configurational analysis whereby the arguments are null pros, and the agreement is true agreement (see Baker 1996, although Baker explicitly does not extend his analysis to Warlpiri-style non-configurationality), the analysis of split ergativity proposed here could carry over, on the assumption that the DP adjuncts

must agree with the null pros in number and case. On such an alternative, the split ergative pattern in Warlpiri would not provide evidence for the non-configurational nature of Warlpiri. Rather, the pattern would be neutral between the two approaches, with the decision between the two theories made elsewhere. Arguments against such a non-configurational analysis of Warlpiri are provided in Legate 2002b.

²¹In many such languages, the dative-marked subject also fails to trigger subject agreement, the verb surfacing with default agreement marking. On the parallel with ergative systems, discussed below, we expect to also see languages in which inherent dative subjects trigger subject agreement. One candidate is Udi, in which “absolute”, ergative, and dative subjects all trigger subject agreement. (One complication is the existence of two subject agreement paradigms, “direct” and “inversion”; the choice between these is dependent on the lexical verb. All verbs that allow dative subjects use the “inversion” paradigm, regardless of whether the subject bears ergative or dative case.) See Crysmann (2000), who cites Harris (1984).

²²I use “accusative” to refer to the overtly marked case used on specific objects, which trigger agreement; Woolford refers to this as “objective”, reserving “accusative” for the unmarked pseudo-noun incorporated objects.

²³In the Thangu data I represent the velar nasal as *ng*; *T* and *N* should be marked dental.

²⁴Bittner also includes Warlpiri, which we have seen is more appropriately analysed as ergative--nominative-accusative, and Enga (Papuan), in which the ergative triggers subject agreement. Further research is needed to determine if Enga is truly ergative-nominative, or rather disguised ergative--nominative-accusative.

²⁵Another often cited point of variation among ergative systems is whether the language is “syntactically ergative” or not, that is whether the intransitive subject (S) and transitive object (O) pattern together for syntactic processes. Dyirbal is the most cited exemplar of a syntactically ergative language, in that S and O pattern together for relativization and deletion under clause coordination (interestingly, regardless of case marking). It should not be thus concluded, however, that S and O occupy the grammatical subject position in Dyirbal. Imperative deletion targets A and S, and A acts as a subject for control (see e.g. Bittner & Hale 1996:533). It may be that the phenomena for which S and O pattern together are sensitive to topichood in the language rather than subjecthood. I leave this question unresolved.

²⁶This claim is potentially partially definitional. Consider the class of languages Dixon (1994) refers to as “split S” languages, in which the subjects of one class of intransitive predicates (perhaps unergatives) bear case marking identical to transitive subjects, while subjects of the other class of intransitive predicates (perhaps unaccusatives) bear case marking identical to transitive objects. This pattern has two clear potential analyses. The first is that inherent ergative case is assigned to the thematic subject of unergatives, either because of an underlying transitive structure for unergatives (see e.g. Hale & Keyser 1993, Laka 1993), or because inherent ergative case is independent of transitivity in these languages. The second is that structural accusative case is not dependent on the presence of a thematic subject, so that the object of unaccusatives also receives accusative case. The first would thus be appropriately labeled an ergative language, whereas the second would not.

²⁷Bobaljik (1993:64) disregards data from case marking of DPs on the following grounds:

Inuit having generally free word order and rampant pro-drop, we will focus primarily on the agreement morphology, assuming that the relations expressed by this morphology are the essential relations of the clause. In this I am obviously learning towards the view that Inuit is typologically akin to “polysynthetic” languages such as Warlpiri, (Jelinek 1984) or Mohawk (Baker 1996). This view would maintain that the agreement morphemes are themselves the arguments of the verb ..., or that they license a null pro in the argument position.

However, simply ignoring the case data because the language is polysynthetic (or nonconfigurational) is inappropriate—if the data are to be accounted for by the polysynthetic nature of the language, this must be explained. Jelinek’s (1984) theory is inadequate (see section 5). Baker does not offer a theory of case marking on overt DPs since Mohawk does not show any case marking, a fact that Baker considers necessary.

DERIVING SPLIT ERGATIVITY IN THE PROGRESSIVE*

The Case of Basque

1. INTRODUCTION: THE PHENOMENON, THE ACCOUNT AND SOME CONSEQUENCES.

This paper explores the relationship between Aspect and case in ergative grammars, and the syntactic structure of sentences with a progressive meaning. It suggests an explanation for aspectually driven split-ergativity phenomena, based on an account of progressive sentences in Basque. The contrast between canonical transitive sentences and their progressive equivalents found in Basque is shown in (1), where glosses are deliberately vague for the moment:

- 1) a. emakume-a-k ogi-a jaten du¹
 woman-DET-E bread-DET eating has
 ‘The woman eats (the) bread’
- b. emakume-a ogi-a jaten ari da
 woman-DET bread-DET eating PROG is
 ‘The woman is eating (the) bread’

As we can see by comparing (1a) and (1b), a change to progressive aspect induces a change in case-assignment, and a change of inflected auxiliary. (1a) is an example of an imperfective transitive sentence, where the external argument *emakumea* ‘the woman’ carries ergative case (morpheme *-k*). The internal argument *ogia* ‘(the) bread’ receives absolutive case, marked zero². In contrast, (1b) has no ergative-marked argument, despite the fact that there is an event of eating, whose agent is the woman. The progressive marker *ari* has an effect on the case assigned to the subject: it does not show ergative case; it is assigned absolutive/zero case.

The pair in (1) is reminiscent of similar phenomena in other ergative languages, where aspectual variations induce changes in the case assigned to the transitive

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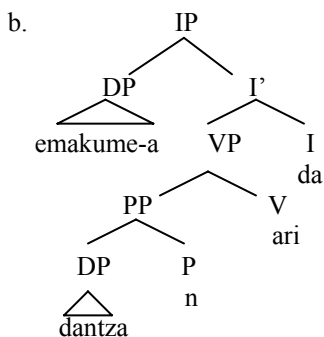
subject, a phenomenon that has come to be known as “split ergativity” (Dixon 1994). The account provided here argues that these progressive forms pattern as expected in an ergative grammar, once their syntactic structure is considered in detail. In this respect, the account derives an apparent case of split ergativity without resort to the notion of a “case split”. That is, without *necessarily* assuming that a change to an accusative pattern has taken place.

The *ari*-progressive illustrated in (1b) has drawn the attention of numerous linguists; it has been claimed to be an antipassive by several authors (Postal (1977), Alonso-Cortés (2002) among others), and it has been argued to be a progressive auxiliary (Holmer (1999)). I follow the traditional view, also assumed by Levin (1983) and expressed by Hualde & Ortiz de Urbina (1987) in the following way: “*ari*, we will argue, is a main verb with its own auxiliary which may take a nominalized clause as its complement” (p.428).

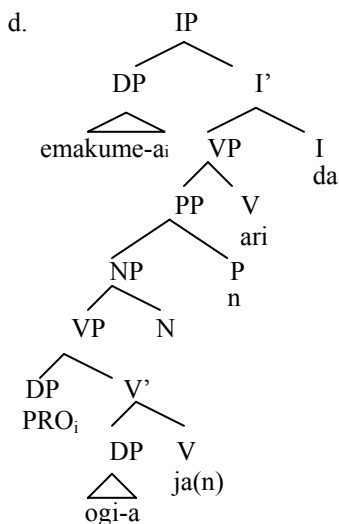
I argue that this biclausal structure of the progressive, for which there is ample evidence in the language, is not a language-particular quirk of Basque grammar, but rather, fits within a very widespread characteristic of human language: progressive is often realized in syntax in the form of a locative predication. The pervasiveness of this grammatical isomorphism between progressive and spatial location has been clearly documented in the typological overview undertaken by Bybee, Perkins & Pagliuca (1994).

The contrast in (1) results from the fact that the *ari* progressive involves a biclausal syntactic structure: the main verb *ari* ‘to be engaged’ takes a locative PP (‘in something’). This locative PP can take either a nominal complement (2a,b), or a nominalized clause (2c,d), in both cases yielding a progressive:

- 2) a. emakume-a dantza-n ari da
 woman-DET dance-LOC engaged is
 ‘the woman is engaged in dance’ (the woman is dancing)



- c. emakume-a ogi-a ja-te-n ari da
 woman-DET bread-DET eat-NOM-LOC engaged is
 ‘the woman is (engaged in) eating the bread’

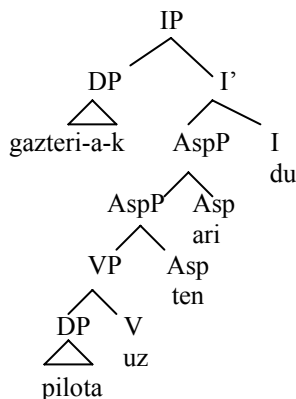


The structure in (2d), in turn, *necessarily* yields the assignment of absolutive case to the main clause's subject *emakumea* 'the woman', regardless of the nature of the verb embedded in the nominalized clause. What determines the case borne by the subject of the main clause is the fact that there is only one argument to case-mark in that clause, namely *emakumea* 'the woman', and this argument receives a non-agentive, theme theta-role, from the verb *ari* 'to be engaged'. The verb embedded in the nominalized clause, *jan* 'eat' is not involved in assigning either case or thematic role to the subject of the main clause, and this is why ergative case does not surface on the main clause's subject. If this approach is correct, then, progressive does not cause a 'split' in the Case system; rather, the case-contrast in (1) follows, given the syntactic structure underlying it (2d).

Section 6. argues that there is a process of grammaticalization currently taking place in eastern varieties of Basque, the result of which is that *ari* is no longer a member of the lexical category Verb, but has become a functional category within the inflectional domain, i.e., an aspectual head (Asp). In these varieties, then, the structure of the progressive is no longer biclausal (3b), and ergative case surfaces in the case of transitive verbs, as shown in (3a):

- 3) a. gazteri-a-k pilota uz-ten ari du
 youth-DET-E ball-DET leave-IMPF PROG has
 'the youth is leaving the ball'
 ('young people are leaving jai-alai playing')

b.



In (3a), the subject *gazteria* ‘the youth’ is the agent of the verb *utzi* (*uz-*) ‘to leave’, and that is why it displays ergative case (*-k*). In these eastern varieties, *ari* is no longer a Verb, but an aspectual element (3b), and therefore the structure contains a single clause, like in (1a).

Mateu & Amadas (1999) argue that the lexical-conceptual structure (LCS) of the progressive is universally unaccusative, because it is universally locative. If the progressive illustrated in (1a) and (2) is an instance of a locative structure, then the evidence presented in this paper supports their claim that progressives are locatives at LCS. However, as we see in the contrast between (1b) and (3a), progressives can display different properties. I account for this contrast by assuming that progressives are not *necessarily* locative in syntax. Grammars may vary in this respect, some resorting to locative/unaccusative syntactic structures for the expression of progressive, others not³.

2. ASPECT-DRIVEN “SPLIT ERGATIVITY”

It has frequently been stated in the literature that ergative systems have a great tendency to display “splits” in their ergativity. That is, most ergative languages appear to be mixed systems, involving varying amounts of ergative and accusative phenomena within their grammars: “Many languages have a mixture of ergative and accusative systems, with these splits being conditioned by the semantic nature of any one or more of various types of obligatory sentence components – verb, noun phrases, aspect/tense/mood – or by the distinction between main and subordinate clauses.” (Dixon 1994:2).

The term “split ergativity” is thus often used as a label for case-alternations in languages otherwise displaying ergative morphology. What must be determined by linguistic theory is whether this label, (a) captures some uniform grammatical phenomenon present in (many) ergative languages, whereby the grammar switches to an accusative mode under certain conditions; or (b) is a cover descriptive term for a set of different but limited grammatical phenomena that yield the observed changes in case assignment without switching to an accusative system. These two

possibilities are not mutually exclusive; we could find that some “split ergativity” phenomena genuinely fall in (a), while others fall in (b). Here, I argue that the case-alternation at stake is an instance of (b).

Focusing our attention on aspectually driven case-splits⁴, it is surely a very significant fact for linguistic theory that they conform to a general pattern, making it plausible that there is a uniform source for the phenomenon. The general pattern we find is: “... if a split is conditioned by tense or aspect, the ergative marking is *always* found either in past tense or in perfective aspect.” (Dixon 1994:99) This pattern is pervasive, and replicated language after language. The pattern of variation follows one direction, but the point at which different grammars display a change in case assignment varies. A classical example of an aspect-driven split is provided by Hindi (from Mahajan (1990)):

- 4) a. Raam-ne roTii khaayii thii
 Raam-E bread/FEM eat-PERF.FEM was.FEM
 ‘Raam had eaten bread’
- b. Raam roTii khaataa tha
 Raam/MASC bread eat-IMPF.MASC was.MASC
 ‘Raam was eating bread’

In (4a), with perfective aspect, the external argument *Raam*, a masculine name, is marked ergative, and the internal argument *roTii* ‘bread’ bears zero case. The inflected copula agrees in gender with the internal argument. This pattern contrasts with (4b), imperfective, where the external argument *Raam* is assigned zero case, and agrees with the inflected copula in gender. Notice that the nominal morphology of the internal argument, the object, in (4b) has not changed to a distinct accusative form, and neither has the subject of (4b) surfaced in a distinct nominative form. They bear no overt case ending. While Hindi grammar makes the cutting point between perfective and imperfective, Basque grammar makes a similar cutting point between imperfective and progressive.

Let us review the Basque data in order to see the similarities:

- 5) a. emakume-a-k ogi-ak ja-n d-it-u
 woman-DET-E bread-DET.PL eat-PRF 3A-PL-have3E
 ‘The woman has eaten (the) breads.’
- b. emakume-a-k ogi-ak ja-ten d-it-u
 woman-DET-E bread-DET.PL eat-IMPF 3A-PL-have3E
 ‘The woman eats (the) breads.’
- c. emakume-a ogi-ak ja-ten ari da
 woman-DET bread-DET.PL eat-IMPF prog 3A.is
 ‘The woman is eating (the) breads.’

Both perfectives and imperfectives (5a,b) pattern in a similar fashion in Basque, and they pattern like Hindi perfectives⁵: the external argument is assigned ergative case; the internal argument bears zero case and it agrees with Inflection. Hindi and Basque differ slightly with respect to agreement: Basque displays agreement both with ergative and absolutive, whereas Hindi displays agreement only with absolutive; there is no gender agreement involved in Basque, while Hindi arguments agree in gender. However, if we consider when agreement with the internal argument surfaces and when it does not, the pattern is similar in both grammars. In contrast, the progressive in (5c) patterns like the Hindi imperfective: the external argument does not carry ergative, but zero case, and it agrees with Inflection; the internal argument does not overtly change its case morphology, but it no longer agrees with Inflection.

Besides the imperfective and perfective values shown in the previous examples, there is one more value that the aspectual morpheme attached to the verb can have in Basque: irrealis⁶. As we can see in (6), the irrealis behaves like the imperfective and perfective regarding case and agreement, and thus they all contrast in the same way with the progressive:

- 6) a. emakume-a-k ogi-a ja-ngo du
 woman-DET-E bread- DET eat-IRR 3A/have/3E
 ‘The woman will eat (the) bread’
- b. emakume-a-k ogi-ak ja-ngo d-it-u
 woman- DET-E bread-DET.PL eat- IRR 3A-PL-have/3 E
 ‘the woman will eat the breads.’

Therefore, the significant contrast we are concerned with is that of the progressive versus all other aspectual values.

The phenomena induced by the “split” are correlated, but where the “split” occurs is subject to variation across languages, as to whether it involves imperfectives as in Hindi, or whether it involves only progressives but not imperfectives, as in Basque. The questions that I would like to address regarding aspectually driven changes in case assignment are: a) Why is it that there are no languages showing a nominative pattern in the perfective aspect and an ergative pattern in other aspectual values? That is, why is it that perfective aspect does not display case splits? b) What determines why imperfective aspect can trigger a split in some languages but not in others?, and c) Why is there no uniformity in aspect driven splits? In order to address these questions, we will start by looking at the syntactic structure of the *ari* progressive in detail.

3. THE SYNTACTIC STRUCTURE OF THE *ARI* PROGRESSIVE.3.1 *The ari-progressive is not an antipassive.*

The distinct case pattern induced by the *ari* progressive has long been noted in the literature; in particular, (a) the fact that with transitive verbs, the external argument surfaces in absolutive, (b) the fact that the inflected auxiliary is not transitive (*ukan* ‘have’), but intransitive (*izan* ‘be’), and (c) the fact that it agrees only with the external argument. The *ari* progressive has been treated as an antipassive (Postal 1977, Alonso-Cortés 2002, among others), even though there is no “demotion” of the internal argument, a defining property of antipassives. Notice that in all the examples, it is only the external argument that undergoes a change in case morphology, not the internal one⁷. Also, as argued by Hualde & Ortiz de Urbina (1987), the use of *ari* is not restricted to transitive verbs, as would be expected of an antipassive morpheme. As the example in (7b) shows, *ari* is used for every kind of progressive, regardless of the valency of the verb:

- 7) a. emakume-a hurbil-tzen da
 woman-DET get/near-IMPF is
 ‘The woman gets closer.’
- b. emakume-a hurbil-tze-n ari da
 woman-DET get/near-NOM-LOC engaged is
 ‘The woman is (engaged in) getting closer.’

Another piece of data that is a problem for the antipassive account⁸ is that *ari* can take a PP that does not contain a clause (Hualde & Ortiz de Urbina (1987)). We have seen an example in (2a,b), and another one is offered in (8):

- 8) emakume-a lan-ean ari da
 woman-DET work-in engaged is
 ‘The woman is engaged in work’

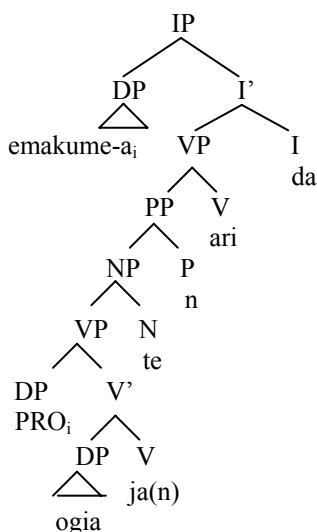
In (8), there is no verb besides *ari*, and the complement it takes is a locative PP, whose complement is the noun *lan* ‘work’; this example has the structure depicted in (2b). An account of *ari* in terms of antipassive is thus forced to assume that (7) and (8) are fundamentally different from (1b), (2c) and (5c), whereas the hypothesis that *ari* is a verb selecting a PP can provide a single, unified explanation for all these cases, and others that we will see below.

3.2 *Traditional accounts of ari: a verb selecting a postpositional phrase.*

The crucial distinction in Basque between progressive on the one hand, and perfectives/imperfectives/irrealis on the other, is the fact that the former involves two clauses and the latter one. This basic insight is by no means new; in fact, the

idea that *ari* is a verb whose meaning is akin to ‘to be engaged’ is the predominant one among all traditional grammarians describing the language. Michelena (1987), the most comprehensive dictionary of the language available so far, translates *ari* as ‘*ocuparse, estar en actividad*’ (to be engaged, to be busy). This vast compilation also offers an extensive list of linguists and grammarians, all of whom have considered *ari* to be a verb⁹. The hypothesis that *ari* is a verb which can take as a complement a non-finite clause, was assumed by Levin (1983)¹⁰ in her study of ergativity in Basque, and it is also assumed in the description of the language undertaken by the Academy of the Basque Language, *Euskaltzaindia* (1987). The biclausal structure of the *ari* progressive is developed in Hualde & Ortiz de Urbina (1987), who argue and show in detail some of the grammatical consequences that follow from this analysis. Thus, the structure of a progressive form is essentially as shown in (9):

9)



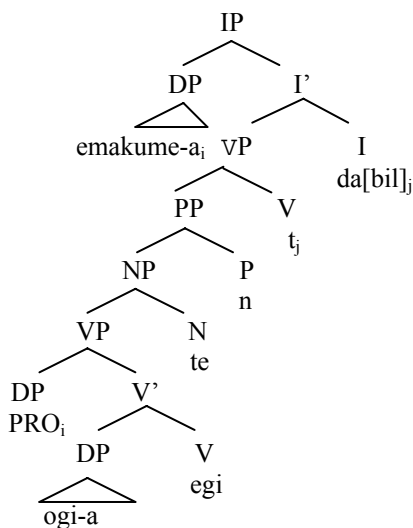
In what follows, I provide various kinds of evidence in support of the structure in (9). The first piece of evidence involves other progressive forms in Basque. The *ari* progressive is used in central and eastern dialects of the language (Laffite (1979), Lafon (1943)), while western varieties of the language have progressives of the type illustrated in (10)¹¹:

- 10) a. emakume-a ogi-a egi-te-n da-bil
 woman-DET bread-DET make-NOM-LOC 3Abe-about
 ‘the woman is (about) making the bread’
- b. emakume-a ogi-a ja-te-n da-go
 woman-DET bread-DET eat-NOM-LOC 3Abe-location
 ‘the woman is (stays) eating bread’

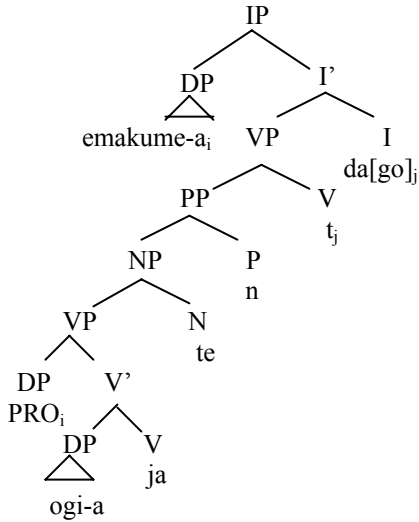
Both (10a) and (10b) denote progressive aspect. They differ from the *ari* construction in the choice of main verb: in (10a), the inflected verb is *dabil*, the third person singular present form of *ibili* ‘to walk, to be about’, the choice of verb indicates that the activity the woman is engaged in involves a certain amount of movement on her part. In (10b), the choice of inflected verb is *dago*, third person singular present form of *egon*, the locative copula, and the choice of verb indicates that the activity the woman is engaged in does not involve a significant amount of movement on her part¹².

This western-type progressive has not generated much discussion in the literature, perhaps because the main verbs involved, *ibili* ‘to walk, to be about’ and *egon* ‘stative be’ are very patently unaccusative verbs that select locative PPs. The syntactic structure of the progressive forms in (10) is shown in (11):

11) a.



b.



The structures in (11) are identical to the structure of the *ari* progressive depicted in (2d); the difference is found in the verb that heads the main clause, *ibili* ‘to be about’ in the case of (11a) and *egon* ‘to be/stay’ in the case of (11b). Both these verbs in turn raise to Inflection, unlike *ari*, because both *ibili/egon* belong to the class of “synthetic” verbs in Basque, that is, the set of verbs that raise to Inflection and form a single morphological unit with it (see Laka 1993a, 1996, and Aldai 2002 for details and different views about inflectional morphology in Basque).

These two verbs, *ibili* ‘to be about’ and *egon* ‘to be/stay’ can also take PPs containing non-clausal complements, that is, PPs whose complements do not involve nominalized clauses:

- 12) a. emakume-a [ppBilbo-n] da-bil
 woman-DET [ppBilbao-LOC] is-about
 ‘the woman is about in Bilbao’
- b. emakume-a [ppBilbo-n] da-go
 woman-DET [ppBilbao-LOC] is-stay
 ‘the woman is in Bilbao’

Similarly, *ari* can take as a complement a non-clausal locative PP, as we saw in (2a, 8). To further illustrate the verbal nature of *ari*, we can see in (13) that the adjunct selected by *ari* need not be a locative:

- 13) a. emakume-a [ppoihu-ka] ari da
 woman-DET scream-ITERATIVE engaged is
 Literally: ‘The woman is engaged in a repeated scream’

- b. emakumea [_{PP} negarr-ez] ari da
 woman-DET cry-INST engaged is
 Literally: 'The woman is engaged in a cry'

In (13a), the phrase *oihu-ka* contains the noun *oihu* 'scream' and the postposition *-ka*, which denotes repetition, and in (13b) the phrase *negarr-ez* is a PP headed by the instrumental Postposition *-z* whose complement is the Noun *negar* 'cry'.¹³ The examples provided in (13) do not exhaust the possibilities for PPs selected by the verb *ari* (see Laffite (1979), Hualde & Ortiz de Urbina (1987))¹⁴.

Another piece of evidence that supports the claim that *ari* is a verb is the fact that it can be nominalized by means of the morpheme *-tze*, a process that is only available to verbs in Basque¹⁵:

- 14) pro [_{DP}[_{NP} emakume-a lan-ean ari] tze] a] ona da
 pro woman-DET work-LOC engage- NOM-DET good is
 'the woman's engaging in work is good'

In (14), the clause headed by *ari* has been nominalized by the morpheme *-tze*, which is followed by the determiner *-a*. The possibility of nominalization distinguishes the class of verbs from the class of modals, auxiliaries and other verbal particles in Basque. Thus, for instance, the modal *ahal* 'can' cannot be nominalized because it is not a verb:

- 15) a. *pro [_{NP}[emakume-a izan ahal]tze]a ona da
 pro woman-DET be can-NOM-DET good is
 (*it is good to can be a woman)
- b. pro [_{NP}[emakume-a izan ahal iza] te] a ona da
 pro woman-DET be can be- NOM-DET good is
 'It is good being able to be a woman'

In (15a), an attempt to nominalize the modal *ahal* 'can' results in ungrammaticality (similarly to attempts to make infinitival forms of English *can*, **to can*), but once the modal is followed by a true Verb, such as *izan* 'to be', the nominalization is successful. The contrast between (14) and (15a) shows that *ari* does not behave like modals and other verbal particles with respect to nominalizations, behaving once again like a verb.¹⁶

The verb *ari* can display the various aspectual markers that verbs can carry in Basque, as we see in (16), where the aspectual morphemes have been highlighted¹⁷:

- 16) a. emakume-a_i [_{PP}PRO_i ogi-a ja-te-n] ari da
 woman-DET_i [PRO_i bread-DET eat-NOM-LOC] engage is
 'the woman is (engaged in) eating bread'

- b. emakume-a_i [_{pp}PRO_i ogi-a ja-te-n] ari-**tu** da
 woman-DET_i PRO_i bread-DET eat-NOM-LOC engage-PERF is
 ‘the woman has been (engaged in) eating bread’
- c. emakume-a_i [_{pp}PRO_i ogi-a ja-te-n] ari-**tzen** da
 woman-DET_i PRO_i bread-DET eat-NOM-LOC engage-IMPF is
 ‘the woman is habitually (engaged in) eating bread’
- d. emakume-a_i [_{pp}PRO_i ogi-a ja-te-n] ari-**ko** da
 woman-DET PRO bread-DET eat-NOM-LOC engage-IRR is
 ‘the woman will be (engaged in) eating bread’

(16a) shows the verb *ari* in its unmarked form, without any overt aspectual morpheme attached to it. But since *ari* is a verb, forms such as (16b,c,d) are also grammatical. In (16b), we find the form *ari-tu*, composed of the verb *ari* and the perfective marker *-tu*, thus yielding a perfective reading. In (16c), the verb *ari* takes the imperfective morpheme *-tzen*, yielding a habitual reading¹⁸. Finally, in (16d), we see the verb *ari* taking the irrealis marker, *-ko*, and yielding a future reading. In brief, we have seen that *ari* displays all the properties that can be expected of a Verb, thus supporting the hypothesis that it *is* a Verb, an idea that has been consistently present in traditional descriptions of the language.

3.3 *Progressives do not become monoclausal in syntax*

Having shown that *ari* is a verb, whose meaning is akin to ‘to be engaged’, and having argued that progressive constructions involving *ari* are constituted by two clauses, I now consider the claim made in Hualde & Ortiz de Urbina (1987) that this biclausal structure undergoes a process of restructuring, as a result of which it is rendered monoclausal. I argue that this restructuring process does not take place in syntax.

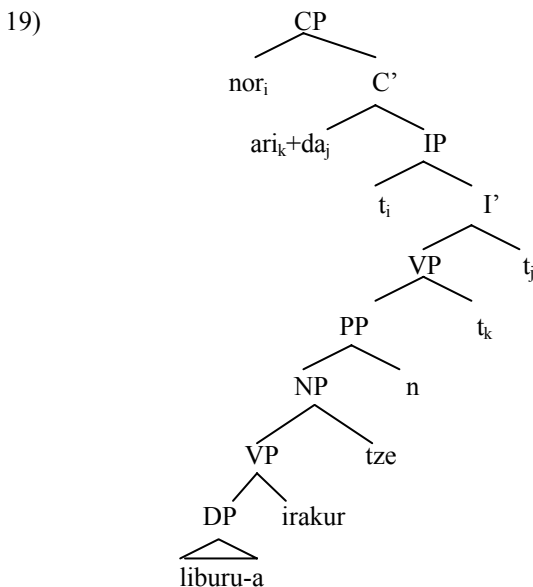
One of the central claims made in Hualde & Ortiz de Urbina (1987) is that “some interesting peculiarities of *ari* with sentential complements can only be accounted for by assuming that a restructuring process has taken place”. The outcome of this restructuring is schematized in (17):

- 17) a. NP_i s[PRO_i VP[...V]] ari
 b. NP VP[...V' [V ari]] (Hualde & Ortiz de Urbina 1987:442)

The main motive for this proposal is the behaviour of *ari* progressives under Wh-movement¹⁹. According to Hualde & Ortiz de Urbina (1987), “*ari* constructions deviate from the normal pattern found in other verbs with inessive [locative] nominalized complements”. This pattern is illustrated in (18):

- 18) a. *nor irakurtzen ari da liburu-a?*
 who reading engaged is book-DET
 ‘who is reading the book?’
- b. *nor ari da liburu-a irakurtzen?*
 who engaged is book-DET reading
 ‘who is reading the book?’ (Hualde & Ortiz de Urbina, 1987)

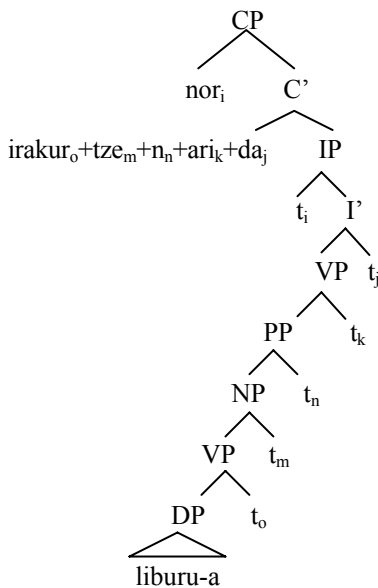
In (18a), the Wh-element *nor* precedes the embedded nominalized verb, whereas in (18b), it precedes the main verb *ari*. The authors follow the account of Wh-movement proposed in Ortiz de Urbina (1989): the WH-constituent moves to Spec-CP, and the verb+auxiliary move to a head-initial CP. Given this account of Wh-movement, the word-order in example (18a) can only be accounted for if it is assumed, as Hualde & Ortiz de Urbina (1987) do, that the embedded verb *irakur*, plus the nominalizer *-tze* and the locative P *-n* have undergone restructuring, amalgamating with the verb *ari*, “with [*irakurtzen ari*] as one single complex verb” (p.445). However, (18b) cannot be accounted for this way, despite the fact that (18b) is the preferred word order. As the authors acknowledge: “matrix subject wh-words tend to be placed immediately preceding the matrix verb *ari* itself” (Hualde & Ortiz de Urbina 1987:445). It would appear that the only way to derive (18b) is if restructuring does not take place, as in the exact derivation in (19):



The derivation of (18b) is left open, however: “Agreement facts seem to indicate that in the latter type of questions, restructuring has also taken place, but further research should be conducted on the distribution of the two alternatives”. If we pursue the idea that restructuring does not take place in either (18a) or (18b), and

therefore that the structures remain bi-clausal throughout the derivation, we can easily derive (18b) as in (19). And we can still derive the marked word-order in (18a), by assuming that a derivation like (20) can also take place:

20)

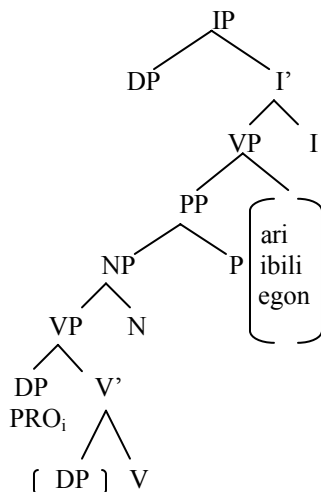


The derivation in (20) results from the application of successive head-movement. This account does not change the biclausal structure of the progressive, that is, we need not argue that there is one clause where there were originally two. This alternative analysis can also explain why (18b), where only the minimally necessary movements have taken place, is the preferred word order for Wh-questions in *ari*-progressives.

3.4 The structure of progressives: *ari*, *ibili*, *egon*

To summarize so far, I have argued that the syntactic structure of progressives in Basque is as follows²⁰:

21)



This structure contains two verbs, heading two clauses. The main clause can be headed by either of three verbs, *ari* ‘to be engaged’, *ibili* ‘to be about’ or *egon* ‘to be/stay’. These verbs select a Postpositional Phrase, which is often headed by the locative Postposition, but other Postpositions can appear as well. The Postposition in turn takes as a complement a Noun Phrase, which, in the case of the progressive, consists of a nominalized clause headed by a verb, transitive or intransitive. This verb assigns thematic roles to its argument(s), and absolutive case to its internal argument (if any), while the embedded subject is empty, controlled by the subject of the matrix clause, and requires no case. In the main clause, the verb, which is unaccusative in all of the three choices, assigns a theme theta-role to its argument and it also assigns absolutive case to it²¹. No process of restructuring is required to account for the case pattern, and marked word-orders can be derived by successive head-movement. The same structure accounts for all other uses of these verbs beyond the progressive readings, when the PPs they select do not contain a nominalized clause.

4. ON THE SYNTACTIC NATURE OF PROGRESSIVES.

I have argued that the syntactic structure of the various progressive forms in Basque is homomorphic with a locative structure. The homomorphism of spatial and temporal relations in human language is a pervasive and well known phenomenon, and the locative-like structure of the progressive is just one instance of this widespread homomorphism. Bybee, Perkins & Pagliuca (1994) report that “The majority of progressive forms in our database derive from expressions involving locative elements (...) The locative notion may be expressed either in the verbal auxiliary employed or in the use of postpositions or prepositions indicating location...” (pp.129-130). What the ultimate reason for this homomorphism might be is

undoubtedly a worthy issue to pursue, but it is a question I will not address here, beyond showing that it manifests itself clearly in the grammar of modern Basque²².

Demirdache & Uribe-etxebarria (1997) and Mateu & Amadas (1999) have independently argued for grammatical architectures where temporal relations are implemented by the same means as spatial relations. Specifically, Mateu & Amadas (1999) argue that “the progressive construction must be regarded as implying an unaccusative structure over that structure assigned to the verb in the lexicon”. Among the examples of grammars where the identification of a locative structure is manifest, besides Basque, they present the following, from typologically distinct languages:

- | | |
|--|-----------------------|
| 22) a. Ik ben aan het`t werken
I am LOC the working
‘I am working’ | Dutch |
| b. Mae Rhiannon yn cysgu
is Rhiannon in sleep
‘Rhiannon is sleeping’ | Welsh |
| c. He is on hunting | Middle English |

(Borsley & Roberts, 1996)

Thus, the claim that the syntactic structure of progressives in Basque is the one in (21) is not a marked, exceptional property of this grammar, and it is not directly related to its ergativity. This syntactic structure happens to manifest itself in many other human languages, regardless of their case system.

Demirdache & Uribe-etxebarria (1997) and Mateu & Amadas (1999), despite the differences in their accounts, share the view that the proposed spatio/temporal structures are language universals. In the case of Demirdache & Uribe-etxebarria (1997), for instance, it is argued that imperfective aspect is universally conveyed by means of a locative structure. However, in the case of Basque grammar, the lack of contrast between perfective and imperfective (5a,b) remains to be accounted for, and similarly the contrast between imperfective and progressive (5b,c) finds no direct explanation. Also, the contrast between Basque and Hindi imperfective, for instance, could not be due to the different structure of the imperfective in the two grammars. Similarly, claiming that progressives are universally unaccusatives, as argued for by Mateu & Amadas (1999) predicts that progressives should always display a locative-like syntax, a prediction that is not borne out, as I argue in the following section.

4.1 *Grammaticalization at work: ari as a functional category*

Biclausal, locative-like unaccusative structures cannot be the only way to construct progressive aspect in the syntax of natural languages. If this were the case, progressive structures should always yield absolutive subjects in all varieties of Basque regardless the valency of the embedded verb. In what follows, I consider data from eastern varieties of Basque that depart from the biclausal pattern in (21). I

argue that they are generated as monoclausal structures, which accounts for their distinctive properties.

As shown in (3), there are varieties of Basque where *ari* progressives contain ergative-marked subjects. One more example of this kind of progressive is shown in (23):

- 23) *ezpata-k eta gose-a-k gu xahu-tzen ari gaitu*
 sword-E and hunger-the-E us-A destroy-IMPF PROG 1pl E -have-3pl A
 ‘the sword and the hunger are destroying us’
 (Duvoisin, in Michelena 1989)

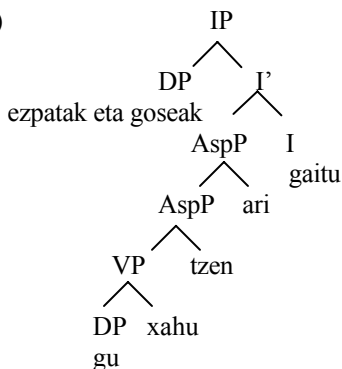
In this usage of *ari* progressive, the case borne by the subject varies depending on the valency of the “embedded” verb, that is, depending on the valency of the verb that we have argued sits in the nominalized clause in our previous account. In (23), the ergative case borne by the subject *ezpatak eta goseak* ‘the sword and the hunger’, is determined by the fact that the verb *xahu(tu)* ‘to destroy, to empty’ is diadic. This fact is clearly seen when we look at sentences with monadic verbs, like (24):

- 24) a. *gu hurbil-tzen ari gara*
 we-A get/close-IMPF PROG 3plA-be
 ‘we are getting close’
 b. **gu-k hurbil-tzen ari gara*
 we-E get/close-IMPF PROG 3plA-be
 (we are getting close)

In the eastern varieties of the language where (23) is grammatical, (24b) is never grammatical, while (24a) always is. The overt difference between this progressive and the more extended one studied in the preceding sections lies precisely in the case-pattern displayed: in the extended type of progressive the case of the subject is always absolutive, regardless of the valency of the embedded verb (due to the fact that it is precisely the unaccusative verb *ari* that assigns this case), but in this eastern type, the case borne by the subject is exclusively determined by the valency of this verb.

I argue that the crucial structural difference between the “standard” progressives, shown in (21), and the eastern progressives illustrated in (23) is the fact that the eastern progressive is not biclausal. The element *ari* has undergone a process of *grammaticalization*, that is, it has become a member of a functional category. It is no longer a verb, and thus it cannot build a clause; instead it has become an aspectual head. In turn, the lexical verb is not a nominalized form with a locative postposition attached as in (21), but rather it is the imperfective value of the verb, as in (5b). This arrangement of categories generates the structure shown in (25)²³:

25)



In this structure, the only verb is *xahu(tu)* 'to destroy, to empty'; it assigns a theme theta role to the internal argument, *gu* 'us', and an agent theta-role to the external argument *ezpatak eta goseak* 'the sword and the hunger'. In an ergative system, this configuration necessarily yields ergative-marking for the agent and absolutive-marking for the theme, regardless of the particular proposal we subscribe to (Bobaljik (1992), Laka (1993), Bittner & Hale (1996), Nash (1995), Manning (1996), among others), because it constitutes an example of a canonical transitive structure.

These monoclausal progressives, which belong to some of the eastern varieties of the language, are relatively recent according to Michelena (1987): "En el resto de los casos, *ari* con auxiliar transitivo es, al parecer, un fenómeno moderno, que sólo podemos documentar desde la 2ª mitad del s. XIX, si bien con ejemplos en casi todos los autores bajo-navarros y labortanos de la época.²⁴" More descriptive work needs to be undertaken to determine the extent of this grammaticalized progressive, but it appears to have expanded during the XXth century into central-southern varieties as well.

The change of category undergone by the form *ari* follows the general pattern we find in grammaticalization, in the sense that the change of category is from lexical to functional. This pattern of linguistic change is described in parallel terms already by Kurylowicz (1964):

Grammaticalization consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one. (page 69).

In the case that concerns us here, the change in category involved is a verb becoming an Aspectual morpheme, a type of change well described for Creole languages (Holm 1988).

This process of grammaticalization of the *ari* progressive, which in some eastern varieties has changed from a locative, unaccusative biclausal structure into a monoclausal structure containing a progressive functional element, illustrates the fact that natural languages *can* convey aspectual and temporal relations by means of

locative structures, but do not need to. Aspectual and temporal relations can be conveyed by means other than locative-like structures.

A similar process appears to have taken place earlier in the history of the language. Consider the imperfective aspect marker shown in (26):

- 26) emakume-a-k ogi-a ja-ten du
 woman-DET-E bread-DET eat-IMPF has
 'The woman eats the bread'

Many authors have noted (Trask 1997, Demirdache & Uribe-etxebarria 1997, Aldai 2002 among others) the similarity between the modern imperfective marker *-t(z)en* and a nominalization with a locative marker attached, like the ones discussed in this paper and illustrated in (21). There is general agreement that in modern Basque the imperfective marker is a single morpheme, because its behaviour is clearly distinct from the behaviour of true nominalizations with locative endings; some distinguishing properties of the two have in fact been discussed in this paper. It appears extremely plausible that older stages of the language had truly locative-like imperfectives, which have been reanalyzed and grammaticalized as containing a single aspectual marker, thus turning what was originally a biclausal structure, like the one displayed by progressives (21), into a monoclausal structure, as it is today. Note that the contrast between (2c) and (3), that is, biclausal and monoclausal progressives, replicates this plausible change in the imperfective at earlier stages of the grammar of Basque.

5. SOME CONCLUSIONS.

The apparent "case split" we find in *ari*-progressives in Basque is the result of their biclausal syntactic structure: *ari* is an unaccusative verb, and it heads the main clause, which contains a nominalized clause. The fact that *ari* is unaccusative explains why its argument receives absolutive case. In fact, these progressive sentences are not instances of agents being assigned absolutive or nominative case; rather, they are themes, and as such they are assigned *absolutive*. In this sense, then, the so-called *ari*-construction is not an instance of split ergativity in Basque.

The syntactic structure proposed here for progressive sentences in Basque is not unique; locative structures like the one studied here are pervasive in human grammars (Bybee, Perkins & Pagliuca 1994). However, this is not the only syntactic architecture that human languages can employ in order to express progressive aspect. In particular, I have argued that there has been a process of grammaticalization in eastern varieties of Basque, as a result of which *ari* has turned into a functional element, an aspectual head. As a consequence of this change of category, *ari*-progressives in these varieties are not biclausal: *ari* occupies an aspectual projection, and the verb heading the VP determines the case assigned to its arguments in the usual way: absolutive is assigned to themes, and ergative is assigned to agents.

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¹ The following abbreviations are used in the glosses: *det* = determiner, *det_{pl}* = plural determiner, *E* = ergative, *A* = absolutive, *prog* = progressive, *loc* = locative, *nom* = nominalizer, *impf* = imperfect, *prf* = perfective, *irr* = irrealis.

² For descriptions and accounts of case-marking in Basque, see Ortiz de Urbina (1986), Laka (1996), (2000), Hualde & Ortiz de Urbina (2003) among others. As for the ambiguity induced by the determiner *a* in objects, see Laka (1993), Artiagoitia (2002): the morpheme *a* can yield definite or indefinite readings in theme positions, a matter I will be ignoring throughout the present paper.

³ Variation of this sort, in turn, can be due to two (independent) factors: (i) Variation at the level of lexical-conceptual structure: some grammars may have locative LCS for the progressive, others not. Variation at the level of LCS is found elsewhere, for instance in the contrast between *sonrojarse/arrojarse* (unaccusatives) and *blush* (unergative), first observed by Rosen (1984); and (ii) Variation in syntax: even if progressives are locative at LCS, conflation or incorporation processes in the mapping from LCS to syntax may yield syntactic structures lacking locative properties. A parallel case is found in unergative predicates, claimed to be universally transitive at LCS (Hale & Keyser 1993). In some grammars this transitive LCS is mapped as a transitive structure in syntax (Basque for instance, Laka 1993b), whereas in others, there is a Noun-incorporation process that yields an intransitive structure in syntax.

⁴ As for other "split ergativity" phenomena that have been discussed in Basque, the interested reader can look at Ortiz de Urbina (1989), Laka (1993a) and Aldai (2002) for the morphology of the inflected auxiliary, and to Levin (1983), Laka (1993a) Fernández (1996) and Holmer (1999) for various case patterns in intransitive/unaccusative predicates.

⁵ To be more precise, we refer here to ergative varieties of Hindi (Cf. Mahajan (1990)).

⁶ Some descriptions of the language refer to the irrealis marker as “future”. However, this marker is not only used to form the future; it is also necessary to form some consequences of conditionals, such as (i), and modals such as (ii):

- (i) zu ba-nintz, ogi-a ja-ngo nuke
 you if-I/were, bread-det eat-irr I/would
 ‘if I were you, I would eat bread’
- (ii) honezkero, emakumeak ogi-a ja-ngo zuen
 by now, woman-det-E bread-det eat-irr had
 ‘the woman would (probably) have eaten the bread by now’

For details of aspectual marking in Basque, see Laka (1996), Hualde & Ortiz de Urbina (2003), Alcázar (2002).

⁷ Alonso-Cortés (2002) offers examples where the internal argument is assigned genitive case, as evidence of the demotion to oblique of the absolutive object:

- (i) ogi-a-ren gizon-a jaten ari da
 bread-det-Gen man-det eating prog is
 ‘the man is engaged eating (from) the bread’

(Alonso Cortés 2002:p.303)

It should be noted that this example is ungrammatical in all varieties, given this word order. As is well known (Laffitte 1962), the possibility of assigning genitive to the object is restricted to eastern dialects, and is independent from the *ari* progressive, as shown in (ii):

- (ii) nire ogi-a-ren egi-te-ra Paris-era noa
 my bread-det-gen make-nom-to Paris-to 1s-go
 ‘I go to Paris to make my bread’

The *ari* progressive is widely used in varieties of the language where sentences like (ii) are ungrammatical. Therefore, genitive-marking of the object and the *ari* progressive are distinct phenomena.

⁸ This also a problem for the hypothesis that *ari* is an auxiliary verb, as argued in Holmer (1999)

⁹ Among them we find for instance: “*Andar o estar haciendo algo, lo que fuere*” (to be busy doing something, whatever that is) Larramendi (1745); “*exprime l’idée d’une action continue mais déterminée; le mot qui le accompagne indique de quel genre est cette action. Le verbe français “occuper” donne une idée de la signification de ce mot, mais il n’en red pas tout le sens.*” Inchauspe (1858).

¹⁰ “Another type of construction involving a non-finite clausal complement is the *ari izan* construction. This construction is found with the verbs *ari* (used to express the progressive), *hasi* “to begin” *jardun* “to be occupied with”. These verbs select non-finite clausal complements which have the verb in the *-tzen* form” (Levin 1983:353)

¹¹ It should be noted that eastern varieties of Basque also use the verbs *ibili* “to be about” and *egon* “to be/stay” to denote ongoing events like (10a,b). For instance, Laffitte (1979) describes the three types of constructions (*ari*, *ibili*, and *egon*) right next to each other (Laffitte 1979:351), and he also considers *ari* to be a verb, which he translates into French as “*agir*”.

¹² Both unaccusatives, *ibili* and *egon* are employed in Basque to denote location in space and time, and thus also to denote stage level predication, as opposed to individual level predication, as shown in (i) versus (ii):

- (i) emakumea nekatuta dago/dabil
 woman-det tired 3A/be-stay/be-about
 ‘the woman is tired’

-
- (ii) emakumea indartsua da
 woman-det strong 3A/be
 'the woman is strong'

As for the choice between *ibili* 'be about' and *egon* 'be stative' in progressives, the amount of movement considered significant varies depending on the speaker's assessment.

¹³ The epenthetic vowel *e* is inserted to avoid the /tʒ/ sequence in word final position.

¹⁴ Parallel to the choice of selected PP in the case of non-clausal adjuncts, the *ari* progressive can also select different Postpositions for the case of nominalized clauses, as shown by Laffite (1979:351):

- (i) sendatzen ari da, *il est en train de guérir* (locative PP)
 (ii) sendatze**a**ri ari da, *il approche de la guérison* (dative PP)
 (iii) haren sendatze**rat** ari da, *il s'efforce de le guérir* (allative PP)

For the purposes of this paper, we concentrate on the locative case, but note that the same account extends to these cases, which, in turn, give further support for the view that *ari* is an unaccusative verb.

¹⁵ For further details on nominalized clauses in Basque, see Zabala & Odriozola (1996).

¹⁶ For further details about modals and particles, and how they depart from *ari* with respect to their grammatical behaviour, see Hualde & Ortiz de Urbina (1987).

¹⁷ See Michelena (1987) *Diccionario General Vasco-Orotariko Euskal Hiztegia* for further examples and illustrations of these aspectual variations.

¹⁸ For details of imperfective and habitual aspect in Basque verbal morphology, see Alcazar (2002), (2003).

¹⁹ Hualde & Ortiz de Urbina (1987) take both questions and focus constructions to be instances of overt Wh-movement, in the spirit of Ortiz de Urbina's (1989) analysis. For a different view that takes Wh-movement and focus to be different processes, see Laka & Uriagereka (1986). For the purposes of this argument, I concentrate on questions, since my objective is to show that restructuring is not required to account for the data at stake.

²⁰ Some details of the derivation have been simplified, for instance the structure of Inflection itself (Laka 1993a), or the generation of the subject within the VP, which is also simplified for ease of exposition.

²¹ There is another verb that denotes 'engagement in activity', namely *ihardun/jardun*, which we are not discussing here, although its syntactic structure is identical to the one depicted in (21). This verb does not appear to be unaccusative in all varieties (Michelena 1987); in some, it seems to assign an agentive theta-role to its argument, always yielding ergative case-marking, as shown in (i). In other varieties, it seems to assign a theme theta-role, always yielding absolutive (ii):

- (i) emakume-a-k lanea-n jardun du (ii) emakume-a jolasea-n jardun da
 woman-det-E work-loc engage has woman-det play-loc engage is
 'the woman has engaged in work' 'the woman has engaged in play'

²² Aldai (2002) argues persuasively that earlier stages of the language have resorted to similar grammatical/morphological isomorphism in the realm of verbal inflection.

²³ Once again, the syntactic structure omits some detail, the interested reader can turn to Laka (1993), (2000) for further details about the structure of Inflection, agreement relations etc.

²⁴ "In the rest of cases, *ari* with transitive auxiliary is, it seems, a modern phenomenon, which we can only document from the 2nd half of the XIXth century onwards, although with examples in all Low Navarrese and Labourdin authors from the period."

ON ‘ERGATIVITY’ IN HALKOMELEM SALISH^{*}

And How to Split and Derive It

1. INTRODUCTION

From looking at a number of different languages which are often classified as “ergative/absolutive”, it becomes clear that “ergativity” is not a uniform phenomenon. This suggests that “ergativity” cannot be reduced to a single “ergativity parameter” provided by universal grammar. Rather, the picture which emerges is that what we call “ergativity” is a derived phenomenon. Consequently we expect that it can be derived in various (language-specific) ways. The main purpose of this paper is to derive the split ergative properties of Halkomelem Salish from independent morpho-syntactic properties of the language (Johns 1992).

2. ERGATIVITY IN HALKOMELEM

Halkomelem¹ shows properties we are used to labelling as “ergative” in that only transitive but not intransitive subjects trigger subject-verb agreement (see Hukari 1976a, Gerdts 1980, 1988 and Jelinek and Demers 1983 among others).

- 1) a. q’ó:y-t-es te Strang te sqelá:w
 kill-TRANS-3S DET Strang DET beaver
 ‘Strang killed the beaver.’
- b. í:mex te Strang
 walking DET Strang
 ‘Strang is walking.’

In contrast, English patterns like a “nominative/accusative” language in that both, transitive and intransitive subjects, trigger subject-verb agreement:

- 2) a. John kisses Mary.
- b. John laughs.

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The standard (principles and parameters) way to account for instances of language variation, like the one we are dealing with here, is to postulate a set of invariant language universals, which are given by universal grammar in addition to a set of parameters which need to be set during language acquisition (Chomsky 1981, and subsequent work). Given the above difference between English and Halkomelem, it is tempting to propose a general “ergativity” parameter, which would be responsible for “ergativity” across languages (see for example Bobaljik 1993, Ndayiragije 2000 among others for such a view). Let us assume for the moment that this is the correct analysis while abstracting away from the exact nature of this parameter. This view is summarized below:

- 3) *Ergativity Parameter*: [+/- ergative]
 English: *no* Halkomelem: *yes*

One might add a functional motivation behind such a parameter along the following lines. With transitive predicates, it is necessary to encode the difference between subjects and objects. In order to do so, there are two options: languages can treat either transitive subjects as the marked form (=ergative) or transitive objects (=accusative). Consequently, intransitive subjects (which do not induce an ambiguity) will pattern with the unmarked (rather than the marked) form (cf. Dixon 1994, Payne 1997).

3. PROBLEMS WITH AN ERGATIVITY PARAMETER

In this section, I will point out several empirical and theoretical problems the parameter approach to ergativity faces. First, it should become clear from reading through this volume that languages differ as to “how ergative” they are, whether the “ergative” is a higher or lower case, and in whether, or how they split the “ergative” pattern. This in itself suggests that “ergativity” is not a uniform phenomenon. However, in this paper I will focus on language internal evidence from Halkomelem suggesting that there is no ergativity parameter.

3.1 *Split ergativity*

It is a well-known fact that languages are almost never purely ergative (see for example Dixon 1994). This is true for Halkomelem as well. In particular, we find two kinds of “split ergativity,” a person split, and a split according to agreement type (indicative vs. subjunctive). We start by discussing the person split.

Consider the data in 4-6 (data from Galloway 1980: 126). We observe that with 1st and 2nd person arguments, Halkomelem shows a “nominative/accusative” pattern, whereby transitive and intransitive subjects pattern together, as in (4) and (5), differentiating them from the transitive objects seen in (6):

- 4) a. máy-t-tsel
help-TRANS-1SG.S
'I help him.'
- b. máy-t-tset
help-TRANS-1PL.S
'We help him.'
- c. máy-t-chexw
help-TRANS-2SG.S
'You help him.'
- d. máy-t-chap
help-TRANS-2PL.S
'You_{pl} help him.'
- 5) a. yó:ys-tsel
work-1SG.S
'I work.'
- b. yó:ys-tset
work-1PL.S
'We work.'
- c. yó:ys-chexw
work-2SG.S
'You work.'
- d. yó:ys-chap
work-2PL.S
'You_{pl} work.'
- 6) a. may-th-óx-es
help-TRANS-1SG.O-3S
'He helps me.'
- b. may-t-óxw-es
help-TRANS-1PL.O-3S
'He helps us.'
- c. may-th-óme-tsel
help-TRANS-2SG.O-1SG.S
'I help you.'

- What is crucial for the present purposes is the patterning of 3rd person, which differs in that subjunctive agreement shows a nominative/accusative pattern, whereas indicative agreement shows an ergative/absolutive pattern. This is summarized in the following table.

	<i>A</i>	<i>S</i>	<i>O</i>
3 rd person subjunctive		-s	∅
3 rd person indicative	-es		∅

10) Ergativity Parameter: [+/- ergative]

In addition to the complications for the ergativity parameter introduced by split ergativity, the subjunctive pattern gives rise to a paradox. Observe that in subjunctive clauses, in addition to the subjunctive agreement on the auxiliary, there is yet another ending on the verb, which is restricted to transitive environments (see 8c). This suggests that one and the same argument can simultaneously trigger both nominative and ergative agreement as indicated below on the basis of the example in (8c) repeated below for convenience:

implies that we cannot postulate a “construction-specific” parameter, and consequently I conclude that there cannot be an “ergativity parameter”. This is consistent with Johns’ (1992) conclusion that:

Ergativity in Inuktitut has been shown to be a superficial description of the outcome of universal principles interacting with language specific lexical properties. It follows that there may be more than one set of features that can produce the constellation of facts that we label ergativity. (Johns 1992: p.82)

In other words, “ergativity” is not to be treated as a primitive of UG (parameters) but rather as a derived property which can differ across languages (cf. also Laka this volume). The goal of this paper is to investigate the specific set of features of Halkomelem that produces the constellation of facts we label “split ergativity”.

4. DERIVING ERGATIVITY IN HALKOMELEM

Assuming that there cannot be an ergativity parameter means that we have to find another way to account for the properties of Halkomelem that we refer to as “ergative properties”. That is, we have to provide an answer to the question as to why in Halkomelem transitive subjects behave differently from intransitive subjects. In this section, I will elaborate the proposal regarding the derivation of ergativity in Halkomelem. In particular, I will argue that in Halkomelem, transitive structures differ syntactically from intransitive structures including unaccusative and unergative intransitives. This difference between transitives and intransitives, whereby transitivity is defined strictly morphologically, is due to differences in argument-projection. As a consequence of this claim, it will follow that transitive subjects occupy a different syntactic position from intransitive subjects and thus show an “ergative” pattern.

4.1 *Two ways of introducing external arguments in Halkomelem Salish*

In Halkomelem, all roots are unaccusative (see Davis 1997). This means that all external arguments must be introduced by a predicate different from the root. I propose that there are two ways to introduce the external argument: either lexically or syntactically. This is summarized below:

- 14) a. Unaccusative verbs: [VP V<TH> THEME]
 b. Unergative verbs:
 i) lexical structure: [[V<TH>] [suffix <AG>]V]V<AG>
 ii) syntactic structure: [VP V<AG> AGENT]
 c. Transitive verbs: [VP AGENT [v' v <AG> [VP V<TH> THEME]]]

If the external argument is introduced in the lexicon, then (by means of the right hand head rule) only the argument of the suffix, i.e. the external argument can be realized since only the argument of the head is available. This derives unergative

predicates. As a consequence, “external arguments” of unergative verbs are introduced VP-internally, and thus unergatives in Halkomelem are not concealed transitives. Furthermore, we do not expect any syntactic differences between unaccusative and unergative verbs in Halkomelem (see Wiltschko 2001a for evidence in Halkomelem and Massam, this volume for a similar result in Niuean).

If the external argument is introduced syntactically, then the argument-introducing suffix acts as a syntactic head (v) and consequently both the internal as well as the external argument can project. This derives transitive predicates (see Kratzer 1994).

As a consequence of introducing the “external” argument in two different ways, the distinction between transitive subjects and intransitive subjects is derived; that is, transitive subjects occupy SpecvP, which crucially differs from the VP-internal position both intransitive subjects and transitive objects occupy.

4.2 *Evidence from the distribution of (in)transitive suffixes*

Evidence for the analysis in (14) comes from the distribution of transitive and intransitive suffixes. We observe that all unaccusatives are roots (15), whereas unergatives are derived by a set of suffixes (-ém, -áls) (16). The latter differ from the set of suffixes deriving transitive predicates (17):

15) Roots (=unaccusatives)

péqw	‘broken in two’	tás	‘get hit, mashed’
xélh	‘hurt’	íkw	‘lost’
tl’éxw	‘covered’	qíq	‘apprehend, caught’
qwés	‘fall into water’	q’óy	‘die’

(Galloway 1993: 246)

16) Lexically derived external arguments (=unergative intransitives)

qw’él-ém	‘barbecue’	lhek’w’-áls	‘hook’
líy-ém	‘laugh’	peh-áls	‘to blow (of the wind)’
hás-em	‘sneeze’		

(Galloway 1993: 250f.)

17) Syntactically derived external arguments (transitives)

tl’xw-et	‘cover so/sthg’	íkw’-et	‘throw away sthg.’
qws-et	‘push so/sthg into water’	q’óy-t	‘kill s.o./s.t.’
tás-et	‘mash sthg (berries)’		

(Galloway 1993: 247f.)

Of course, this predicts the existence of minimal pairs where we get either transitives (18) or unergatives (19) derived from unaccusatives:

- 18) Unaccusative predicates: Transitive predicates:
- | | | | |
|--------------------|-------------------|-----------------------|---------------------------------|
| q'óy | 'die' | q'óy-t | 'kill sthg/so.' |
| íkw' | 'lost' | íkw'-et | 'throw sthg away, discard sthg' |
| tás | 'get hit, mashed' | tás-et | 'mash sthg (berries)' |
| qw'és | 'fall into water' | qw'sé-t | 'push sthg./so. into water' |
| tl'é _{xw} | 'covered' | tl' _{xw} é-t | 'cover so/sthg' |
| _x élh | 'hurt' | _x lhé-t | 'beat so. up' (lit. 'hurt so.') |
| _{xw} ét | 'tear' | _{xw} té-t | 'tear sthg' |
- (Galloway 1993: 245-247)
- 19) Unaccusative predicates: Unergative predicates:
- | | | | |
|--------|-------------------|-------------------------|----------------------|
| lhíkw' | 'hooked, gaffed' | lhek _w '-áls | 'hook (e.g. fish)' |
| yéqw | 'burn' | yeqw-áls | 'perform a burning' |
| líw | 'be inside sthg.' | lewíl-ém | 'go into an opening' |
| qw'él | 'cooked; ripe' | qw'él-ém | 'barbecue, roast' |
- (Galloway 1993: 251f.)

In sum, in Halkomelem all unergative and transitive predicates are necessarily suffixed.⁴

4.3 Evidence from selectional restrictions: Agent Control

Evidence to the effect that both the suffixes deriving unergative and transitive predicates do indeed introduce the external argument comes from the fact that they impose certain selectional restrictions on the agent, i.e. the external argument. Consider first two different kinds of transitive suffixes. As shown below, the two transitive suffixes differ with respect to the degree of control the agent has over the event:

- 20) $-t$ = full control $-l(exw)$ = limited/no control⁵
- | | | | |
|--------------------|------------------------------|-----------------------|-----------------------------|
| _x lhé-t | 'to hurt someone on purpose' | _x élh-lexw | 'to hurt s.o. accidentally' |
| kw'áts-et | 'to look at s.t./s.o.' | kw'éts-lexw | 'to see s.t./s.o.' |
| íkw'-et | 'to throw s.t. away' | ákw'-lexw | 'to lose s.t.' |
- (Galloway 1993: 245f.)

(20) establishes that transitive suffixes impose selectional restrictions on the external argument, which is consistent with the assumption that they in fact introduce the external argument.

Now let us turn to intransitive suffixes. It has been argued by Thompson (1985) and Galloway (1993) that intransitive suffixes encode the same distinction of agent control as transitive suffixes:

- | | | |
|-----|------------------------------------|----------------------------------|
| 21) | – <i>áls</i> = full control | – <i>em</i> = limited/no control |
| | q'etx-áls 'to rattle; to shivaree' | q'átx-em 'make a rattling sound' |
| | hóqw-els 'smelling/sniffing' | hóqw-em 'smell, give off smell' |
| | | (Galloway 1993: 252) |

This pattern is again consistent with the assumption that intransitive suffixes introduce the external argument: they impose selectional restrictions on the argument they introduce.

4.4 *Evidence for the syntax/lexicon distinction*

It is a crucial assumption of the present analysis that the intransitive and transitive suffixes are attached in different components, i.e. transitives are syntactic heads whereas intransitive suffixes are introduced at the lexical level and thus do not project. For reasons of space, I cannot go into a detailed discussion of the empirical evidence (see Wiltschko 2002a for discussion). It should suffice for the present purpose to mention the relevant distinguishing properties of transitive and intransitive suffixes. First, transitive suffixes are more productive. Second, the meaning of a predicate derived from a transitive suffix is always compositionally determined, whereas derived intransitives often have a fixed or frozen (that is lexicalized) meaning. Third, evidence from stress assignment supports the syntax/lexicon distinction: only intransitive suffixes but not transitive suffixes can receive primary stress, that is intransitive suffixes are part of the domain for lexical stress assignment. Fourth, derived intransitives do not trigger object agreement, even in cases when an intransitive appears with an object. And finally, such an object is always realized as an oblique, rather than a direct argument. Given these distinguishing properties, I conclude that the difference between transitive and intransitive suffixes is best captured by assuming that they are attached in different components, i.e. the former syntactically vs. the latter lexically.

4.5 *Deriving the ergative properties of Halkomelem*

With the assumption that intransitive and transitive suffixes are associated with different syntactic structures in that only transitives but not intransitives (neither unergatives nor unaccusatives) are associated with vP, we can derive the ergative properties of Halkomelem. In other words, the morphosyntax of transitivity derives the ergative properties and thus there is no need for an ergativity parameter. In this section I will briefly discuss the ergative properties of Halkomelem and how they follow from the present proposal.

First, as mentioned above, Halkomelem apparently has 3rd person ergative agreement (*-es*). This is shown in (1) repeated below as (22):

- 22) a. q'ó:y-t-es te Strang te sqelá:w
 kill-TRANS-3S DET Strang DET beaver
 'Strang killed the beaver.'

- b. í:mex te Strang
 walk DET Strang
 'Strang is walking.'

Within the present proposal, this pattern suggests that 3rd person *-es* appears in *v*, in other words, "ergative agreement" is *v*-agreement as shown in (23).

- 23) [_{VP} AGENT [_v [*t-es*]_{v <AG>} [_{VP} V<TH> THEME]]]

This analysis implies that agreement can occupy a position which is already occupied by another head (the transitive suffix is found in *v* as well). I thus assume an analysis of agreement which is along the lines of Halle & Marantz's (1993) distributed morphology, in that agreement endings are "morphologically" adjoined to a syntactic head (see also Bobaljik and Branigan, this volume).

From the assumption that "ergative agreement" is *v*-agreement, it follows that the occurrence of *-es* is restricted to transitive constructions, since the occurrence of *vP* is restricted to transitive constructions, i.e. intransitives (including unergatives and unaccusatives) are not associated with *vP* and consequently do not show *v*-agreement.

Secondly, the oblique determiner *tl'* in Upriver Halkomelem can only occur within transitive subjects as shown in (24):

- 24) a. q'ó:y-t-es [tl' Strang] te sqelá:w
 kill-TRANS-3S DET.OBL Strang DET beaver
 'Strang killed the beaver.'
- b. *q'ó:y-t-es te spá:th [tl' Strang]
 kill-TRANS-3S DET bear DET.OBL Strang
 'The bear killed Strang.'
- c. *í:mex [tl' Strang]
 walk DET.OBL Strang
 'Strang is walking.'

Within the present proposal, we can interpret this to mean that *v* can optionally assign an inherent (oblique) case to the argument in Spec*vP*:

- 25) [_{VP} [tl' Strang] [_v [*t-es*]_{v <AG>} [_{VP} V<TH> [te sqelá:w]]]]

Finally, Gerdtz (1988) observes that extraction in Island Halkomelem is sensitive to the ergative/absolute distinction. The same is true for Upriver Halkomelem: quantifiers can only extract out of intransitive subjects and transitive objects, but not out of transitive subjects:⁶

- 26) a. mékw' ítet ye pú:s *Intransitive subject*
 all sleep DET.PL cat
 'All the cats are sleeping.'
- b. mékw' lép'ex-es te pú:s te sth'óqwi *Transitive object*
 all eat-3S DET cat DET fish
 'The cat ate all the fish.'
- c. *mékw' hélp'ex ye pú:s te sth'óqwi⁷ *Transitive subject*
 all eat.CONT DET.PL cat DET fish
 'All the cats ate the fish.'
 (Wiltschko 2002b: 17, 32/33)

Within the present proposal we can assume that constituents in SpecvP are islands for (sub)extraction whereas VP-internal constituents are not. Consequently intransitive subjects and transitive objects, which are both VP-internal arguments will allow for extraction but transitive subjects which are VP-external will not.

4.6 Deriving the "intransitive object construction"

A welcome by-product of the present analysis is that it allows us to capture the fact that unergative predicates are formally marked as intransitives but yet allow for an overt object, as shown in (12) and repeated below as (27):

- 27) a. q'ó:y-t-es te Strang te sqelá:w *Transitive*
 kill-TRANS-3S DET Strang DET beaver
 'Strang killed the beaver.'
- b. qwél-em te Strang te sth'óqwi *'Intransitive'*
 barbecue-INTRANS DET Strang DET fish
 'Strang barbecues the fish.'

Recall from above that this pattern presented a problem for a functionally motivated ergativity parameter in that, in (27b), both subject and object are realized, yet they are not cross-referenced by subject agreement. Even though the presence of an object would make this sentence into a semantically transitive construction, ergative agreement is not triggered.

The present proposal immediately derives this pattern: unergative intransitives (unlike transitives) are not associated with vP and as a consequence they do not trigger "ergative agreement", since ergative agreement is v-agreement. However, we still have another problem, namely it is not clear at all why unergative intransitives allow for objects at all. In (14b) it was proposed that the argument of an unergative intransitive is introduced lexically by a suffix which acts as the head and consequently determines the argument-structure of the complex predicate. The relevant representation is repeated below:

- It is clear from the representation in 14b that the argument of the root is still present, but cannot be assigned directly (i.e., cannot be syntactically licensed). This is similar to the pattern of English nominalizations as shown below:

- Here, the original direct object can be realized by means of a preposition. I propose that the intransitive object construction has similar properties, i.e. the object is assigned as an oblique. Note, however, that in (27) there is no overt evidence that the intransitive object is indeed realized as an oblique. Closer inspection shows, however, that this superficial impression is misleading and that there is indeed evidence to the effect that the intransitive object is realized as an oblique (see Wiltschko 2003a for detailed discussion). The evidence comes from a comparison with Island Halkomelem, where the intransitive object is indeed introduced by an oblique determiner (which has been lost in Upriver Halkomelem, see Galloway 1993):

- Furthermore, extraction of intransitive objects differs from extraction of transitive objects (see Gerds 1988 and Hukari 1979 for Island Halkomelem). In particular, extraction of transitive objects does not trigger any special morphology (30) but extraction of intransitive objects triggers nominalization of the embedded clause (31):

- 30) a. ni č q̣ʷ əl-ət
AUX 2S bake-TRANS
'You baked it.'
- b. stem k'ʷə ni q̣ʷ əl-ət-əxʷ
what DET AUX bake-TRANS-2SS
'What did you bake.'
- (Gerdt 1988: 68, 144)
- 31) a. ni q̣ʷ əl-əm tə stəni? ʔə kʷθə səplil
AUX bake-INTRANS DET woman OBL DET bread
'The woman baked the bread.'

- b. səplil k^wθə ni s-q^wəl-əm-s ɬə sténi?
 bread DET AUX NOM-bake-INTRANS-3POS DET woman
 ‘Bread is what the woman baked.’ (Gerdt 1988: 154, 22)

Crucially, extraction of obliques also triggers the same nominalization morphology, as shown in (32), where (32b) shows extraction of ‘road’:

- 32) a. yáθ ʔu yə-ʃ^wánčənəm ʔə tənáʔ šé.ɬ
 always LNK ser-run OBL DET road
 ‘He always ran on that road.’
 b. yáθ ʔu ʃ-ʃ^wánčənəm-s tənáʔ šé.ɬ
 always LNK NOM-run-3POS DET road
 ‘He always ran on that road.’
 [literally: ‘This road was always his running on.’] (Hukari 1977)

The same effects are found in Upriver Halkomelem. We can thus conclude that intransitive objects are obliques as expected by the present analysis.

4.7 Summary

In this section we have seen evidence that in Upriver Halkomelem transitive subjects are associated with a syntactic position which is not available for other arguments. This automatically sets apart transitive subjects from intransitive subjects and transitive objects. Consequently, the ergative properties of Halkomelem are a byproduct of the morphosyntax of (in)transitive suffixes. The crucial conclusion that we can draw on the basis of this pattern is that we can derive ergative properties in a given language without appealing to an “ergativity parameter”. This is a desirable result as argued in section 2. But next we have to turn to the question as to how “split ergativity” fits into this picture.

5. DERIVING SPLIT ERGATIVITY

5.1 The problem: 2 kinds of split ergativity

We have already seen in section 3 (Table 1) that Upriver Halkomelem shows split ergativity, where the split occurs along two different dimensions. First, we find a person split whereby 1st and 2nd person agreement shows a nominative/accusative pattern whereas 3rd person shows an ergative/absolutive pattern.

Secondly, we find a split according to the type of agreement. That is that subjunctive agreement (which differs only for subject agreement) shows a nominative/accusative pattern even for 3rd person, as shown in Table 3:

Table 3. Subjunctive agreement

	<i>A</i>	<i>S</i>	<i>O</i>
1sg	-l		-óx
2sg	-xw		-óme
3sg	-s		Ø
1pl	-t		-ó(l)xw
2pl	-p		-óle
3pl	-s		Ø

The question that we are facing at this point is how to derive split ergativity? That is, it is not immediately clear from the analysis presented in section 4 how to account for this split pattern. In particular, we have seen that the ergative properties of Halkomelem derive from the morphosyntax of transitivity. It is important to note though that the morphosyntax of transitivity does not differ according to person or subjunctive marking. In other words, we find the same kind of transitivity and intransitivity marking in the context of 1st/2nd person subjects as we do for 3rd person subjects (data from Galloway 1980: 126):

- 33) a. máy-t-tsel
help-TRANS-1SG.S
'I help him.'

Transitives

- b. máy-t-tset
help-TRANS-1PL.S
'We help him.'

- c. máy-t-chexw
help-TRANS-2SG.S
'You help him.'

- d. máy-t-chap
help-TRANS-2PL.S
'You_{pl} help him.'

- e. máy-t-es
help-TRANS-3S
'(S)he/they help(s) him/her/them.'

- 34) a. íkw'-tsel
lost-1SG.S
'I'm lost.'

Intransitives

- b. íkw'-tset
lost-1PL.S
'We are lost.'
- c. íkw'-chexw
lost-2SG.S
'You are lost.'
- d. íkw'-chap
lost-2PL.S
'You_{pl} are lost.'
- e. íkw'
lost
'He/they is/are lost.'

Similarly, the morphosyntax of (in)transitivity is the same in the context of subjunctive agreement:

- 35) a. éwe lí-s íkw'
NEG AUX-3SS lost
'He is not lost.'
- b. éwe lí-s máy-th-óx-es
NEG AUX-3SS help-TRANS-1SG.O-3S
'He doesn't help me.'

Given that the morphosyntax of (in)transitivity is the same, independent of the person or agreement type involved, and given that we have derived ergativity from the morphosyntax of transitivity, we would not immediately expect that there be such a split. In the following subsections I will present a solution to this problem, starting with an account for the person split.

5.2 *Deriving split ergativity: Person split*

To derive the person split I assume that 1st and 2nd person agreement endings are to be analyzed as inflected complementizers (Wiltschko 2002c). Consequently, 1st and 2nd person agreement is not located in *v* but in *C*. This implies that the occurrence of 1st and 2nd person agreement is independent of the presence or absence of *v*, and therefore we expect that 1st and 2nd person subjects do not show an ergative/absolutive pattern. That is, 1st and 2nd person agreement – as *C*-agreement – will be present in both transitive and intransitive constructions and consequently they show a nominative/accusative pattern:

- 36) a. Intransitive: [_{CP} [_{C'} [_{1st/2nd} agreement]_i]_C [_{IP} *pro*_i [_{I'} I⁰ [_{VP} V DP_i]]]]]
 b. Transitive: [_{CP} [_{C'} [_{1st/2nd} agr_i]_C [_{IP} *pro*_i [_{I'} I⁰ [_{VP} DP_i [_{V'} [_V trans]] [_{VP} V DP]]]]]]]]]

Evidence for the assumption that 3rd person agreement appears in a syntactic position which is different from 1st and 2nd person agreement comes from the following considerations. 1st and 2nd person subject agreement endings are clitics with varying distribution. For example, in the absence of an auxiliary they attach to the verb (in a position following the transitive marker and the object marker if there is one). Compare (33) with (37) below (from Galloway 1980: 126):⁸

- 37) a. li-tsel máy-t
 AUX-1SG.S. help-TRANS
 'I helped him.'
- b. li-tset máy-t
 AUX-1PL.S help-TRANS
 'We helped him.'
- c. li-chexw máy-t
 AUX-2SG.S help-TRANS
 'You helped him.'
- d. li-chap máy-t
 AUX-2PL.S help-TRANS
 'You_{pl} helped him.'

In contrast, 3rd person agreement is suffixal and has a fixed distribution: it always appears attached to the main verb, independent of the presence or absence of an auxiliary:

- 38) máy-t-es
 help-TRANS-3S
 'He helps someone.'
- 39) a. *li-s máy-t
 AUX-3S help-TRANS
 'He helped someone.'
- b. li máy-t-es
 AUX help-TRANS-3S
 'He helped someone.'

Additional evidence for the assumption that 1st and 2nd person agreement is located in C comes from the fact that it is in complementary distribution with embedded complementizers. In other words, if there is an overt complementizer present, we no longer find subject clitics for 1st and 2nd person subject agreement. In

nominalized clauses with the complementizer *kw'*, subject agreement is realized as possessive agreement as shown in (40). Crucially, in this environment subject clitics cannot be used as shown in (41):

- 40) a. *skw'áy* [kw'-el-s kw'êts-lexw]
impossible COMP-1SG.POSS-NOM see-TRANS
'I can't see it.'
- b. *skw'áy* [kw'-a-s kw'êts-lexw]
impossible COMP-2SG.POSS-NOM see- TRANS
'You can't see it.' (Galloway 1993: 181)
- 41) a. *skw'áy* [kw'-el-s(*-tsel) kw'êts-lexw]
impossible COMP-1SG.POSS-NOM-(1SG.S) see- TRANS
'I can't see it.'
- b. *skw'áy* [kw'-a-s(*-chexw) kw'êts-lexw]
impossible COMP-2SG.POSS-NOM-(2SG.S) see- TRANS
'You can't see it.' (Galloway 1993:181)

Similarly, in subjunctive clauses we find the complementizer *we* and subject agreement is manifested as subjunctive agreement, as shown in (42). Again, clitics cannot be used in this environment as shown in (43)

- 42) a. *we-lám-ál*
if-go-1SG.SS
'If I go...'
- b. *we-lám-exw*
if-go-2SG.SS
'If you go...' (Galloway 1993: 184)
- 43) a. *we-(*tsel) lám-(èl)*
if-(1SG.S) go-1SG.SS
'If I go...'
- b. *we-(*chexw) lám(-exw)*
if-(2SG.S) go-2SG.SS
'If you go...' (Galloway 1993: 184)

In sum, the impossibility of using subject clitics in nominalized and subjunctive clauses follows from the assumption that subject clitics are instances of inflected complementizers and thus they are expected to be in complementary distribution with other complementizers. We thus have independent evidence for our analysis of split ergativity: 3rd person agreement is v-agreement whereas 1st and 2nd person agreement is C-agreement. It follows that only the former, but not the latter, is

dependent on the presence or absence of *v*, deriving the “ergative” properties of Halkomelem.

5.3 *Deriving split ergativity: Subjunctive agreement*

In this subsection I will propose a similar analysis for the second kind of split we have encountered, namely the split according to the type of agreement. Recall that subjunctive agreement does not show any ergative/absolutive patterning, only nominative/accusative. In other words, intransitive verbs trigger subjunctive subject agreement just like transitive verbs, as shown below on the basis of examples introduced by *we* (‘if’).

- 44) a. *we-lám-ál*
if-go-1SG.SS
‘If I go...’
- b. *we-lám-et*
if-go-1PL.SS
‘If we go...’
- c. *we-lám-exw*
if-go-2SG.SS
‘If you go...’
- d. *we-lám-elep*
if-go-2PL.SS
‘If you_{pl} go...’
- e. *we-lám-es*
if-go-3SS
‘If he goes....’

(Galloway 1993:184)

I propose that subjunctive agreement is not located in *v* but in *I*.⁹ It follows from this proposal that the occurrence of subjunctive agreement (just like the occurrence of 1st and 2nd person indicative agreement) is independent of the presence or absence of *v* as shown in (45).

- 45) a. Intransitive: [_{IP} *pro*_i [_I [subjunctive agreement]_i] [_{VP} V DP_i]]]]
- b. Transitive: [_{IP} *pro*_i [_I [subjunctive agr._i] [_{VP} DP_i [_v [_v trans] [_{VP} V DP]]]]]]]]

As was the case for 1st and 2nd person indicative agreement (subject clitics), we find distributional evidence for the assumption that “ergative” agreement is located in a different position than subjunctive agreement: *v* vs. *I*, respectively. In the absence of an auxiliary, subjunctive agreement attaches to the main verb (46),

whereas in the presence of an auxiliary, subjunctive agreement attaches to the auxiliary (47):

- 46) a. éwe-chap t'ilem-ap wáyeles
 NEG-2PL.S sing-2PL.SS tomorrow
 'You folks won't be singing tomorrow.'
- b. éwe-tset t'ilem-et wáyeles
 NEG-1PL.S sing-1PL.SS tomorrow
 'We won't be working tomorrow'
- c. éwe-chexw kw'ákw'eth-eth-óx-exw
 neg-2SG.S looking-TRANS-1SG.O-2SG.SS
 'You are not going to be looking at me' (Wiltschko, 2002c:272, 31)
- 47) a. éwe-tsel lí-l yóyes
 NEG-1SG.S AUX-1SG.SS working
 'I'm not working'
- b. éwe-tset lí-t yóyes
 NEG-1PL.S AUX-1PL.SS working
 'We are not working.'
- c. éwe-chexw lí-xw yóyes
 NEG-2SG.S AUX-2SG.SS working
 'You're not working.'
- d. éwe-chap lí-p yóyes
 NEG-2PL.S AUX-2PL.SS working
 'You are not working.' (Wiltschko 2002c: 261, 14)

Again, the position of "ergative" agreement is not affected by the presence or absence of an auxiliary. Rather, ergative agreement is always realized on the verb, no matter whether an auxiliary is present (48b/c) or not (48a):

- 48) a. q'ó:y-t-es te Strang te sqelá:w
 kill-TRANS-3S DET Strang DET beaver
 'Strang killed the beaver.'
- b. li q'ó:y-t-es te Strang te sqelá:w
 AUX kill- TRANS-3S DET Strang DET beaver
 'Strang killed the beaver.'
- c. *li-s q'ó:y-t te Strang te sqelá:w
 AUX-3S kill- TRANS DET Strang DET beaver
 'Strang killed the beaver.'

The distributional difference between “ergative” and subjunctive agreement (which shows a nominative/accusative patterning) supports the assumption that they are associated with different syntactic positions: ergative agreement is located in *v* and subjunctive agreement is located in *I*.

We are now in a position to solve the negative-ergative paradox introduced in section 3. Recall that in the presence of 3rd person subjunctive agreement, which shows a nominative/accusative pattern, we still find ergative agreement. In other words, there are two subject agreement endings found within one clause. A relevant example is repeated below for convenience.

- 49) éwe li-s tl'íls-th-òx-es
 NEG AUX-3SS want-TRANS-1SG.O-3S
 ‘He/she/it/they doesn’t/don’t like me.’ (Galloway, 1993: 186)

Under an analysis whereby the ergative/absolutive pattern is the result of a parameter this example is problematic, since it simultaneously shows ergative/absolutive as well as nominative/accusative pattern.

Under the present analysis however, it is expected that in transitive constructions, both subjunctive and ergative agreement are realized. That is, since they occupy different syntactic positions (*I* and *v*) we expect them to be able to cooccur.

- 50) Transitive structure:

[_{IP} *pro*_i [_I [subjunctive agreement]_i] [_{VP} DP_i [_v [v ergative agreement] [_{VP} V DP]]]]]]]

5.4 Summary

The analysis of split ergativity in Halkomelem put forward in this paper is highly modular; that is, we have argued that ergativity in Halkomelem derives from the morphosyntax of transitivity: only transitive subjects appear in SpecvP, whereas intransitive subjects are generated VP-internally.

The two types of split in the ergative system of Halkomelem derive from the syntactic distribution of different kinds of agreement morphology. In particular we have argued that “ergative agreement” is *v*-agreement; subjunctive agreement and possessive is *I*-agreement; while indicative agreement (i.e. subject clitics) is *C*-agreement. Furthermore it is necessary to assume that not every position for agreement is associated with a full (audible) paradigm, i.e. there are some gaps in the paradigm. We find the following distribution of agreement in Halkomelem, shown in (51) and Table 4:

- 51) [_{CP} [indicative agr]_C] [_{IP} [possessive/subjunctive agr]_I] [_{VP} [_v ergative agr] [_{VP}]]]]

Table 4. *Distribution of Agreement in Halkomelem*

	<i>C-agr</i>	<i>I-agr (poss)</i>	<i>I-agr (subjunctive)</i>	<i>v-agr</i>
1sg	tseł	-el	-l	--
2sg	chexw	-’a	-exw	--
3sg	--	-s	-s	-es
1pl	tset	-tset	-t	--
2pl	chap	-a’-elep	-ep	--
3pl	--	-s	-s	-es

We find that both possessive and subjunctive agreement (i.e. I-agreement) are associated with full paradigms. Indicative (C-) agreement is associated with a slightly defective paradigm, where 3rd person is zero. And finally “ergative” (v-) agreement is highly defective in that it is only associated with a form for 3rd person. It thus complements indicative (C-) agreement.

As a consequence of our proposal we have to assume that subject agreement is not uniformly associated with I (see Davis 2000 for a cross-Salish perspective; Déchaine 1999 for evidence from Algonquian; Ritter 1995; Shlonsky 1989). Furthermore we have to assume that agreement paradigms are not uniformly associated with a full paradigm. Given these assumptions, the acquisition of a split ergative pattern is not tied to a single parameter, but rather the child needs to acquire the morphological paradigms and the syntactic distribution of a given paradigm. In addition, the child acquiring Halkomelem needs to learn that not all “external” arguments are introduced syntactically: in particular, the presence of *v* is dependent on overt transitivity marking. Note that there is overt morphological evidence leading the child to this conclusion; the presence of *v* is strictly tied to the appearance of the transitive marker in Halkomelem. Thus, the present analysis conforms with the standard assumption that triggers for language acquisition need to be learnable on the basis of morphological properties.

6. A CROSS-SALISH PERSPECTIVE

In this last section I will address an important question arising from the analysis so far. We have seen that split ergativity is a derived phenomenon. In Halkomelem it derives from the morphosyntax of transitivity in interaction with the morphosyntax of agreement. Given its derived (rather than primitive) nature, we expect to find significant cross-linguistic variation in two ways. First “ergativity” is expected to manifest itself in different ways, which is indeed the case as evident from this volume. Secondly, we expect that the split is independent of “ergativity” and can manifest itself in different ways.

Note that in a system where “split ergativity” is treated as a primitive parameter it can be either ON or OFF with no difference in the way the split works. However in the present system, we might expect fine-tuned differences depending on the morpho-syntax of agreement and transitivity. These fine-tuned differences would be

hard to express in the parameter view. A look at other patterns across the Salish family confirms our expectation.

6.1 From Proto-Salish to Halkomelem

So far we have seen that the Halkomelem agreement system consists of a complete paradigm of I-agreement, a slightly defective paradigm of C-agreement, which is restricted to 1st/2nd person, and a highly defective paradigm of v-agreement, which is restricted to 3rd person. It turns out that historically the highly defective v-agreement paradigm of Halkomelem has not always been defective. According to Davis (2000) the Proto-Salish system consisted of the following paradigms:¹⁰

Table 5. Proto-Salish Agreement System (Davis 2000: 513, Table 2)

	<i>Indicative Clitic</i> [C-agreement]	<i>Possessive Clitic</i> [I-agreement]	<i>Conjunctive Clitic</i> ¹¹ [=I-agreement]	<i>Subject Suffix</i> [=v-agreement]
1 sg	*=kan	*n=	*=wan	*-an
2 sg	*=kax ^w	*ʔn=	*=wax ^w	*-ax ^w
3 sg	*∅	*=s	*=was	*-as
1 pl	*=kat	*=iɬ	*=wat	*-at
2 pl	*=kap	*=lap	*=wap	*-ap
3 pl	*∅	*=s	*=was	*-as

In Table 5 we see that, as in Halkomelem, Proto-Salish I-agreement is complete, and C-agreement is slightly defective in that it is restricted to 1st/2nd person. However, unlike Halkomelem, Proto-Salish has a complete paradigm of v-agreement. In order to understand the cross-linguistic pattern I will propose the following economy condition, which regulates the appearance of agreement:

- 52) Economy of agreement: "Use agreement only if you need to."

The Proto-Salish agreement paradigms in interaction with the economy of agreement condition predict the following pattern for Proto-Salish. In the presence of v-agreement, C-agreement should not be used, as it is not necessary (i.e. v-agreement already covers every person in the paradigm). Consequently, we predict that C-agreement is restricted to intransitive environments.

- 53) a. Intransitive: [_{CP} [_C [1st/2nd/3rd agreement]_i] [_{IP} *pro*_i [_I I⁰ [_{VP} V DP_i]]]]]
 b. Transitive: [_{CP} [_C [_{IP} *pro*_i [_I I [_{VP} DP_i [_{V'} [_v [1st/2nd/3rd agr_i]_v] [_{VP} V DP]]]]]]]]]

The pattern we predict for Proto-Salish turns out to be exactly the pattern we find in the Interior Salish languages (except for Lillooet). That is, in Interior Salish (Shuswap), subject clitics (i.e. C-agreement) are only used with intransitive predicates

and subject suffixes (i.e. v-agreement) are only used with transitive predicates (cf. Kroeber 1999):

- 54) a. *cút-kt* *Intransitives*
 intend-1PL.SUBJ.CL
 ‘We intend.’
- b. *cút-k*
 intend-2SG.SUBJ.CL
 ‘You intend.’
- c. *cút-Ø*
 intend-3.SUBJ.CL
 ‘S/he intends.’ (Kuipers, 1974: 44)
- 55) a. *píc’-n-x* *Transitives*
 squeeze-TRANS-2SG.SUBJ.SUFFIX
 ‘You squeeze him/her/it.’
- b. *lx-nt-és*
 squeal.on-TRANS-3SUBJ.SUFFIX
 ‘She/he squeals on him/her’. (Kuipers, 1974: 48)

Note that this split is based on *transitivity*, in that transitive subjects behave differently from intransitive subjects, but intransitive subjects do not behave like transitive objects. This means that we are not dealing with an “ergative” split, and consequently it supports our view that “split ergative” properties are epiphenomenal.

Given the Proto-Salish pattern (and its present manifestation in the Interior Salish languages) the question arises as to how the Halkomelem system has developed. The system we have set up so far allows us to interpret the development of the Halkomelem system in the following way. Consider again the distribution of agreement in Proto-Salish given in Table 5 above.

A striking feature of the paradigms in Table 5 is the transparent morphological relation between v- and C-agreement. I propose that this transparency made it possible for v-agreement to be reanalyzed as C-agreement. The only place where this reanalysis could not take place is 3rd person agreement because there is no 3rd person C-agreement.¹² I therefore propose that Halkomelem has reanalyzed the Proto-Salish system in the following way:

Table 6. Reanalyzing Subject Suffixes (v-agreement)

	<i>Indicative Clitic</i> [=C-agreement]	<i>Subject Suffix</i> [=v-agreement]
1 sg	*=kan	*-an
2 sg	*=kax ^w	*-ax ^w
3 sg	*Ø	*-as
1 pl	*=kat	*-at
2 pl	*=kap	*-ap
3 pl	*Ø	*-as

Thus by reanalyzing part of the v-agreement paradigm as being part of the C-agreement paradigm, made possible by its morphological transparency, we arrive at the highly defective v-agreement system of Halkomelem and consequently at the “ergative” system, which is split along 1st/2nd vs. 3rd person.

6.2 Other possible splits

In this subsection I will discuss another possible split that can arise out of the Proto-Salish system. Without the economy of agreement condition, the Proto-Salish system shown in Table 6 would give rise to the following pattern where both C- and v-agreement are simultaneously realized in a transitive configuration:

- 56) [CP[C¹[1st/2nd/3rdagr]_C[IP *pro*_i[I¹I_{VP}DP_i[_v[_v[1st/2nd/3rdagr]_v][_{VP} V DP]]]]]]]

The pattern in (56) violates the “economy of agreement” condition. Suppose that there are actually two ways to avoid such a violation. The first one is the one found in Proto-Salish and present day Interior Salish languages where the higher occurrence of agreement (C-agreement) is only realized in the absence of v-agreement. Assume that another way to circumvent this economy violation is by assigning a certain meaning to one of the agreement paradigms. That is, I interpret the economy of agreement condition as an instance of the blocking principle in the sense of Williams (1997) in that “same-form-same-meaning-pairs” are blocked. Blocking then requires either the elimination of one of the forms or the creation of a meaning difference. Furthermore, once a meaning is associated with *v*, we might expect that *v* is no longer restricted to transitive environments but generalizes to intransitives as well. That is, we might expect a split that is not guided by transitivity (as in Proto-Salish) nor by Person (as in Halkomelem), but by the new meaning dimension associated with v-agreement or C-agreement. Such a pattern is indeed found in the Tsamosan branch of the Salish languages.

In Upper Chehalis (Tsamosan Salish), conjunctive clitics (i.e. C-agreement) and subject suffixes (i.e. v-agreement) are collapsed, and there is a single set of cognate suffixes used for transitive and intransitive predicates to mark continuative aspect (Kinkade 1964a/b; 1976; Kroeber 1998; 1999).

- 57) a. ?it ?iln-čn *Subject clitics (non-continuative aspect)*
 CPL sing-1S.SUBJ.CL
 ‘I sang.’
- b. ?ac-ša?á-ci- čn
 STV-love-TRANS+2S.OBJ-1S.SUBJ.CL
 ‘I love you.’
- c. ?it č’áč-i-Ø
 CPL watch-TRANS+2SG.OBJ-3SG.SUBJ.CL
 ‘He/she watched you.’ (Kinkade 1964: 32-34)
- 58) a. s-?ílan-anš *Subject suffixes (continuative aspect)*
 CONT-sing-1SG.SUBJ.SUFFIX
 ‘I am singing.’
- b. s-č’is-mi-ci-nš
 CTN-come.after-TRANS-2SG.OBJ-1SG.SUBJ.SUFFIX
 ‘I’m coming after you.’ (Kinkade 1964: 32-34)

The examples in (57) and (58) establish that C-agreement (subject clitics) is used with continuative aspect, whereas v-agreement (subject suffixes) is used with non-continuative aspect. Within the present analysis we interpret this to mean that the meaning difference associated with C-agreement and v-agreement is aspectual in nature. Note that this is not surprising since one of the meaning-dimensions associated with v is aspectual (see Kratzer 1994, Borer 1994, Déchaine 2002, Laka, this volume.). As a consequence of the aspectual dimension associated with v in Upper Chehalis, the presence of v is regulated by aspect and not restricted to transitive constructions, as it is in Halkomelem.

- 59) a. Continuative: $[_{CP}[_{C'} C[_{IP}pro_i[_{I'}I[_{vP}DP_i[_{v'}[_{v'}[1^{st}/2^{nd}/3^{rd}agr_i]_{v'}] [_{VP} V DP]]]]]]]$
- b. Non-continuative: $[_{CP}[_{C'} [1^{st}/2^{nd}/3^{rd}agr_i]_C[_{IP}pro_i[_{I'}I[_{vP}DP_i[_{v'}v[_{VP} V DP]]]]]]]$

We now predict that where there is a special meaning associated with one of the agreement paradigms we will find instances of double agreement. In other words, anytime we have two agreement endings, at least one of them must encode a different meaning.¹³ In this context, consider again the instances of double agreement in Halkomelem negative clauses discussed in section 5.3.

- 60) éwe-tsel lí-l tl’íls-th-òmə
 NEG-1SG.S AUX-1SG.SS want-TRANS-2SG.
 ‘I don’t like you.’ (Galloway 1993: p.186)

Given our system, we predict that at least one of these agreement endings is associated with a special meaning. This prediction is indeed borne out, in that I-agreement is associated with a meaning best described as hypothetical or irrealis. C-agreement on the other hand seems to encode "matrix indicative". Note that this descriptive generalization is consistent with the fact that both indicative clitics (i.e. C-agreement) and subjunctive agreement, (i.e. I-agreement), are (at least diachronically) morphologically complex, as shown in the following table.¹⁴

Table 7. *Proto-Salish System*(from Davis 2000: 513 table 2)

	<i>Indicative Clitic</i> [=C-agreement]	<i>Conjunctive Clitic</i> [=I-agreement]	<i>Subject Suffix</i> [=v-agreement]
1 sg	*=k-an	*=w-an	*-an
2 sg	*=k-ax ^w	*=w-ax ^w	*-ax ^w
3 sg	*Ø	*=w-as	*-as
1 pl	*=k-at	*=w-at	*-at
2 pl	*=k-ap	*=w-ap	*-ap
3 pl	*Ø	*=w-as	*-as

Table 7 shows that C-agreement consists of an initial consonant *k* in addition to v-agreement whereas I-agreement consists of an initial consonant *w* in addition to v-agreement.¹⁵ I speculate that it is these initial consonants which are the source of the meaning encoded.

To conclude, the claim that split "ergativity" is a derived notion predicts that it can manifest itself in different ways. This prediction is borne out in Salish in that different kinds of split patterns are the result of different properties of the agreement paradigms. As a result, assuming that "ergativity" is a derived phenomenon helps us to understand different kinds of splits (including splits that are not even "ergative"). The different kinds of split can all be learned on the basis of paradigms in interaction with the economy of agreement condition, which I take to be a guiding principle for language acquisition rather than a principle of grammar *per se*.

7. CONCLUSION

On the basis of evidence from Halkomelem Salish, this paper has argued against a dedicated "ergativity parameter". Rather, it was shown that ergativity in Halkomelem is best viewed as a property which is derived from assuming that external arguments can be introduced lexically yielding (unergative) intransitive predicates, or syntactically by means of the secondary predicate *v* yielding transitive predicates. It was argued that the structural difference between transitive and intransitive predicates (i.e. the presence or absence of *v*) is responsible for the ergative properties.

In addition, it was argued that the split ergative properties of Halkomelem derive from the fact that 1st and 2nd person indicative agreement occupy a position different from 3rd person indicative agreement. Since the former is in C, it is not sensitive to

whether or not *v* is projected. In contrast 3rd person agreement is in *v* and consequently it is only found in transitive clauses. This gives rise to a nominative/accusative pattern in 1st and 2nd person but an ergative/absolutive pattern for 3rd person deriving the person split. Furthermore, it was argued that subjunctive agreement is found in *I* across all persons. Again, since the presence of *I* is not sensitive to the presence of *v*, subjunctive agreement does not differentiate between transitive and intransitive subjects, and a nominative/accusative pattern emerges deriving the subjunctive split.

In sum, it was shown that the (split) ergative properties of Halkomelem can be successfully derived from two assumptions: i) external arguments can be introduced lexically or syntactically and ii) agreement morphology is systematically associated with different heads (*v*, *I* or *C*). If we accept this analysis, whereby ergativity is a derived rather than a primitive property of universal grammar, it follows that languages can differ significantly as to how ergative properties are derived and consequently we expect that so called “ergative” properties can be of very different nature, rather than uniform across languages. The findings reported in the present volume clearly support this view on ergativity.

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¹ Halkomelem is a Central Coast Salish language, spoken on the coast of British Columbia. There are three main dialects: Upriver, Downriver and Island Halkomelem. Original data as well as data from Galloway are from the Upriver dialect (Stó:lō Halq'eméylem). Gerdts's data are from the Island (Cowichan) dialect. Abbreviations used are as follows: 1=1st person; 2=2nd person; 3=3rd person; aux=auxiliary; comp=complementizer; cont=continuative; cpl=copula; det=determiner; intrans=intransitive suffix; lnk=linker; neg=negative marker; nom=nominalization; o=object; obl=oblique; pl=plural; poss=possessive agreement; s=subject; ser=serial; sg=singular; ss=subjunctive subject; stv=stative; subj.cl=subject clitic; subj.suffix=subject suffix; trans=transitive suffix. All data from the Upriver dialect are presented in the practical orthography. The key to this orthography is as follows a = æ or ε; ch = tʃ, ch' = tʃ', e (between palatals) = i, e (between labials) = u, e (elsewhere) = ə, lh = ɬ, o = a, ō = o, xw = x^w, x̣ = x̣, y = j, sh = ʃ, th = θ, th' = tθ', tl' = tɬ', ts = c, ts' = c', x = x or x̣, xw = x^w, ' = ʔ, ' = high pitch stress, ˘ = mid pitch stress (see Galloway 1980 for discussion on this orthography and Galloway 1993 on the properties of stress in Upriver Halkomelem).

² / in *oxw* is not used in all dialects of Upriver Halkomelem, i.e. my consultants use *oxw* instead.

³ For evidence that this is indeed an intransitive suffix see Galloway (1993) among others.

⁴ There are a few seemingly underived unergatives (see Gerdts 1991). For those I will assume, following Davis (1997) that they are derived by a Ø-morpheme.

⁵ There is significant evidence that the transitivizers *lexw* and *stexw* can actually be decomposed into transitivizers –/ and –st and a 3rd person object agreement –*exw* (see Wiltschko, 2003b). Note that this analysis of –*lexw*–*stexw* already undermines the classification of Halkomelem as ergative since there is a 3rd person object marker, which is not available for 3rd person intransitive subjects.

⁶ Note that the restriction on extraction only applies to extraction out of a DP within this position, but not to movement from that position in general.

⁷ Note that "ergative agreement" is missing in this example. This is due to an independent constraint which dictates the loss of "ergative agreement" when the transitive subject undergoes A'-movement.

⁸ Note that we cannot simply treat subject clitics as second position clitics, since in the absence of an auxiliary they can also appear in initial position (see Galloway 1993):

- | | | | |
|---------------|------------|-----------------|------------|
| i) tsel | máy-t | chexw | máy-t |
| 1sg.s | help-trans | 2sg.s | help-trans |
| 'I help him.' | | 'You help him.' | |

⁹ There are reasons to believe that subjunctive agreement is located in a second C-position, and that Halkomelem does not have any IP-level projection (see Ritter & Wiltschko 2004), but this doesn't affect the main proposal of the present paper. For ease of exposition I will continue to assume that subjunctive agreement is located in I.

¹⁰ Davis' reconstruction differs from the one presented in Hoard (1971) and Newman (1979; 1980), who recognize only 3 different categories (conflating the conjunctive clitic series with the subject suffix series). Inasmuch as the analysis in this paper is on the right track, it supports Davis' distinction between subject suffixes (our "ergative agreement") and conjunctive clitics (our "subjunctive").

¹¹ Conjunctive clitics correspond to what we have called "subjunctive agreement". The difference in terminology only reflects different authors working on different languages (i.e. Galloway 1993 uses "subjunctive").

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- ¹² Note that this might not be an accidental gap. If we assume that C-agreement is "discourse agreement" (cf. Déchaine 1999), then it might follow that only direct discourse participants (speaker and hearer = 1st and 2nd person) can license C-agreement. This is supported by the fact that in many languages which show agreement in C, this is restricted to 1st and 2nd person, and if 3rd agreement is found in C, then it triggers an "inverse system" (see Déchaine 1999).
- ¹³ See Davis 2000 for a detailed discussion of other instances of double agreement across the Salish family. Note that inflected complementizers in Bavarian German contradict this claim. I have nothing to say about this, except that the Bavarian system might be corrupted by Standard German. Our system predicts that Bavarian should either lose one of the agreement paradigms or alternatively associate a special meaning with one of them.
- ¹⁴ See Newman 1979, 1980; Thompson 1979, Kroeber 1991, Thompson & Thompson 1992. Note however that there is no synchronic evidence that these elements are indeed complex.
- ¹⁵ Thompson (1979) proposes that these initial consonants derive from auxiliaries.

TREE-GEOMETRIC RELATIONAL HIERARCHIES AND NUUMIIPUUTÍMT (NEZ PERCE) CASE^{*}

1. INTRODUCTION

Most languages that have an ergative pattern of case marking show a “split”, where some argument types are marked with ergative/absolutive (ERG/ABS), and others are marked with a nominative/accusative pattern (NOM/ACC). In the typological literature¹, these splits are determined by reference to markedness hierarchies (also known as relational, accessibility and semantic hierarchies): If a given nominal has certain semantic or pragmatic features and appears “high” on a markedness hierarchy, then it is more likely to be indicated by a NOM/ACC pattern². For example, in his classic work on split case marking in Dyirbal, Dixon (1979) argues that local persons (1st and 2nd person) are ranked more highly on the person hierarchy and thus receive a NOM/ACC pattern; by contrast, third person and referential NPs are low on the hierarchy and receive ERG/ABS case.

We propose a purely formal account of such phenomena with particular reference to the so-called four-way case system of Nuumiipuutímt (known more commonly as Nez Perce), a Sahaptian language spoken in Idaho. We make a number of claims: First and foremost, in the spirit of Jelinek (1993) and Jelinek and Carnie (2003), we claim that relational hierarchies are epiphenomena. Semantic prominence of arguments with particular case markings is seen as an artifact of the surface position of the argument, as triggered by formal feature checking requirements, and are thus tree-geometric. The semantic effects are due to the interpretation of the tree structure when it is submitted to the semantic component. The labor of the relational hierarchy is divided into two parts here. On one hand, we have the lexical semantic and selectional properties of the formal features that drive the syntax. These restrictions make extensive use of formal feature variation in the ‘little’ *v* category (see Ura, this volume and Wiltschko, this volume, for similar approaches to splits). On the other hand, we also have the semantic interpretation of the final tree. We will argue, contra Jelinek and Carnie (2003), that the semantics is not the driving force in determining the surface position of the argument; instead, felicitous semantic interpretations are the result of the proper positioning of arguments as governed by the formal and selectional properties of the tree. In particular, we claim that the fact that syntactic considerations place certain arguments high in the phrase structure tree

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corresponds directly with the appearance of such argument as high in relational hierarchies, particularly in the case of Nuumiipuutímt.

2. TWO NOTIONS OF “HIERARCHY” IN SYNTACTIC THEORY

The term “hierarchy” in linguistics has at least two uses in current linguistic practice, maybe more. One use represents the relationships that exist among constituents. Constituent hierarchies can be represented a number of ways (phrase structure trees, box notation, brackets, sets, etc.), but they all represent facts about the behaviour of words and groups of words in a sentence, such that groups of words seem to form distinct subparts of other groups of words. Such hierarchies are motivated by the behaviours we commonly use to test for constituency, such as movement, coordination, replacement, pronominalization, ellipsis, fragmenthood, etc. While these tests aren’t without their problems, constituent hierarchies are widely accepted within the generative paradigm.

Other kinds of hierarchies include the markedness hierarchies such as that seen in (1) (taken from Dixon 1994):

- 1) 1st > 2nd > 3rd > Proper nouns > Humans > Animates > Inanimates

Within generative grammar this kind of hierarchy has been formalized a number of ways. For example, the “Theta Hierarchy” and the conditions for its implementation in early GB theory: UTAH (Baker 1988), and relational grammar: UAH (Perlmutter and Postal 1984), reflect that nouns bearing semantic relations such as agenthood are at an underlying level more syntactically prominent than those bearing relations like theme and experiencer.

In the principles and parameters tradition, particularly in Minimalism, however, it has been the trend to derive relational information from the constituent hierarchies. Constituency is viewed as the road map to semantic interpretation. For example, grammatical relations are usually defined in terms of placement in the tree. Subjects are in the specifier of TP. Objects are usually the sister to the verb (or more recently the specifier of AgrOP or vP). Coreference and binding relations are frequently defined in terms of tree geometry such as government or c-command. Another good example is the body of work produced by Hale and Keyser (1992, 1993, 2002 and others). They claim that theta roles are defined by the structural positions occupied by NPs in the VP at D-structure. Agents are in the specifier of VP, patients are defined as the complement to V etc. Any “hierarchical” effects among thematic relations are due to their underlying position in the tree. In this paper, we attempt a similar account of the more surface-oriented relational hierarchies; claiming that they are merely reflections of surface position in the constituent tree.

3. NUUMIIPUUTÍMT SPLIT CASE MARKING

According to Woolford (1997), Nuumiipuutímt exhibits four cases, summarized in the chart in (2). For reasons that will become clear below, in this paper we refer to

the various cases by their morphological form rather than a theoretically laden label. Since there are two null cases, we distinguish them with subscript _{SUBJ} and _{OBJ} markers. As Woolford notes, these two null cases differ not only in what grammatical relations they express, but also in whether or not they trigger agreement morphology (and, as such, need to be distinguished from one another).

2) Relation	Woolford's name	Case marking	Agreement	Name in this paper
subject	ergative	-nm or -nim	yes	-NM or ERG
subject	nominative	-Ø	yes	-Ø _{SUBJ} or NOM/ABS
object	objective	-ne	yes	-NE
object	accusative	-Ø	no	-Ø _{OBJ}

Examples of each of these cases is seen below:

- 3) a. Háama +Ø hi+'wí+ye wewúkiye+Ø Ø/Ø pattern
 man+Ø_{SUBJ} 3+shoot+ASP elk+Ø_{OBJ}
 'The man shot an elk' (Rude 1988's gloss)
- b. Háama+nm péé+'wí+ye³ wewúkiye+ne NM/NE pattern
 man+ERG 3/3+shoot+ASP elk+NE
 'The man shot an elk' (Rude 1988's gloss)

There are a number of things to note about these sentences. First, consider the differences in agreement: Only the NM/NE pattern shows both subject and object agreement (in the form of the portmanteau *pée*), whereas the Ø_{SUBJ}/Ø_{OBJ} pattern expresses only subject agreement (*hi*) (a very similar phenomenon occurs in Halq'eméylem, see Wiltschko, this volume). Second, note that the presence of NM marking is tightly tied to the presence of the NE case; similarly, the two Ø cases are linked. Unlike many other multiple case systems, there is no overlap between the two systems; the following case patterns are illicit⁴:

- 4) *Ø_{SUBJ} NE
 *ERG Ø_{OBJ}

3.1 Woolford (1997)

Building upon the analysis of Ergative case given in Levin (1983), Bok-Bennema (1991), Bittner and Hale (1996a, 1996b), Woolford (1997) characterizes the NM case as an optionally thematically linked lexical case, others (see also Ura, Legate, Massam, Spreng, all in this volume, for similar claims):

- 5) Vtran <ag, th>
 |
 (erg)

marking (all \emptyset) of these constructions are essentially identical to that of true intransitives (7).

- 7) 'ipí + \emptyset hi +kú +ye
 he+ \emptyset_{subj} 3 +go+ ASP
 'He went' (Rude, 1982)

- 8) Intransitive & $\emptyset_{\text{SUBJ}}/\emptyset_{\text{OBJ}}$ 1,2⁶ 3
 \emptyset hi
- ERG/NE 1,2/1,2 1/3 2/3 3/3 3/1,2
 \emptyset 'e 'aw péé hi⁷

We argue this relationship is no accident. Ergative case only shows up in those situations where the construction is truly transitive. In the \emptyset/\emptyset constructions, the objects are caseless. Further evidence for the intransitivity of \emptyset/\emptyset constructions comes from the fact that they cannot be passivized, as is predicted if they were intransitive (Perlmutter and Postal 1983). Passives are exceedingly rare in Nuumiipuutímt. They are so rare in the spoken language that native speakers are hard pressed to identify them. Rude (1985:171) shows that only 4% of sentences in a written corpus were passive. Of these, all of the theme subjects were highly topical, indicating that they could not be derived from the \emptyset/\emptyset incorporated structure, which requires non-topical themes. Indeed Rude (1985:172) draws an explicit parallel between the pragmatic function of ERG/NE constructions and passives, distinguishing them from the \emptyset/\emptyset structures. Like passives, the ERG/NE construction involves topical presuppositional objects; on the current account, this common property derives from the fact that the objects are outside the VP in both passives and ERG/NE constructions.

There are at least two plausible (possibly not incompatible) views of how intransitivity in the \emptyset/\emptyset constructions arises. First is the possibility that these \emptyset/\emptyset constructions are antipassives, as is claimed by one original field worker on the language: Rude (1988). Woolford (1997) argues that these constructions lack the usual hallmarks of antipassives: There is no overt voice morphology, and the object does not appear in an oblique case. Nevertheless, they have the typical semantic properties of antipassives (including allowing non-specifics in the object position as noted above), at least in the 'extended' sense of antipassive discussed by Hopper and Thompson (1980:268)⁸. An alternative detransitivizing operation worth considering is incorporation. These constructions are well known in the literature on the indigenous languages of the Americas. Baker's (1988) work focused on constructions in the Iroquoian language Mohawk (9).

- 9) a. Yaowira'a ye-nuhwe's ne kanuhsa'
 Baby 3fs-like the house
 'The baby likes the house.'

- b. Yaowira'a ye-**nuhs**-nuhwe's
 Baby 3fs-house-like
 'The baby likes houses.'
 (Baker 1988)

In Mohawk, presupposed NPs show up as full NPs, whereas generic asserted nominals are incorporated into the verb root. Presumably, this is one means of licensing a nominal that is caseless. However, there is an important difference between Mohawk incorporated objects and Nuumiipuutímt Ø_{obj} NPs. In Mohawk the NPs must be bare N heads. In Nuumiipuutímt, Ø_{obj} NPs can be full NPs⁹.

- 10) ...met'éete [ilsteemqet liwnin] hiwaya'npqáawnima
 ...but burned-wood burned 3.grabbed
 '...but he grabbed a piece of burnt wood'
 (Aoki 1979)¹⁰

This obviously points away from a head-incorporated structure. We are left then with the problem that this "incorporation" doesn't bear the standard hallmarks of head-incorporation either. Interestingly, in the Polynesian language Niuean, we find a very similar phenomenon, commonly called "pseudo-incorporation" (Massam 2001, see also Massam, this volume). Niuean is an ergative/absolutive, predicate initial language.

- 11) Ne inu e Sione e kofe.
 PAST drink ERG Sione ABS coffee
 'Sione drank the coffee.'

Massam (2001) has argued, following the standard take on verb initial languages, that predicate initial order derives from fronting the predicate. Interestingly, under circumstances similar to the situation in Nuumiipuutímt, objects can lose their absolutive case marking and shift with the verb to the front of the sentence. The sentence then becomes intransitive (as seen by the shift from ergative to absolutive case on the subject).

- 12) Ne inu kofe a Sione.
 PAST drink coffee ABS Sione
 'Sione drank coffee'

Again as in Nuumiipuutímt these "incorporated" objects need not be limited to N° heads:

- 13) Ne kai [sipi mo e ika mitaki] a Sione.
 PAST eat chip COM ABS fish good ABS Sione
 'Sione ate good fish and chips.'

Massam encodes this in the syntax by distinguishing between NPs and DPs. DPs require case and NPs do not. Pseudo-incorporation constructions have NP objects, not DPs. Due to the fact that proper names and possessive constructions—typical DP

Next, let's turn to the question of why ERG case is assigned to the subject in transitives but intransitives (both underlying and derived) take \emptyset_{SUBJ} marking. We assume a structural account, drawing on the idea that there are different types of little *v* (Chomsky 1995, Hale and Keyser 2002, as well as Ura, Ndayiragije, Tsedryk, and Legate, all in this volume). In a nominative/accusative language, v_{TRAN} has the dual function of assigning accusative case to the object and introducing the external argument. v_{TRAN} crucially selects for, and can only be merged with, a VP that appears with an internal argument. The unergative counterpart, v_{INTRAN} introduces an external argument, but does not check accusative case. It selects for VPs without an internal argument. Unaccusative predicates lack *v* entirely, thus do not have agent arguments or accusative case. This system essentially stipulates Burzio's generalization as part of the lexical entry of the light verbs (Chomsky 1995).

14) a. v_{TRAN} <ag, VP_[+DP]>
 |
 ERG
 b. v_{INTRAN} <ag, VP_[-DP]>

15) [TP NOM/ABS_i T_[+nom] [vP ERG v_{tran} [vP V t_i]]]

The Nuumiipuutimt system is intermediate between a purely nominative/accusative and the kind of ergative/absolutive system described above. Nuumiipuutimt v_{TRAN} has both lexically assigned ergative and a structural [ACC] feature to check the case of DP objects that are marked with *-ne* (called objective case in the literature on Nuumiipuutimt). Following Chomsky (2001) we assume that accusative case marked NPs are tucked in between agents and little *v* (see also Massam, this volume).

- 16) a. $v_{\text{TRAN}} <\text{ag}, \text{VP}_{[+D]}> \begin{array}{c} [+acc] \\ | \\ \text{ERG} \end{array}$
- b. $[_{\text{TP}} \text{ T}_{[+nom]} [_{\text{VP}} \text{ ERG} [_{\text{VP}} \text{ ACC}_i \text{ v}_{\text{tran}} [_{\text{VP}} \text{ V } t_i]]]]$

Nuumiipuutímt v_{INTRAN} (which selects for both regular intransitive VPs and derived intransitive VPs) lacks both these features so agent DPs must shift to the specifier of TP for case reasons to get NOM/ABS case (\emptyset_{SUBJ} marking).

- 17) a. $v_{\text{INTRAN}} <\text{ag}, \text{VP}_{[-D]}>^{13}$
- b. $[_{\text{TP}} \text{ NOM/ABS}_i \text{ T}_{[+nom]} [_{\text{VP}} t_i \text{ v}_{\text{intran}} [_{\text{VP}} \dots]]]$

One fact still requires explanation: why both NOM/ABS and ERG DPs in Nuumiipuutímt trigger subject agreement. Let us assume that subject agreement features are intimately tied to TP. Further let's assume that T has a D-feature associated with the extended projection principle [+EPP]. T thus has the requirement that it be filled, even in structures where both DPs have their case checked in the vP. For reasons of derivational economy, the higher of the two arguments,¹⁴ the ergative, shifts to satisfy this EPP requirement, and consequently triggers subject agreement (cf. Ura, this volume, and Anand and Nevins, this volume, who both claim that only ergative-marked NPs move to the specifier of TP for EPP reasons, and Massam, this volume who dismisses an EPP account of argument prominence). We thus get an essentially nominative/accusative pattern of agreement with a lexical subject case.

This predicts that Nuumiipuutímt is not syntactically ergative in the sense of Dixon (1994). Syntactic ergativity usually refers to situations where the absolutive counts as the subject for extra-clausal relations (such as which element governs PRO in conjunction etc.). Those languages that treat subjects of intransitives and objects of intransitives as the "pivot" (governor or binder) are "syntactically ergative". Compare the Dyirbal and English sentences in (18).

- 18) a. $[\text{Mother}_i \text{ saw Father}_j] \text{ and } [\text{PRO}_i \text{ returned}]$ (i.e., she returned)
- b. $[\eta\text{uma}_i \quad \text{yabuŋgu}_j \quad \text{buran}] [\text{PRO}_j \quad \text{banaganyu}]$
 father.ABS mother.ERG saw returned
 'Mother saw father and he returned.' (Dixon 1979)

English (18a) is syntactically accusative; the nominative argument is the pivot. Dyirbal (18b) by contrast is syntactically ergative; the absolutive object argument controls the PRO. Unfortunately, it is very difficult to test this in Nuumiipuutímt, since pronominal arguments are expressed in the verbal agreement morphology.

- 19) ... púuyewkunya kaa péetemesitke
 ...3/3-dashed.to.meet and 3/3-lasso
 'He dashed to meet him and he lassoed him' (Aoki 1979)¹⁵

Following Stenson (1989), we assume that in null subject languages PRO and *pro* are identical with respect to binding and control properties. The interpretation of (19) is consistent with an accusative pattern:

- 20) a. 'He_i dashed to meet him_j and he_i lassoed him_j'
 b.* 'H_ę dashed to meet him_j and h_ę lassoed him_j'

This seems to point towards a syntactically accusative structure, as might be expected from the analysis presented here.

4. THE INFORMATION STRUCTURE OF NUUMIIPUUTÍMT NOMINALS

Thus far in this paper, we have presented a purely formal account of the positioning of nominals in Nuumiipuutímt. The surface position of nominals is determined solely by their featural content and the features associated with the various functional categories that introduce and license them. What is needed now is a theory of the relationship between the surface position and the information structure status of the arguments. We survey first the view of Jelinek and her co-authors, where the appropriate device is the Mapping Principle of Diesing (1992). While we adopt the spirit of this approach, we show how the semantic range of nominals is greater than that predicted by the Mapping Principle. Instead, we adopt the view of Carlson (2000) where certain kinds of nominals are themselves part of the same semantic type as verbs, and do not move for case.

4.1 *Jelinek's conjecture*

One important attempt to derive all relational hierarchies from constituent hierarchies is the single and joint work by Jelinek (Jelinek 1993, Diesing and Jelinek 1995, Jelinek and Carnie 2003). We summarize the basic intuition behind this approach in (21):

21) *Jelinek's conjecture*:

All relational hierarchies can be mapped from constituency hierarchies. Elements that are higher in a relational hierarchy are higher in the constituent at some level of representation.

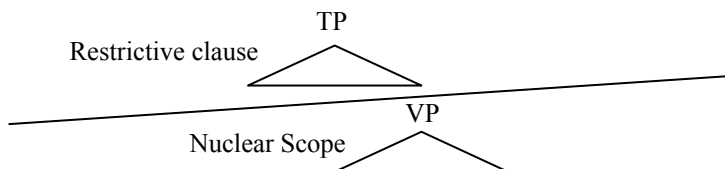
Jelinek has analyzed a number of phenomena—including person/number splits in Lummi, voice alternations in Navajo, dative constructions in English, clitic raising in Arabic—with this kind of theoretical assumption in mind. (See Jelinek & Carnie 2003 for a survey.) In particular, Jelinek uses the approach first advocated in Diesing (1992), where there is a direct mapping (encoded in a semantic mapping principle) between syntactic constituent structure (at some level of representation) and semantic structures¹⁶. The view advocated by Diesing assumes the Kamp (1981)/Heim (1982) approach to the interpretation of nominals. Oversimplifying

somewhat, the sentence (or proposition) is divided up into three parts: (a) a quantifier which asserts the number of entities participating in the action or state; this corresponds roughly to the CP portion of the clause. (b) A restrictor, which asserts the presupposed information about the participants; this roughly correlates with the TP or IP portion of the clause and (c) a nuclear scope, corresponding to the VP, which asserts what is true of the entities and provides the new information to the clause. A very simplistic example is given in (22):

- 22) (Quantifier_{x,y} [Restrictor (x,y)] [Nuclear Scope (x,y)])
 Every person loves cookies

These tripartite structures are derived directly from the syntax via the Mapping Principle:

- 23) *The Mapping Principle* (Diesing 1992)
 1) By LF, the material from TP and above maps into the restriction on some operator.
 2) The material from VP maps into the nuclear scope.



On a more formal level, only variables are allowed in the nuclear scope. These variables can be of two sorts: i) the traces of NPs that have moved out of the VP; ii) a non-quantificational, non-presuppositional NP, which is bound by Existential Closure (i.e., will be as a default taken to mean “there is an X”). In terms of the syntax, what this means is that (at LF) Quantificational (Presuppositional) NPs (such as definites) cannot be inside the VP. Such DPs have to move to create a variable; only non-presuppositional ones (such non-specific indefinites) can remain in situ.

Jelinek (1993) extends the Mapping Principle to account for ergative splits based on person, such as that found in the Salishan language Lummi. The analysis she gives is very much in the spirit of the analyses by Abraham (1996), Dubois (1987), and Delancy (1981), who give a discourse basis to split ergativity. Jelinek, however, formalizes these intuitive characterizations in terms of the Mapping Principle. She claims that nominative local persons (1st and 2nd person) are inherently presuppositional, and thus must raise out of the domain of existential closure. Ergative non-local persons, by contrast, remain VP internal. She assumes that ergative case is a lexical case and is VP-internal. VPs you will recall, define the domain of existential closure. Local NPs are thus disallowed from this position, since they are presuppositional. So no local NP would ever take ergative case.

4.2 Problems with Jelinek's Mapping Approach

The mapping approach is appealing in its simplicity and in the way it reduces one less-understood phenomenon to another. In fact, in this paper, we adopt one of the basic intuitions behind the analysis: the idea that phrase structure prominence corresponds in some way to semantic prominence. Nevertheless, there remain a number of theoretical and empirical problems with Jelinek's analysis.

The first problem is minimalist-theory internal, but nevertheless significant. In the mapping approach to hierarchies, the driving force behind whether an NP remains inside the VP or outside it is semantic. In effect, the pragmatics determines the syntactic realization of various arguments, while this is the predicted direction of cause and effect in a performance-based functionalist approach, it goes against the basic principles of grammatical organization in a competence-based feature-driven model, where reference to external factors such as discourse cannot drive syntactic behaviour. On a related note, it isn't clear why the semantics drives movement in some languages and not in others if we assume that the semantic component is invariant.¹⁷

Finally we have a problem that is both technical and empirical. Diesing's mapping hypothesis requires that elements within the nuclear scope include only variable terms—either the traces of movement or non-specific indefinites. For Jelinek, this roughly corresponds to some notion of “presuppositionality” where elements in the restrictor are “presupposed” and elements in the nuclear scope are asserted. However, how this is actually encoded in the semantics isn't at all clear for animacy, topicality and person. In languages that make reference to person hierarchies (including Lummi), third persons can be (and in many cases must be) specific, yet nevertheless remain in the VP. A similar situation is found in Nuumiipuutimt¹⁸: Clearly specific elements can appear in with the Ø case marking as seen in (24):

- 24) póopci'yawna'ysana [kúksne miyá'c]
 3PL_{SUBJ}.kill [Cook's son]-Ø_{obj}
 'They killed Cook's son' (*Mrs. Agnes Moses/Aoki 1979*)

This is inconsistent with Jelinek's implementation of the mapping hypothesis as an explanation for relational hierarchies.

4.3 Carlson (2000) denotation-type analysis

Carlson (2000) proposes that Diesing's Mapping Principle can be derived from the nature of the semantics of NP types and their compatibility with event semantics. He adopts Bach's (1986) proposal that verbs (and any incorporated arguments) denote eventualities. He claims that eventualities constitute a set **E**; where every element in **E** bears some relation to other elements in **E** via a join semilattice structure, which is defined using the 'part-of' relation \leq . For example $\llbracket \text{boogie} \rrbracket \leq \llbracket \text{dance} \rrbracket$. Kinds or properties, in the sense of McNally (1998), are members of the set **P**. Elements of **P**

are also related to one another with \leq . (e.g. $\llbracket \text{robin} \rrbracket \leq \llbracket \text{bird} \rrbracket$ but $\llbracket \text{bird} \rrbracket \not\leq \llbracket \text{dog} \rrbracket$). Carlson notes that when verbs are combined with property-denoting nominals, they inherit the ‘part-of’ relations:

“If N and N' are property-denoting arguments, and $\llbracket N \rrbracket \leq \llbracket N' \rrbracket$ both in \mathbf{P} , and $\llbracket V \rrbracket$ is a member of \mathbf{E} , then $\llbracket V N \rrbracket \leq \llbracket V N' \rrbracket$ and both are in \mathbf{E} . (And ... if $\neg \llbracket N \rrbracket \leq \llbracket N' \rrbracket$, then $\llbracket V N \rrbracket \not\leq \llbracket V N' \rrbracket$)” (Carlson 2000:5)

Carlson gives us the intuitive example that $\llbracket \text{eat cake} \rrbracket \leq \llbracket \text{eat food} \rrbracket$.

This can be contrasted with arguments that are not kinds/properties (for example, those that are strongly quantified). It is not the case that $\llbracket \text{fed every dog} \rrbracket \leq \llbracket \text{fed every mammal} \rrbracket$ even though $\llbracket \text{dog} \rrbracket \leq \llbracket \text{mammal} \rrbracket$ is in \mathbf{P} . Carlson explains this by appealing to the differing denotations of VPs and TPs. What is crucial here is that the denotations of VPs are contextless; they are merely the extensions of the elements in \mathbf{E} . As such only elements that are not evaluated with respect to possible worlds and truth can appear VP internally. The denotation of TP involves a propositional context; as such nominals that are presupposed (such as strongly quantified nominals) and require evaluation with respect to a particular context appear outside the VP. This explains the common distinction between specific and non-specifics in terms of their position in the tree.

Recall, however, that in Nuumiipuuṭimt Ø-marked nominals are not limited to indefinites. Proper names and possessive constructions appear with the Ø case. (Relatedly, in Jelinek’s analysis of Lummi, 3rd person pronouns can take the $V(v)P$ -internal ergative case marking.) On the surface this appears to contradict Carlson’s characterization, because such nominals typically require a context in order to be interpreted. However, recall our native speaker’s characterization of Ø-marked objects. He characterized them as being of “no-consequence”. By contrast arguments with NE-marking are “highly salient”. We attribute this marking to a kind of evidentiality. ERG/NE marking indicates that the nominals are to be interpreted given the context. Ø/Ø marked nominals by contrast are not given a contextual interpretation. While Carlson explicitly excludes individuals from \mathbf{P} , it may well be the case that non-evidentially interpreted nominals (in languages with evidential marking) are part of \mathbf{P} . This seems consistent with his characterization of the members of \mathbf{U} , which are the extensions of \mathbf{P} :

“These entities are best understood as property-instantiations and not as individuals proper. The problem is that the same individual may have different properties at different times and in different worlds. The same individual may be a child then an adult; a student, then a lawyer, and so forth, so the members of \mathbf{U} might be looked upon as individuals-while-they-are-an- N , and not individuals proper.” (Carlson 2000:6)

5. CONCLUSIONS

In this short paper, we have suggested that relational hierarchies can be formalized into the feature checking properties of types of little v . We have claimed that the interpretative/semantic appearance of the hierarchies is due to the fact that nominals in particular syntactic positions must receive certain types of semantic interpretation as governed by Carlson’s recasting of Diesing’s Mapping Principle (1992) and we

have shown how this explains the restrictions on the so-called four way case system of the Sahaptian language Nuumiipuutimt.

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¹ For example, Dixon (1979, 1994), Silverstein (1976), DuBois (1987), Delancy (1981), and Aissen (1999, forthcoming) among others, including a number of papers in this volume.

² Among the types of such hierarchies we find splits based in terms of aspect or tense. We will not attempt to deal with this kind of split in this paper. However, see Ura (this volume), Anand and Nevins (this volume), and Legate (this volume) for analyses of splits that uses very similar technology

to the one we propose here. See also Abraham (1996), Ritter and Rosen (1998), Hopper and Thompson (1980), Laka (this volume).

³ This surfaces as *péewiye*. The reader will find throughout that the *pée* prefix changes form due to various phonological processes including vowel harmony. We leave these details aside here.

⁴ Woolford accounts for the non-existence of the patterns in (4) with the Maximum Accusatives Generalization⁷

i) *Maximum Accusative Generalization*

Max ACC = #Arguments - #lexical cases - 1

The number of accusatives (\emptyset_{OBJ}) found in a clause is a function of the number of arguments, less any lexically marked arguments (such as ergative NPs), less 1. The evidence for this generalization comes mainly from ditransitive and double object verbs, which need not concern us here. The effect of this generalization is that in a simple transitive when an Ergative subject is present, a \emptyset_{OBJ} is not allowed (2 arguments - 1 lexical ergative - 1 = 0 \emptyset_{OBJ} cases). The non-co-occurrence of the \emptyset_{SUBJ} and NE cases is described in the following passage from Woolford, the material in square brackets was added by us:

“The ungrammaticality of sentences with a nominative[\emptyset_{SUBJ}]-objective[-NE] Case pattern in Nez Perce is attributed to the notion that accusative Case [\emptyset_{OBJ}] assignment is obligatory in Nez Perce, unless interfered with by the [Max ACC] generalization” (p. 202)

It is unclear to us how accusative case is marked as “obligatory” in the grammar and Woolford offers no further explanation. Further it is uncertain how the Max ACC generalization actually interferes in the case marking of the arguments. To be fair, the Max ACC Generalization is not meant to be a syntactic constraint, but merely a descriptive statement. The exact means of implementing it in the grammar are left open by Woolford. We offer a different analysis below.

⁵ This is actually a modern translation of Woolford’s tree, which makes use of AgrPs. Nothing crucial appears to ride on whether we use AgrPs or not.

⁶ 1, 2 and 3 stand for first, second and third person respectively. In the ERG/NE cases the first number represents the ergative, the second the NE argument.

⁷ The observant reader will note that with 1/2 objects, we also get an agreement pattern identical to that of intransitives (with \emptyset and *hi*). In these cases, however, the ERG/NE pattern of case marking still shows up. We leave study of this pattern to future research.

⁸ For more on antipassives, see Spreng, Johns, Bobaljik and Branigan, and Ndayiragije (all in this volume).

⁹ Nuumiiputimt also has unproductive head-incorporation:

i) ‘ipna+tams-as+iyayi-k-sa

3SG.REFL-wild.roseberries-move.around.in.order.to-V-PST

‘picking berries’

Here, the incorporated noun is *táamsas* ‘wild roseberries’. It is often the case that the suffix *-k* is obligatory in these constructions; the analysis of such forms lies beyond the scope of this paper.

¹⁰ From “Feathering Place” as told by Mr. Harry Wheeler, 1961.

¹¹ We are not making any claims about all types of ergative/absolutive languages here, only those that seem to take a lexical ergative on agents.

¹² For alternative views see the extensive literature on ergativity including, but not limited to: the various papers in this volume, Bittner and Hale 1996a, 1996b, Bobaljik 1993, Bok-Bennema 1991, Campana 1992, Dixon 1979, 1994, Johns 1992, Levin and Massam 1985, Mahajan 1997, Nash 1995, Phillips 1993, Yip, Maling and Jackendoff 1987. Ura’s analysis (2001, this volume), actually involves absolutive checking via the AGREE function rather than through movement; but the basic idea is similar.

¹³ [-D] is not meant here as a means of encoding some kind of long distance selection. We assume it to be a featural property of Vs (and thus the VPs headed by these Vs). It is necessarily the case that verbs are classed into groups representing their argument structure properties, thus the selection here is for the VP type, as encoded in the head V; it is not selection for the complement of the V.

¹⁴ This option is not allowed in “regular” ergative/absolutive languages for reasons of convergence. In Nuumiiputimt, the specifier of TP serves only to check EPP, as both arguments have had their case checked in vP. In regular ERG/ABS systems, by contrast, the object’s case features remain unchecked.

Movement of the object around the ergative subject thus serves a dual function: EPP checking for the TP and case checking for the object. Failure to move this NP would result in a non-convergent derivation, and thus overrides economy considerations.

¹⁵ From "Cannibal" told by Mrs. Elizabeth P. Wilson, 1962.

¹⁶ In many ways, this kind of approach mirrors formally the intuitions of many functional accounts of hierarchies and ergativity: DeLancy's (1981), given in terms of figure/ground viewpoint and attention flow mechanisms (a.k.a. voice marking and case marking) and DuBois's (1987) discourse based account.

¹⁷ A fact supported indirectly by the fact that there are universal trends in the structure of markedness hierarchies, in that while not all languages make reference to animacy hierarchies, there are no languages which rank inanimates more highly than animates.

¹⁸ For a fuller discussion of case marking in Nuumiipuutimt and the semantic associations of that case marking, see Woolford (1997) or Rude (1988).

III

ANTIPASSIVE

BETTINA SPRENG[†]

ANTIPASSIVE MORPHOLOGY AND CASE ASSIGNMENT IN INUKTITUT

1. INTRODUCTION

The Antipassive (AP) construction in Inuktitut exhibits most commonly known properties associated with the Antipassive. It has special morphology on the verb and the object receives oblique case, thus showing a different case configuration from the normal transitive construction in ergative languages (Dixon 1994:146). This paper examines the Antipassive construction in Inuktitut with focus on AP morphology and its effect on case assignment. Based on findings on the distribution of AP morphology in Inuktitut, I propose that there are two different object cases in what has previously been called the AP construction in Inuktitut. I adopt a framework following Woolford (1997, 2004) making a distinction between structural, lexical, and inherent case. When the verb shows overt AP morphology, the object case in the AP construction is structural accusative case and is assigned by *v*. When there is no overt AP morpheme on the verb, the object case is an inherent case, dependent on a theta role but is not a syntactic argument of the verb. It is elevated to argument status only by agreement with *T* in the case of the ergative construction when it receives ergative case.

The analysis is counter to Bok-Bennema (1991) who suggests that the object case of the AP is always accusative. It is also counter to the traditional notion that the AP is a detransitivizing operation, demoting the patient argument of the transitive construction (ergative construction from hereon in this paper) to an oblique case. Instead, the analysis conforms to Bok-Bennema (1991) when the verb requires overt AP morphology, while in the absence of the AP morpheme, it claims that we have a normal intransitive construction without any demotion.

Counter to most treatments of the AP in Inuktitut (Bok-Bennema 1991, Bittner 1987, 1991) I argue further that there is no evidence to support the view that there is allomorphy between overt and non-overt AP morphology and that there is in fact no phonologically null AP allomorph at all. I also argue that the AP morpheme is verbal, occupying *v*, a view counter to analyses that take the AP morpheme to be an incorporated noun (Baker 1988). The analysis is based on the fact that AP morphology is determined by the verb's argument structure and therefore determined in *l*-syntax (Hale & Keyser 1993).

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The paper is organized as follows. Section 2 describes the basic properties of the AP in Inuktitut; Section 3 provides a discussion of the distribution the AP morpheme; Section 4 discusses the properties of ergative, absolutive and oblique case and Section 5 offers an analysis of these constructions. Section 6 provides further evidence for the idea that there are two different object cases in the AP, and Section 7 ends the paper with concluding remarks.

2. THE ANTIPASSIVE IN INUKTITUT

Inuktitut has a predominantly ergative case assignment system with an alternative system of case assignment, the AP. The transitive (ergative) and intransitive constructions differ with respect to case assignment and agreement.

As shown in (1), the ergative construction shows ergative case on the agent, absolutive case on the patient, and agreement in person and number with both arguments on the verb (1a). An intransitive sentence shows absolutive case on the sole argument and the verb agrees with it (1b).

- 1) a. anguti-up arnaq kunik-taa *Ergative*
 man-ERG woman(ABS) kiss-PART.3SG/3SG
 ‘The man kissed the woman’
- b. anguti niri-vuq *Intransitive*¹
 man(ABS) eat-IND.3SG
 ‘The man is eating.’

The AP differs from the ergative construction both in case assignment and overt agreement morphology on the verb.

The agent receives absolutive case (like the sole argument in an intransitive sentence or the patient argument in the ergative construction) and the verb shows agreement only with this argument. The patient receives what traditionally has been called an oblique case, the *mik*-case². Example (2a) illustrates that the verb is marked with an AP marker *-si-*. This marker has previously been taken to have a zero allomorph (2b).

- 2) a. anguti kunik-si-vuq arna-mik *AP with overt AP marker*
 man(ABS) kiss -AP-IND.3SG woman-mik
 ‘the man kissed a woman’
- b. anguti niri-Ø-vuq niqi-mik *AP w/non-overt morphology*
 man(ABS) eat- AP-IND.3SG meat-mik
 ‘the man is eating meat’

Inuktitut could be called a *pro*-drop language, in the sense that overt pronominal agreement on the verb signals the role of non-overt arguments both in ergative and intransitive sentences.³

- 3) a. kunik-taa
 kiss-PART.3SG/3SG
 's/he is kissing him/her'
- b. niri-vuq
 eat-IND.3SG
 's/he is eating (something)'

In the AP construction, there is agreement only with the absolutive argument. Although the verb shows agreement only with the agent argument, the patient argument can also be non-overt. This could mean either that the patient argument is simply not present at all or the patient argument could be represented as object-*pro*.⁴

- 4) a. kunik-si-vuq
 kiss-AP-IND.3SG
 's/he is kissing someone'
- b. niri-vuq
 eat-IND.3SG
 's/he is eating something'

Due to the absence of an overt AP marker, the constructions in (3b) and (4b) look exactly the same. Without the implicit assumption that (4b) contains a non-overt AP marker, the constructions are indistinguishable. On the other hand, (4a) can never occur without overt *-si-*, whereas (4b) never occurs with overt *-si*.

With respect to AP morphology, Inuktitut verbs fall into three classes. The first class consists of unaccusative verbs that never occur in a construction similar to the AP with an overt argument in the *mik*-case. When they can be transitivized, either overtly with a causative suffix or non-overtly, they require overt AP morphology in the AP construction. They correspond roughly to the stative/inchoative alternation verbs in English.

- 5) a. naalauti surak-tuq
 radio(ABS) broke
 'the radio broke'
- b. Piita surak-*(*si*)-juq naalauti-mik
 Peter(ABS) break-AP-PART.3SG radio-mik
 'Peter broke the radio.'

The second class is unergative verbs, which, even when possible with a second argument, never allow AP morphology. I call these unergative verbs which optionally allow a lower argument object-permitting verbs.

- 6) a. Piita aqut-tuq
 Peter(ABS) drive-PART.3SG
 ‘Peter is driving.’
- b. Piita aqut-(*si)-juq unakkuuruti-mik
 Peter(ABS) drive-PART.3SG car-mik
 ‘Peter is driving a car.’

The third class consists of transitive verbs that never occur in intransitive constructions unless marked with AP morphology. Like the first class they always require AP morphology in the AP construction.

- 7) a. *Piita kapi-vuq
 Peter(ABS) stab-IND.3SG
 ‘Peter stabbed himself’⁵
- b. Piita kapi-*(si)-vuq nanu-mik
 Peter(ABS) stab-AP-IND.3SG polar bear-mik
 ‘Peter stabbed a polar bear.’

This short overview has shown that AP morphology is predictable from the verb’s argument structure. The following section provides more evidence to that effect. It also shows why the AP morpheme is verbal (see also Spreng 2001a,b), that it is not an aspectual suffix,⁶ and that it is responsible for a particular derivation in the syntax.

3. THE DISTRIBUTION OF THE AP MORPHEME

3.1 *Unaccusative Verbs and Causativization*

According to Burzio’s generalization (Burzio 1986), verbs that do not assign a theta-role to an external argument cannot assign accusative case to their complement, forcing the latter to raise to subject position. Transferring this generalization to Inuktitut, we are faced with the following facts.

As we expect, unaccusative verbs in Inuktitut are usually verbs that have no agent. They cannot occur in the AP with an overt *mik*-NP, whether with overt or with non-overt AP morphology.

- 8) a. Piita tiki-juq iglu-mut
 Peter(ABS) arrive-PART.3SG house-all
 ‘Peter arrives at the house.’
- b. *Piita tiki-si-juq iglu-*mik
 Peter(ABS) arrive-INCPT.-PART.3SG house-mik
 ‘Peter is about to arrive at the house.’

- c. Piita-up anautaq surak-taa *Ergative*
 Peter-ERG stick(ABS) break-PART.3SG/3SG
 'Peter broke the stick'

The argument that always occurs is a patient argument. Regardless of whether the sentence is intransitive or in the ergative construction, this argument appears in the absolutive case. The agent argument is optional in the sense that the verb may be intransitive. The intransitive construction is possible only with the overt AP morpheme *-si*.

3.2 *Inherently Transitive Verbs*

This group of verbs occurs in ergative constructions but cannot appear in an intransitive construction except with obligatory AP morphology.

- 12) a. Piita kapi-si-vuq nanur-mik *AP*
 Peter(ABS) stab-AP-IND.3SG polar bear-mik
 'Peter stabbed a polar bear.'
- b. Piita-up nanuq kapi-jaa *Ergative*
 Peter-ERG polar bear(ABS) stab-PART.3SG/3SG
 'Peter stabbed the polar bear'.
- c. *Piita kapivuq⁸ *Intransitive*
 Peter(ABS) stab-IND.3SG
 'Peter stabbed (himself accidentally, fell onto a knife).'
- 13) a. anguti kunik-si-vuq arna-mik *AP*
 man(ABS) kiss-AP-IND.3SG woman-mik
 'The man kissed a woman'
- b. anguti-up arnaq kunik-taa *Ergative*
 man-ERG woman(ABS) kiss-PART.3SG/3SG
 'The man kissed the woman'
- c. *anguti kuniktuq *Intransitive*
 man(ABS) kiss-PART.3SG
 'The man kissed'

Concerning the AP morpheme, inherently transitive verbs behave identically to causativized unaccusative verbs such as *surak-* 'break', i.e., they require overt *-si*.

I therefore assume that they behave identical to causativized unaccusative verbs in the AP.

3.3 Unergative Verbs and Object-permitting Verbs

I assume unergative verbs to be basically transitive. This means that there is always a higher verbal element *v*, which merges with the sole external argument but the verb itself has no argument. These verbs are distinct from unaccusative verbs in that regard, since the latter require the sole argument themselves.

- 14) a. Piita pisuk-tuq
Peter(ABS) walk-PART.3SG
'Peter is walking'
- b. Piita iglaq-juq
Peter(ABS) laugh-PART.3SG
'Peter is laughing.'

However, some of the semantically agentive unergative verbs allow for a second internal argument. I call these verbs object-permitting verbs. In Inuktitut, these verbs occur in intransitive sentences (15a, 16a), ergative constructions (15b, 16b), and AP constructions (15c, 16c). In the AP construction and in a simple intransitive sentence, crucially they do not show overt AP morphology.

- 15) a. anguti niri-juq *Intransitive/AP*
man(ABS) eat-PART.3SG
'the man is eating (something)'
- b. anguti-up niqi niri-vaa *Ergative*
man-ERG meat(ABS) eat-IND.3SG/3SG
'the man is eating meat'
- c. anguti niri-vuq niqi-mik *AP*
man(ABS) eat-IND.3SG meat-mik
'the man is eating meat'
- 16) a. Piita taku-juq *Intransitive/AP*
Peter(ABS) see-PART.3SG
'Peter sees (something)'
- b. Piita-up qimmiq taku-jaa *Ergative*
Peter-ERG dog(ABS) see-PART.3SG/3SG
'Peter sees/saw the dog'
- c. Piita taku-juq qimmir-mik *AP*
Peter(ABS) see-PART.3SG dog-mik
'Peter sees a dog'

The AP construction without overt *mik*-NP and a normal intransitive construction appear exactly the same on the surface in these cases (15a, 16a). Only the assumption that there is a zero AP allomorph in (15c) and (16c) in combination with the optional *mik*-NP could provide a means to distinguish the AP from the intransitive constructions in (15a) and (16a). This assumption is however by no means substantiated.

Following Hale & Keyser (1993) and Harley (1999), I assume that unergative verbs are derived through incorporation of a root into a semantically (almost) empty verb. The difference to Baker's (1988) incorporation analysis of the AP lies in the following: there is no AP morpheme that is incorporated into a verbal root but a root element is incorporated into an abstract verbal element, thus forming a verb. Baker's analysis targets only AP constructions with overt AP morpheme in syntax proper whereas this analysis derives unergative and object-permitting verbs.⁹ The underlying structure parallels the analytic form of Basque noun-*egin* constructions, which are usually semantically unergative verbs in other languages (Levin 1983). The implication here is that the incorporation does not occur in Basque.

- 17) Oso ondo hitz egin duzu
 very good word-SA make 3SA-ukan-2SE
 'You spoke very well.' (Levin 1983:304)¹⁰

Apart from the option of the second argument, the verbs in (15) and (16) are indistinct from intransitive unergative verbs. However, the *mik*-case argument is optional for both. The theme argument is optional in the same sense as the agent argument is optional for so-called unaccusative verbs.

3.4 *Is there a zero AP allomorph?*

In previous literature on the AP morpheme, it has been claimed that the AP morpheme denotes some sort of aspect (Bittner 1987, Benua 1995). However, this claim cannot be supported for Inuktitut. The identical inceptive suffix *-si-* has properties distinct from the AP morpheme *-si-* as shown in (18).

- 18) a. anguti kunik-si-vuq arna-mik
 man(ABS) kiss-AP-IND.3SG woman-mik
 'the man is kissing the woman'
- b. anguti kunik-si-si-vuq arna-mik
 man(ABS) kiss-AP-ICPT.-IND.3SG woman-mik
 'the man starts to kiss the woman'
- c. anguti kunik-si-lir-puq arna-mik
 man(ABS) kiss-AP-ICPT.-IND.3SG woman-mik
 'the man starts to kiss a woman'

- d. anguti-up arnaq kuni-si-jaa
 man-ERG woman(ABS) kiss-ICPT-IND.3SG/3SG
 'the man starts to kiss the woman'
 *the man kissed the woman

- e. anguti-up arnaq kuni-lir-paa
 man-ERG woman(ABS) kiss-ICPT-IND.3SG/3SG
 'the man starts to kiss the woman'

The inceptive *-si-* can appear in the ergative construction (18d, e) whereas the AP *-si-* cannot. An important difference to note here is that the inceptive *-si-* deletes the preceding consonant of the verb root (18d) just like its equivalent *-lir-* (18e), whereas the AP morpheme does not (18a). In addition, with respect to affix order, the aspectual marker cannot precede the AP marker (18b, c). This conforms to the affix ordering posed by Fortescue (1983). The AP morpheme *-si-* belongs to the group of what he calls "verb-extending affixes", which precede negation and "sentential affixes" (Fortescue 1983:97). Inceptive *-lir-* and inceptive *-si-* belong to the latter category.¹¹

We cannot necessarily assume that the zero AP morpheme differs in the same respect from the aspectual morpheme. However, there is evidence that there is no deletion of the final consonant of the verb root in the AP construction whereas the aspectual morpheme causes the deletion of the preceding consonant as well in AP constructions with non-overt AP morpheme.

- 19) a. Piita pisuk-tuq
 Peter(ABS) walk-PART.3SG
 'Peter is walking'
- b. Piita pisu-si-juq
 Peter(ABS) walk-ICPT-PART.3SG
 'Peter starts to walk'
- c. nunakkuuruti-mik aqut-tuq
 car-mik drive-PART.3SG
 'he is driving a car'
- d. nunakkuuruti-mik aqu-si-juq
 car-mik drive-ICPT-PART.3SG
 'he is starting to drive a car'

Example (19b, d) illustrate that the aspectual *-si-* causes deletion of the final consonant of the verb root, thus implying that there is no interfering element between root and suffix.

Although the evidence is not too clear that there is no AP morpheme, there is absolutely no evidence that there is a zero AP allomorph present. The latter view has been taken because the construction with the overt *mik*-case argument looks

identical. However, this assumption can in no way account for the fact that the argument structure of the verbs determines the occurrence of the AP morpheme. Only verbs that are inherently transitive and causativized verbs take overt AP morphology; object-permitting verbs never occur without it and this distribution needs to be accounted for.

4. THE VERBAL PROJECTION

The structure of the VP has undergone various modifications within Generative Syntax. Especially since Larson's (1988) proposal for Double Object Constructions with a second VP shell above the basic VP, the view on verbal projections has motivated approaches such as Hale & Keyser's (1993) structural design for argument structure.

It has also led to the view that the external argument is introduced by a higher functional head *v* (Chomsky 1995 et seq.), promoting the idea that the external argument is not actually an argument of the lexical verb (Marantz 1984; Kratzer 1996; Harley 1995, 1999; Hung 1988, and others). Kratzer (1996) has argued that external actually means that it is an argument of an event/causer element, which – when it is overt – can be a Spell-Out of *v*. In general, there seems to be agreement on the idea that the external argument is not an argument of the lexical verb per se. The presence of an external argument is equivalent in some sense to the notion of transitivity. Traditionally, transitivity implies that there is a second argument that is required by the verb's subcategorization frame. However, if this second argument is merged with *v* instead, this notion of transitivity is meaningless. Transitivity on the argument structure level thus does not exist since the lexical verb as such requires only one argument with which it merges. Furthermore, transitivity means that the so-formed VP requires merger with a little *v*, which in itself may or may not require merging with an argument.

Unergative verbs behave differently from inherently transitive and unaccusative causativized verbs, in that a second verbal element is included in their argument structure, but the verb as such does not have an internal argument (Harley 1999). Some of them allow optionally for an internal argument, which begs the central question that drives this paper: Is the object in *Peter ate an apple* an argument of the verb in the same sense as the object in *Peter killed the dog*?

Based on the above discussion, the answer has to be in the negative (following Hale & Keyser 1993, Harley 1995, 1999, Chomsky 1995). The lower argument *an apple* is optional in the sense that when it is left out, the sentence stays grammatical. No syntactic alternation needs to take place. In the AP in Inuktitut, agreement is with the absolutive regardless of whether the apple is expressed or not. The verb *eat* only takes one argument, the agent. If we take *eat* as a verb that patterns with unergative verbs as in Inuktitut, the sole argument needs to be the argument of *v*, thus implying that there is no lower argument merging with a lexical V.

In other words, the merger of *v* with an argument is only a requirement if a lower derivation makes it a requirement of *v* to merge with an argument into its specifier. Following Harley (1999), this CAUSER/MAKE/DO element in *v* always provides

an external argument position for the agent. The root incorporates into this semantically impoverished v on the level of I-syntax. This has the following consequence: If an unergative verb is always derived through incorporation of a root into a semantically empty verb, and we assume this semantically empty verb to be v , there is no verbal entry for unergative verbs in the lexicon. This means there is no VP projection in the syntax but a syntactically (categorially) undetermined $\sqrt{\quad}$ that will incorporate into v .¹² The optional theme for object-permitting verbs like 'eat' is therefore not an argument of the verb.

By providing a slot for the external argument, the presence of *v* is a necessity for the derivation of unergative verbs, whereas the presence of the lower DP is optional in the case of such verbs that may or may not have a second DP present. In contrast, unaccusative verbs *require* an internal argument and may or may not merge subsequently with a functional ‘transitivizing’ or ‘causativizing’ *v*, which in turn merges with an external argument. In this case, the external argument is optional or rather irrelevant for the lexical verb.

4.1 The Cases of Inuktitut: Absolute

Adopting the idea of an obligatory case that must be assigned in a language (Levin & Massam 1985, Bobaljik 1993, Austin & López 1997) I assume this to be absolutive case in Inuktitut.

Following Johns (1987, 1992), Bok-Bennema (1991), Bittner (1994), Schieberl-Manga (1996), and others, I assume that the absolutive NP always receives case by T. The subjecthood of the absolutive NP or at least its patterning together with respect to control¹³ and relativization (Creider 1978, Smith 1984, Johns 1987, Bok-Bennema 1991, Gugeler 1994, Bittner 1994) seems to be justified.

That there is a clear syntactic difference between absolutive NP's on one hand and ergative NP's on the other in Inuktitut is shown in the fact that only absolutive NP's can refer to the external heads in relative clauses. If the relative clause is transitive (with two arguments) and the head refers to the agent proto-role, the relative clause is in the Antipassive construction, with the subject in the absolutive. According to Creider (1978:95), "... the only noun phrase (NP) position inside the relative clause which may be relativized into is the absolutive." In that respect, the absolutive patterns with the *mik*-NP.

- 20) a. angum-mik (arna-mik taku-ju-mik) taku-vunga
man-ACC woman-ACC see-AP-ACC see-IND(I)¹⁴
'I saw the man who saw the woman.'
(Creider 1978:100)
- b. *anguti (arnaq taku-ja-mik) taku-vara
man (woman(ABS) see-transitive-mik) see-IND.1SG/3SG
'I saw the man who saw the woman'.¹⁵

Sentence (20a) would be ungrammatical if the verb in the relative clause had double agreement and the noun were in the absolutive case such as in (20b). The

latter is ungrammatical since *arnaq* in the relative clause is in the absolutive which is *not* the head noun of the matrix clause.

I further claim that absolutive is the only structural case in Inuktitut¹⁶ and thus a reflex of phi-Agree with T. This follows straightforwardly from the fact that regardless of the construction, one NP always has absolutive case and the finite verb always agrees with this NP. Further, the absolutive NP is not tied to one theta role.

4.2 *The Cases of Inuktitut: Ergative Case*

Other than, for instance in Basque (Uriagareka 1999), where instruments can be marked ergative, in Inuktitut, ergative always marks the proto-agent argument (which includes possessors) in the sense of Dowty (1991).

I assume that *v* by default does not license structural case in Inuktitut, following Woolford (2004).¹⁷ Woolford (2004) proposes a model of non-structural case that distinguishes between inherent and lexical case which have the following properties (Woolford 2004:3-4).

21) a. Non-Structural Cases

- (i) Lexical Case: Idiosyncratic, lexically selected case
- (ii) Inherent Case: Case inherently associated with θ -role licensing

b. Arguments

- (i) Idiosyncratic Lexical Case is limited to T arguments
- (ii) The more regular Inherent Case is limited to A and G arguments¹⁸

c. Licensers

- (i) Only lexical heads (e.g. V, P) may license idiosyncratic lexical case.
- (ii) Only little/light *v* heads may license inherent case.

Ergative case in Inuktitut matches all the properties of inherent case. It is licensed by *v* and is closely tied to the agent proto-role (Dowty 1991). Furthermore, experiencer verbs like ‘be happy’ or ‘fear’ require a transitivity morpheme to be in an ergative construction. Assuming this morpheme to be in little *v*, the ergative, which bears the agent role, is again licensed by it instead of the verb.

22) a. quviasuk-tunga

happy-PART.1SG

‘I am happy’

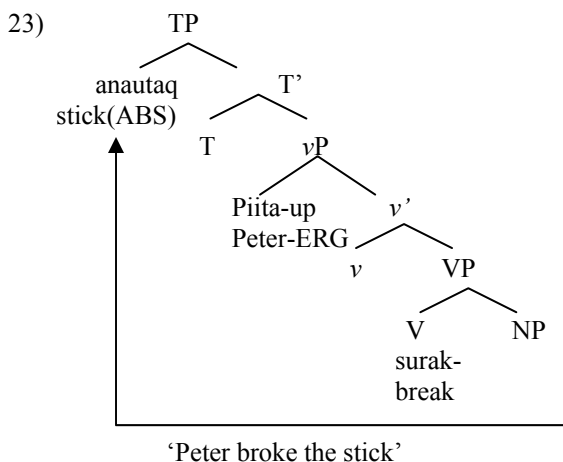
b. quviasuk-ti-taanga

happy-CAUS-PART.3SG/1SG

‘She made me happy’

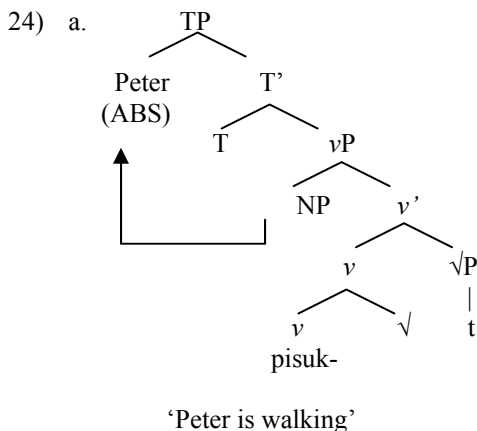
However, agreement in Inuktitut as described in the beginning, is always with the absolutive. When there is an ergative argument, there is also agreement with this

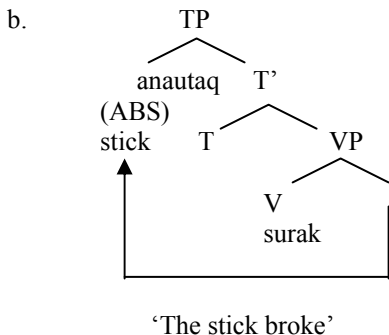
argument. To account for the agreement properties, I propose that the phi-features of T probe for the NP in spec,vP and value its features. However, only part of the phi-feature set of T can be valued in the ergative construction, forcing a further probe to the lower NP. Absolutive is a reflex of the second valuing of phi-features whereas ergative has been assigned by *v* as inherent case.



One consequence of *v* not assigning structural case is that there is never structural case assignment to the lower argument by *v*, thus no agree relation is established.

For the intransitive construction, whether with unergative or unaccusative verbs, the only case that is assigned is absolutive. *v* cannot license ergative case in these constructions, thus showing a *v* with different (‘intransitive’) properties. Thus, the phi-probe on T searches for the first NP, finding it either in spec of vP (24a) for unergative verbs or lower within VP (24b) for unaccusative verbs.





4.3 The Cases of Inuktitut: mik-case

With respect to agreement, the verb shows overt agreement only with the absolutive NP in the AP. The object case is the *mik*-case. I propose, further developing the analysis in Spreng (2001b) that the AP morpheme *-si-* is in *v* and is responsible for *mik*-case on the lower argument. When there is no AP morpheme, *mik*-case is assigned as lexical case by the lexical head.

The *mik*-case is thus assigned structurally, which means the AP morpheme has 3rd person and number phi-features. Evidence comes from Double Object Constructions (DOC). Consider the following DOC's from Central Arctic Eskimo (Johnson, 1980:16, with slight modification of glosses).

- 25) a. Anguti-up titiraut nutarar-mut tuni-vaa.
 man-ERG pencil(ABS) child-all. give-IND.3SG/3SG
 ‘The man gave the pencil to the child’
- b. anguti-up titirauti-*mik* nutaraq tuni-vaa
 man-ERG pencil-COMIT. (MIK-CASE) child(ABS) give-IND.3SG/3SG
 ‘the man gave the child the pencil’

The *mik*-case for *nutaraq* ‘the child’ in (25a) would be ungrammatical.

- 26) a. angut titirauti-*mik* nutarar-mut tuni-*si*-vuq
 man(ABS) pencil-*mik* child-all. give-AP-IND.3SG
 ‘the man gave the pencil to the child’
- b. *angut titirauti-*mik* nutarar-*mik* tuni-*si*-vuq
 man(ABS) pencil-*mik* child-*mik* give-AP-IND.3SG
 ‘the man gave the pencil to the child’

Johns (1984) argues that (26b) is ungrammatical because there are two NP's with *mik*-case. The ungrammaticality stems not from the AP morpheme or agreement

problems but from the fact that both objects are marked with *mik*-case. If *mik*-case is structural in this instance, this should follow.

More evidence comes from DOC's in Iñupiaq, a variety of Western Inuit, spoken in the inland villages along Kobuk River in Alaska. One independent fact is that traditionally, the *mik*-case has been shown to have different functions in Inuktitut. It can function as an instrumental, a goal, or marks a patient argument in the AP. Consider the examples for the former from Iñupiaq.

- 27) a. Anguti-m tuqut-kaa agnaq saviṇ-mik
 man kill(p)-IND3SG3SG woman knife-MODSG¹⁹
 'Man killed woman with a knife.'
- b. Angun tuyuq-tuq nauria-nik aana-miñun.
 man send(a)-IND3SG flower-MODPL mother-TER3RSGSG
 'Man sent flowers to his mother.' (Nagai 1998:14)

Assuming accusative as structural case assigned by *v*, we do not expect two accusative cases in one sentence when the verb is marked with the AP morpheme. A ditransitive AP construction with overt AP morpheme must have the second object in a case other than the *mik*-case. On the other hand, AP ditransitive constructions without overt AP morpheme allow both objects in the *mik*-case.

- 28) a. Anjun akuqtu-i-ruq aglaṇ-nik taata-miñiñ
 man receive(p)-ANTI-IND3SG letter-MODPL father-ABL3RSGSG
 'Man received letter(s) from his father.'
- b. Anjun tuni-si-ruq aquppiuta-mik agna-mun
 man sell(p)-ANTI-IND3SG chair-mik woman-TERSG
 'Man sold chair to woman.' (Nagai 1998:55,57)
- 29) Anjun simmiq-ø-suq makpiḡaa-nik agna-mun[/agna-miñ]
 man exchange(a)-ANTI-IND3SG sheet-MODPL woman-TERSG/woman-ABLSG
 'Man exchanged book(s) with woman.' (Nagai 1998:53)

Although Nagai (1998) does not make a distinction between aspectual and AP morphemes for Iñupiaq and Iñupiaq might have more than one AP morpheme, the same analysis as for Inuktitut should hold even if the verbs classes might be divided along different lines. Consider (30).

- 30) a. Anjun uqaq-ø-tuq nukatpia-mun
 man talk to(a)-ANTI-IND3SG young man-TERSG
 'Man talked to young man.'

- b. Aṇun uqaq-nik-tuq nukatpia-mik
 man talk to(a)-ANTI-IND3SG young man-MODSG
 ‘Man started talking to young man.’ (Nagai 1998:30)

Obviously, when the verb shows an overt suffix after the verb root, the meaning is inceptive. In addition, Nagai’s classification of which verbs allow which AP markers coincides roughly with the classification I am proposing. Nagai’s “agentive stems” (Nagai 1998:27) are unergative and object-permitting verbs in my system and are the only ones that allow a zero AP suffix (Nagai 1998:25).

- 31) a. Aṇun tamuq-ø-tuq paniqtu-mik
 man chew(a)-ANTI-IND3SG dried fish-MODSG
 ‘Man chewed dried fish.’
 b. Aṇun tamuq-si-tuq paniqtu-mik
 man chew(a)-ANTI-IND3SG dried fish-MODSG
 ‘Man took bite of dried fish. Man tasted dried fish.’ (Nagai 1998:29)

Examples (30) and (31) demonstrate clearly that *-nik-* in (30b) and *-si-* in (31b) are not AP morphemes but the inceptive ‘start to’ just like in Inuktitut. Although Nagai mentions “agentive” stems that allow for non-overt and overt AP morphemes as well as different overt morphemes, it seems these are in fact aspectual morphemes.

- 32) a. Aṇun qia-ø-ruq igñig-miñun [/igñig-miñik]
 man cry for(a)-ANTI-IND3SG son-TER3RSGSG/son-MOD3RSGSG
 ‘Man cried for his son.’
 b. Aṇun qia-sri-ruq igñig-miñik [/igñig-miñun]
 man cry for(a)-ANTI-IND3SG son-TER3RSGSG/son-MOD3RSGSG
 ‘Man started to cry for his son’

In addition, (32) shows that the *mik*-case can be replaced by other oblique cases only when the verb has no overt AP morpheme. When there is an overt suffix, it is an aspectual morpheme, not an AP morpheme. With verbs with no AP morpheme, the objective case can either be the *mik*-case, the modalis, or the terminalis.

The view that the AP morpheme is a verbal element contrasts with many analyses that take the AP morpheme to be a nominal element that incorporates into the verb, absorbing the case the verb usually assigns (Baker 1988, Bittner & Hale 1996a, b, Bittner 1994, Marantz 1984). However, the idea that *-si-* is verbal instead of nominal avoids the problems caused by an incorporation analysis for the AP in Inuktitut.

For instance, noun incorporation in Inuktitut is restricted to a certain class of affixal verbs. These verbs need to incorporate obligatorily not only for morphological but for semantic reasons. (cf. Johns 2003). The verbs that supposedly

incorporate the AP morpheme in the AP construction do not belong to the class of verbs that obligatorily incorporate. Another problem with the incorporation analysis lies in the fact that the incorporated noun (i.e. the AP morpheme) attaches to the right of the verb, whereas with incorporating verbs the incorporated noun attaches to the left of the verb. Although word order is relatively free in Inuktitut, morpheme order does not allow much room for variation (Fortescue 1983). On the other hand, the AP morpheme *-si-* behaves like a verbal element in many respects. Verbal inflection as well as verbal postbases that do not change syntactic categories can be attached to it directly. It can also directly precede an aspectual marker.

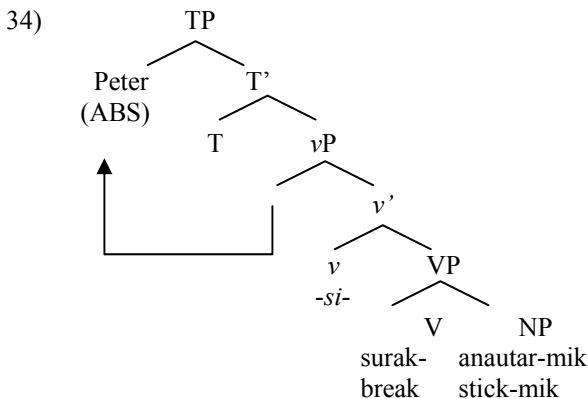
- 33) anguti kunik-si-lir-puq arna-mik
man(ABS) kiss-AP-ICPT.-IND.3SG woman-mik
‘the man starts to kiss a woman’

Since it is not plausible to assume that the aspectual marker is a verbalizing element that attaches to a noun I claim that the AP morpheme must be verbal.²⁰

5. THE AP MORPHEME & THE VERB’S ARGUMENT STRUCTURE: AN ACCOUNT

5.1 AP with *-si-*

Consider a semantically unaccusative (agent-less) verb such as *surak-* ‘break’, which can be causativized by overt or non-overt means. As demonstrated in Section 3, it occurs in the AP with *-si-*. I propose that *v* is occupied by *-si-* thus equipping it with phi-features to agree with the lower NP.



This analysis adopts the view that *mik*-case is an accusative case (Bok-Bennema 1991). We can abandon the notion that the AP morpheme is a nominal that absorbs the verb’s case and theta role (Baker 1988) or blocks its theta-assigning feature

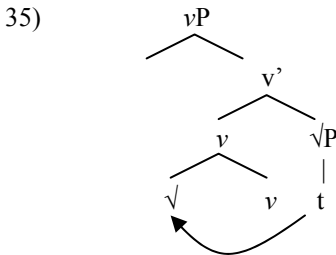
(Jensen & Johns 1989), notions that are in themselves rather problematic. However, *v* can only assign accusative case when occupied by the AP morpheme *-si-*.²¹

5.2 *AP with Object-permitting Verbs*

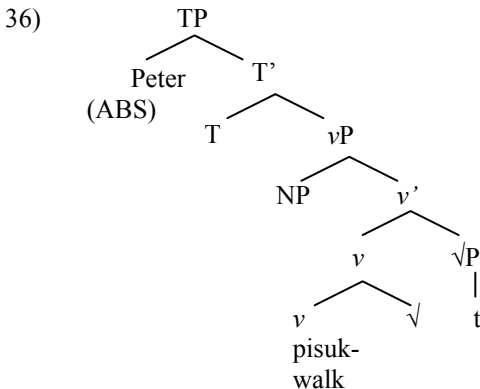
As already mentioned, according to Hale & Keyser (1993) unergative verbs are derived via incorporation of a noun into a higher verbal head at the level of I-syntax.

Working within a later model of Minimalism, this means – and this is more or less generally agreed upon – that unergative verbs always project *v*P where *v* requires the so-called external argument. I am adopting Harley's (1999) analysis that modifies Hale & Keyser's proposal for the derivation of unergative verbs.

A semantically simple (almost empty) verb *v* merges with a \sqrt{P} , which in turn obligatorily incorporates into *v* to create a syntactic category verb. Note that if these verbs need to be derived in syntax, they cannot be lexical verbs with an entry in the lexicon.²²

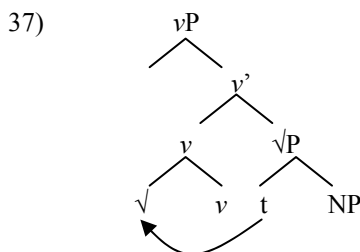


The external argument is merged with the *v*- $\sqrt{}$ complex. This complex head has no phi-features due to the absence of *-si-*. It can license ergative case for its specifier but when T has only one set of person/number features, the case of the spec,*v*P is spelled out as absolutive due to Agree with T.

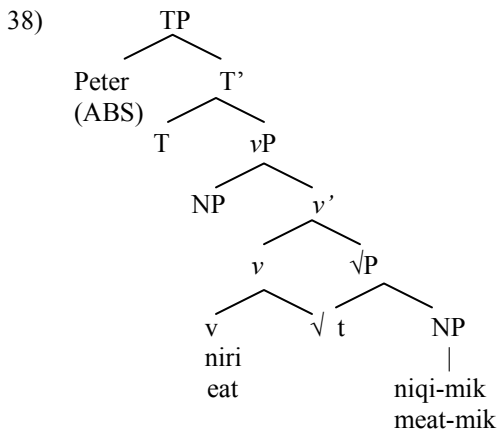


If these verbs have a lower argument, we are faced with a predicament. The question is whether it is the incorporated $\sqrt{\quad}$ that merges with this argument prior to incorporation or whether it is the v - $\sqrt{\quad}$ complex. The optionality of this NP is due to the fact that the root does not have argument structure. The verb is derived through incorporation and has no lexical entry. If we keep the notion that a verb's argument structure is a structurally represented lexical property, *niri-* 'eat' has no lexically defined argument structure since it has no lexical entry. Therefore, I assume that the optional patient argument merges optionally with the root. Implied in this assumption is the idea that this root has no argument structure, so if there is a second overt NP, it merges with the root. This optionality is represented in the fact that it can be omitted without further consequences. In contrast, the patient argument of an unaccusative verb can never be left out since it is required obligatorily by the lexical verb. On the other hand, the derived unergative/object-permitting verb does require an external argument in its specifier. In this case, only v requires an argument. Thus, extensions of the lexically determined argument structure of the verb are caused by v through causativization for unaccusative verbs. In the case of object-permitting verbs, the extension is not an extension of the argument structure of the derived verb but rather an optional merger with the root.

For the derivation of the AP, if we assume that there is a zero AP allomorph present in v with the same features as *-si-*, the derivation should proceed in the same manner as the derivation of AP construction with *-si-*. Hence, the internal argument would receive accusative case from v . However, v in this case is occupied by a v - $\sqrt{\quad}$ complex. We would have to assume that the root incorporates to the zero AP allomorph that occupies v which also needs to be occupied by some semantically impoverished verbal element. An analysis that assumes that there is no AP morpheme present makes no such prediction. In fact, unless occupied by *-si-*, v can only license inherent case.



The internal argument however receives *mik*-case from the \sqrt{v} complex.²³ The difference to the AP construction with causativized unaccusative verbs is that *mik*-case is assigned as lexical case. This accounts for the optionality of the lower NP based on the obligatory absence of the AP morpheme in v . Little v is in essence a lexical head in this instance, since it basically has *become* the verb in this sentence through incorporation.



Little *v* has thus the same feature make-up in the AP, the ergative, and the intransitive construction for these verbs, which accounts for the fact that they never allow an AP morpheme. In all constructions, *v* has no ϕ -features but is a licenser for inherent case. It simply does not assign structural case. However, the difference lies in the agreement patterns. When *T* has two sets of phi-features²⁴, case of spec,vP is spelled out as ergative. When it is intransitive, the case of spec,vP is spelled out as absolutive, thus accounting for the fact that the finite verb always agrees with the absolutive NP, regardless of the construction.

Intransitive constructions and AP constructions with no AP morpheme thus look and derive identically, whereas AP constructions with overt AP morphology derive in an identical fashion to, for example, a transitive sentence in an accusative language.

Thus, we have an explanation for why object-permitting verbs never allow an AP morpheme.

6. SUMMARY

The above analysis crucially depends on the notion that *v* differs in its feature make-up depending on the kind of construction and the argument structure of the verb.

Little *v* is identical for unergative/object-permitting verbs in the traditionally called AP construction and the intransitive construction. In fact, these constructions only differ in the optionally present lower NP. On the other hand, unaccusative and causativized verbs differ in the AP and the intransitive construction, due to a *v* that only occurs when there is an additional higher argument. In case of inherently transitive verbs, this is also the case, probably also due to a causativizing element in *v* that is however obligatory for these verbs in contrast to causativized unaccusative verbs. The difference between the ergative construction on the one hand and the AP and the intransitive on the other is that *T* has two sets of phi-features, each of which agree with both arguments. The difference between AP constructions and other intransitive constructions simply lies in the AP morpheme's property to provide *v*

with unvalued phi-features that probe to agree with a lower NP. Intransitive constructions with or without an overt lower NP present, do not differ in that respect.

An analysis that assumes that there is always an AP morpheme, either zero or overt cannot explain the distribution of the overt versus the non-overt version of the AP morpheme. Therefore, an analysis that contains as a crucial feature that there is in fact no alternation can not only explain the morphological alternation – or rather, that there is in fact none – but also the fact that this so-called alternation depends crucially on the verb's argument structure.

7. CONCLUSION

The examination of the distribution of the AP morpheme in Inuktitut has produced the following results. The AP morpheme has no zero allomorph and occurs only with verbs that have an external argument due to overt or non-overt causativization. The AP morpheme is a verbal element that agrees with a lower argument and thus licenses structural accusative case, thus causing a syntactic derivation that is different from the ergative construction and intransitive construction. With respect to parameterization, we can conclude that *v* in the predominantly ergative languages like Inuktitut lacks the ability to license structural case. In Inuktitut, structural case is licensed either by an AP morpheme *-si-* that occupies the head of *vP* or by default by *T*.

In contrast to many previous approaches to ergativity, the above conclusions were reached through a close examination of the distribution of the AP morpheme. Firstly, this examination shows that the AP marker is distinct from the aspect marker counter to what was previously claimed for West Greenlandic (Bittner 1987). It also illustrates that the previously assumed alternation between zero and overt AP marker can be supported only by circumstantial evidence. The empirical evidence supports also the alternative view, i.e. that there is no alternation. The proposed analysis explains why the alternation is closely related to the argument structure of the verb. The alternative, namely that there is alternation can of course explain why the object becomes an oblique. However it can neither explain why the supposed alternation correlates to the argument structure of the verb nor why other cases than the *mik*-case are possible only without the overt AP morpheme. An analysis claiming that there is alternation would have to stipulate this correlation.

The above proposal provides an account for the fact that the distribution of the overt AP morpheme coincides with verbs that display identical argument structure, thus it is able to predict the occurrence of the AP morpheme in Inuktitut.

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¹ Gloss: ERG=ergative case; ABS=absolutive case; part.=participial mood; ind.=indicative mood. The mood marker is an obligatory part of the verbal agreement inflection. See Johns (1987, 1992) for a discussion.

Unless otherwise indicated, examples are taken from my fieldwork with Ida Awa, a speaker of Mittimatalik, a variety of Canadian Inuktitut spoken in North Baffin. My thanks go to her. Of course, any errors can be blamed on me.

² This case has received various names in the literature: modalis, comitative, instrumental. To avoid terminological confusion, I refer to this case as the *mik*-case according to its morphological form in the singular. Examples taken from sources other than my fieldwork are glossed according to the sources.

³ Thus I call sentences with double agreement transitive, constructions with single agreement intransitive throughout this paper.

⁴ See Spreng (2001a) for a detailed discussion of this issue.

⁵ Marantz (1984) based Johnson (1980) and Siegel (1998) based on Kalmar (1977) report that this is a possible reading in Central Arctic. In North Baffin, this can only be forced with a reading where Peter accidentally falls onto his knife. There are, of course, other ways to express such an event.

⁶ The aspectual differences between ergative and AP construction are not quite clear. The data I collected so far suggests that there is a split along the progressive, similar to Basque (see Laka, this volume). However, not all verbs seem to take part in the alternation. See Spreng (2004) for a preliminary analysis.

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- ⁷ *-tit-* usually means literally ‘make, cause to, let’, whereas the consonant in (9c) might be a more direct means of causativization (Alana Johns, p.c.).
- ⁸ Siegel (1998) cites Kalmar (1979:17) claiming that the intransitive form *kapi-vunga* ‘I stab myself’ is entirely acceptable. My consultant had the same problems with this form as with *kapi-vuq* ‘he stabbed himself’. This class of verbs is very problematic with an intransitive inflection. Marantz (1984) claims that this type of verbs is necessarily reflexive in Central Arctic, but with a passive reading in Kallaalissut, following Sadock (1980). The ‘accidental’ reading of (12c) would allow both interpretations in Mittimatalik. However, (13c) is entirely unacceptable.
- ⁹ According to Hale & Keyser (1993), this derivation occurs in l-syntax. In this framework, an interesting question would be where the boundary between l-syntax and s-syntax would be located. I will however leave this issue for further research.
- ¹⁰ 3sA=3rd person singular absolutive; 2sE=2nd person singular ergative agreement.
- ¹¹ Inceptive *-lir* and inceptive *-si* can be found in group 17, (Fortescue 1983:44). AP *-si* or intransitivizing *-si-*, as he calls it, can be found in group 14 (Fortescue 1983:42). According to Fortescue 1983: 97, affixes of group 9-14 precede affixes of group 15-18 (Fortescue 1983:97).
- ¹² See Harley (1999) for a similar analysis within Distributed Morphology.
- ¹³ See Wharram (1996) for a critique of this view regarding control and infinitive sentence structures.
- ¹⁴ I use Creider’s gloss here: Acc=accusative, AP=active participle, I=1st pers. sg. Note that the verb seems to be case-marked with accusative in the relative clause. Brackets indicate the relative clause. The example is from Kaniqliniq, which is typologically close to the Baffin Island dialects.
- ¹⁵ Taken from my own fieldwork since Creider (1978) does not provide the contrasting ungrammatical example.
- ¹⁶ With one exception which I will discuss in the next section.
- ¹⁷ Note that I am making no claims about other ergative languages in that respect.
- ¹⁸ A argument: Agent argument, T Argument: Theme Argument; G Argument: Goal Argument (Woolford 2004).
- ¹⁹ Gloss in Nagai (1998): Ter: terminalis case; Mod: *mik*-case; Abl: ablative case; R: possessive; (a) agentive stem (my object-permitting); (p) patientive stem (my causativized unaccusative); (man) is marked ergative in 27a). (cf. Nagai 1998:viii).
- ²⁰ See a detailed discussion in Spreng (2001b).
- ²¹ For an approach that the AP is reflexive in Kirundi, see Ndayiragije (this volume). Other than in Kirundi, a reflexive interpretation seems only possible in certain dialects and only in the *absence* of an AP marker.
- ²² For a discussion on the properties of verbal roots in Inuktitut, see Spreng (2004).
- ²³ Previously, inherent case was taken to be a lexical property of the verb. However, since there is no lexical verb, the notion of inherent case must be redefined for these verbs.
- ²⁴ And the details of this view of course still need to be worked out.

THE ERGATIVITY PARAMETER: A VIEW FROM ANTIPASSIVE

1. INTRODUCTION

An antipassive construction is the mirror image of passive, with salient properties in (1) from Dixon (1994):

- 1) a. It applies to an underlying transitive clause and forms intransitive
- b. The underlying Agent becomes the subject by being Case-marked Absolutive
- c. The underlying Object is demoted, being marked by non-core Case/P or omitted
- d. There is always some explicit formal marking of antipassive, as for passive.

An illustration is given in (2), from Inuktitut. (2a) is a transitive sentence, (2b) an antipassive (data from Bittner and Hale 1996a).

- 2) a. Junna-p Anna kunip-p-a-a
Juuna-ERG Anna kiss-IND-[+tr]-3sg.3sg
'Juuna kissed Anna.'
- b. Junna(Anna-mik) kunis-si-v-u-q
Juuna(Anna-INS) kiss-AP-[-tr]-3sg
'Juuna kisses/is kissing (Anna).'

Antipassive is standardly viewed as a trademark of ergative languages (Bittner and Hale 1996a). Well-studied Nominative languages such as English or French lack it entirely¹. This raises a non-trivial issue barely discussed in the literature: what is in ergative languages that attracts antipassive?

I have argued elsewhere that ergativity is an epiphenomenon derivable from (3):

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3) **The Ergativity Parameter** (Ndayiragije 2000)

T and v are devoid of Structural Case features in pure ergative languages²

The proposal was risky five years ago, and remains so in some circles, but with no warrant, in my opinion³. Under (3), Ergative Case is a θ -related lexical Case assigned to the external argument (Agent) in-situ, i.e. in [Spec, vP]; while Absolutive Case is a default Case valued by the object in a functional projection located in between TP and vP that I dubbed “Focus” Phrase; yet nothing in the proposal hinges on that label⁴. What is new with the proposal is rather the idea that Absolutive Case is not a feature of T or v, contrary to the standard view (see most of the papers in this volume, among others).

Empirical evidence supporting (3) were drawn from striking syntactic similarities (such as wh-extraction restrictions, Case-marking alternations, binding, Control, etc.) found in Dyirbal, a syntactically ergative language, and Malagasy, a language I take to be probably the best example of a pure ergative language, in accord with (3). I will not review those arguments here; see Paul and Travis (this volume) for a discussion of some, with an opposite stand on the ergative nature of Malagasy, a view I respectfully disagree with.

In this paper, I intend to convince the reader to buy (3), by taking a look at antipassive, a construction commonly viewed as a species property of ergative languages. In my opinion, such a seemingly privileged status might be one of the clues towards understanding the real nature of ergativity.

To do so, I will first show that antipassive is not an exclusive seal of ergative languages. It is found in nominative languages such as Kirundi, a Bantu language spoken in Burundi. Interestingly enough, Kirundi antipassive occurs in a configuration where v lacks Case feature, a welcome result in support of (part of) (3). Relevant facts are presented in the following section.

2. ANTIPASSIVE IN NOMINATIVE LANGUAGES

2.1 *Dixon’s (1994) Footnote 7*

Let us start with the following discovery by Crowley (1981), as quoted in Dixon (1994):

“[...] in the Australian language Anguthimri (Crowley 1981), the verbal derivational suffix *-pri* can signal an antipassive or a reciprocal (there is a different affix *-thi*, for reflexive).” (p.147)

As we will see shortly, a quite similar morphological strategy is at work in Kirundi reciprocals, which strongly suggests that 2.2. holds.

2.2 *Kirundi reciprocals are antipassive*

Consider first sentences (4a-b) from Chichewa, a well-known Bantu language. (4a) is a transitive sentence, (4b) a reciprocal one. In (4b), the suffix *an* is added to the

4) a. Mbizi zi-ku-mény-a mkân̄go. *Transitive*
zebras 3p-PRES-hit-ASP lion
'The zebras are hitting the lion.'

b. Mbizi zi-ku-mény-an-a. *Reciprocal*
zebras 3p-PRES-hit-AN-ASP
'The zebras are hitting each other.'

5) Mkângo u-na-dzi-súpul-a. *Reflexive*
 lion 3s-PST-REFL-bruise-ASP
 'The lion bruised itself.'

6) a. Abagabo ba-a-kúbit-ye abâna. *Transitive*
 men 3p-PST-hit-ASP children
 ‘The men hit children.’

b. Abagabo ba-a-kúbit-an-ye. *Reciprocal*
 men 3p-PST-hit-AN-ASP
 ‘The men hit each other.’

c. Abagabo ba-a-i-kúbit-ye. *Reflexive*
 men 3p-PST- REFL-hit-ASP
 ‘The men hit themselves.’

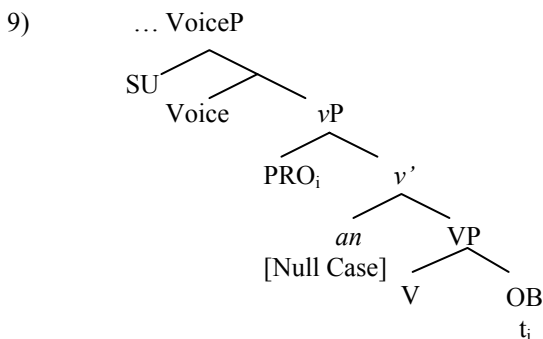
- 7)
 - a. Chichewa reciprocal *an* is a [-N] category that reduces the arity of the predicate.
 - b. Arity changing is a morphological process taking place in the lexicon.
 - c. The reciprocal interpretation arises from the lexical meaning of *an* itself.

As we will see shortly, Kirundi and Chichewa reciprocals share many syntactic and semantic similarities, but also some important contrasts that make the lexicalist approach in (7) untenable.

An alternative proposal, syntactic in nature, will be defended, based on assumption (8):

- 8) *an* is a v-head underspecified for a [Null Case] feature.

Under that assumption, both Chichewa reciprocal (4b) and Kirundi equivalent (7b) follow the same derivational path, partially depicted in (9). The null Case feature of *v* probes the direct object (OB). Consequently, the latter spells out as the empty category PRO, as expected under the Null Case hypothesis in (8). As for the external argument (SU), it is probed by T's Nominative Case, phi- and EPP-feature, therefore becomes the subject of the sentence.



Under this view, Bantu reciprocals are not intransitive, strictly speaking. They are control structures, with a null argument PRO in the object position. At first glance, this might sound exotic or unearthly, especially to those who only know PRO in subject position. Yet, nothing on theoretical grounds is weird with PRO in object position or elsewhere, if licensing conditions are met.

On empirical grounds, antipassive in Anguthimri might be another instance of PRO object, a hypothesis I won't pursue in details here, for lack of data. What is important in my proposal is the hypothesis that the antipassive constructions occurs in a configuration where *v* has a Null Case feature; that is, no Case at all.

If true, then the intriguing issue why the antipassive construction is predominantly found in ergative languages receives a principled explanation. It is a logical consequence of (3).

The proposal might raise scepticism in some circles⁶. Yet, sceptical readers must offer a better explanation, as the antipassive puzzle can no longer be left aside in the ergativity debate. It is among "emerging issues", although an old one.

The following section presents empirical arguments in support of the proposal in (8-9).

2.3 *Kirundi reciprocals*

There are at least seven syntactic and semantic properties of Kirundi reciprocals that any analysis must deal with.

Property 1°: Kirundi reciprocals are systematically ambiguous between a reciprocal reading (i) and a generic/quantificational one (ii), as illustrated by (10b). Importantly, the two readings are triggered by the presence of *an* on the verb. As a matter of fact, *an* deletion in (10b) eliminates (i-ii) readings, and leads to ungrammaticality, as shown by (10c).

- 10) a. Abanyéeshuúle ba-a-tuk-ye umwarimu.
 Students 3p-PST-insult-ASP teacher
 ‘Students insulted the teacher.’
- b. Abanyéeshuúle ba-a-tuk-an-ye.
 Students 3p-PST-insult-AN-asp
 (i) ‘Students insulted each other.’
 (ii) ‘Students insulted people_{arb.}’
- c. *Abanyéeshuúle ba-á-tuk-ye.
 Students 3p-PST-insult-ASP
 ‘*Students insulted each other/people_{arb.}’

Needless to say, Kirundi has verbs like English *eat*, *talk*, *read*, etc, whose internal argument may be omitted, as shown by (11b). Importantly, the verb in (11b) bears the same morphology as in (11a). Furthermore, (11b) has no reciprocal or quantificational (PRO_{arb}) reading. Accordingly, the two readings depend upon *an*-insertion, as in (11c).

- 11) a. imbwa zi-a-ri-ye inyama.
 dogs 3p-PST-eat-ASP meat
 ‘Dogs ate meat.’
- b. imbwa zi-a-ri-ye.
 dogs 3p-PST-eat-ASP
 ‘Dogs ate (something) / *Dogs bit each other/people_{arb.}’
- c. imbwa zi-a-ri-an-ye.
 dogs 3p-PST-eat-AN-ASP
 ‘Dogs bit each other/people_{arb}/*some thing.’

Property 2°: As a consequence of 1°, Kirundi reciprocals permit a [-plural] subject, leading to only the generic reading, as in (12b).

- 12) a. Umunyéeshuúle a-a-tuk-ye umwarimu.
 Student 3s-PST-insult-ASP teacher
 'A student insulted the teacher.'
- b. Umunyéeshuúle a-a-tuk-an-ye.
 Student 3s-PST-insult-AN-ASP
 'A student insulted people_{arb.}'

The well-formedness of (12b) is unexpected if *an* is a reciprocal morpheme, as claimed by Darlymple, Mchombo & Peters (1994) for Chichewa (see 7c)⁷.

Property 3°: The missing argument in (12b) can be overtly realized in a demoted phrase headed by *na* (13a), a light *p* (preposition/Kase) head also used in passive, as shown by (13b), the passive sentence formed from (12a):

- 13) a. Umunyéeshuúle a-a-tuk-an-ye na umwarimu.
 Student 3s-PST-insult-AN-ASP by teacher
 'A student and a teacher insulted each other.'
- b. umwarimu a-a-tuk-u-ye na umunyéeshuúle.
 teacher 3s-PST-insult-PASS-ASP by student
 'A teacher was insulted by a student.'

Property 4°: An important difference exists between Kirundi reciprocals and passives: passivization demotes the external argument, triggering raising of the internal argument to the subject position, as illustrated by (14b). On the other hand, reciprocalization demotes the internal argument, as shown in (14c). (14d), compared to (14c) and (13a), is odd with the overt *na*-phrase, probably for pragmatic reasons. Our world is fortunately free of situations where a tree and a person fight each other, at least so far.

- 14) a. Igití ki-á-kúbit-a Yohani.
 tree 3s-PST-hit-ASP John
 'The tree hit John.'
- b. Yohani_i a-á-kúbit-u-a t_i (na igiti)
 John 3s-PST-hit-PASS-ASP by tree
 'John was hit (by a tree).'
- c. Igití ki-á-kubit-an-a.
 tree 3s-PST-hit-AN-ASP
 'The tree hit people_{arb.}'
- d. Igití ki-á-kubit-an-a (*na Yohani).
 tree 3s-PST-hit-AN-ASP
 '*The tree and John hit each other.'

From the facts presented under Property 1°- 4°, and given Dixon's list of antipassive properties in (1), an inescapable conclusion follows: Kirundi reciprocals are antipassive or Dixon's checklist in (1) is to blame.

Property 5°: An interesting selectional (theta) restriction on *an*-suffixation splits Bantu languages into two groups: the Chichewa-type and the Kirundi one.

In Chichewa-type, which includes Kiswahili and Kilega, among others, *an*-suffixation only targets transitive verbs, as shown by the contrast of grammaticality between (15b) and (16b), from Kiswahili.

- 15) a. Wale watoto wa-na-pend-a maziwa. *Transitive*
 those children 3p-PRES-like-ASP milk
 'Those kids like milk.'
- b. Wale watoto wa-na-pend-an-a.
 those children 3p-PRES-like-AN-ASP
 'Those kids like each other/people_{arb.}'
- 16) a. Wale wanamke wa-me-imb-a. *Unergative*
 those girls 3p-PST-sing-ASP
 'Those girls sang.'
- b. *Wale wanamke wa-me-imb-an-a.
 those girls 3p-PST-sing-AN-ASP
 'Those women sang together / with people_{arb.}'

In Kirundi-type on the other hand, no selectional restriction applies. The suffix *an* freely inserts to any verb, be it transitive, unergative or unaccusative, as illustrated by (b) sentences of (17-19), from Kirundi.

- 17) a. Abo bâna ba-zoo-kund-a amatá. *Transitive*
 those children 3p-FUT-like-ASP milk
 'Those children will like milk.'
- b. Abo bâna ba-zoo-kund-an-a.
 those children 3p-FUT-like-AN-ASP
 'Those children will like each other/people_{arb.}'
- 18) a. Abo bagoré ba-á-ra-tamb-ye. *Unergative*
 those women 3p-PST-AF-dance-ASP
 'Those women danced.'
- b. Abo bagoré ba-á-ra-tamb-an-ye.
 those women 3p-PST-AF-dance-AN-ASP
 'Those women danced together /? with people_{arb.}'

- 19) a. Abo bagoré ba-á-ra-sohok-ye. *Unaccusative*
 those women 3p-PST-AF-go out-ASP
 'Those women went out.'
- b. Abo bagoré ba-á-ra-sohok-an-ye.
 those women 3p-PST-AF-go out-AN-ASP
 'Those women went out together / ?with people_{arb.}'

Property 6°: As a consequence of 5°, Kirundi reciprocalized transitive verbs may tolerate overt realization of the internal argument, as illustrated in (20c). (20a) is a transitive sentence. (20b) is the reciprocalized version, with *an* merged with the verb. The object 'my house' of (20a) is dropped in (20b), giving rise to the reciprocal and quantificational readings: the men are destroying each other or they are destroying some unknown people. Sentence (20c) is (20b) plus the object 'my house' of (20a). A semantic change occurs here: the men are working together or with unspecified people in destroying my house.

- 20) a. Abo bagabo ba-a-sambur-ye inzu yanje.
 those men 3p-PST-destroy-ASP house of-me
 'Those men destroyed my house.'
- b. Abo bagabo ba-a-sambur-an-ye.
 those men 3p-PST-destroy-AN-ASP
 'Those men destroyed each other/people_{arb.}'
- c. Abo bagabo ba-a-sambur-an-ye inzu yanje.
 those men 3p-PST-destroy-AN-ASP house of-me
 'Those men destroyed my house together / with people_{arb.}'

The facts in (20) offer a strong empirical argument against the idea that Bantu reciprocals are intransitive. A final argument is provided below.

Property 7°: A reciprocalized verb may contain the reflexive anaphor, but not pronouns.

(21a) is a transitive sentence, (21b) a reflexive: the reflexive clitic *i* is prefixed to the verbal root. (21c) shows that pronominal clitics may fill the reflexive position in (21b).

- 21) a. Yohani a-a-sek-ye Mariya *Transitive*
 John 3s-PST-hurt-ASP Mary
 'John hurt Mary.'
- b. Yohani a-a-i-sek-ye. *Reflexivization*
 John 3s-PST-REFL-hurt-ASP
 'John hurt himself.'

- c. Yohani a-a-tu/ku/ba-sek-ye. *Object pronouns*
 John 3s-PST-us/you/them-hurt-ASP
 'John hurt us/you/them.'

Consider now sentences (22b-d) formed from (22a). (22b) shows that reflexive-insertion leads to ungrammaticality, a non-surprising fact derivable from θ -Criterion. Since the verb is unergative, it lacks an internal argument position to host the reflexive anaphor.

Interestingly, (22b) can be rescued by suffixing *an* to the verb, as shown in (22c). I come back to (22d) shortly.

- 22) a. Abo bagoré ba-a-tamb-ye. *Unergative*
 those women 3p-PST-dance-ASP
 'Those women danced.'
- b.*Abo bagoré ba-a-i-tamb-ye. *Reflexive*
 those women 3p-PST-REFL-dance-ASP
 '*Those women danced themselves.'
- c. Abo bagoré ba-a-i-tamb-an-ye. *Reflexive+Reciprocal*
 those women 3p-PST-REFL-dance-AN-ASP
 'Those women danced with themselves (i.e. alone).'
- d.*Abo bagoré ba-a-tu/ku/ba-tamb-an-ye. *Obj. pronouns+Reciprocal*
 those women 3p-PST-us/you/them-dance-AN-ASP
 'Those women danced with us/you/them.'

The contrast between (22b*) and (22c) suggests that the presence of the reflexive clitic *i* in (22c) is governed by the presence of *an*. Two important generalizations follow: first, *an* is a θ -assigner head. Second, Kirundi reciprocals are not intransitive, or both (22b) and (22c) would be ill-formed.

We now return to (22d). Here, object pronouns are banned from the position of the reflexive in (22c), under the intended meaning⁸. This is quite unexpected as both reflexive and pronouns are legible in object position, witness (21b-c). At first glance, the ill-formedness of (22d) also goes against the preceding conclusion that Kirundi reciprocals are transitive, that is, they contain an object position.

The alleged counter-argument is only illusory, though. It rather gives us a clue towards discovering *an*'s formal features as a Probe, by looking at those of its Goal. The question to be asked is: what do Kirundi pronouns have, but reflexives don't, that disqualifies them as potential Goal for Probe *an*?

The answer lies in the morphological makeup of Kirundi reflexive and pronouns. Pronouns are fully specified for inflectional features such as person, number, Case, and gender⁹. By contrast, the reflexive clitic has a bare form, with no other intrinsic formal feature apart from that of being reflexive. Note that the reflexive does not even inherit/copy morphological phi-features from its binder

under *Agree* in overt syntax. Illustrations are given in (23a-b); the reflexive *i* is invariable, irrespective of its binder's formal features.

- 23) a. *pro* n/u/tu/ba-a-i-ank-ye.
 1s/2s/1p/3p-PST-REFL-hate-ASP
 'I/you/we/they hated myself/yourself/ourselves/themselves'
- b. Umwana a-a-i-koror-ye.
 child 3s-PST-REFL-drop-ASP
 'The child fell down by himself'
- c. Uburiri bu-a-i-koror-ye.
 bed(s) 3s/p-PST-REFL-drop-ASP
 'The bed(s) fell down by itself/themselves'

From (23), it follows that Kirundi reflexive is phi-defective, contrary to, say, English or French counterparts which pick morphological agreement features from their binder. The reason why (22c) is well-formed while (22d) is not now becomes clear: the matching Goal of Probe *an* must be phi-defective. Accordingly, the following conclusion holds: *an* must lack phi-features, for *Agree* to apply.

Assume so. Then, by being phi-defective, Probe *an* must also lack uninterpretable Case-feature as the latter is valued under phi-Agree (Chomsky 2001a, 2001b).

The conclusion that *an* is devoid of formal features paves the way for a principled account of all properties of Bantu reciprocals described above.

2.4 A Feature-driven Syntactic Account

The successful theory of Kirundi reciprocals (and Bantu ones in general) is the one that affords a unified account of the three main issues summarized in (24):

- 24) a. The whereabouts of the missing object in some reciprocals
- b. The transitivity-split of Bantu into two subgroups: Chichewa-type vs. Kirundi one
- c. The systematic ambiguity of Bantu reciprocals

Needless to say, Darlymple, Mchombo & Peters' (1994) lexicalist approach, which claims that *an* is an intransitivizer, cannot reach the "short list" of competing theories for (24a-c), if generalized to Kirundi reciprocals. Let us briefly recall why, before turning to our proposal.

First, a lexicalist approach fails to account for Kirundi sentences where the object of a transitive verb survives *an* invasion as in (20c), or not, as in (20b), thus leading to uncertainty.

Second, the lexicalist approach wrongly predicts *an*-insertion to apply to only transitive verbs, but not intransitive ones, an obviously wrong prediction as shown by the well-formedness of (b) sentences in (18-19).

Third, the lexicalist approach hardly accommodates cases like (22c-d) where *an*'s alleged role, namely removing the object, turns to be that of feeding the verb with an extra argument (reflexive but not pronouns).

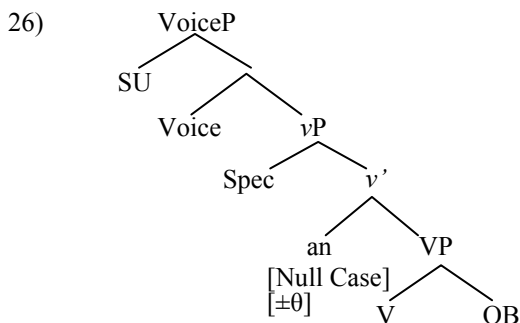
Finally, the lexicalist approach needs extra devices to account for the semantic ambiguity of reciprocals. For those reasons, the search for an alternative account becomes a pressing necessity.

In the following lines, I argue for alternative proposal couched within the minimalist program, which takes syntax to be uniform, and allows variation only in feature specification of items drawn from the lexicon.

Under that view, the following assumptions on Case and θ - features of *an* are not ad hoc:

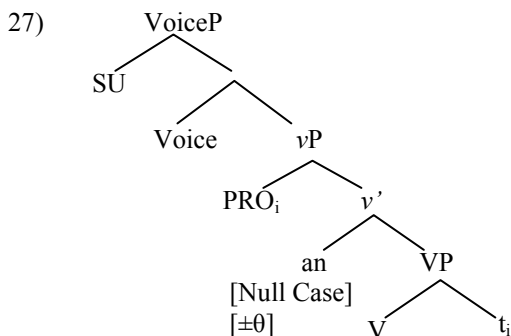
- 25) a. Case feature: Probe *an* has a Null Case feature in both Chichewa and Kirundi.
 b. θ -feature: Chichewa *an* is θ -defective, Kirundi *an* is unmarked.

Those features are represented on head *an* in the partial structure (26):



From (26), the apparent intransitivity of Bantu reciprocals follows straightforwardly.

Probe *an* values its uninterpretable Null Case feature through *Agree* with phi-features of Goal OB, forcing the latter to dress as PRO at PHON. Under that view, the whereabouts of the missing object (i.e. apparent intransitivity) is now known. The object is simply not missing - neither in Chichewa nor in Kirundi. It is there, but silent, due to (25a), as depicted in (27):



Other properties follow from the parametric property in (25b) according to which *an* is θ -defective in Chichewa, but unmarked in Kirundi.

First, the transitivity restriction. Why is Chichewa *an* compatible with transitive verbs only? The answer is simple: because of Case-feature valuation demands. Indeed, due to its θ -defectiveness, Chichewa *an* has no other option but to merge with a transitive verb, which provides a Goal to value *an*'s Null Case feature.

What about Kirundi *an*? Its θ -ambivalence makes it free to merge with any verb, be it transitive or not. With an intransitive verb, *an* activates its θ -role specification, thus allowing its Null Case feature to find an appropriate matching Goal.

As for transitive verbs, two possibilities are afforded in Kirundi: either the object of the transitive verb values the Null Case feature of *an*, with the same result as in Chichewa, or *an* activates its own θ -position, whose argument values the Null Case feature, hence no object omission. The two options were illustrated by sentences (20b-c), repeated below.

- 28) a. Abo bagabo ba-a-sambur-ye inzu yanje.
 those men 3p-PST-destroy-ASP house of-me
 'Those men destroyed my house.'
- b. Abo bagabo ba-a-sambur-an-ye.
 those men 3p-PST-destroy-AN-ASP
 'Those men destroyed each other/people_{arb.}'
- c. Abo bagabo ba-a-sambur-an-ye inzu yanje.
 those men 3p-PST-destroy-AN-ASP house of-me
 'Those men destroyed my house together / with people_{arb.}'

Then, the lack of transitivity restriction in Kirundi follows, and (24a-b) find a simple and principled explanation. The same for the last issue, that is, (24c). The latter is indeed a direct consequence of the assumed Null Case feature of *an*, which brings in a bound pronoun PRO, as depicted in (27). Finally, the semantic ambiguity follows straightforwardly. As a matter of fact, when PRO is coindexed with the

c-commanding subject (SU) raised into [Spec,TP], a reciprocal reading obtains. If not, a generic/quantificational reading follows, an intrinsic property of PROarb¹⁰.

3. A CONFIGURATIONAL APPROACH À LA PYLKKÄNEN (2000)

This section aims at strengthening the feature-driven syntactic account advocated for above, by ruling out an alternative account, also syntactic but configurational in nature, which as we will see proves to be untenable on empirical grounds.

The discussion will focus on the asymmetry (24b) between Chichewa and Kirundi regarding the transitivity restriction, a phenomenon similar to the applicative asymmetry noted by Pylkkänen (2000) in English vs. Chaga (Bantu).

3.1 *English vs. Bantu Applicatives*

Consider first English. In (29b), an applied/benefactive argument, the pronoun *him*, has been added to the transitive sentence (29a). The result is well-formed.

By contrast, insertion of an applied/benefactive argument to intransitive sentences leads to ungrammaticality, witness (30b).

29) a. I baked a cake. *Transitive*

b. I baked him a cake

30) a. I ran. *Unergative*

b. *I ran him (i.e. I ran for him)

The situation is different in Chaga, as illustrated in (31-32). (31a) is a transitive sentence. An applied argument has been added to it in (31b). The result is the same as (29b). (32a) is an intransitive sentence. Unexpectedly, the latter takes applied arguments, as shown by (32b), compared to (30b).

31) a. N-a-i-lyi-à k-élyà. *Transitive*
 FOC-3s-PR-eat-FV 7-food
 ‘He is eating food’

b. N-a-i-lyi-i-à my-ka k-élyà.
 FOC-3s-PR-eat-APPL-FV 1-wife 7-food
 ‘He is eating food for his wife’

32) a. N-a-i-zric-à. *Unergative*
 FOC-3s-PR-run-FV
 ‘He is running’

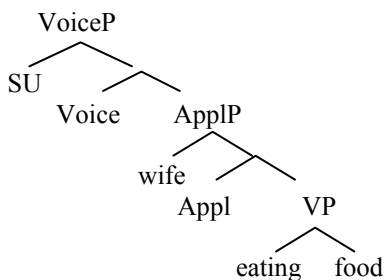
- b. N-a-i-zric-i-à mbùyà.
 FOC-3s-PR-run-APPL-FV 9-friend
 'He is running for a friend'

The question is: why is Chaga (32b) well-formed while English (30b) is not? Pykkänen (2000) offers an interesting solution to be discussed shortly. Before that, a comment is in order here: Chaga sentences (31b) and (32b) are grammatical if and only if the applicative suffix *-i-* is overtly realized on the verb. Otherwise, both sentences are ill-formed. In other words, to compare Chaga applicatives and English ones, one must contrast Chaga (31b) and (32b) with English sentences of the form *he is eating food for his wife* and *he is running for a friend*, with the result that there is probably no difference at all between the two languages, as far as the applicative syntax is concerned. That said, let us examine Pykkänen's (2000) solution to the puzzle noted above.

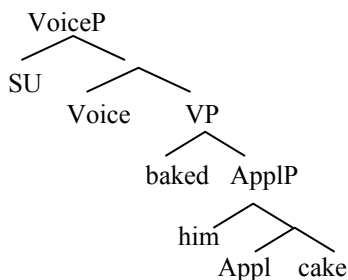
3.1 Low vs. High Applicatives

To account for the contrast of grammaticality between Chaga (32b) and English (31b), Pykkänen (2000) proposes two structural positions for the applicative head that licenses applied arguments. The latter may be merged either above VP, or below VP. Pykkänen called the two positions "High applicative", and "Low applicative", respectively. The former applies to Chaga, the latter to English, as depicted in (33a-b):

33) a. High Applicative (Chaga)



b. Low Applicative (English)



To further support the configurational approach in (33), Pykkänen appeals to semantic considerations. She pointed out that, on semantic grounds, the high applicative head (33a) relates the applied argument to the event expressed by the verb, whereas the low applicative in (33b) connects two arguments: the applied argument and the direct object.

Assume (33a-b) to hold. Then, the next question is: why does English only use transitive clauses to host the applied argument? Pykkänen's answer is as follows: transitive clauses have room for the applied argument, as required by the

configuration in (33b); whereas intransitive lacks it, hence can't host the applied argument. The transitivity restriction follows.

In Chaga, the situation is different. Since the applied argument is directly related to the event expressed by the verb, as depicted in (33a), any verb with event structure becomes a host. Accordingly, no transitivity scrutiny is needed for applicatives to enter Chaga territory.

Let us apply the configurational approach (33a-b) to Chichewa and Kirundi reciprocals. We obtain new labels like 3.3.

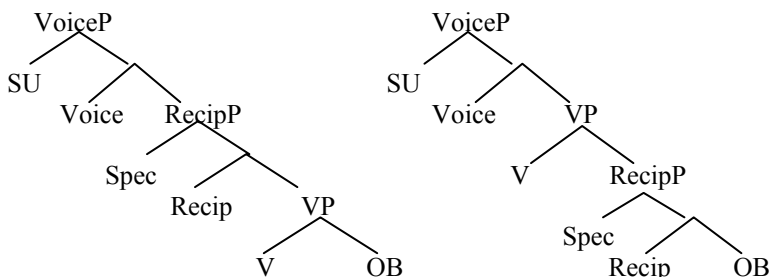
3.3 *High Reciprocal vs. Low Reciprocal*

Recall that Chichewa imposes a transitivity restriction of *an* suffixation while Kirundi does not. Within Pykkänen's approach, this amounts to say that Chichewa reciprocals are configurationally similar to English applicatives (33b), while Kirundi ones are similar to Chaga applicatives (33a).

(34a-b) give the two configurations where the (Recip)rocal head *an* that licenses the reciprocal argument is merged above VP and below VP, respectively.

34) a. *High Reciprocal* (Kirundi)

b. *Low Reciprocal* (Chichewa)



Under (34), the only difference between applicatives and reciprocals is that Spec of the applicative/reciprocal head is overtly spelled-out in applicatives (see 32a-b) but silent in reciprocal constructions, for reasons of Case valuation only.

The configurational approach in (34a-b) has all the ingredients needed to account for the transitivity restriction in Chichewa reciprocals and its absence in Kirundi.

Yet, the merits of that approach end here. As a matter of fact, (34a-b) face two important puzzles presented below: a semantic puzzle, and a syntactic one.

3.4 *A semantic dilemma*

Recall that Pykkänen's High vs. Low Applicative distinction is associated with some semantic effects. In one configuration (33a), the applicative head relates the applied argument to the event structure, while in the other (33b) it relates two arguments.

Under that view, one expects to find similar semantic contrasts between Chichewa reciprocals and Kirundi ones. Interestingly, at least one contrast has been encountered, which deals with Kirundi reciprocals from intransitive verbs on one side, and those from transitive verbs but with no object deletion on the other side. In both cases, *an* suffixation produces an associative reading, *x and y are doing something together*, absent in Chichewa.

To account for the unavailability of that reading in Chichewa, one may simply assume that there are actually two *an* in Kirundi: associative and reciprocal. The former is a high reciprocal (34a), the latter a low one (34b). Under that view, the transitivity restriction found in Chichewa would follow from the unavailability of configurations like (34a).

Such an account leads to a paradox, though. As a matter of fact, what we expect on configurational grounds is not borne out on semantic grounds.

To see the paradox, consider again the configuration in (34b) supposed to produce a reading in which the low reciprocal relates a reciprocalized argument to the direct object, as in low applicatives (33b).

The problem is: how to derive the reciprocal reading from (34b), that is, a reading like *they liked each other*? For that reading to obtain, the reciprocal head in (34b) must generate an argument in [Spec,RecipP] semantically linked to the direct object. Yet, that is simply impossible. Indeed, the presence of an external argument in [Spec,RecipP] of (34b) leads to an associative meaning: *x and y are doing something together*.

Yet, under the assumed configurations, the associative meaning must be a property of high reciprocals such as (34a), a configuration free of the transitivity restriction, not one like low applicatives (34b), bound by that restriction. We thus end up with a paradox: the semantics we want does not fit in the configuration we adopt.

The following section discusses a second problem of the configurational approach, which shows up when applicatives and reciprocals meet.

3.5 *A syntactic dilemma: Reciprocalization of Applicatives*

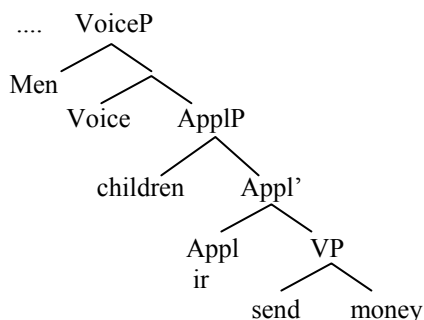
Consider first Kirundi sentences (b) of (35-36) which illustrate an applicative alternation. The presence of the applied argument ‘children’ depends upon the presence of the applicative head *ir* on the verb.

- | | | | | | |
|-----|----|----------------------------------|----------------------|----------------|-------------------|
| 35) | a. | Abo bagabo | ba-a-rungik-ye | amahera. | <i>Transitive</i> |
| | | those men | 3p-PST-send-APPL-ASP | money | |
| | | ‘Those men sent children money.’ | | | |
| | | | | | |
| | b. | Abo bagabo | ba-a-rungik-ir-ye | abana amahera. | |
| | | those men | 3p-PST-send-APPL-ASP | children money | |
| | | ‘Those men sent children money.’ | | | |

- 36) a. Abo bagabo ba-a-tamb-ye. *Unergative*
 those men 3p-PST-dance-ASP
 ‘Those men danced.’
- b. Abo bagabo ba-a-tamb-ir-ye abana.
 those men 3p-PST-send-APPL-ASP children
 ‘Those men danced for children.’

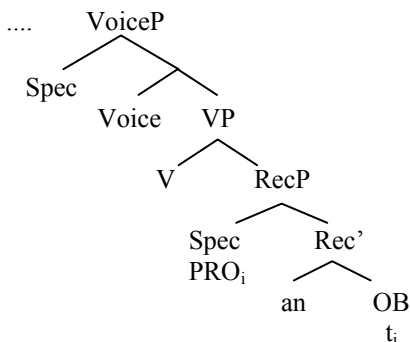
The well-formedness of (36b), from intransitive (36a), proves that Kirundi applicatives follow Chaga pattern: they are high applicatives. If so then, their structure must be (37):

37) Kirundi/Chaga High Applicatives



We now turn to reciprocals. Under Pylkkänen's approach to the transitivity restriction in English vs. Chaga, Kirundi/Chichewa reciprocal *an* is of the Low Applicative type (34b), as depicted again in (38).

38) Kirundi/Chichewa Low Reciprocals



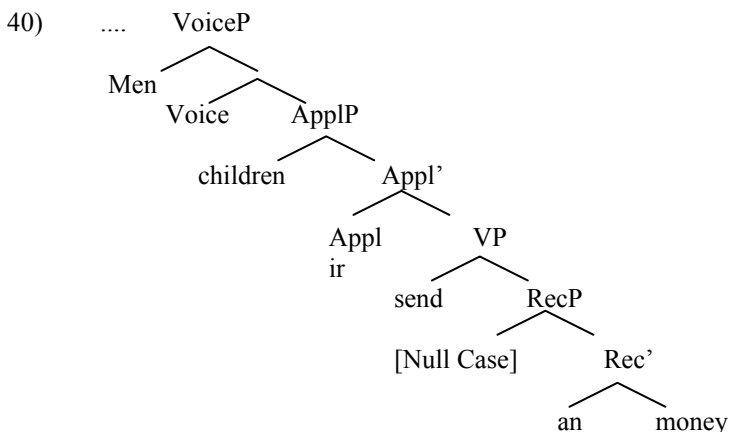
Note in passing that (38) includes the empty category PRO, a consequence of Null Case feature of Probe *an* valued by the direct object.

Consider now (39a-b). (39a) is the applicative construction in (35b). (39b) is the reciprocalized version¹¹.

- 39) a. Abo bagabo ba-a-rungik-ir-ye abana amahera.
 those men 3p-PST-send-APPL-ASP children money
 ‘Those men sent children money.’
- b. Abo bagabo ba-a-rungik-ir-an-ye amahera.
 those men 3p-PST-send-APPL-AN-ASP money
 ‘Those men sent money to each other/people_{arb.}’

Crucially, reciprocalization in (39b) “suppresses” the benefactive argument *abana* ‘children’ of (39a), but not the theme argument *amahera* ‘money’. This raises an inescapable question: how to derive (39b) if (37) and (38) hold.

We have no option other than (40), a combination of (37) and (38):



But then, (40) turns to be untenable, for a quite obvious reason. As a matter of fact, the expected output of (40) is (39b) where the “suppressed” argument is the benefactive argument, not the theme one. Yet, there is no way for the benefactive argument generated in the high applicative configuration in (40) to value the Null Case feature of the low reciprocal *an*, an essential condition for that argument to be phonetically null, as required by (38). We thus end up with a syntactic paradox.

4. A FINAL ARGUMENT FOR THE FEATURE-DRIVEN ACCOUNT

The argument in question lies in the observation that Kirundi *an* may “assign” Structural Case feature in non reciprocal contexts.

Consider first (41a-c). (41b) is a reciprocal sentence formed from the unergative sentence (41a), with an associative meaning as expected. The postverbal argument in (41b) is embedded in a “by-phrase” headed by the P/Kase marker *na*. (41c) shows

that cliticisation of the postverbal by-phrase leads to ungrammaticality, an indication that it is not structurally Case-marked by the main verb or its host *an*.

- 41) a. Yohani a-a-tamb-ye. *Unergative*
 John 3s-PST-dance-ASP
 ‘John danced’
- b. Yohani a-a-tamb-an-ye na Mariya. *Reciprocal*
 John 3s-PST-dance-AN-ASP by Mary
 ‘John and Mary danced together (with each other)’
- c. *Yohani a-a-mu-tamb-an-ye. *Object Pronoun*
 John 3s-PST-OM-dance-AN-ASP
 *‘John danced with her’

Consider now (42a), which is (41b) minus the Case marker *na*, with a semantic change, though. Here, the individual denoted by the DP subject is either the locus of the individual denoted by the postverbal DP, or is adversely affecting the latter by dancing.

Interestingly enough, the postverbal DP of (42a) may be pronominalized, as illustrated in (42b), a clear indication that the postverbal DP of (42a) is structurally Case-marked by *an*, as the unergative verb ‘dance’ is Case-defective.

- 42) a. Yohani a-a-tamb-an-ye Mariya.
 John 3s-PST-dance-AN-ASP Mary
 ‘(i): John danced holding Mary (like a baby in his hands)’ *Location*
 ‘(ii): Mary was adversely affected by John dancing’ *Adversity*
- b. Yohani a-a-mu-tamb-an-ye.
 John 3s-PST-OM-dance-AN-ASP
 same readings as (42a)

A similar pattern arises when the postverbal DP is an inanimate entity, as shown in (43a-b).

- 43) a. Yohani a-a-tamb-an-ye ibitabo. *Location*
 John 3s-PST-dance-AN-asp books
 ‘John danced holding books’
- b. Yohani a-a-bi-tamb-an-ye.
 John 3s-PST-OM-dance-AN-asp
 ‘John danced holding them’

From the facts in (41-43), a sceptical reader might be tempted to conclude that *an* of (41) is semantically different from *an* of (42-43). Therefore, (42-43) are not compelling evidence for the feature-driven account. Yet, a close investigation of all

the uses of *an* reveals that they share a core meaning: *an* is a pure relational/applicative functor with an abstract contact meaning of the kind *x is located at y*, from which the different usages of *an* may be derived.

On minimalist grounds, the null hypothesis is to assume that there is only one *an*.

If so, then the facts in (42-43) support the feature-driven syntactic account and call for a slight modification of the lexical specifications of *an* assumed in (25). The following is a final version.

44) a. Case feature: Chichewa *an* has a null Case feature, Kirundi *an* is unmarked.

b. θ -feature: Chichewa *an* is θ -defective, Kirundi *an* is unmarked.

At first glance, the assumption that Kirundi *an* is unmarked with respect to Case feature might seem exotic to some sceptical readers. Yet, this is not an innovation. The functional category T has exactly the same Case ambivalence when used as [+finite] T vs. [-finite] T of control and raising constructions.

In the same vein, the assumption that Kirundi *an* is θ -ambivalent is not a complication of the lexicon. English verbs show similar θ -ambivalence. One example among others is the verb *threaten* which behaves like control verbs (i.e. θ -nondefective) in sentences like *John threatened to leave* or raising verbs (i.e. θ -nondefective) in sentences like *the roof threatened to fall*. The parallelism is not accidental.

5. CONCLUSION

In this paper, we showed that Kirundi reciprocals perfectly fit in Dixon's checklist of antipassive properties. We therefore concluded that they are antipassive. Furthermore, we demonstrated that Kirundi reciprocals are syntactically derived from a structure where *v* is devoid of Structural Case feature, but θ -active, much like T of control constructions. If so then, the fact that antipassives are predominantly found in ergative languages finds a principled explanation: it is a logical consequence and a strong support of (part of) the *Ergativity Parameter* in (1).

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- 1 I don't consider a pair of sentences like *He is writing a paper* vs. *He is writing* as an instance of active/antipassive alternation, for the following reasons. There is no formal marking on the verb in the allegedly antipassive variant. Furthermore, object is not demoted here, strictly speaking; it is rather simply omitted and may be freely restored in the direct object position, which is not possible in true antipassives. Finally, object omission in English is lexically constrained, rather than syntactically, as shown by the contrast of grammaticality between **He is beating* and *He is beating the robber*.
- 2 By pure ergative language, I mean a language lacking split-ergativity entirely. See footnote 3 for details.
- 3 The only apparent counter-example to (3) is split-ergativity which, by the way, challenges all available theories of ergativity. Yet, that is just an excuse, not an explanation. Taken seriously, split-ergativity is not a real counter-argument. Rather, it is a clue in the search for the best ergative language, one that would meet (3). That language would be of the Malagasy-type, namely an ergative language that lacks split-Case systems and overt Case marking on NPs. As a matter of fact, it is striking that all ergative languages discussed in the literature have overt Case marking on NPs, much like Russian or Latin of the Nominative paradigm. The question is: why is there no reported ergative language that is parallel to English; i.e. an ergative language lacking overt Case marking on NPs? My view of Malagasy as an ergative language arose from that non-trivial question.
- 4 Another possibility would be to view it as a Topic phrase, thus conforming with some LF effects of definiteness, specificity, person/animate hierarchy, old vs. new information, etc. which are reportedly linked to Absolutive marking (see Carnie (this volume) for an extensive discussion of these effects).
- 5 Their analysis was a reply to Heim, I., H. Lasnik and R. May's (1991a, b) semantic account of English reciprocals.
- 6 An anonymous reviewer repeatedly mentioned that Kirundi reciprocals should not be viewed as true antipassives because their semantics is not found in antipassives of ergative languages like (2b) from Inuit. Yet, Dixon's checklist of antipassive properties in (1) does not, and indeed should not, include any semantic consideration. Furthermore, Crowley's (1981) discovery of Anguthimri morphological evidence linking antipassives to reciprocals leaves no room to such an objection. Finally, the semantics of Kirundi antipassives derives (in part) from the presence of PRO in object position, triggered by the Null Case feature of the applicative head *an* in v (9). In other languages, Antipassives might lack PRO object if v's features include the ability to "absorb" a θ -role, much like passive. In that case, the object position would be thematically empty, thus triggering no semantic effect.
- 7 Unless Chichewa lacks sentences of the type in (12b), which is not the case. The construction is spread in many other Bantu languages, including Kiswahili and Kilega, two languages that share with Kilega another important property to be discussed shortly.
- 8 (22d) may be acceptable with a different meaning, an important observation I return to in the last section of this paper.
- 9 Bantu languages have a rich gender system morphologically distributed into noun classes.
- 10 This account leaves two unresolved problems: (i) the unavailability of a reflexive interpretation when PRO is coindexed with the antecedent, and (ii) the freedom for PRO to be or not controlled within IP. Note that French reflexives raise similar problems, namely the possibility for first and second person reflexives *nous* and *vous* to escape local binding, much like our PRO, and conversely the freedom for

se to have more than one interpretation: reflexive, reciprocal, and middle. As nothing in the proposal hinges on those questions, I leave them for future research.

- 11 The applicative head *ir* is subject to phonological changes, including reduplication, a fact that is not pertinent here.

ERGATIVITY AND CHANGE IN INUKTITUT^{*}

1. INTRODUCTION

Ergativity is property of a language which treats the subject of an intransitive verb as identical in some grammatical fashion to the patient/theme argument of a transitive verb. Explanations for this patterning within generative grammar are many (see Manning 1996; Johns 2000 for an overview). It is also known that languages can change from nominative-accusative to ergative and vice-versa (see Dixon 1994). In light of accounts in generative grammar where ergativity is not a single property within universal grammar, e.g. Johns (1992); Bittner and Hale (1996a; 1996b), we expect that changes in ergativity will also vary, restricted by universal grammar. At the same time we expect that these changes will shed light on the overall nature of ergativity, as linguistic change highlights critical subsets of properties of a grammar. In this paper we will examine one language, Inuktitut, which has undergone a partial change, observable across dialects. As outlined in Johns (1999), ergative patterning is more predominant in Inuktitut dialects spoken in the west in than the more easterly dialects, especially Labrador Inuttut. In this paper we will examine in detail one aspect of that change, the properties of the antipassive construction. Johns (2001a; 2001b) argues that it is properties of the antipassive construction, not the ergative construction, which have led the change in eastern dialects and are thus the focal point of ergativity change in Inuktitut.¹ In this paper we will examine formal properties of that construction in an effort to further understand both the antipassive construction itself and the cross-dialectal change in ergativity.

Central to this question are the properties of both the antipassive morpheme and the case assigned to the object of the antipassive. We will follow Spreng (2001) who proposes that the antipassive morpheme is in little *v*. I will argue here that antipassive morphemes are in some sense “grammaticalized” aspect, i.e. they contain aspectual features which have a different interpretation when they are merged in little *v* from the interpretation they have outside of little *v* (see Travis forthcoming for a detailed examination of aspect and object positions crosslinguistically). In addition, we will see that the case on the objects of antipassives has undergone a change across dialects of Inuktitut. Whereas in conservative western dialects, this case is linked to the aspectual features of the antipassive’s little *v*, in eastern dialects, it is linked only to the category of little *v*. As a result, antipassive in western dialects resembles languages like Finnish, where

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object case shares interpretive features with aspect, while the antipassive in eastern dialects resembles the more familiar accusative pattern. A correlate of this dialectal difference is that ergativity in western dialects is still very robust, while in eastern dialects, it is waning.

2. ERGATIVE VS. ANTIPASSIVE

Languages which are described as having ergativity usually have two competing constructions (excluding passive) which allow both the agent and the theme/patient to be expressed. I will call the clause which displays the marked agent the ergative clause. In many instances the competing construction is called the antipassive, a term which traditionally denotes a clause where the agent in subject position, the verb is a derived intransitive, and the object is marked with oblique case. We can see the two constructions in the Inuktitut examples² in (1).³

- | | | | | | |
|----|----|---------------------------------------|-----------------|-------------|---------------------|
| 1) | a. | anguti-up | nanuq | kapi-jaa | <i>Ergative</i> |
| | | man-REL | polar.bear(ABS) | stab-3s/3s | |
| | | 'The man stabbed the polar bear.' | | | |
| | b. | angut | pisuk-tuq | | <i>Intransitive</i> |
| | | man(ABS) | walk-3s | | |
| | | 'The man is walking.' | | | |
| | c. | angut | nanur-mik | kapi-si-juq | <i>Antipassive</i> |
| | | man(ABS) | polar.bear-MIK | stab-AP-3s | |
| | | 'The man is stabbing the polar bear.' | | | |

In (1a) we see an Ergative construction, where the agent of the clause is in a special case (relative), contrasting with the absolutive case appearing on both the patient/theme of the ergative construction in (1a), and the subject of the intransitive construction in (1b). Absolutive case is the case which is obligatorily assigned in any Inuktitut clause, although because it is a pro-drop language, this restriction is not always visible. The verb in (1a) also carries agreement features for both subject and object, while in the intransitive example in (1b), there are only features for the agent.

In the antipassive construction in (1c), we see that the agent is in absolutive case, and is the only argument controlling agreement on the verb. Agreement with a single argument is sometimes misleadingly termed intransitive since the agreement system contrasts single and double agreement. Thus single agreement is sometimes called intransitive, and double agreement transitive. Note, however, that were the ergative clause not available for comparison, the single agreement patterns exactly the same as a transitive in a familiar nominative-accusative language, where only agreement with the subject is possible. The theme/patient *nanuq* 'polar bear' in (1c) is marked with the case morpheme MIK, which is variously called accusative, modalis, instrumental, etc. in the literature.

The derivation of the theme/patient in an antipassive in Inuktitut has been the subject of much study over the last decade (Bok Bennema 1991; Bittner 1987; Bittner and Hale 1996a, 1996b; de Hoop 2003 and references therein; Benua 1995; Van Geenhoven 1998; Spreng 2001 and this volume; Wharram 2003; Beach 2003). It is beyond the scope of the present paper to adequately deal with all the issues arising from this discussion, but I will focus on a few of them as they relate to the language change. Overall, most of the linguists above have concluded that the theme argument of an antipassive is in fact an object argument and not an oblique argument. The choice of the antipassive over the ergative construction has been attributed to scope, indefiniteness, aspect, choice-functions, etc. In this paper, we attempt to focus on this issue as it pertains to language change. The main thing to keep in mind is that, in principle, a patient/theme in Inuktitut can appear either in absolutive case in the ergative construction or in MIK case in the antipassive construction. This paper is concerned with the formal representation of deviations from this gross generalization. Specifically I will be concerned with dialectal differences associated with the MIK case.

3. ERGATIVE CHANGE IN INUKTITUT – AN OVERVIEW

Johns (1999) outlines the differences in the role of the ergative clause across dialects of Inuktitut, making the claim that ergativity diminishes in prominence from western to eastern dialects. For the sake of brevity, I will make an artificial binary distinction by contrasting one western dialect of Inuktitut, Iñupiaq, with one easterly dialect, Labrador Inuttut. In fact, the situation is probably a lot more complex, with dialects forming a continuum of change.

The overall impression is that the ergative clause is much more unmarked in the Iñupiaq, while the antipassive is slightly more marked. In contrast Labrador Inuttut uses the antipassive extensively, and the ergative clause is more rare.

Providing empirical support for this claim is challenging. Johns (1999; 2001a) discusses a restriction which holds of ergative clauses in Iñupiaq but not in Labrador Inuttut. This is the fact that Iñupiaq does not allow the theme/patient of an antipassive clause to be a name (Manning 1996).⁴ Examples contrasting this distinction between Iñupiaq and Labrador Inuttut are in (2), where the names are bolded.

- | | | | | | |
|----|----|--|--|-----------------------------------|--|
| 2) | a. | *John
John(ABS)
'John sees Mary' | tautuk-tuq
see-3s.
'John sees Mary' | Mary-mik
Mary-MIK | Iñupiaq

(Manning 1996, 95) |
| | b. | Margarita
Margarita(ABS)
'Margarita is tickling Richard' | Kuinatsa-i-juk
tickle-AP-.3s
'Margarita is tickling Richard' | Ritsati-mik
Richard-MIK | Labrador Inuttut |

- c. Nancy angka-li-mmat **Rigolet (Labrador)**
 Nancy(ABS) home-PROG-because.3s

aklâ-gulak iksiva-juk Kaksi-tâ-gula-ngmi, iksiva-ju
 black.bear-dear(ABS) sitting-3s hillock-get-dear-LOC.S sitting-3s

Kaksi-tâ-gula-ngmi **Nancy-mik** tautuk-tuk
 hillock-get-dear- LOC.S Nancy-MIK look.at-.3s

‘... if Nancy was coming home, the young black bear would be sitting on a little hill, sitting on the little hill, watching Nancy’

The source of the ungrammatical example in (2a) is Edna MacLean, an Iñupiaq linguist and speaker of the language. According to Manning (1996), the status of names in antipassive in central dialects Inuktitut is also of some doubt. I have found a similar restriction as that shown in (2a) in Inuvialuktun (Siglitun), a western dialect immediately to the east of Iñupiaq. In Lowe’s 1985 grammar of Uummarmiut, a variety of Iñupiaq, there are no names in the numerous examples which contain nominals in MIK case.⁵

The examples in (2b) and (2c), on the other hand, are both from Labrador Inuttut and are perfectly grammatical and common constructions within this dialect.⁶ All three examples are roughly equivalent in verb type and structure,⁷ yet the grammaticality of a name in MIK case within the antipassive is very different.

Johns (1999) hypothesizes that a dialect which loosens restrictions on the antipassive, at the same time tightening restrictions on the ergative clause, will show an increase in the number of antipassive clauses. Johns (2001a) investigates this hypothesis by comparing narratives from a number of dialects. The number of tokens of NPs marked with MIK in a Labrador Inuttut narrative is compared with the number obtained from some narratives of western dialects, including Inuvialuktun, which, as mentioned above, is a dialect which prohibits names in antipassives. The point of comparison was simply number of nominals marked with singular MIK case (excluding plural NIK). As it turned out, there was no significant quantitative difference in the frequency of MIK use across the dialects. A closer inspection of the data showed that the frequency of MIK in Inuvialuktun can be explained by this dialect’s more frequent use of ditransitive and applicative constructions (less common in eastern dialects). These constructions make use of MIK as an extra case. As only one absolutive case is ever available, and absolutive is normally associated with the goal or beneficiary in ditransitives and applicatives, the theme/patient will be marked with MIK. An example from Iñupiaq is given in (3). where the goal *irñi-ni* ‘his son’ is associated with absolutive case and agreement on the verb, and the theme *huppun* ‘gun’ appears with MIK case.

- 3) huppun-mik irñi-ni aatchu-raa
 gun-MIK son-REFL3s give-3s/3s
 ‘He gave his son a gun’

(Lowe 1985a, 61)

Thus the overall consistency in the percentage of MIK use across dialects does not reflect similarity in use of antipassive, but instead the interesting fact that as the number of ditransitives and applicatives diminishes, the number of antipassives increases.

In summary, we have seen that there is reason to believe that western dialects differ from eastern dialects in terms of markedness of the antipassive construction. In western dialects, the ergative is the unmarked choice for a transitive construction, with the antipassive being somewhat marked. Ditransitives and applicatives are common. In contrast, in eastern dialects, the antipassive is quite unmarked, and the status of the ergative in these instances is marginalized. Ditransitives and applicatives are less common.⁸ These generalizations apply specifically to third person agent/ third person patient/theme combinations. Whether other person combinations show the same distribution is unclear at this time and requires further investigation.⁹

It is important to keep in mind that the MIK case is not found exclusively in the antipassive construction. It is also found in a) instrumental case in the western dialects (see section 6), b) ditransitives and applicatives, as discussed above, and c) modifiers of incorporated nouns. When an incorporated noun has any additional material which is outside the root, it must appear adjacent to the nominal root in MIK case, as in (4)

- 4) qatiqu-mik atigi-ruaq-tuaq
white-MIK parka-have-3s
'He has a white parka'

Inuvialuktun

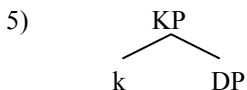
(Lowe 1985b, 65)

In summary, the antipassive in Inuktitut consists of i., an "intransitive" verb, i.e., a verb with single agreement; ii., sometimes an antipassive affix, plus iii., the theme/patient in MIK case. Each occurs independently of the antipassive construction. It is only when they co-occur that we get the constellation of properties which we call the antipassive.

4. NATURE OF THE MIK CASE

Given the wide range of usages of the MIK case throughout Inuktitut, as discussed above in section 3, I will argue that MIK is the default structural case in Inuktitut. A default case is, according to Schütze (2001), a default spell-out of on DPs which are independently licensed in the syntax. As such, we do not expect it to be associated with any one syntactic configuration. de Hoop (2003) finds support for Vainikkaa (1989), who proposes that the Finnish partitive case is a structural default case in Finnish. We will see that the Finnish partitive has some resemblance to the MIK case, as has been noted by de Hoop (2003), Benua (1995; 2001), and others.

In Johns (2001b) I propose that the structure of the MIK case is a light or little *k*, which takes a nominal complement. This is shown in (5).



Under this view, the MIK case is a functional element. Like little *v* in VPs, the little *k* may contain features.

Johns (2003) and Compton (2004) propose that all Inuktitut nominals are referential (see also Wharram 2003, who claims they are non-quantificational), and therefore do not need independent determiners. This claim has wider implications than space permits here. One prediction is that a bare nominal cannot receive a kind or set interpretation without some additional morphology, such as that which is sometimes mediated by MIK.

As a default case, little *k* forms various unrelated syntactic relations in the syntax. Modifiers may be coindexed with a little *v* in the noun incorporation construction (see Johns 2003), as in (4) above. It is also found as the extra case assigner in a ditransitive construction, as in (3) above. Finally, it appears on “objects” in the antipassive construction. Little *k* forms a syntactic relation with little *v*, which I will characterize as AGREE.

This idea is similar to that proposed in Svenonius (2001). Based on the proposal of Pesetsky and Torrego (2001) that nominative case is uninterpretable tense, Svenonius (2001) posits that structural case in Icelandic is the manifestation on the NP of semantically interpretable features within the VP. Svenonius proposes to remove the case feature from its anomalous category as the only feature of the syntactic component which is always uninterpretable. He proposes instead that accusative case is an uninterpretable feature which is checked by an interpretable feature. Effectively, in the framework of Chomsky (2000), we may view accusative/partitive case as an AGREE relation. I will assume some version of such an analysis here, and now turn in the next section to a discussion of the interpretable features which are present in little *v*.

5. ASPECT AND ANTIPASSIVE

Aspect has been a constant topic within the discussion of antipassive in Inuktitut (see Bittner 1987; Benua 1995; Seigel 1997; Spreng 2001 and this volume) and with antipassive crosslinguistically (see Dixon 1994).

In recent years, a number of linguists have focussed attention on the pivotal relation between aspect and case in some languages. In fact, Kiparsky (1998), a paper on Finnish aspect case relations, inspired Svenonius (2001) to claim that case can be instantiated aspect. The interplay between Finnish partitive and aspect is shown in (6). The data and analysis are taken from Kiparsky (1998), although the presentation is modified.

- 6) a. Ammu-i-n karhu-a
 shoot-PAST-1s bear-PARTITIVE
 ‘I shot at the/a bear’

- b. Ammu-i-n karhu-n
 shoot-PAST-1s bear-ACCUSATIVE
 'I shot the/a bear'
- c. saa-n karhu-j-a
 get-1s bear-PLURAL-PARTITIVE
 'I'll get bears'
- d. saa-n karhu-t
 get-1s bear-ACCUSATIVE
 'I'll get the bears'

The partitive case can reflect the unboundedness of either the verb or the noun, depending on the inherent aspect of the verb. In (6a) it reflects the unboundedness of the predicate because the verb 'shoot' can be either unbounded or bounded. When the predicate is bounded, accusative case is found on the nominal, as in (6b). In (6c), verb 'get' is inherently bounded. As a result, the partitive case can only reflect the unboundedness of the nominal, i.e. a canonical partitive meaning. When the nominal is itself bounded, accusative case is found, as in (6d). If a verb is inherently unbounded, only partitive case will be found on the object, regardless of whether the object itself is bounded or not.

Similarly, Scots Gaelic displays differential case marking on the object, depending on the aspect of the verb. The data is from Ramchand (1997, 89-90).

- 7) a. Bha Calum a' gearradh chraobhan
 be-PAST Calum AG cut-VBLNOUN trees-GEN
 'Calum was cutting trees'
- b. Gheàrr Calum craobhan
 cut-PAST Calum trees-DIR
 'Calum cut some particular trees'
- c. Tha Calum a' gearradh na craoibhe
 be-PRES Calum AG cut-VBLNOUN the tree-GEN
 'Calum is cutting/cuts at the tree'

In particular we see that in (7c), where the NP is definite, the morphological genitive is not associated with an indefinite reading, as it is in (7a), but instead marks the unboundedness of the entire predicate.

What we learn from these two cases then is that it is possible for a syntactic relation to exist between aspect within the predicate/VP and case on the nominal, such that the case on the nominal is sometimes the morphological reflex of predicate aspect.

3.1 *Relation Between Aspect and Antipassive in Inuktitut*

The connection between the Inuktitut antipassive and aspect has been discussed at least since Bittner (1987), who mentions, in her cogent discussion of general meaning differences between the ergative and antipassive clause, that many of the antipassive morphemes mark aspect. Benua (1995; 2001), recognizing the similarity between the Finnish and Scots Gaelic cases, and Eskimo languages, develops an aspectual analysis based on Yup'ik, a language closely related to Inuktitut. Following Borer (1993), Benua proposes that aspect forms an ASP phrase above the VP and that absolutive objects move outside of this phrase, while antipassive objects remain within it. Predicates and some NPs remaining within the ASPP headed by the antipassive will get an incomplete aspectual interpretation. A Yup'ik example illustrating this distinction is shown in (8).¹⁰

- 8) a. Lucy-m Mary-q utaqaallrua
 Lucy-ERG Mary-ABS wait.for-PAST-3s/3s
 'Lucy waited for Mary'
- b. Lucy-q Mary-mek utaqaallruuq
 Lucy-ABS Mary-MIK wait.for-PAST-3s
 'Lucy waited for Mary' (Benua 1995, 37)

According to Benua, Mary is assumed to have showed up in (8a), but did not necessarily appear in (8b).

Spreng (2001) investigates this issue in Mittimatalik, an eastern dialect of Inuktitut spoken on Baffin Island. She does not find significant differences in interpretation.

- 9) a. Luci-up Mary utarqi-laur-tanga
 Lucy-REL Mary(ABS) wait.for-PAST-3s/3s
 'Lucy waited for Mary' (no sense as to whether Mary showed up)
- b. Lucy utarqi-laur-tuq Mary-mik
 Lucy wait.for-PAST-3s Mary-MIK
 'Lucy waited for Mary' (Mary probably showed up) (Spreng 2001, 162)

More importantly, Spreng (2001) delineates between two functions of "antipassive" morphemes within Inuktitut. One of the most common antipassive morphemes across dialects is *-si*,¹¹ which can appear both as an unambiguous inceptive aspectual marker, as in (10a), or more ambiguously, as an antipassive morpheme, in (10b).

- 10) a. Peter pisu-si-juq
 Peter walk-INCEPT-INTR.3s
 'Peter starts to walk'

Mittimatalik

- b. Peter surak-si-juq anautar-mik
 Peter-break-AP-INTR.3s stick-MIK
 'Peter broke the stick.'

(Spreng 2001, 170-171)

Spreng makes an important and strong argument for not conflating these two usages. First of all, the meanings are very different. The genuine antipassive does not have an inceptive meaning, i.e. (10b) does not mean 'Peter is starting to break the stick.' Secondly the genuine antipassive morpheme is syntactically obligatory when it is found (its appearance depending on the argument structure of the verb). In contrast, the inceptive morpheme is always syntactically optional whenever it is found. Thirdly, the inceptive morpheme displays slightly different phonological properties in Mittimatalik, deleting any stem final consonant. The antipassive morpheme does not trigger this deletion. This property can be seen in (10a) where the verb *pisuk* 'walk' has undergone deletion. In contrast, in (10b), the verb *surak*¹² 'break' does not undergo deletion. Keeping these two usages distinct is critical to understanding the antipassive, as Spreng (this volume) shows for Iñupiaq. She provides evidence that a) the genuine antipassive morpheme is merged in little *v* and b) that inceptive aspect is not in this position. Thus antipassive and aspect morphemes are in distinct syntactic positions.

5.2 *A Proposal*

While accepting Spreng's analysis of antipassive morphology as being little *v*, I will depart from her conclusion that the inceptive morpheme and the antipassive morpheme are not related.¹³ Instead I propose that they both contain the same features, those of an indefinite quantifier. When these features are located outside the VP, they are interpreted as inceptive aspect. Within the VP, while they maintain aspectual features, they are simply atelic. Most importantly, from their position in little *v*, they form a link with accusative case.

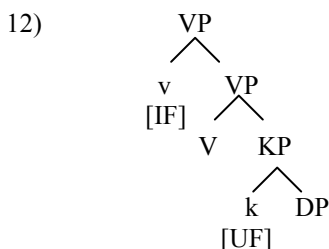
Interestingly, Travis (forthcoming) also discusses aspectual morphemes in Tagalog which can have either +start or imperfective interpretations. The former is outer aspect in Travis' analysis and the latter is inner aspect. These correspond remarkably with Spreng's analysis of Inuktitut *-si*, where the inceptive is outside the VP and the antipassive morpheme is in little *v*. The main difference between Tagalog and Inuktitut is that in the former, inner and outer aspect are spelled out as different morphemes, while in Inuktitut the same phonological material can be inserted in each position. Travis argues for both a non-derived and derived object position, where the derived position is licensed by aspect. Inuktitut has only the derived position within the VP for objects. Thus Inuktitut in general lacks canonical, or non-derived, accusative case.

When the indefinite quantity features are outside of the *vP*, they are interpreted as indefinite activity external or peripheral with respect to the event or action. When they are merged in the little *v* position, these same atelic features result in imperfective or indefinite boundary with respect to the event. In little *v* position, these features, which are interpretable, can form an agreement relation with little *k*.

Under this view, little *k* has uninterpretable features, following the proposal of Svenonius (2001) for Icelandic. Thus the representation for the MIK case is shown in (11).



However, unlike most uninterpretable features, these are quite unspecified as to the category they are seeking to agree with, i.e. they have no Match properties.¹⁴ In the antipassive, these features form an AGREE relation¹⁵ with the interpretable aspectual features in little *v*, as shown in (12).¹⁶



The AGREE relation between the uninterpretable features of the default case MIK and the interpretable features of the aspectual morpheme when it appears in little *v* explains a number of properties of Inuktitut. First of all it explains why the antipassive morphemes are homophonous with aspectual morphemes, at the same time allowing them distinct properties. They are not the same “morphemes.” What they are is the same features in different positions of the syntactic tree. This conclusion is in keeping with tenets of Distributed Morphology. Halle and Marantz (1993) claim that morphemes do not exist *per se*, but that syntactic features are spelled out through phonology. An analysis which rejects the premise that the aspect and antipassive morphemes contain the same features, e.g. Spreng (2001), will have no explanation for the frequent, but not necessary, homophony across aspect and antipassive in Inuktitut. On the other hand, an analysis which holds that the aspect/antipassive pairs are exactly the same morpheme will have no explanation for the varying interpretations, and varying obligatory properties.

Another outcome of this relation is an explanation for the indefinite nature of the NP-MIK in many dialects of Inuktitut. Since the features with which the NP-MIK has an agreement relation are indefinite quantity, we get an indefinite or partitive meaning for the nominal. When the nominal is a name, the name and indefinite features clash. As a result, names are impossible in these dialects with MIK case, except where the name is interpreted as some abstract property.

The fact that the same features are involved, but in different positions, predicts that the genuine aspect morpheme will be optional, as would be expected of an inceptive, but that the antipassive morpheme is obligatory in contexts where little *v*

must be filled (see Spreng 2001). It also explains the difference in interpretation of antipassive vs. ergative clauses. Benua (1995; 2001) discusses how an antipassive morpheme is translated as ongoing, or incomplete in some sense, while the ergative clause is not. Yet this aspectual interpretation is not identical to the “pure” aspect interpretation of the morpheme outside of little *v*. While this latter interpretation is inceptive, the antipassive morpheme is imperfective, ongoing, unbounded, atelic, etc.

Finally, this approach explains, as Spreng (2001) demonstrates in Mittimatalik, the presence of both aspectual and antipassive morphemes on the same verb, as in (13).

- 13) anguti kunik-si-si-vuq arna-mik¹⁷
 man kiss-AP-INCEPT-3s woman-MIK
 ‘The man is starting to kiss the woman’ (Spreng 2001, 165)

In (13) we have both morphemes, where the same features are both in little *v* and above VP. Spreng argues that the inceptive is outside the antipassive based on the fact that only the aspectual morpheme deletes stem final consonants, and the stem *kunik-* does not undergo consonant deletion. Under the current approach, the deletion of phonological material will not result from the features of the morpheme, but from the position of the features. Spreng’s analysis is supported by the fact that the deletion of the second *-si* will result in the loss of inceptive interpretation of the verb.

Positing indefinite quantifier features on antipassive morphemes is in keeping with analyses that link aspect to antipassive (Bittner 1987; Benua 1995, etc.). It also predicts that where a language makes an aspectual split between seemingly nominative-accusative and ergative-absolutive properties, that the nominative-accusative, and not the ergative-absolutive, will be associated with the imperfective.

5.2.1 No Null Antipassive

Spreng (2001; this volume) argues that in Inuktitut, an overt antipassive morpheme is in little *v* in causative verbs, i.e. when the verb is inherently causative, e.g. *kapi-* ‘stab,’ as in (14a) below. Overt antipassive is also found in the little *v* of derived causative verbs, which alternates with an unaccusative, as in (14b) below. Spreng argues, against all previous analyses, that there is no reason to posit a zero allomorph for the antipassive. She proposes that the presence of an overt antipassive morpheme such as *-si* in these verbs is blocked by the fact that both unergative and object-deletion verbs, the root *v* incorporates into little *v* position. The distribution of antipassive morphology is shown in the Mittimatalik examples in (14), all from Spreng (2001).

- 14) a. Peter kapi-si-vuq nanu-mik¹⁸
 Peter stab-AP-3s polar.bear-MIK
 ‘Peter stabbed a polar bear’

b. Peter maturi-si-juq paa-mik
 Peter(ABS) open-AP-3s door-MIK
 'Peter opens a door'

c. anguti niri-juq niqi-mik
 man(ABS) eat-3s meat-MIK
 'The man is eating meat.'

Thus Spreng explains the fact that not all antipassive constructions in Inuktitut manifest antipassive morphology. From the perspective taken in this paper, Spreng's results fit in well. Recall that an overt antipassive morpheme is associated with an indefinite quantity feature in little *v*. We find a parallel in verb roots which are inherently atelic, or unbounded, i.e. activity predicates. These are the only verb roots which move to little *v* in this construction. In fact, as Spreng shows, the addition of antipassive morphology to these predicates will inevitably result in a "genuine" aspectual interpretation, i.e. inceptive, as in (10a) above. The explanation for this is that the activity roots occupy little *v*, so the only position the "antipassive" morpheme can merge in is external to the *vP*, i.e. it will never have the properties of antipassive morpheme, only those of an aspectual morpheme and is therefore grammatically optional. Thus the distribution of overt antipassive morphemes in an antipassive construction is conditioned by the aspectual nature of the verb root; those verb roots which are inherently atelic do not take an antipassive morpheme, and those which are not inherently atelic need an aspect morpheme occupying little *v* in the antipassive construction. In addition, the dual nature of the aspectual morpheme as both atelic and antipassive is clarified. Where it merges in little *v*, it is antipassive and obligatory in that construction; elsewhere it is aspectual and found optionally.

5.3 *Multiple Antipassives in Other Languages?*

Gerdts and Hukurai (2000), in a stimulating paper about antipassives in Halkomelem, point out that Halkomelem antipassive morphemes are aspectual in meaning, the most common one *-els* having the meaning of "a job-like activity." They show that this morpheme, along with another antipassive morpheme which they call the middle suffix (*-m*), can appear stacked, as it were, on a single verb. This can be seen in (15), where the antipassive morpheme *-m* is followed by *-els* (both shown in bold).

- 15) q^wəl-**əm-els** cən ce? ?ə k^w sce:ltən ?əw k^weyəl-əs
 bake-MID-ACT 1SUB FUT OBL DET sałmon COMP day-3S.SUB
 'I am going to barbeque fish tomorrow.' (Gerdts & Hukari 2000)

For Gerdts and Hukari, both *-els* and *-m* are antipassive morphemes. They describe examples such as (15) as posing a problem for linguistic theory. If an

We have just seen similar examples in Inuktitut. Above, we saw that Spreng (2001) argues that only one of the pair of antipassives in (13) above is truly an antipassive, i.e. is in little *v*. Thus we may hypothesize that the Halkomelem example in (15) is of the same nature, one antipassive morpheme in little *v*, followed by one aspectual morpheme. If this is so, we expect that the meaning of the second antipassive morpheme in (15) above to be more genuinely aspectual than we would find when it is the only antipassive morpheme, as in the Halkomelem example in (16).

- The data in Gerdts and Hukari (2000) does not contain evidence in either direction. Thus we currently cannot determine if Halkomelem stacked antipassives are in fact an antipassive followed by aspectual marker.

We now return to the initial cross-dialectal differences outlined in section 3. How can we explain the differences between the majority (or possibly just western) varieties of Inuktitut, and Labrador Inuttut (and perhaps all eastern dialects), where the latter shows more of a nominative-accusative pattern. The incremental nature of this change, as described in Johns (1999; 2001a, b) now becomes more clear. We are not simply switching from an ergative-absolutive system to a nominative-accusative system in one fell swoop. Johns (2001b) argues that the switch is from a lexical to a structural case. This turns out to be gross simplification. I propose here instead that the featural properties involved in the case agreement relation between the verb and

the nominal have changed. In the more conservative western dialects, the AGREE relation is based on a relation between the content of little *v* and uninterpretable features of the MIK case on the nominal. In contrast, in Labrador Inuttut, the relation has changed from agreeing with the content of little *v* to a more formal agreement relation, bringing it closer to accusative case, as Bok- Bennema (1991) argues for all Inuktitut. In other words, the MIK case has changed from general uninterpretable features, as in (17a) to one with a Match property, needing to match with the category *v*, as in (17b).⁶¹

17) a. Western Dialects

ASP(F)_v UF_{MIK} No Match Properties

b. Labrador Inuttut

ASP(F)_v UF_v_{MIK} Match Properties

The Uninterpretable Features (UF) in (17a) are very broad and are consistent with MIK being a Default Case (see Schütze 2001). Legate (this volume) proposes that absolutive in Warlpiri is a Default Morphological Case, meaning that when a particular case is licensed, but lacks phonological form, the default absolutive will be inserted. In contrast, MIK is a Default Syntactic Case. It is not associated with a specific case licenser. Crucially, as Schütze (2001) argues, Default Case is not freely generated, but is found in a set of constructions which resemble the elsewhere class, not having a common factor.

The default MIK case has UF. As a result, it must link with some element, which although it is not a canonical Case Licenser, will be able to satisfy the uninterpretable features of MIK. Through this linking, Case is satisfied. MIK is found in many different contexts in these dialects. In the antipassive construction, MIK forms the relation AGREE with the morpheme in little *v* (i.e. antipassive morpheme or activity verb). Thus the uninterpretable features of MIK will be eliminated as they link to the interpretable aspect features of little *v* (à la Svenonius 2001). As a result of the indefinite quantity interpretation of the atelic aspect in little *v*, the nominal to which MIK attaches will also be interpreted as an indefinite quantity, something like partitive. Names will not normally be possible in this context.

However, there are other features which can also satisfy the UF of MIK. If the KP containing MIK is adjoined to the *v*P, an AGREE relation can be established with the agent of the clause, leading to an instrumental interpretation. This is shown in (18).

- 18) a. tukungayu-mik qupi-yaa
 axe-MIK split-3s/3s
 ‘He split it with an axe.’

Inuvialuktun

(Lowe, 1985b, 63)

- b. angalat-kaa aluutta-mik
 stir-3s/3s spoon-MIK
 'She stirred it with a spoon'

Uummarmiut Iñupiaq

(Lowe, 1985a, 64)

As mentioned in section 2, one of the names for the MIK case is instrumental. We now see that the instrumental interpretation of MIK in (18) is derived from its "parasitic" nature, that is, it agrees with the first interpretive property it can find within its domain,⁶² the agent role. As an instrument is a subsidiary to the agent, the MIK case spells out this property. A prediction of this account is that, in western dialects, when MIK is instrumental case, names will not be prohibited. This is because MIK, in its instrumental realization, is not linked to aspect but merely to agency. This prediction turns out to be true, as can be seen in the following example from Iñupiaq:

- 19) Martha Kaapani-lia-qami Igluru-mik uqaqhi-huaq
 Martha(ABS) Bay-go-when3REFLEXIVE Igluruq-MIK speak-3s
 'When Martha went to the Bay, she used Igluruq as an interpreter.'

(Lowe 1985a, 65)

Returning to the representation for MIK case in Labrador Inuttut in (17b), we see one main difference. In Labrador Inuttut, there is a MATCH property on MIK, which entails that it probes not for just the first interpretable feature it can find, as does the MIK in (17a); instead, it probes for the first little *v* category it can find. Again, the aspect in little *v*, will satisfy the uninterpretable features of MIK; however this time the AGREE relation is formed with the category *v*, not the atelic aspect. As a result, there is no partitive interpretation to nominal objects with MIK case. Names are allowed as MIK objects.

The change of MIK to an element with UF Match property has consequences for the instrumental case in Labrador Inuttut as well. Given that MIK in this dialect probes only for a *v* Match, it is impossible for it to be parasitic on the semantic property agency in this dialect. We thus predict that MIK is unavailable for instrumental case in this dialect. This turns out to be true, as shown in (20).

- 20) sana-sima-juk savi-mmut
 work-complete-3s knife-MUT
 'He made (it) with a knife'

Labrador Inuttut

(Smith 1977, 20)

In fact the instrumental case is also MUT in the Tarramiut dialect of Inuktitut spoken in northern Québec, as shown in (21), taken from Dorais (1988, 31).

- 21) kautar-nut sana-jau-juq
 hammer-MUTPL work-PASSIVE-3s
 'With hammers, it has been worked'

In neither Labrador nor Quebec grammars of Inuktitut is there any mention of an instrumental meaning associated with MIK. Conversely there is no mention of

an instrumental use of MUT in the grammars of the two western dialects in (17). Thus the choice of instrumental case marking may be a signal of a grammatical boundary or isogloss between dialects. Dialects A) use MIK as an instrumental and have an obligatory indefinite/partitive interpretation on objects of antipassives. Dialects B) use MUT as an instrumental and do not restrict the interpretation of objects of the antipassive.

A more general question then arises: is there any difference in interpretation in Labrador Inuttut between the theme/patient in absolutive case in an ergative construction and the theme/patient in MIK case in the antipassive construction? It is likely that there is none in Labrador Inuttut, and this has likely led to the (near) eradication of the ergative construction, in main clauses.

While the use of MIK versus MUT for the instrumental is very telling, there remain many questions regarding dialect differences. For example, the link between widespread use of ditransitive constructions and strong ergativity requires further research.

7. CONCLUSION

We have seen that a number of results derived from combing the aspectual analysis of Bittner (1987), Benua (1995), etc. with the little *v* analysis of Spreng (2001). It turns out that aspect is part of the VP, except that, when it heads little *v*, it is no longer only an aspectual element but also a “case assigner” in the sense that it is in a syntactic position which can satisfy the uninterpretable features of the case feature in light *k*. Homophony with actual aspect markers, complementary distribution with unergative roots, and meaning variation all derive from this distinction.

By characterizing the case/little *v* relation as AGREE, we can now understand why the antipassive in Inuktitut looks to be intransitive. Lack of person and number agreement with theme/patient in an antipassive is a direct result of the fact that it agrees with other features. Likewise the interpretation of theme/patients as quantitative entities results from this agreement relation. Thus antipassive not really a detransitivizing process but another type of transitive.

Change in ergativity in Inuktitut is now seen to be related to the extent to which Default Case contains a Match feature. In the more ergative dialects the Match feature is missing, thus the Default Case is found in a wide variety of syntactic contexts. In the dialect with less ergativity, there is a Match feature, restricting the syntactic contexts of the Default Case and bringing it closer in line to accusative case in more familiar languages.

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¹ We may wonder if languages which are becoming less ergative will always show changes in the competing (antipassive) construction, or whether it is in fact possible that a language could become less ergative through changes in the ergative clause itself. At the same time, we may ask whether in languages which are becoming more ergative, the locus of the change will be the ergative clause itself (see Dixon 1994 for some discussion). In other words, is it the "usurping" construction which changes?

² Abbreviations used in examples, including those from other sources, are: rel.=relative; (abs)=absolutive (phonologically null); s=singular; 3=third person; 1=1st person; /=combined person inflection, i.e. agent and patient/theme; AP=antipassive; prog=progressive; loc.=locative; Refl=reflexive; V=verb; gen=genitive; DIR=direct (accusative) case; pres=present; erg=ergative; incept=inceptive; intr.=intransitive; mid=middle; act=activity; sub=subject; fut=future; obl=oblique; det=determiner; comp=complementier; aux=auxiliary

³ In this paper I am simplifying the labelling of mood, transitivity and inflection labeling to just the person and number involved.

⁴ Seiler (1978) gives an example from Inupiaq which appear to be violation of this generalization.

- (i) John uqaq-tuq Mary-mik
 John speak-intr.3s Mary-MIK
 'John talks about Mary'

However notice that 'Mary' here is not a referential entity but more of a general topic. This is exactly what we will see predicted under the account given in section 5 for western dialects.

⁵ Names can be found in MIK case with an instrumental interpretation. See section 6.

⁶ The second example is from Rigolet Inuttut, a closely related dialect. There are no differences in ergativity between these two dialects to the best of my knowledge.

⁷ This is very important because, as Michael Fortescue informed Manning (1996, 94), a name can exceptionally be found as the theme in an antipassive construction only in syntactic contexts where the ergative clause is not permitted for independent reasons, e.g. when a relative clause has an agent as head. See also Dixon (1994, 195).

⁸ In fact, it may be the case that these are more frequently found with non-transitive inflection in Labrador Inuttut. This possibility needs more research.

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- ⁹ For speakers of some South Baffin dialects, the use of the ergative is prohibited only when there is 3/3, i.e. when both the agent and the theme are third person.
- ¹⁰ We note that names seem to be possible with MIK in Yup'ik. Thus Yup'ik, although a western language within the Eskimo language family, is distinct from western dialects of Inuktitut. However Yup'ik has collapsed MIK case with another case MIT, so it is a slightly different system (see Mather, Meade and Miyaoka 2002).
- ¹¹ Johns (1999; 2001) claims that there is a paucity of antipassive morphemes in western dialects of Inuktitut, as compared with eastern ones. Nagai (personal communication) corrects this view, showing that there are at least four in Iñupiaq (see Nagai 1998).
- ¹² The root here is normally *suraq-* in other dialects.
- ¹³ Siegel (1998) also broaches the issue of the homophony of the aspectual and antipassive uses of *-si*. Like Spreng (2001), she realizes that the distributions of the two basic meanings are complementary, but she stops short of providing an account in which the same features are involved.
- ¹⁴ Susana Bejar has suggested to me (personal communication) that such a probe resembles EPP features.
- ¹⁵ Note that the uninterpretable features will have to probe upwards in order to be satisfied. This seems possible under an interpretation of AGREE as involving dynamic search space – see Rezac 2004.
- ¹⁶ In the antipassive construction, an antipassive morpheme must occupy little *v*. If one were missing, the uninterpretable features could look higher. In fact, the reflexive construction consists of a pronoun marked with MIK, an intransitive verb and no antipassive morpheme.
- ¹⁷ Based on other dialects, this form should be *arnar-mik*, or *arnang-mik*. It may be that the uvular is very difficult to hear or absent in the Mittimatalik dialect.
- ¹⁸ Again other dialects would have *nanurmik* or *nanungmik*. See note 17.
- ¹⁹ Something of this nature must be a property of language; otherwise all languages would be like Finnish, agreeing in aspect with the verb.
- ²⁰ Clearly more must be said about uninterpretable case features and domains. Unlike features of T and C, uninterpretable features of K seem to look only upwards and not downwards. This may have something to do with the nature and structure of case.

THE RANGE OF ERGATIVITY

ILEANA PAUL[†] AND LISA TRAVIS[‡]

ERGATIVITY IN AUSTRONESIAN LANGUAGES^{*}

What It Can Do, What It Can't, But Not Why

1. INTRODUCTION

In this paper, we address the following questions. Do ergative languages form some kind of homogeneous class? What are the (syntactic) ingredients of ergativity? To answer these questions, we begin by assessing the ergative analysis of Malagasy, a Western Austronesian language. Malagasy both fits and does not fit the definition of ergative. We conclude that ergativity characteristics vary not only from language to language but even within languages and within particular constructions, raising serious doubt as to whether there is a macroparameter of ergativity and even whether there is a necessary clustering of ergative characteristics in any construction.

2. MALAGASY AS ERGATIVE

We begin by looking at the possibility that Malagasy is an ergative language. Malagasy provides an interesting test case since it seems to have more ergative characteristics than some languages (like English), but it has fewer ergative characteristics than other languages (like Dyirbal, Inuktitut, and Basque). Nevertheless, other than Bittner and Hale (1996) and Mirto (1993), we are not aware of any proposals in the literature (other than Ndayiragije, this volume) that treat Malagasy as ergative (but see Aldridge 2004; de Guzman 1988, and Gerdtz 1988 for ergative analyses of closely related Philippine languages).

2.1 *The Malagasy voice system*

At issue is the proper characterization of the Malagasy voice system (see Keenan 1976). Descriptively, the different verbal voices indicate the “role” of the element in the subject/topic position (which is clause-final).¹ The examples in (1) illustrate a standard paradigm. In an Actor Topic (AT) sentence (1a), the agent is the subject; with Theme Topic (TT) (1b), the theme is the subject; with Circumstantial Topic

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(CT) (1c), a former oblique is the subject. Note that throughout this paper, we will use these glosses.²

- 1) a. Nanapaka ity hazo ity tamin'ny antsy i Sahondra.
 PST.AT.cut this tree this PST.P.GEN.DET knife Sahondra
 'Sahondra cut this tree with the knife.'
- b. Notapahin'i Sahondra tamin'ny antsy ity hazo ity.
 PST.TT.cut.GEN.Sahondra PST.P.GEN.DET knife this tree this
 'Sahondra cut this tree with the knife.'
- c. Nanapahan'i Sahondra ity hazo ity ny antsy.
 PST.CT.cut.GEN. Sahondra this tree this DET knife
 'Sahondra cut this tree with the knife.'

Typically, this kind of verbal morphology is seen as a kind of agreement system (theta-agreement, case-agreement).³ Under an ergative analysis, as we will see in more detail in the next section, these morphemes will have to be reanalyzed as (in)transitivity markers.

2.2 *A reanalysis*

To begin, we adopt Dixon's (1994) terminology in our discussion. The S is the subject of an intransitive predicate; the A is the subject of a transitive predicate; the O is the object of a transitive predicate. Ergative languages treat S and O on a par, while in accusative languages, S and A pattern together. Turning now to Malagasy, we see that this language has certain ergative properties. In this section, we first outline what we believe to be a possible ergative analysis; we then consider the advantages of this approach; and finally we discuss some disadvantages of the ergative analysis.

As mentioned above, the ergative approach to Malagasy requires modifying the analysis of the voice morphemes. The Actor Topic construction in 1a) is in fact antipassive: the A (*i Sahondra*) is in the absolutive position⁴ and the demoted O (*ity hazo ity* 'this tree') is oblique. We repeat (1a) in (2).

- 2) Nanapaka ity hazo ity tamin'ny antsy i Sahondra.
 PST.AT.cut this tree this PST.P.GEN.DET knife Sahondra
 'Sahondra cut this tree with the knife.'

According to this analysis, the AT morphology *an-* is an antipassive or intransitive affix. Note also that the oblique O bears no special marking. The lack of formal marking of the O in the antipassive distinguishes Malagasy from other ergative languages, such as West Greenlandic, as shown in (3)(data from Manning 1996:82). In (3b), both the demoted O and the verb bear overt morphology.⁵

- 3) a. Hansi-p inuit tuqup-paa **West Greenlandic**
 Hansi-ERG people.NOM kill-IND.3SG.3SG
 ‘Hansi killed the people.’
- b. Hansi inun-nik tuqut-si-vuq **West Greenlandic**
 Hansi.ABS people-MOD kill-ANTIP-IND.3SG
 ‘Hansi killed people.’

The Central Arctic Eskimo (4b) illustrates a null verbal antipassive, but the object is still overtly marked as oblique (from Manning 1996:15).

- 4) a. Jaani-up tuktu taku-vaa **Central Arctic Eskimo**
 Jaani-ERG caribou.ABS see-IND.TR.3SG.3SG
 ‘Jaani sees the caribou.’ (from Manning 1996:15)
- b. Jaani tuktu-mik taku-vuq. **Central Arctic Eskimo**
 Jaani.ABS caribou-MOD see-IND.INTR.3SG
 ‘Jaani sees a caribou.’

In Malagasy, there is no clear marking on the object leaving the burden of the marking to the verb. However, as we will discuss in detail in section 2.4.1, analyzing the AT in Malagasy as antipassive runs into serious problems.⁶

Continuing from an ergative perspective, what we initially called Theme Topic is in fact an active sentence: the Agent (A) (*i Sahondra*) is ergative (glossed as genitive) and the theme (O) (*ity hazo ity* ‘this tree’) is absolutive. (1b) is repeated in (5) below.

- 5) Notapahin’i Sahondra tamin’ny antsy ity hazo ity.
 PST.TT.cut.GEN Sahondra PST.P.GEN.DET knife this tree this
 ‘Sahondra cut this tree with the knife.’

The TT morphology *-Vna* is in fact a transitive morpheme. Note that the ergative A bears no special marking, but appears with the generalized “N-bonding” form common to many constructions (Keenan 2000). N-bonding refers to the insertion of a nasal between two words and subsequent nasal assimilation in the appropriate phonological context. The result is a single phonological word that is marked orthographically by an apostrophe (as seen (5)).

Finally, we turn our attention to Circumstantial Topic, which is seen from the ergative perspective as an applicative (3 → 2). The Agent (A) is ergative, the Theme (demoted O) is oblique and the underlying oblique (surface O) is absolutive. An example is given in (6).

- 6) Nanapahan’i Sahondra ity hazo ity ny antsy.
 PST.CT.cut.GEN. Sahondra this tree this DET knife
 ‘Sahondra cut this tree with the knife.’

In this example, we see that there are two morphemes: *-Vna*, the transitive morpheme and *an-* the applicative morpheme. Once again, neither the ergative A nor the oblique O bears any special marking.

Before turning to a more detailed discussion of ergativity in Malagasy, we point out an important structural fact. It has long been noted that in Malagasy, the clause-final DP (the absolutive, the subject, the topic) is outside the VP (Keenan 1976; Pearson 2001). This positioning can be seen from the distribution of particles, such as the NPI *intsony* ‘any more’.

- 7) a. Tsy nanapaka ity hazo ity tamin’ny antsy intsony i Sahondra.
 NEG PST.AT.cut this tree this PST.P.GEN.DET knife NPI Sahondra
 ‘Sahondra no longer cut this tree with the knife.’
- b. Tsy notapahin’i Sahondra tamin’ny antsy intsony ity hazo ity.
 NEG PST.TT.cut.GEN.S. PST.P.GEN.DET knife NPI this tree this
 ‘Sahondra no longer cut this tree with the knife.’
- c. Tsy nanapahan’i Sahondra ity hazo ity intsony ny antsy.
 NEG PST.CT.cut.GEN. Sahondra this tree this NPI DET knife
 ‘Sahondra no longer cut this tree with the knife.’

If we are to continue with a Malagasy-as-ergative analysis, we must adopt the “absolutive as nominative” rather than the “ergative as nominative” view or, at the very least, a view where there is a mapping of absolutive case to a designated external position (as in Bittner and Hale 1996, Ura this volume and contra Bobaljik 1993). We will show in section 2.4.4 that such a view has important consequences.

2.3 *Advantages of an ergative analysis*

In this section, we illustrate how Malagasy patterns with other ergative languages. In other words, there are certain syntactic facts that support the Malagasy-as-ergative analysis. Similar facts in Tagalog have already been discussed by Schachter (1976, 1996). In particular we will see that the A argument has a certain syntactic prominence that is clearly accounted for by the ergative analysis.

First, the A argument is the controller. In (8a), *Rasoa* is an ergative A and controls the (ergative) PRO of the lower predicate. A similar example from a less disputed ergative language, West Greenlandic, is given in (8b) (from Bittner 1994, 168).

- 8) a. Kasain-dRasoa hosasana ny zaza.
 intend.TT.GEN.Rasoa FUT.TT.wash DET child
 ‘Rasoa intends to wash the child.’

- Second, the A is the binder: the ergative DP can bind an anaphor in the absolutive position (9a) or in the oblique O (9b). (9c) and (9d) show that in Inuit (and Inuktitut), an A can bind into an O but not vice versa (taken from Manning 1996, 15).

- Two other characteristics of the A are that it is typically the imperative addressee (10) and it appears with the same case as the possessor (11) (see Johns 1992 for an account of this in Inuktitut).

- Fifth, the absolutive DP is the only element that can be (A-bar) extracted (Keenan 1976) (e.g. relativization, clefting, wh-questions). Thus the relativization of the oblique O in (12b) is ungrammatical; the transitive (TT) morphology must be

used to put the O in the absolutive position, from which it can be relativized (see Manning 1996, 14-15 for similar examples from Inuit).

- 12) a. ny zazavavy (izay) manasa ny lamba
 DET girl (that) AT.wash DET cloth.
 ‘the girl who is washing the clothes’
- b. *ny lamba (izay) manasa ny zazavavy
 DET cloth (that) AT.wash DET girl
- c. ny lamba (izay) sasan’ ny zazavavy
 DET cloth (that) TT.wash.GEN. DET girl
 ‘the clothes that are washed by the girl’ (Keenan 1976:265)

As pointed out by Manning (1996), many ergative languages share this restriction on extraction.⁷

Finally, the ergative analysis provides a neat explanation for the lack of derived objects. Travis (2001) shows that Malagasy lacks typical derived object constructions (raising to object, applicatives, possessor raising). If Malagasy is indeed ergative, it is expected that the position of the demoted O in an antipassive is not a possible target for movement.

In sum, we concede that the ergative analysis of Malagasy accounts for some unusual syntactic patterns observed in this language.⁸ We now turn, however, to certain problems with this analysis.

2.4 *Disadvantages of an ergative analysis*

Despite the advantages of the ergative perspective, we note certain drawbacks to this approach. These can be subdivided into two main areas: the antipassive and the position of the ABS DP. We first address the problem of the antipassive, alluded to earlier. We note here that Bittner and Hale (1996b) analyze Malagasy as ergative with accusative Case and therefore avoid these problems. We mention the advantage of their analysis briefly in section 4.

2.4.1 *The antipassive and verbal morphology*

A quick perusal of the Malagasy voice system makes clear that the antipassive is not morphologically derived from the transitive (nor vice-versa). We illustrate with some verbs in (13).

- | | | | |
|------------------|--------------|---------------|--------|
| 13) Antipassive: | Transitive: | Applicative: | |
| (n)anapaka | (no)tapahina | (n)anapahana | ‘cut’ |
| (n)anasa | (no)sasana | (n)anasana | ‘wash’ |
| (n)ividy | (no)vidina | (n)ividianana | ‘buy’ |

This situation contrasts with typical ergative languages, such as West Greenlandic, where the antipassive in (14b) is clearly derived from the transitive in (14a).

- 14) a. Hansi-p inuit tuqup-paa
 Hansi-ERG people.NOM kill-IND.3SG.3SG
 ‘Hansi killed the people.’
- b. Hansi inun-nik tuqut-si-vuq
 Hansi.ABS people-MOD kill-ANTIP-IND.3SG
 ‘Hansi killed people.’ (Manning 1996:82)

Another problem with the antipassive analysis is the treatment of the antipassive morpheme itself (*an-/i-*). This morpheme occurs on intransitives of various kinds. (15) illustrates an unergative intransitive:

- 15) Mandihy Rabe.
 AT.dance Rabe
 ‘Rabe is dancing.’

(16) illustrates noun-incorporation, a derived intransitive.

- 16) a. Mihinam-bary Rabe.
 AT.eat-rice Rabe
 ‘Rabe is eating rice.’
- b. Manam-bola Rasoaa.
 AT.have-money Rasoaa
 ‘Rasoaa is rich.’

Reciprocals (derived intransitives) also appear with the supposed antipassive morpheme (17a) and in fact, can’t be done with TT (the transitive). The impossibility of a reciprocal transitive is shown by the contrast between (17b) and (17c).

- 17) a. Mifanaja Rabe sy Rabao.
 RECIP.AT.respect Rabe and Rabao
 ‘Rabe and Rabao respect each other.’
- b. Mifanoratra taratasy Rabe sy Rabao.
 RECIP.AT.write letter Rabe and Rabao
 ‘Rabe and Rabao write letters to each other.’
- c. *If-soratan-dRabe sy Rabao ny taratasy.
 RECIP.TT.write.GEN.Rabe and Rabao DET letter
 ‘Rabe and Rabao write letters to each other.’

Similarly, the applicative construction uses the same antipassive morpheme.

- 18) Nanapahan'i Sahondra ity hazo ity ny antsy.
 PST.CT.cut.GEN.Sahondra this tree this DET knife
 'Sahondra cut this tree with the knife.'

In fact, the antipassive occurs in many different forms, variations on which are linked to lexical semantics. As shown in (19), the "intransitive antipassive" morpheme is *i-*, while the "transitive antipassive" is *an-*.

- | | | | | |
|-----|----------------------|---------------|-----------------------|-----------------|
| 19) | (n) <u>i</u> hisatra | X move slowly | (n) <u>an</u> isatra | Y move X slowly |
| | (n) <u>i</u> lahatra | X be in order | (n) <u>an</u> dahatra | Y arrange X |
| | (n) <u>i</u> lona | X soak | (n) <u>an</u> dona | Y soak X |
| | (n) <u>i</u> sitrika | X hide | (n) <u>an</u> itrika | Y hide X |

Thus if *i-/an-* is an antipassive, as far as we know it has characteristics unlike other antipassive morphemes discussed in the literature.

2.4.2 The anti-passive and the status of the O

The second problem with the antipassive in Malagasy relates to the status of the O. Various syntactic tests show that the O is not in fact demoted, as would be expected under an ergative analysis. In other words, the O is still a term. First, the O is not usually omissible, as seen in (20).

- 20) Mamafy *(voa) ny mpamboly.
 AT.sow seed DET farmer
 'The farmer sowed seeds.'

Second, the O enjoys a syntactic status that is unlike obliques. For example, it can control a (depictive) secondary predicate.

- 21) Misotro mangatsiaka ny kafe Rasoa.
 AT.drink cold DET coffee Rasoa
 'Rasoa drinks coffee cold.'

And the O can control PRO. (22) presents an example of "object control", where the O clearly controls the PRO of the embedded predicate.

- 22) Niangavy an-dRabe_i [PRO_i handoko io trano io] Rasoa.
 PST.AT.ask ACC-Rabe FUT.AT.paint this house this Rasoa
 'Rasoa asked Rabe to paint this house.'

Finally, unlike in Tagalog, the O is not nonspecific/indefinite (23a), nor does it necessarily take narrow scope (23b).

- 23) a. Nanapaka ity hazo ity tamin'ny antsy i Sahondra.
 PST.AT.cut this tree this PST.P.GEN.DET knife Sahondra
 'Sahondra cut this tree with the knife.'
- b. Namaky ny boky roa ny mpianatra tsirairay.
 PST.AT.read DET book two DET student each
 'Each student read two books.' (2>∀)

Summing up, the O in the supposed antipassive does not behave like a non-term, suggesting that it bears structural accusative case, rather than oblique or inherent case.

2.4.3 *The status of the A*

Unlike the O, the A in an ergative sentence has some non-argument properties: it is always optional and often omitted.⁹

- 24) Notapahina tamin'ny antsy ity hazo ity.
 PST.TT.cut PST.P.GEN.DET knife this tree this
 'Someone cut this tree with the knife.' (this tree was cut with the knife)

Note that this optionality is much more wide spread than would be expected with some kind of optional transitivity (which is lexically restricted). Moreover, the optionality of the A is in stark contrast with the non-optionality of the O (in an antipassive). Thus the situation is the reverse of what we expect under an ergative analysis.

2.4.4 *The problem of the NABS position*

Our final argument against the ergative analysis comes from weak crossover. It has been noted that in ergative languages, the absolutive quantified DP can't bind a pronoun in the ergative DP. In other words, the absolutive position behaves like an A-bar position, creating weak crossover violations. An example from Basque is given in (25).¹⁰

- 25)*?Nor maite du bere amak ?
 who-ABS love AUX.3sA/3sE his mother-ERG
 'Who_i does his_i mother love?' (Bobaljik 1993: 60)

In Malagasy, on the other hand, movement of a quantified DP to the absolutive position fixes weak crossover violations (data from Pearson 2001; see also Richards 2000 on Tagalog). The data in (26) illustrate the prominence of the A. As expected under an ergative analysis, a quantified DP in the ergative position can bind a pronoun in the absolutive position (26b).

- 26) a. Namangy ny rainy_i ny mpianatra tsirairay_i omaly.
 PST.AT.visit DET father.3 DET student each yesterday
 'Each student visited his father yesterday.'
- b. Novangian' ny mpianatra tsirairay_i ny rainy_i omaly.
 PST.TT.visit.GEN.DET student each DET father.3 yesterday
 'Each student visited his father yesterday.'

The data in (27), however, are problematic. (27a) shows that weak crossover is relevant in Malagasy: the quantified DP must c-command the bound pronoun at some level. The grammaticality of (27b) shows the absence of weak crossover in TT constructions. A quantified DP in the absolutive position can bind a pronoun in the ergative DP.

- 27) a. *Namangy ny mpianatra tsirairay_i ny rainy_i.
 PST.AT.visit DET student each DET father.3
 'His father visited each student.'
- b. [Novangian'ny rainy_i] ny mpianatra tsirairay_i omaly.
 PST.TT.visit.DET father.3 DET student each yesterday
 'His father visited each student yesterday.'

The grammaticality of (27b) is unexpected under the ergative analysis. We would instead expect to find a violation of weak crossover, similar to (25).

2.5 Summary

What do we gain by saying Malagasy is ergative? It seems that we can account for two classes of syntactic phenomena: binding and control (as well as imperative formation and genitive case assignment to Actors) on the one hand and extraction on the other. What remains puzzling is the nature of verbal morphology, the term versus non-term status of the O and the A and, finally, the lack of weak crossover.

3. AN ALTERNATIVE: SUBJECTS ARE A'-TOPICS

The peculiarities of Malagasy (and other related languages, such as Tagalog), have suggested to researchers another solution. In order to account for the syntactic prominence of the ergative DP, some have argued that the subject is in fact a topic, an A-bar position (Pearson 2001, Richards 2000). As an A-bar element, the topic undergoes reconstruction and therefore acts "low" for purposes of binding, control, etc. Moreover, the A-bar analysis can account for the lack of weak crossover effects by appealing to "weakest crossover" (Lasnik and Stowell 1991). Finally, unlike the ergative analysis, the A-bar analysis is not forced to appeal to exceptional accusative case in AT clauses.

As with the ergative analysis, there remain some unexplained problems. First, as we have already seen, the verbal morphology appears to agree with the topic (in case or theta-role). In general, topicalization does not trigger verbal agreement, as shown in the Icelandic examples below.

- 28) a. *Ég hef aldrei hitt Maríu.*
 I have never met Maria
 ‘I have never met Mary.’

- b. *Maríu hef ég aldrei hitt*
 Maria have I never met
 ‘I have never met Mary.’

(Rögnvaldsson & Thráinsson 1990)

Second, topicalization in Malagasy triggers a change in case marking (examples adapted from Keenan 1976: 256).

- 29) a. *Mividy mofo ho azy aho.*
 AT.buy bread for 3(ACC) 1SG(NOM)
 ‘I am buying bread for him.’

- b. *Ividianako mofo izy.*
 CT.buy.1SG(GEN) bread 3(ACC)
 ‘He was bought bread by me.’

This case marking is not typical of topicalization, for example, in Icelandic (see 28)). Third, there are questions of word order that arise in other related languages. For example, in Pangasinan (Mulder and Schwartz 1981), Kalagan (Collins 1970), and Cebuano (Bell 1979), the unmarked order is the following: V Actor Topic Theme Goal. In other words, the topic appears in a position embedded within the verbal projection. It is not clear what sort of structure could be proposed that would have this VP internal position as an A-bar position.

4. INTERIM SUMMARY

It seems that we have come full circle and now return to Schachter’s original problem: the questions of two subjects (Topic and Actor). Several analyses have been proposed in the literature. We mention three main classes here.

- Class I: Ergative (plus exceptional accusative) analysis: e.g. Bittner and Hale (1993), Maclachlan (1996)
 Topic position is A-bar (L-bar as in Mahajan 1990, Campana 1992)
 Actor position is Ergative

Class II: A-bar analysis: e.g. Richards (2000), Sells (2000), Pearson (2001)
Topic position is a Topic (similar to Icelandic)
Actor position is subject

Class III: Accusative (plus genitive) analysis: e.g. Guilfoyle et al. (1992)
Topic position is A-subject
Actor position is (exceptional) genitive

In Table 1, we list the different phenomena and whether or not the different analyses can account for them.

Table 1. Phenomena and Analyses

	<i>ERGATIVE</i>		<i>A-BAR</i>	<i>ACCUSATIVE</i>
	Anti-Pass	w/Acc		
Verbal Morphology	?	√	?	√
Object Status	?	√	√	√
Weak Crossover	?	?	√	√
Optionality of Actor	?	?	√	√
Case/AGR with Topic	√	√	?	√
Binding/Control/Imperative	√	√	√	?
Extraction	√	√	√	?

We see, for example that the ergative analysis does poorly unless combined with an exceptional accusative (as in Bittner and Hale 1993). Then the only question remains how to deal with weak crossover and the optionality of the Actor. The A-bar analysis fares better in that respect, but must explain the special verbal morphology and Case, which are not usually correlated with topicalization/A-bar movement.

Finally, the accusative analysis must explain the special syntactic prominence of the A (binding, control) and also the extraction restrictions. Thus it might seem that all three proposals fare equally well or equally badly. In the next section we raise further doubts about the ease of fit of an ergative analysis of some related languages. We return to the shaded area in the table in section 5.4.

5. THE ERGATIVITY CONTINUUM: AUSTRONESIAN LANGUAGES

In this section we explore some of the issues that our investigation of Malagasy has raised. The over-riding question is whether languages can be more or less ergative. What we seem to have is a situation where not only *languages* can vary on what signs of ergativity they show, but also *constructions* can vary. The Austronesian language family provides an ideal laboratory for comparing very similar languages that might vary in minimal ways. There are members of the family that are generally considered ergative (Tongan, Niuean) and there are members of the family that are rarely considered ergative (Bahasa Indonesia, though as we will see below,

there are ergative constructions). The steps across the variations, however, seem quite small. Here we simply begin what is a large project to compare syntactic details of these languages to uncover what appears to be an ergativity continuum. The task would be to determine if there are necessary clustering of properties or if ergativity is, in fact, a constellation of independently occurring microparameters.¹¹ We take as some beginning observations a split in properties. Manning (1996:14) points to these properties in his comparison of Inuit and Tagalog.

30) <i>Absolutive Marked DP:</i>	<i>Actor:</i>
Subcategorized element of every clause	Antecedent reflexives
Relativization	Equi Target
Specific/Wide Scope	Imperative Addressee

5.1 *Malagasy is less ergative than Tagalog*

We have already seen above that Malagasy is not purely ergative. In fact, it seems to be slightly less ergative than Tagalog. It is telling that many more researchers have come to the conclusion that Tagalog is ergative than have come to the conclusion that Malagasy is ergative. Very superficially, the apparent non-ergativity of Malagasy (in spite of deeper syntactic similarities to ergative languages) derives from two things: the clear linking of Absolutive case to a structural position outside of the rest of the clause and the apparent term status of the O in an antipassive construction. We repeat our original examples below.

- 31) a. [Notapahin'i Sahondra tamin'ny antsy] ity hazo ity. *Transitive*
 V A O
 PST.TT.cut.GEN.Sahondra PST.P.GEN.DET knife this tree this
 'Sahondra cut this tree with the knife.'
- b. [Nanapaka ity hazo ity tamin'ny antsy] i Sahondra. *Antipassive*
 V oblique? S
 PST.AT.cut this tree this PST.P.GEN.DET knife Sahondra
 'Sahondra cut this tree with the knife.'

As we pointed out earlier, the fact that absolutive is external to the clause in 31a) requires absolutive case to map to a very "high" position in the structure. In other words, absolutive case cannot be assigned within the verbal projection. It is the motivation for this movement to an external position that the A-bar analysis attempts to provide, as discussed in section 3. Analyzing this element as an O is further undermined by the fact that the antipassive construction has a VP internal element that behaves much more like a traditional O.

Tagalog behaves slightly differently from Malagasy. Below are examples of an intransitive (32a), and, in what would be an ergative analysis of Tagalog, a transitive construction (32b) and an antipassive construction (32c) (from Maclachlan 1996).

The first thing to point out is that the word order is much freer but there is a tendency for Actors to appear directly following the verb independent of the case they appear in. The word order puzzle found in Malagasy, then, does not arise.

- 32) a. natulog ang lalaki
 slept ABS man
 'The man slept.'
- b. nakita ng lalaki ang hayop
 saw ERG man ABS animal
 'The man saw the animal.'
- c. nakakita ang lalaki ng hayop
 APAS.see ABS man OBP animal
 'The man saw an animal.'

Further, by adopting an ergative analysis of Tagalog, one can explain an otherwise puzzling definiteness restriction on non-promoted Themes in Tagalog. This is shown in the contrast of the translations of (32b) and (32c) above and is clearly reminiscent of the facts concerning oblique objects in antipassive constructions (see MacLachlan and Nakamura 1997). Finally, in certain paradigms, the verbal morphology for the antipassive construction does seem to be morphologically derived from the transitive verb. We can see additional morphology in the antipassive verbal form in (32c) as compared to the transitive verbal form in (32b).

As shown by MacLachlan (1996), however, an ergative analysis of Tagalog runs into problems similar to the ones we have discussed above for Malagasy. The verbal morphology over a larger set of verbal paradigms does not fit neatly into an ergative analysis, the status of the demoted object is not clearly oblique, and the status of the A is not clearly a transitive subject.

5.2 *Malagasy is more ergative than Bahasa Indonesia*

In the ergativity continuum of the Austronesian language family, while Malagasy appears to be less ergative than Tagalog, it appears to be more ergative than another related language, Bahasa Indonesia. Bahasa Indonesia is an SVO language. As clearly shown by Chung (1976), this language has both nominative/accusative characteristics and ergative/absolutive characteristics. This is clearest in, what Chung called at the time, the two passive constructions. More accurately, one is a passive construction, and one is like the Theme Topic constructions seen in the discussion of Malagasy and Tagalog above. The passive construction looks somewhat like English (i.e. accusative) and the Theme-Topic construction looks like its Western Austronesian relatives (i.e. ergative). Ideally, these two constructions could provide a testing ground for clustering of ergative type properties.

Below are the two relevant constructions (adapted slightly from Arka and Manning (1998)). (33a) is an English-type passive construction. The verb bears the prefix *di-* and the demoted Actor is realized in an optional *oleh* phrase similar to a *by* phrase in an English passive. In (33b) we find a construction similar to the Malagasy Theme Topic constructions. The verb is a bare root and the Actor is in a preverbal position.¹² These constructions are more limited in Bahasa Indonesia than they are in Malagasy in that they can only be used when the Actor is a pronominal.

- 33) a. Buku itu di-baca oleh Amir
 book that PASS-read by Amir
 'The book was read by Amir.'

- b. Buku itu saya/kamu/dia baca
 book that 1sg/2/3 read
 'That book, I/you/he read.'

As pointed out by Arka and Manning (1998) as well as Chung, the construction in (33b) has ergative characteristics. The construction appears to be transitive but the logical object has the same syntactic characteristics as the logical subject of an intransitive construction. We might, then, expect that within one language we have a way to test the clustering of properties. In other words, if the syntactic properties of ergative languages can be explained through an ergative parameter, we might expect to find these properties in the ergative construction but not in the non-ergative construction. We will see below that, while the binding facts initially point in this direction, the facts of control and extraction argue otherwise. In the end, within one language, we raise the problems that we have already seen appear in crosslinguistic discrepancies.

5.2.1 Binding

Arka and Manning (1998) discuss the binding facts in these two constructions. As might be expected, in the English type passive construction, the binding facts look like English. In the Malagasy type ergative construction, the binding facts look like Malagasy.

We begin with the English type passive construction. The relevant examples are given below.

- 34) a. Saya menyerahkan diri saya ke polisi
 1SG AT.surrender self 1sg to police
 'I surrendered myself to the police.'

- b. ?*Dirinya di-serahkan ke polisi oleh Amir
 self.3 PASS-surrender to police by Amir
 'Himself was surrendered to the police by Amir.'

(34a) shows a simple active transitive (accusative) structure. Here the Agent subject binds the Theme object. (34b) shows that a similar sentence, now passivized, cannot preserve this binding. The demoted Agent in the *oleh* phrase cannot bind the Theme which is now in the sentence initial subject position.¹³ None of this is surprising given what we know about English.

Now we turn to binding in the second sort of passive, the ergative-like construction. In (35) below we see that the binding facts in this sort of passive are different from the binding facts we have just seen.

- 35) Diri saya saya serahkan ke polisi
 Self 1 1SG surrender to police
 'I surrendered myself to the police.'

Here we see that the binding facts of the active transitive accusative construction that we saw in (34) *have* been preserved. The Agent is still binding the Theme even though the Theme is now in the sentence initial subject position. None of this is surprising given what we know about Malagasy (see example 9a)).¹⁴

We have an apparent case of split ergativity here. In the non-ergative construction, we have non-ergative characteristics. In the ergative construction, we have ergative characteristics. We will see shortly, however, that the picture is not so neat.

5.2.2 *Extraction*

One of the characteristics of ergative languages that we have seen above is that only absolutes may extract. This characteristic has been documented in non-Austronesian ergative languages as well as the Austronesian cases that we have been discussing. Turning to Bahasa Indonesia, we know that this restriction on extraction also exists in this language.¹⁵ However, Arka and Manning point out that this restriction holds equally in the ergative-like Theme Topic construction as well as the non-ergative-like passive construction. This is a crucial observation for their analysis of the two types of passive constructions as it is used as a test for what is the grammatical subject. For our purposes, however, it shows us something quite different. We see here that, even the English type construction, the passive, Bahasa Indonesia is behaving like Malagasy.

5.2.3 *Control*

Another test used by Arka and Manning to determine the grammatical subject (the sentence initial DP) is control. Only the grammatical subject can be PRO (i.e. can undergo Equi-DP deletion). Control is a phenomenon that is generally sensitive to the Actor not the absolute DP in ergative languages. In this way, then, Bahasa Indonesia is behaving like an accusative language where PRO is determined by structure/case and not by thematic relation. Arka and Manning point out that this restriction of the Equi-NP holds equally in the ergative Theme Topic construction as

well as the non-ergative-like passive construction. Now we have the opposite situation to the case of extraction that we have just discussed. In this case, even in the Malagasy type construction, the Theme Topic construction, Bahasa Indonesia is behaving like English.

In sum, looking back at the table provided by Manning given in (30) and using the correlations that he has set up there, we see the following pattern in the two passives of Bahasa Indonesia. Extraction appears to be ergative-like in both passives. Control seems to be accusative-like in both passives. Reflexivization is ergative-like in the ergative-like passive and accusative-like in accusative-like passive.

5.3 *Further leakage*

We have seen that a macro-parameter does not adequately explain cross-linguistic differences in languages. Further, ergative-like properties also seem to covary within a language where a certain construction may show only a subset of the ergative or accusative properties available to it within that particular language. In this section we see that even within a particular construction, the appearance of apparent ergative-like characteristics is not always consistent. It is at this point that generalizations are particularly difficult to make. In Table 1, we have shaded in an area where certain leakage in the analysis occurs. We look at two cases, both from Tagalog. One involves a phenomenon generally sensitive to the absolutive DP (extraction), the other phenomenon generally sensitive to the Actor DP (control). While extraction (relativization) is generally restricted to absolutive phrases (*ang* phrases), with certain predicates this may be relaxed. In these cases, extraction is possible over Abs/Topic/Subject (Cena 1979). Two examples are given in (36) and (37) below.

- 36) a. Suwail ang anak ng doctor.
 blacksheep T child GEN doctor
 'The doctor's child is a blacksheep.'
- b. Madismaya ang doctor na suwail ang anak.
 disappoint T doctor LINK blacksheep T child
 'The doctor whose child is a blacksheep was disappointed.'
- 37) a. Katulong ng doktor ang anak.
 help GEN doctor T child
 'The child is helping the doctor.'
- b. Madismaya ang doktor na katulong ang anak
 disappoint T doctor LINK help T child
 'The doctor whom the child is helping was disappointed.'

In (36a) and (37a) above, there is one *ang* (absolutive) phrase and one *ng* (genitive) phrase. As (36b) and (37b) show, the *ng* (genitive) phrase can be extracted for the purposes of relativization, something that is generally disallowed in this language. Any account of extraction would have to be flexible enough to allow for these constructions where extraction is no longer sensitive to the absolutive DP.

Turning now to control, we find a similar need for flexibility. In Tagalog, control is usually sensitive to the Actor DP but in certain cases it is sensitive to the absolutive (see discussion in Dell 1983 and Kroeger 1993:95). This occurs when the verbal morphology is of the form *a(ka)-* rather than *pag-*. In the examples below, we see a case where it is possible to control the Theme DP. However, control is not possible when the deleted DP would have been in the genitive/ergative case (as in 38a)) but is grammatical when the deleted DP is in the absolutive case (as in 38b)).

- 38) a. *In-utus-an ko si Maria ng ma-halik-an si Pedro
 PERF-order-DV I.SG.GEN NOM M. COMP NONVOL-kiss-DV NOM P.
 b. In-utus-an ko si Maria ng ma-halik-an ni Pedro
 PERF-order-DV I.SG.GEN NOM M. COMP NONVOL-kiss-DV GEN Pedro

‘I ordered Maria (to allow herself) to be kissed by Pedro.’

Here then we have a case where any analysis of control has to allow enough flexibility to have control sensitive to the Actor/Agent when the verb is in one form and the absolutive when the verb is in another form.¹⁶

6. CONCLUSION

We have looked at cases where languages differ from each other in very small ways in terms of ergative types of behaviour. We have looked language internally and seen how constructions can differ in very small ways in terms of ergative behaviour. We have seen that even within constructions there are slight variations depending on the predicates that are being used. All of this raises questions about the viability of an ergativity macroparameter. Imagine, instead, that the ergativity parameter were (in part) linked to the availability of an internal inherent case (ergative) for agents. In other words, ergativity is linked to features of *v*, as is desirable within the Minimalist Program, where all language variation stems from the lexicon. Similar proposals are made in a number of papers in this volume (e.g. Anand and Nevins, Legate, Massam, Ura) and also in Woolford (1997). Such an analysis of ergativity still raises the question of how to account for language- and construction-internal variation.

The next step is the more difficult one. In order to understand the phenomenon of (apparent) ergativity, we need to better understand the reliability of the generalizations being made language internally, and the reliability of the generalizations being made cross-linguistically. At this point we will be able to

retest the hypothesis that there is, in fact, natural class of ergative languages and/or ergative constructions.

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¹ In Section 2.4.3 of this paper, we address the question of subject versus topic.

² Unless otherwise indicated, data are from our own field notes. We use the following abbreviations:

AT=actor topic	TT=theme topic	CT=circumstantial topic	PST=past
GEN=genitive case	DET=determiner	ABS=absolutive	ERG=ergative
ANTIP=antipassive	IND=indicative	MOD	TR=transitive
INTR=intransitive	FUT=future	IMP=imperative	RECIP=reciprocal
T=topic	PERF=perfective	DAT=dative voice	

³ See (12) for a breakdown of the verbal morphology.

⁴ Malagasy does not have a rich system of overt case markers and grammatical relations are generally determined through word order.

⁵ When discussing these examples, we will use the language name chosen by the cited author.

⁶ Dixon (1994:146) makes the observation that ergative languages always have "some explicit formal marking of an anti-passive construction". If it can be shown that there is no formal marking on the verb or on the demoted object in Malagasy, this can be used as an argument against an ergative analysis of Malagasy.

⁷ Though not all ergative languages limit extraction to the absolutive, e.g. Niuean. We would like to thank Diane Massam for drawing our attention to this.

⁸ See similar discussions in Aldridge (in prep), deGuzman (1988), Gerdts (1988), MacLachlan (1996), Manning (1996), etc.

⁹ It has been shown (Keenan and Manorohanta 2001) that in text counts, these agents, while apparently optional, are not dropped to the extent that oblique agents in passive constructions are dropped in

English texts. We are concerned, however, with what is possible, not to what extent or under what circumstances the possibility is put to use. Note that Malagasy is not a pro-drop language.

¹⁰ Readers may object that Basque is not a syntactically ergative language. But similar weak crossover effects are cited for Niuean by Massam (this volume) and by Bobaljik (1993) for Nishga.

¹¹ See Legate 2002 for a similar decomposition of the macroparameter of non-configurationality into independently occurring microparameters.

¹² Arka and Manning discuss a third type of construction, the *di-V-nya* construction which behaves similarly to 33b).

¹³ Arka and Manning show that oblique Agents can bind other elements in the sentence, in particular what they call oblique Themes. The relevant example is given in (i) below.

- (i) Saya di-tanyai oleh Amir tentang dirinya
 1 PASS-ask by Amir about self.3
 ‘I was asked by Amir about himself.’

This is needed to show that it is not the case that a demoted Agent is simply outside of binding theory.

¹⁴ Arka and Manning account for this difference by having binding sensitive to argument structure (a-command) and having passive affect argument structure. Theme Topic constructions (their Object Voice constructions) do not affect argument structure but rather affect only the linking of arguments to grammatical relations.

¹⁵ Actually, this generalization, while fairly accepted for many years has been called into question more recently (see e.g. Cole and Hermon 1998). This does not, however, detract from our point. Counterexamples to the claim would be added to the observations that we make in section 5.4.

¹⁶ Kroeger (1993) accounts for control semantically. Since the verbal morphology changes the degree of voluntariness of the Actor/Agent, this is a reasonable direction to follow.

THE SPLIT VERB AS A SOURCE OF MORPHOLOGICAL ERGATIVITY

The Case of Russian and Its Northern Dialects

1. INTRODUCTION

This paper argues (a) that ergative Case is neither a language-specific property (that is, postulated in terms of a parameter) nor a primitive feature of a verbal head, and (b) that morphological ergativity derives from a structural configuration with two v heads above the root (v_1 , licensing Case, and v_2 , introducing an external argument). Evidence supporting the proposal comes from Russian Experiencer constructions and past-participial constructions in North Russian dialects. Section 3 will show that Russian dative Experiencer verbs follow the “ergative pattern” (double v configuration), while nominative Experiencer verbs follow the “accusative pattern” (single v configuration). Section 4 will show that the single v vs. split v differentiation is at the heart of the contrasts observed between Standard and North Russian participial constructions with regard to (i) their semantic interpretation, (ii) the Case marking of the object and (iii) some morphological peculiarities of deverbal affixation. Before that, a brief comment on ergative Case.

2. INTERNAL CASE OF THE EXTERNAL ARGUMENT

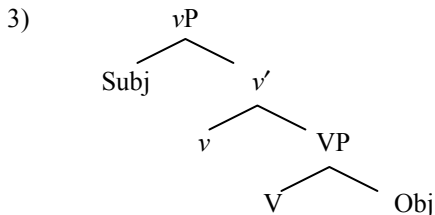
If we assume that ergative Case is verbal, the basic question is to explain the cross-linguistic variation in the directionality of Case relations inside a verbal phrase. In some languages, it is a verb-object relation, resulting in accusative Case marking, as illustrated in (1). In other languages, it is a verb-subject relation, resulting in ergative Case marking as shown in (2).¹ In (1), the logical subject (the hearer) is less marked than the object (the heard person), which bears the accusative ending *-a*. In (2), the markedness is distributed in the opposite order with the logical subject taking the ergative ending *-ŋgu*.

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- 1) a. Rebēnok uslyša-l otc-a. **Russian**
 child.M.NOM hear.PERF-PST.M father-M.ACC
 'The child_{Subj} heard father_{Obj}.'
- b. Otec uslyša-l rebēnk-a.
 father.M.NOM hear.PERF-PST.M child-M.ACC
 'Father_{Subj} heard the child_{Obj}.'
- 2) a. ŋuma jaja-ŋgu ŋamba-n. **Dyirbal**
 father.ABS child-ERG hear-NONFUT
 'The child_{Subj} heard father_{Obj}.' (Dixon 1994:162, (23))
- b. Jaja ŋuma-ŋgu ŋamba-n.
 child.ABS father-ERG hear-NONFUT
 'Father_{Subj} heard the child_{Obj}.' (Dixon 1994:166, (50))

There are two possible ways to account for directionality of Case assignment in (1)-(2). One of them is to assume that the verbal phrase is the same for both (1) and (2). Another possibility is to say that (1) and (2) are derived from different verbal structures.

Starting with the first possibility, let us assume that (3) is a configuration that is universally valid for transitive verb phrases.



Little *v* in (3) has two basic properties, both components of Burzio's generalization: (i) it introduces the external argument (Subj), and (ii) it licenses the Case of an argument (either Subj or Obj). We thus have to explain why in Dyirbal the Case relation is *v*-Subj (order is irrelevant at this point) and not *v*-Obj as in Russian. Ura (this volume) suggests that Case relations inside the *v*P are regulated by the so-called "ergative parameter," which allows a feature-checking relation between Subj and *v* (resulting in ergative morphology). In the languages that have a negative value for this parameter, an argument must move in order to perform a checking operation. In this case, only Obj is able to check *v*'s features (resulting in accusative morphology). "Ergative" and "accusative" are thus two labels for a structural Case originating from *v*. This view leaves us with the following question: What is the difference, if any, between structural and inherent Case marking of Spec,*v*P positions? We cannot claim that Subj in (3) is unable to receive an inherent Case in accusative languages; even though this possibility is excluded for Agents, it is still available for Experiencers. Section 3 argues that in Russian dative

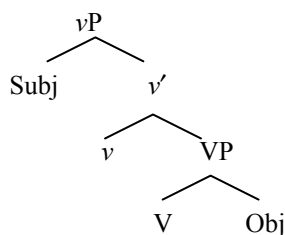
Experiencer constructions, such as (4), dative marking follows from the *v*-Subj relation, akin to the Case marking of Agents in ergative languages.

- 4) Otc-u nadoe-l rebēnok.
 father-M.DAT bore.PERF-PST.M child.M.NOM
 'The child_{Theme} bored father_{Exp.}'

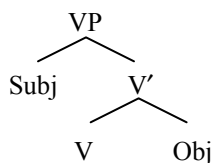
As for the second possibility, we might question the universal validity of the structure in (3). Nash (1995), for example, proposes that accusative languages differ from ergative ones with regard to the category that introduces the external argument. In accusative languages, Subj is introduced by a functional head (*v*) and is external to the event denoted by V, whereas in ergative languages it is base-generated directly in the lexical Spec,VP position, and is internal to VP:

5) *Internal Ergative Subject Hypothesis (Nash 1995)*

a. *Accusative pattern*



b. *Ergative pattern*



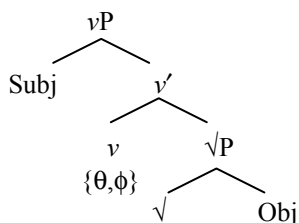
If *v* is a source of structural Case, the dichotomy in (5) has a direct Case-theoretic implication: ergativity is nothing more than a mere lack of structural Case, at least at the level of verbal phrase; see Ndayiragije (this volume) for further extension and a possible parameterization with regard to the structural Case specification of *v* and T(ense) heads. In (5b), Subj is closely associated with the lexical semantics of the verbal root, which makes it susceptible to receiving an inherent Case. Ergative marking could thus be seen as morphological strategy differentiating Agents from non-Agents inside a bi-argumental VP of the (5b) type.

In what follows, I would like to pursue an avenue that goes in between the two possibilities just sketched above. My main claim is that Ura's ergative parameter derives from a structural difference at the *v*P level. However, unlike Nash, I will not propose that ergativity results from the lack of *v* head altogether with structural Case. In fact, I assume that "ergative" and "accusative" *v*Ps do not differ in the inventory of (un)interpretable features assigned to (or checked by) the arguments. Rather, the only difference is that in ergative *v*Ps there is a tendency for different features to be distributed among separate heads, while in accusative *v*Ps there is a tendency for features to constellate in a single head.²

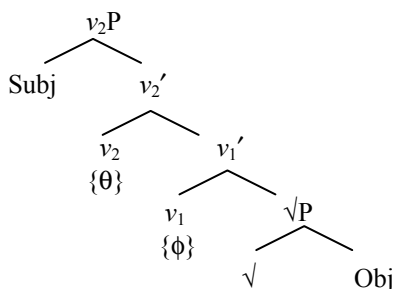
2.1 Proposal

I propose that in accusative languages formal (ϕ) and thematic (θ) properties have the tendency to coexist in a single v head, while in ergative languages ϕ and θ are properties of two separate heads. This split v hypothesis underlies the structural representations (6a) and (6b), corresponding to accusative and ergative patterns respectively.³ Note that the label V(erb) used in (3) corresponds to the head $\sqrt{}$ (root) in (6a) and to the complex structure [$\sqrt{}v_1$] that is formed after head adjunction in (6b).

6) a. Accusative pattern



b. Ergative pattern



The existence of both (6a) and (6b) is not an absolute dichotomy that divides languages into two groups. Even if a language has a tendency to show one of these patterns,⁴ non-canonical configurations can still arise. For example, the number of v heads projected above the verbal root can result in two types of constructions in a given language or dialect. It is also possible to have the same type of construction patterning either as (6a) or as (6b), thus producing a dialectal microvariation. In the next sections, I show how both kinds of variation are manifested in Russian. Section 3 shows that, in Standard Russian, (6a) corresponds to the nominative Experiencer constructions, while (6b) characterizes the dative Experiencer constructions. Section 4 is devoted to the dialectal variation. Comparing participial constructions in Standard Russian and its Northern varieties, I argue that North Russian dialects favor the pattern (6b), while the same constructions in Standard Russian follow instead (6a). Before we turn to these issues, let us take a look at how the configurations in (6) derive Ura's ergative parameter.

2.2 Assumptions and theoretical implementation

I adopt Chomsky's (2000) model of inflectional feature checking. According to this model, uninterpretable features are deleted under the relation of a long distance agreement (Agree), which is triggered by an uninterpretable feature (or a set of uninterpretable features), referred to as a probe.⁵ The probe seeks a goal, which is the closest matching feature(s) in the c-command domain of the probe.⁶ For Agree

to take place there is one more requirement in addition to matching (feature identity), c-command and closeness: the head containing a goal must also contain an uninterpretable feature that is identified with an interpretable feature contained in the same head as probe. Put differently, Agree is a reciprocal operation to feature checking.

If uninterpretable ϕ -features in T or v find interpretable ϕ -features in a DP, Agree is possible only if this DP has an uninterpretable feature, which in Chomsky (2000) is assumed to be Case. However, what Chomsky does not address is what kind of interpretable feature in v and T must match Case.⁷ For example, Pesetsky and Torrego (2001:361) identify an interpretable tense feature of T with the nominative Case, which they define as an uninterpretable tense feature on D. Later they extend their proposal to the accusative Case (Pesetsky and Torrego 2004), making assumption that structural Case features are indeed tense features that must underspecify the arguments of a clause (their Argument-Tense Condition, p. 501).⁸ For my purposes here, I assume the following informal definition of an abstract Case feature (κ):

- 7) κ is an uninterpretable spatiotemporal feature on D that must be checked in order to identify an argument in relation to the event denoted by the predicate.

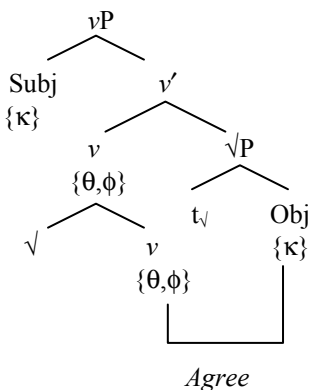
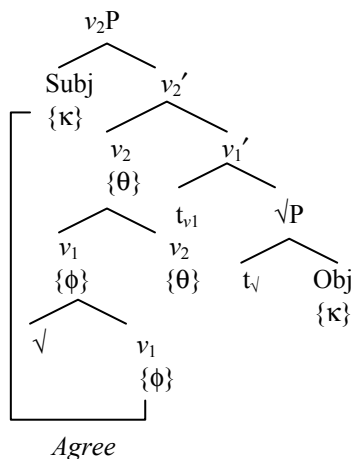
κ of a DP must be checked either against a tense feature on T or an eventive feature on v , depending on the particular configuration, namely, on c-command and closeness. The definition in (7) implies that κ can function as a probe seeking a goal, and that ϕ -features of v or T can passively benefit from an Agree relation triggered by κ of a c-commanding DP

Finally, I should comment on the general “mechanics” of Agree itself. In this paper, I assume that Agree is nothing more than a relation between two syntactic elements: it neither deletes nor values uninterpretable features, but simply relates them to interpretable ones, ensuring in this way their legibility for the output. Feature deletion and feature valuing (i.e., assignment of morphological values to a feature matrix) take place at the Morphology-PF component depending on Agree relations established in syntax.

Turning now to the domain of vP itself, the theory briefly outlined so far implies that the κ feature of a DP ($\kappa(DP)$) and the ϕ -features of v ($\phi(v)$) are interpretable as long as they are involved in an Agree relation, which is then read by PF for proper vocabulary insertion. In (8), I summarize conditions on Agree inside a vP abstracting away from matching and closeness requirements.

- 8) Agree is triggered iff
- a. $\phi(v)$ and $\kappa(DP)$ are uninterpretable; and
 - b. (i) Either $\phi(v)$ c-commands $\kappa(DP)$ (ϕ = probe) or (ii) $\kappa(DP)$ c-commands $\phi(v)$ (κ = probe).

Let us now return to the accusative and ergative patterns, examining what happens in each of them after head movement. As illustrated in (9a), Agree holds between v and Obj, with the ϕ -set functioning as a probe. Note that Agree between Subj and v is precluded by (8a), since the ϕ -set is interpretable under an Agree relation with Obj. Subj may agree only with some higher head (such as T). In (9b), the situation is different. After head movement, the ϕ -set does not c-command Obj, and condition (8bi) is not respected; an Agree relation thus cannot hold between v_1 and Obj. As a result, an uninterpretable $\kappa(\text{Subj})$ targets v_1 and triggers an Agree relation in accordance with (8a) and (8bii).⁹

9) a. *Accusative pattern*b. *Ergative pattern*

An anonymous reviewer asks: “Why can’t an Agree relation between the ϕ -set of v_1 and the Obj be established once v_1 is merged with \sqrt{P} ?” Indeed it can, but, as I said before, nothing happens until Spell-Out applies; Agree itself neither deletes nor values features, it is just a syntactic relation between two matching heads under a strict c-command relation. In the course of the derivation (which includes morphological merger), Agree holds for a while between v_1 and Obj but it does not “survive” until the vocabulary insertion and has no importance for the articulatory-perceptual interface. As soon as the [$\sqrt{v_1}$] complex adjoins to v_2 , Obj is no longer visible for v_1 , whose ϕ -set is then probed by κ -feature of Subj. When the vP phase is over, morpho-phonological processes (of feature valuing, deletion and insertion) apply, looking at the heads related by Agree.¹⁰

What happens with an Obj that does not have any relation with v , as in (9b)? If Obj moves to an \bar{A} -position (higher than inner Spec, v_2P), $\kappa(\text{Obj})$ is licensed by some higher head, for example, T or Focus as proposed in Ndayiragije (2000). If Obj stays in situ, its ϕ -features are “invisible” for a higher probe because of the intervention of the closer $\phi(\text{Subj})$ set. In this situation, an “isolated” $\kappa(\text{Obj})$ is assigned a default

morphological value. With either of these two options, Obj surfaces with the least morphological marking, that is, absolutive/nominative Case.

In summary, there is no substantial difference between the accusative and ergative Cases. Both are verb-internal and are derived by an Agree relation (i.e., are structural). The only difference is that the accusative Case reflects a v -Obj agreement relation triggered by $\phi(v)$, while the ergative Case reflects a Subj- v_1 agreement relation triggered by $\kappa(\text{Subj})$. We do not need to postulate a special parameter for the directionality of Agree, since it follows from the split v structure that has been proposed here.

3. NOMINATIVE AND DATIVE EXPERIENCERS IN RUSSIAN

Comparing a nominative Experiencer (NOM-Exp) construction with a dative Experiencer (DAT-Exp) construction, we see that the Theme ('child') is more marked in (10a) than in (10b), while the inverse marking relation is observed in the case of the Experiencer ('father').

- 10) a. Otec ljubi-l rebēnk-a. *NOM-Exp*
 father.M.NOM love.IMPERF-PST.M child-M.ACC
 'Father_{Exp} loved the child_{Theme}.'
- b. Otc-u nravi-l-sja rebēnok. *DAT-Exp*
 father-M.DAT please.IMPERF-PST.M-SJA child.M.NOM
 'The child_{Theme} pleased father_{Exp}.'

In other words, from the point of view of argument markedness, (10a) can be related to (10b) in the same way as a transitive clause in Dyirbal is related to an analogous clause in Russian. As we saw earlier, the markedness of Subj and Obj in these languages is distributed differently. However, the parallel between NOM-Exp and DAT-Exp constructions, on the one hand, and Russian and Dyirbal transitive clauses, on the other hand, can be drawn only if the Experiencer is an external argument in both examples in (10) below. Section 3.1 therefore argues that the Experiencer is generated higher than the Theme not only in (10a) but also in (10b). Section 3.2 shows that there are more v heads in (10b) than in (10a), as indicated by the presence of *-sja* in (10b). I propose that the dative Case marking in (10b) reflects an Agree relation between Subj and v_1 , which is triggered by $\kappa(\text{Subj})$, functioning as a probe.

3.1 Base generation of the Experiencer

In what follows, I show that the Experiencer always takes scope over the Theme, but that in some cases the Theme fails to take scope over the Experiencer. This asymmetry is clearly manifested in constructions where an operator must bind a variable. As a starting point, let us consider the constructions in (11), where the quantified Experiencer binds the reflexive possessive specifying the Theme. In both

sentences, the Experiencer occupies an A-position, presumably Spec,TP, and the sentences are thus grammatical.

- 11) a. [Každyj otec]_i ljubil [svoego_i reběnka]. *NOM-Exp*
 [every father]-NOM loved [self's child]-ACC
 'Every father]_i loved [his_i child].'
 b. [Každomu otcu]_i nadoel [svoji reběnok]. *DAT-Exp*
 [every father]-DAT bored [self's child]-NOM
 'Every father]_i was bored with [his_i child].'

If we invert the arguments in (11), the Experiencer is still able to take scope over the Theme. Inversion applied to (11a) does not alter the binding relation, as shown in (12a). This means that at LF the accusative Theme is interpreted lower than the Experiencer even if it is in Spec,TP position at PF, as represented in (12b). Therefore, there needs to be either a reconstruction of [*self's child*]-ACC into the base generation position, as shown in (12c), or a quantifier raising (QR) of [*every father*]-NOM into an \bar{A} -position. The latter option would result in a weak crossover (WCO) effect, which is not observed in (12a).¹¹ I will thus retain (12b-c) as the most plausible analysis of (12a).

- 12) a. [Svoego_i reběnka] ljubil [každyj otec]_i.
 [self's child]-ACC loved [every father]-NOM
 b. *Arguments in (12a) at PF:*
 [_{TP} [self's child]-ACC [_{VP} [every father]-NOM]]
 c. *Arguments in (12a) at LF with reconstruction of ACC-Theme:*
 [_{VP} [every father]-NOM [_{VP} [self's child]-ACC]]

Interestingly, inversion applied to (11b) produces a WCO effect, as shown in (13a), where [*self's child*]-NOM stays in Spec,TP and [*every father*]-DAT is in a vP position (see (13b)).

- 13) a. ??[Svoji reběnok] nadoel [každomu otcu]_i.
 [self's child]-NOM bored [every father]-DAT
 'His_i child] bored [every father]_i.'
 b. *Arguments in (13a) at PF:*
 [_{TP} [self's child]-NOM [_{VP} [every father]-DAT]]
 c. *Arguments in (13b) at LF with quantifier raising of DAT-Exp:*
 [_{TP} [every father]-DAT [_{TP} [self's child]-NOM]]

The deviance in (13a) implies that instead of reconstruction, there is QR at LF; that is, [*every father*]-DAT ends up in a TP adjoined (\bar{A}) position, as shown in (13c).

DAT-Exp verbs that are derived from NOM-Exp verbs by *-sja* suffixation, as shown in (16).

- 16) a. Rebēnok poljubi-l etu igrušku. *NOM-Exp*
 child.M.NOM like.PERF-PST.M [this toy]-F.ACC
 ‘The child grew fond of this toy.’
- b. Rebēnk-u poljubi-l-a-s’¹² eta igruška. *Derived DAT-Exp*
 child-M.DAT like.PERF-PST-F-*SJA* [this toy]-F.NOM
 ‘The child grew fond of this toy.’

Working within a Relational Grammar framework, Legendre and Akimova (1994:287) analyze constructions like (16b) in terms of inversion of the Experiencer, that is, 1-to-3 demotion of the Experiencer accompanied by the 2-to-1 “retroherent” advancement of the Theme. In their terms, “retroherent” means that *eta igruška* ‘this toy’ advances to 1 without loosing its “2-hood,” which is due to the *-sja* suffixation in (16b). (Note that their analysis supports our claim that the Experiencer and the Theme in (16b) are generated as subject and object, respectively.) Setting aside the details of their analysis, we should take a closer look at *-sja* in (16b) in particular. It has three crucial properties:

Property 1: *-sja* in (16b) “converts” the Case assigning property of the verb. In (16a), the verb assigns accusative Case to the complement of the verb (i.e., Theme), while in (16b) the verb assigns the dative Case to the Spec,vP position (i.e., Experiencer).

Property 2: Even though *-sja* in (16b) has an impact on Case assignment, it does not change the argument structure of the verb. This is not a canonical use of the particle *-sja* in Russian. As Babby (1975) notes, “[*-sja*] is not a ‘passive marker’, a ‘reflexive morpheme’ etc. Its only function is to signal that an underlying transitive verb is intransitive in the surface structure” (p. 298). Thus, when *-sja* is affixed to a transitive non-psych verb, it suppresses one of the arguments, as illustrated in (17). However, this does not happen in (16).

- 17) a. Otec zakry-l dver’. *Transitive*
 father.M.NOM close.PERF-PST.M door.F.ACC
 ‘Father_{Agent} closed the door_{Theme}.’
- b. Dver’ zakry-l-a-s’. *Middle*
 door.F.ACC close.PERF-PST-F-*SJA*
 ‘The door_{Theme} closed.’
- c. Otec zakry-l-sja. *Reflexive*
 father.M.NOM close.PERF-PST.M-*SJA*
 ‘Father_{Agent/Patient} enclosed himself.’

Property 3: *-sja* in (16b) has a specific selectional property. For example, if we remove the prefix *po-* from the predicate, *-sja* suffixation becomes impossible. The

ungrammaticality of (18b) is due to the incompatibility of the verb *ljubit* 'to like' and *-sja*.

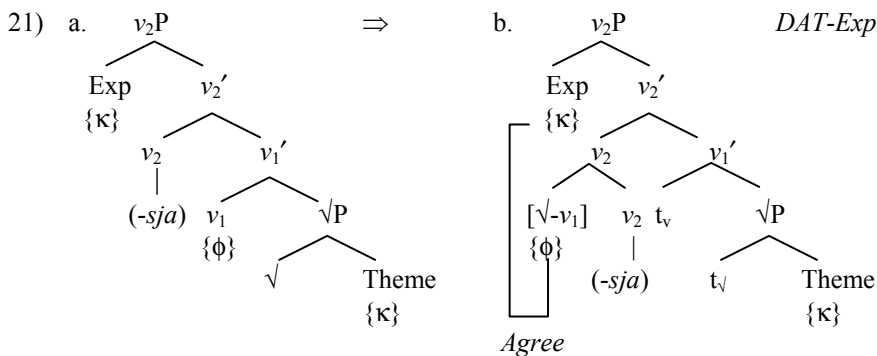
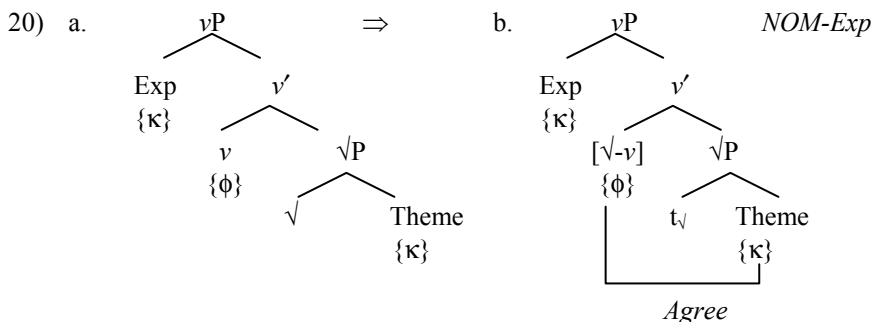
- 18) a. Rebēnok ljubi-l etu igrušku.
 child.M.NOM like.IMPERF-PST.M [this toy]-F.ACC
 'The child liked this toy.'
- b. *Rebēnk-u ljubi-l-a-s' eta igruška.
 child-M.DAT like.IMPERF-PST-F-SJA [this toy]-F.NOM
 'The child liked this toy.'

The examples in (16) and (18) differ in the aspectual properties of the verb: *poljubit* 'to grow fond of' is perfective, while *ljubit* 'to like' is imperfective. More precisely, the two verbal forms are differentiated by the attenuative measure prefix *po-*, which induces that the child's fondness for the toy grew by small measures. Furthermore, the presence of a measure prefix can sometimes convert an unergative NOM-Exp verb into a dyadic DAT-Exp one. Consider, for example, a verb such as *skučat* 'to be bored' in (19a). With the addition of the accumulative prefix *na-*, as shown in (19b), this verb becomes a DAT-Exp verb.¹³ Here, *na-* indicates that an overwhelming quantity of boredom is triggered by the toy. From a syntactic point of view, *na-* seems, on the one hand, to increase the valency of the predicate allowing the use of the nominative Theme; on the other hand, *na-* seems to be involved in the dative Case assignment to the external Experiencer.

- 19) a. Rebēnok skuča-l (po etoj igruške).
 child.M.NOM be.bored.IMPERF-PST.M (on [this toy]-F.DAT)
 'The child was bored.' ('The child was missing this toy.')
- b. Rebēnk-u naskuči-l-a eta igruška.
 child-M.DAT bore.PERF-PST-F [this toy]-F.NOM
 'This toy bored the child.'

One could assume that *na-* in (19b) assigns dative Case to the Experiencer. However, the question that then arises is why *po-* is unable to assign dative Case without *-sja* in (16a). For example, the distributive/locative preposition *po* in Russian assigns dative Case, as can be observed in (19a); but for some reason it loses this property when it is prefixed to the verbal stem. We also see in (17b,c) that *-sja* is not a dative Case assigner on its own, and it seems implausible that in (16b) we are dealing with a special *-sja* that inherently assigns dative Case.

Liakin and Ndayiragije (2000) recently proposed that *-sja* can be analyzed as a voice marker heading *vP* and assigning null Case to its Spec position. Partially adopting their proposal, I suggest that *-sja* suffixed to a NOM-Exp verb spells out an extra *v* head that lacks any ϕ -features. Thus, NOM-Exp verbs have the structure (20a), while DAT-Exp verbs have the more complex structure in (21a). After head adjunction, we obtain configurations (20b) and (21b).



For the reasons explained in section 2, $\phi(v)$ functions as a probe targeting the Theme in (20b), and $\kappa(Exp)$ functions as a probe targeting v in (21b). In the former case, an Agree relation results in accusative marking of the Theme, whereas in the latter case, Agree is expressed by dative marking of the Experiencer. This analysis is compatible with the assumption that NOM-Exp (or SubjExp) verbs are more primitive than ACC/DAT-Exp verbs. For example, as Arad (1998:231) points out: “With SubjExp verbs there is only one state which is not being caused by an outside force: it is ‘there’.” These verbs are always stative, and as proposed in Arad (1999:14), their v may be considered a “BE” predicate (in terms of Harley (1995)).

To summarize, we can assume that Russian has a tendency to use the split v structure whenever the little v containing ϕ -features is stative. As we will see in section 4, North Russian dialects use the split v structure in participle constructions whose meaning is essentially stative.

4. PARTICIPIAL CONSTRUCTIONS IN NORTH RUSSIAN DIALECTS

The constructions discussed in this section are encountered in the dialects spoken in north-western Russia.¹⁴ Some of the constructions mentioned are also found in central Russia closer to the Belarussian and Ukrainian borders. Since the work that is the original source of the data (Kuz'mina and Nemčenko 1971; henceforth K&N) is written in Russian, I use English translations from subsequent works on K&N's

data (Timberlake 1976, Orr 1989 and for the most part Lavine 2000). Whenever an English source is not specified, I use my own analogical translations, relying on the descriptions provided by K&N. In this section, North Russian (NR) participial constructions are compared with similar constructions found in Contemporary Standard Russian (CSR). I therefore consider only those NR constructions whose participial forms are also attested in CSR, that is, past participles formed with suffixes *-n-* and *-t-* (glossed as *-PARTIC-*).¹⁵ Even though Timberlake (1976) considers participial forms studied here to be passives, I will avoid this term for the most part so as not to imply a specific theoretical view of these forms in terms of Case and θ -role absorption. NR participial constructions are introduced in section 4.1. Section 4.2 presents the peculiarities of verbal agreement and object Case marking in the constructions studied. In section 4.3, I compare the distribution of the morphemes *-n-* and *-t-* in both NR and CSR and summarize the main differences between NR and CSR in section 4.4. The discussion of the contrasts between NR and CSR in the light of my proposal is presented in section 4.5.

4.1 Morphological ergativity in NR

In a NR participial construction like (22), the Agent is expressed by the locative PP, with the preposition *u* 'at' taking a genitive noun as a complement.

- 22) U lisic-y unese-n-o kuročk-a. **NR**
 at fox-F.GEN carry.off.PERF-PARTIC-NEU chicken-F.NOM
 'A fox_{Subj} has carried off a chicken_{Obj.}' (K&N:27, Lavine 2000:188)

Such PPs as *u lisicy* 'at fox' in (22) are usually used to express possession in Russian (I return to this issue shortly), hereafter referred to as possessive phrase (PossP). The Patient in (22), *kuročka* 'chicken', carries the morphologically unmarked nominative Case. As for the participle, it has the neutral gender inflection *-o*, showing lack of agreement with either of the arguments in the clause. From a semantic point of view, (22) can be interpreted in the same way as the active clause in (23) from CSR, where the Agent is nominative and the Patient is accusative.

- 23) Lisic-a unes-l-a kuročk-u. **CSR**
 fox-F.NOM carry.off.PERF-PST-F chicken-F.ACC
 'A fox_{Subj} has carried off a chicken_{Obj.}'

According to Timberlake (1976:552), constructions like (22) share a property with CSR passive constructions in that they have a *stative meaning*. Furthermore, Timberlake (ibid.) also points out that "[these constructions] have a clear perfect meaning, and are often identified as *possessive perfects*" (emphasis mine).

Timberlake (1976) and Lavine (1999, 2000) provide abundant evidence for the subjecthood of PossP in (22). I will not review various tests here. Instead, I present below some constructions from NR (24)-(26) that show the basic syntactic

24) U Šurki_i privede-n-o svoja_i staraja nevesta. **NR**
 at Shurka-M.GEN bring.PERF-PARTIC-NEU [self's old bride]-F.NOM
 'Shurka_i brought his_i old bride.'
 (K&N:35, Lavine 2000:208)

25) U nego_i bylo vzja-t-o-s' [PRO_i skosit' gektar]. **NR**
 at him.GEN was-NEU take.PERF-PARTIC-NEU-*SJA* [PRO to.mow hectare]
 'He undertook to mow a hectare.'
 (K&N:99, based on Timberlake 1976:556)

26) Pečka zatople-n-o i ujde-n-o. **NR**
 stove-F.NOM lit.PERF-PARTIC-NEU and go.PERF-PARTIC-NEU
 ‘Somebody lit the stove and left.’ / *‘The stove was lit and left.’
 (K&N:29, Lavine 2000:217)

27) Pečka zatople-n-a i *ušě-l / pokinu-t-a. CSR
stove-F.NOM lit.PERF-PARTIC-F and go.PERF-PST / leave.PERF-PARTIC-F
*'Somebody lit the stove and left.' / 'The stove was lit and left.'

Because of the spurious marking of the arguments in NR participial constructions, Orr (1989) and Lavine (1999, 2000) propose to analyze them as an instance of a split-ergative system. Using Trask's (1979) typology of ergative languages, they suggest that NR shows "Type B" ergativity, as opposed to the more robust "Type A" ergativity (found, for example, in Dyirbal). According to Trask (1979), Type B ergativity correlates on the one hand with the lack of the verb 'have' in the expression of possession and the perfective tenses, and on the other, with the presence of dative-subject and locative-subject constructions. If this observation is correct, Russian is in some sense a Type B ergative language, since the Russian verb *imet'* is much more restricted in its usage than its English counterpart *have*. That is, the verb *imet'* expresses an abstract possession (e.g., *imet' pravo na obrazovanie* 'to have a right for education') rather than a physical one. The latter kind of possession is expressed in Russian with the verb 'be' and PossP, as shown in (28). As

mentioned earlier, PossP is composed of the locative preposition *u* ‘at’ merged with a noun, to which it assigns the genitive Case.

- 28) U menja est’ knig-a.
 at me.GEN is book-F.NOM
 ‘I have a book.’

CSR

According to Trask (1979), Type B ergative languages are derived from “the incorporation into the inflectional paradigm of a nominalized deverbal form with *stative force*” (quoted by Orr 1989:12). I will suggest in section 4.5 that this *deverbal form with stative force* is derived from the double *v* structure, where *v*₁ is a kind of stative *v* of NOM-Exp verbs or *v*₁ of DAT-Exp verbs, discussed in section 3.

Let us now take closer look at the morpho-syntactic properties of NR participial constructions, namely, the Case marking of the object, and the agreement marking of the participle formed with the participial suffixes *-n-* and *-t-*.

4.2 Object Case marking and agreement

There are three patterns for the structural Case of the object and its agreement with the participle: (i) a nominative object agreeing with the participle (29a), (ii) a nominative object not agreeing with the participle (29b) (repeats (22)), and (iii) an accusative object not agreeing with the participle (29c).¹⁶

- 29) a. U otc-a nakoše-n-a trav-a.
 at father-M.GEN mow.PERF-PARTIC-F grass-F.NOM
 ‘Father has/had the grass mown./Father has mown the grass.’

(Orr 1989:8)

- b. U lisic-y unese-n-o kuročk-a.
 at fox-F.GEN carry.off.PERF-PARTIC-NEU chicken-F.NOM
 ‘A fox has carried off a chicken.’

- c. ⁹³U bat’k-i saže-n-o berězk-u
 at father-M.GEN plant.IMPERF-PARTIC-NEU birch-F.ACC
 ‘Father has planted a birch.’

(K&N:38)

CSR has also constructions like (29a). However, as pointed out by Timberlake (1976:551), in such constructions the PossP is read as a Benefactor or “possessor of the results of an action” rather than as an Agent (i.e., ‘father’ is the only person who could have mown the grass). In other words, the English translation of (29a) in CSR is ‘father has/had the grass mown’ and not ‘father has mown the grass’ (see also Orr 1989:6).

As for the NOM-without-agreement pattern in (29b), it has two possible realizations when the copula is used in a participial construction: either the nominative object triggers agreement on the copula but not on the participle,

as shown in (30a), or the nominative object does not trigger any agreement, as shown in (30b).

- 30) a. Moj brat by-l arestova-n-o. **NR**
 my brother.M.NOM be-PST.M arrest.PERF-PARTIC-NEU
 ‘My brother was arrested.’ (K&N:36)
- b. Malink-a by-l-o posože-n-o. **NR**
 raspberry-F.NOM be-PST-NEU plant.PERF-PARTIC-NEU
 ‘Raspberry bushes were planted.’ (Ibid.)

Whether there is agreement with the copula depends on the type of participial inflection, which can be of two types: the neuter gender inflection *-o*, as in (30), or a null masculine gender inflection, as in (31).

- 31) Komnat-a by-l-a zapečata-n. **NR**
 room-F.NOM be-PST-F seal.up.PERF-PARTIC.M
 ‘The room was sealed up.’ (K&N:79)

Agreement with the copula is much more frequent with the participles that have a null inflection (K&N:79). Compare examples (30b) and (31) whose nominals belong to the same declensional class.

There is one more interesting fact concerning the correlation between the type of the participial inflection and the Case marking of the object. The data collected by K&N does not include constructions in which the accusative object co-occurs with the null inflection on the participle (K&N:77). To put it somewhat differently, we can generalize that if the object is accusative, the participle must have the inflection *-o*.

4.3 *The participial morpheme -n-/-t-*

The use of the participial morpheme *-n-/-t-* in NR differs from its use in CSR in the following three ways:

First, *-n-/-t-* is compatible with imperfective verbs in NR, as in (32a), whereas, in CSR, *-n-/-t-* must be used with perfective verbs, as shown in (32b-c). In CSR the *-sja* morpheme must be used to form imperfective passive constructions, as I illustrate in (32d).

- 32) a. U nego cerkv-a stroe-n-a. **NR**
 at him.GEN church-F.NOM build.IMPERF-PARTIC-F
 ‘He has built a church.’ / ‘He has/had a church built.’ (K&N:92)
- b. *U nego cerkov’ stroe-n-a. **CSR**
 at him.GEN church-F.NOM build.IMPERF-PARTIC-F
 ‘He has/had a church built.’

- c. U nego cerkov' **postroe-n-a.** **CSR**
 at him.GEN church-F.NOM build.PERF-PARTIC-F
 'He has/had a church built.'
- d. Cerkov' stroi-l-a-s' moim ocom. **CSR**
 church.F.NOM build.IMPERF-PST-F-*SJA* [my father]-M.INSTR
 'This church was built by my father.'

Second, *-n-/-t-* can be used with intransitive verbs in NR but not in CSR. Since the participles given in (33a) and (34a) do not exist in CSR, I present past tense active forms in (33b) and (34b). The examples in (33) show an unaccusative verb, and those in (34) show an unergative verb.

- 33) a. Devušĥ-a uexa-n-a by-l-a v Leningrad. **NR**
 girl-F.NOM go.PERF-PARTIC-F be-PST-F to Leningrad
 'The girl went to Leningrad.' (K&N:26)
- b. Devušĥ-a uexa-l-a v Leningrad. **CSR**
 girl-F.NOM go.PERF-PST-F to Leningrad
 'The girl went to Leningrad.'
- 34) a. My ne spa-t-y noč'. **NR**
 we.NOM NEG sleep.IMPERF-PARTIC-PL night
 'We didn't sleep at night.' (K&N:26)
- b. My ne spa-l-i noč'. **CSR**
 we.NOM NEG sleep.IMPERF-PST-PL night
 'We didn't sleep at night.'

The third and the most crucial difference between CSR and NR is that the morpheme *-n-/-t-* attached to the verbal stem can be followed by *-sja* in NR but never in CSR, as shown in (35) and (36).

- 35) a. Xleb-a napeče-**n-o-s'**. **NR**
 bread-M.GEN bake.PERF-PARTIC-NEU-*SJA*
 '(Some/a lot of) bread was baked.' (K&N:84)
- b. Xleb-a napeče-**n-o(*-s')**. **CSR**
 bread-M.GEN bake.PERF-PARTIC-NEU-(*-*SJA*)
 '(Some/a lot of) bread was baked.'
- 36) a. Porosĥnok výkupa-**n-o-s'**. **NR**
 piglet.M.NOM bath.PERF-PARTIC-NEU-*SJA*
 'The piglet was bathed.' / 'The piglet bathed.' (K&N:84)

- b. Porosěnok výkupa-**n**-(***-sja**). **CSR**
 piglet.M.NOM bath.PERF-PARTIC-(***-SJA**)
 'The piglet was bathed.'
- c. Porosěnok výkupa-l-sja. **CSR**
 piglet.M.NOM bath.PERF-PST-*SJA*
 'The piglet bathed.'

In (35), the verb is a non-reflexive transitive, and (a) and (b) both have a passive reading. In (36), the verb can also be used as reflexive. In NR, (36a) is ambiguous between a reflexive and a passive reading since both *-n-* and *-sja* are attached to the verb (K&N:84). As shown in (36b-c), each reading is associated with a different morpheme in CSR. When *-n-* is used, the reading is passive, and when *-sja* is used the verb is unambiguously reflexive.

4.4 Summary

Let us review the main facts concerning constructions with a participial form on *-n-/-t-*:

- I. In NR, a participle may have (a) a nominative object that agrees with the participle in number (and gender if singular), (b) a nominative object that does not agree with the participle, and (c) an accusative object that does not agree with the participle.
- II. In NR, the participial morphemes *-n-/-t-* can host two kinds of non-agreeing inflection: default agreement inflection *-o* (*-no/-to*) or null inflection (*-n/-t*).
- III. A nominative object that does not agree with the participle in NR can still agree with the copula. The lack of agreement with the participle and the presence of agreement with the copula is much more productive when the participial inflection is null (*-n/-t*).
- IV. Accusative objects are attested only with the default inflection (*-no/-to*) in NR.
- V. Constructions like (37), presented previously as (29a), exist in both CSR and in NR. However, the agentive reading is available only in NR (Timberlake 1976:551).

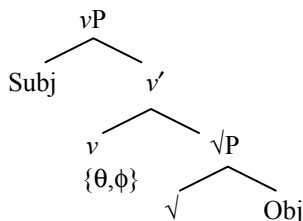
- 37) U otc-a nakoše-n-a trav-a.
 at father-M.GEN mow.PERF-PARTIC-F grass-F.NOM
 'Father has mown the grass.' (father = Agent) ✓NR/#CSR
 'Father has/had the grass mown.' (father = Benefactor-possessor) ✓NR/✓CSR

- VI. *-n-/-t-* are in complementary distribution with *-sja* in CSR, while *-n-/-t-* and *-sja* can be attached to a single verbal stem in NR.

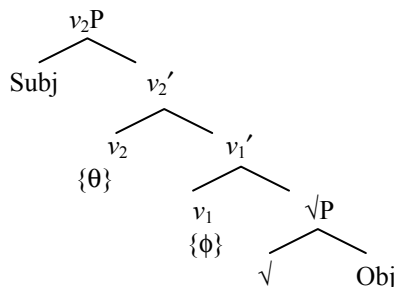
4.5 Discussion

Assuming that *-n-/-t-* and the particle *-sja* are inserted into a little *v*, the fact that *-n-/-t-* and *-sja* are in complementary distribution in CSR but not in NR follows straightforwardly from the general assumption that CSR follows the accusative pattern (38a), while NR follows the ergative pattern (38b).

38) a. CSR



b. NR



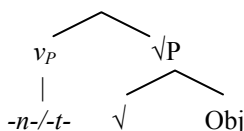
Consequently, either *-n-/-t-* or *-sja* may be inserted into *v* in CSR, whereas in NR *-n-* and *-t-* are inserted into *v*₁ and *-sja* into *v*₂. Recall from the earlier discussion of Russian psych-constructions, that *-sja* targets the θ -property of *v*. In contrast, *-n-* and *-t-* target a ϕ -property of *v*. In fact, the morphemes *-n-* and *-t-* mark third person in Russian. For example, *-n-* is observed in the paradigm of third person pronouns, as shown in (39a), where the initial *o-* is an epenthetic vowel with no morphological meaning. *-t-* is observed in third person verbal inflection, as shown in (39b).

- 39) a. o-n o-n-a o-n-o o-n-i
o-3.M *o*-3-F *o*-3-NEU *o*-3-PL
 'he' 'she' 'it' 'they'

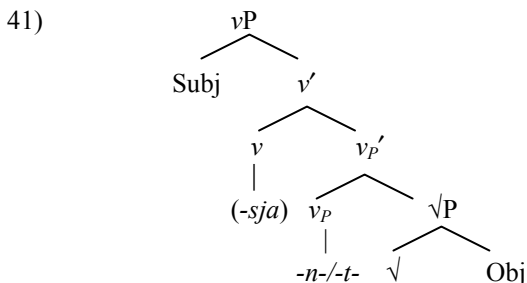
- b. On pokin-e-t. Oni pokin-u-t.
 he leave.PERF-SG-3 they leave.PERF-PL-3
 'He will leave.' 'They will leave.'

Since we are examining participial constructions in particular here, let us assume that there is a special kind of participial *v* (*v_P*) whose person feature is interpretable while other ϕ -features are not. This *v_P* does not introduce an external argument, and, in Russian, it is spelled out as *-n-/-t-* (third person markers) as presented below.¹⁷

40)



What happens in NR is that an extra v is merged to the structure in (40), deriving (41). The second v , which can be spelled out as *-sja*, introduces an external argument.



After head movement, the object is no longer c-commanded by v_P , which blocks an Agree relation between these elements. Therefore, the participle will appear at PF with a default inflection *-o* (an exponent of neutralized ϕ -features in Russian; see Tsedryk 2004). Alternatively, the object can be targeted by a higher head occupied by the copula verb. This produces patterns where there is no agreement between the nominative object and the participle, but there is agreement between this object and the copula.

The above analysis also implies that where there is agreement between the participle and its object, this agreement is intermediated by a higher inflectional head (Infl), which is optionally spelled out as a copula verb. In other words, agreement between the object and the participle is likely a by-product of two syntactic relations—Infl-Obj and Infl- v_P . The latter (but not the former) type of relation can be observed in (30b), repeated as (42).

- 42) Malink-a by-l-o posože-n-o.
 raspberry-F.NOM be-PST-NEU plant.PERF-PARTIC-NEU
 ‘Raspberry bushes were planted.’ (K&N:36)

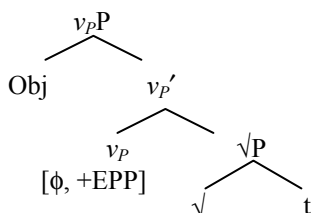
Here, participial ϕ -features take the default neutral value and Infl targets v_P to license its own ϕ -features. Consequently, both appear with *-o*. In this example, the object is not involved in any agreement relation, and the nominative Case in (42) is a default morphological value assigned to the “isolated” object’s Case feature.

Agreement between the copula and the participle is not expected if the v_P in (42) is defective ($v_{P\text{def}}$), that is, if it has only the interpretable person feature. This $v_{P\text{def}}$ cannot enter into an Agree relation with any head, and it cannot be spelled out with the default inflection *-o* that signals a neutralized ϕ -feature bundle; in other words, $v_{P\text{def}}$ is always spelled out as *-n/-t* (null inflection). Now we have a clue to interpreting patterns in which there is a lack of agreement between the copula and the non-inflected *-n/-t* participle and a very frequent presence of agreement between the copula and the object, as observed in (43) (repeats (31)).

- 43) Komnat-a by-l-a zapečata-n.
 room-F.NOM be-PST-F seal.up.PERF-PARTIC.M
 'The room was sealed up.'
 (K&N:79)

Let us now turn to accusative participial objects. I would like to suggest that the nominative-accusative variation follows from the parametric setting for ϕ -features in v_P . One possibility is to relate this variation to EPP (see note 10), which can be considered to be a subfeature of an uninterpretable feature (following Pesetsky and Torrego 2001). If ϕ -set is [+EPP], it triggers pied-piping of the object, as shown in (44); if ϕ -set is [-EPP] (the unmarked option), the object remains in situ. The accusative morphology thus reflects the checking of $[\phi, +EPP]$ in v_P .

44) *Accusative objects*



Interestingly, this analysis of participial accusative objects can also account for the fact that accusative objects are not attested with null inflected participles. As I have proposed, a null participial inflection, either *-n* or *-t*, spells out $v_{P\text{def}}$, whose only feature is an interpretable person. If we assume that EPP is exclusively a subfeature of an uninterpretable feature, $v_{P\text{def}}$ is unable to trigger the pied-piping of the object illustrated in (44) and thus cannot qualify as an accusative Case assigner.

Finally, let us take a look at the difference between NR and CSR with regard to sentences like (45), previously presented as (29a) and (37). In NR but not in CSR, the PossP *u otca* 'at father' in (45) can refer to the only person who did the job (agentive reading). In CSR, this reading can be obtained only by putting an argument either in the nominative, if the clause is active, or in the instrumental ("by-phrase"), if the clause is passive.

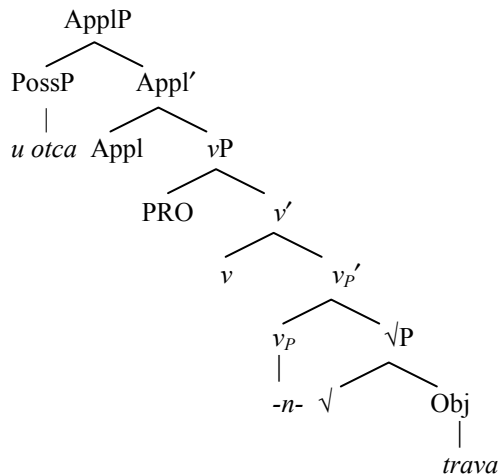
- 45) U otca-a nakoše-n-a trav-a.
 at father-M.GEN mow.PERF-PARTIC-F grass-F.NOM
 'Father has mown the grass.' (father = Agent) ✓NR/#CSR
 'Father has/had the grass mown.' (father = Benefactor-possessor) ✓NR/✓CSR

We first have to decide what is the base generated position of PossP (*u* 'at' + GEN). We could follow Lavine (1999, 2000), for example, who assumes that *u* 'at' + GEN in (45) is an instance of ergative Case.¹⁸ Under my analysis, this kind of ergative morphology would follow from an Agree relation triggered by $\kappa(\text{Subj})$ in

a structure like (41). PossP should thus be base-generated in Spec,vP in NR. However, it is not clear how we would treat the same expression in CSR: also as ergative Case or as a some kind of modifier in a vP adjoined position. Furthermore, the presence of PossP is optional in NR participial constructions, which suggests that it is not generated in a θ -related position. In other words, the assumption that *u* ‘at’ + GEN in NR expresses an inherent ergative Case leaves a number of unanswered questions.

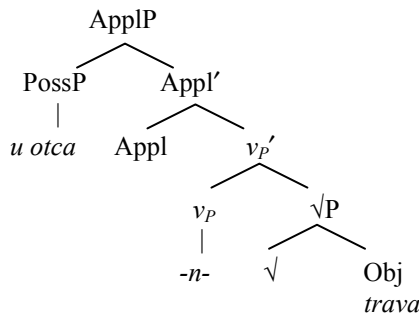
I would like to suggest that in both NR and CSR, PossP is an applied argument introduced by a high applicative head that “relates an additional individual to the event described by the verb” (Pylkänen 2002:21). Thus, the NR construction in (45) has the structure shown in (46), where the external Spec,vP position is realized as PRO (Agent).

- 46) *PossP_i PRO_i = Agent; PossP PRO_{arb} = Benefactor-possessor* **NR**



CSR participles are different from those in NR in that they do not have a *v* that introduces an external argument beyond *v_P*, so, the structure of (45) in CSR is (47).

- 47) *PossP = Benefactor-possessor* **CSR**



If PRO in (46) has an arbitrary reading, PossP has the same interpretation as in (47)—it refers to an individual that is related to the event as a non-participant (labeled here as “benefactor-possessor”).¹⁹ However, if PossP in (46) controls PRO, it receives an agentive reading, which is not available in (47). In the latter case, the Agent can be expressed by an additional instrumental argument, as in (48).

- 48) U otc-a syn-om nakoše-n-a trav-a. **CSR**
 at father-M.GEN son-M.INSTR mow.PERF-PARTIC-F grass-F.NOM
 'Father has/had the grass mown by his son.'

What happens if we have two PossPs in a single clause? In CSR, the only source of interpretation for PossP is the Appl head that relates it to the whole vP. Because in a binary structure we cannot have more than one Appl per vP, we predict just one PossP per clause in CSR. There are, however, two sources of interpretation for PossP in NR: Appl (with a benefactive θ -role) and control of PRO (with an agentive θ -role). We thus predict that a double PossP is possible in NR. Indeed, both predictions are borne out by the example in (49), which is grammatical in NR but not in CSR.

- 49) **U menja tri jajca svežix by-l-o tol'ko polože-n-o u kur.**
 atme.GEN three [eggs fresh]-PL.ACC be-PST-NEU just lay.PERF-PART-NEU at hen.PL.GEN
 'I just had three fresh eggs laid by the hens.' (Timberlake 1976:552)
 ✓NR/*CSR

If *u kur* ‘at hens’ in (49) is dropped or replaced by *kurjami* ‘hens(INSTR)’, the sentence becomes interpretable in CSR, which indicates that the ungrammaticality is originally caused by the double PossP.

To sum up, this section showed that some asymmetries arise between two closely related dialects differentiated by the number of *v* projections dominating the verbal root. The fact that the morphemes *-n/-t-* can be merged to the verb together with the particle *-sja* suggests that there are two *v* heads in NR participial constructions. This morphological combination is precluded in CSR, which implies that there is just one *v* in this language. Then, I have shown that, with minor additional assumptions concerning the morpho-syntactic composition of the participial forms, other differences between NR and CSR receive a unified analysis.

5. CONCLUSION

In this paper, ergative Case is analyzed as structural, being assigned in Spec,vP position. Morphological ergativity is not attributed to a primitive parameter, but is analyzed as a by-product of a split *v* structure where each *v* has a specific function with regard to Case and external argument licensing. Accusativity, on the other hand, is defined in terms of a single multifunctional *v* that combines thematic and morphological properties. This is not an absolute dichotomy that divides languages into two groups, and, as I illustrated with the case of Russian psych-verbs, a

canonically accusative language can have double *v* structures. Dative Case is assigned to the external argument Experiencer, an instance of morphological ergativity in Russian. Postulating a split *v* structure for participial constructions in North Russian, we account for a number of peculiarities (Case marking, agreement and semantic interpretation) that differentiate them from analogous constructions in standard varieties having only one *v* above the root. As it stands, nothing prevents a split *v* structure from being the rule rather than the exception in canonically accusative languages such as English. In this case, accusativity is to be defined in terms of obligatory A-movement, which is predicted to be more restricted in languages that exhibit (a lesser or greater degree of) morphological ergativity (see note 10). Presumably, syntactically ergative languages lack A-movement entirely. Linking the accusativity-ergativity continuum to the degree of A-movement in a language, we might one day create another testing ground of what is commonly known as ergative.

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¹ The question concerning the directionality of Case relations becomes irrelevant if we assume that ergative Case is inflectional rather than verbal. For an overview and discussion of the existing theories on ergative Case, see Nevins and Anand (this volume) and references therein.

² I will not discuss here whether the ergative pattern is derived from some general principle such as the Feature Scattering Principle, which states that "each feature can head a projection" (Georgi and Pianesi 1997:15).

³ v_1 and v_2 in (6b) can be compared with the Tr(ansitivity) and Pr(edication) heads in Bowers' (2002) theory of transitivity. Thus, the ergative pattern in (6b) may be considered a true transitive structure. On the other hand, the accusative pattern can be viewed as a sub-case of intransitivity in which the Pr head contains ϕ -features and there is no Tr projection.

⁴ It remains to be explained why one pattern is chosen over the other within a particular language. At this point, any suggestion is highly speculative. However, one possibility is that the ergative is a default pattern, and a language would start dividing the "job" among different functional heads. Once the double v structure is established, the next step is to synthesize two heads creating a single one. If this suggestion is correct, I would predict that language change therefore goes from (6b) to (6a) and not vice versa.

⁵ In the literature, a probe and a goal are often referred to as heads containing features not as features themselves.

⁶ "[...] A matching feature G is closest to P if there is no G' [...] matching P such that G is [c -commanded by G']" (Chomsky 2000:122). α c -commands β , if the sister of α dominates β .

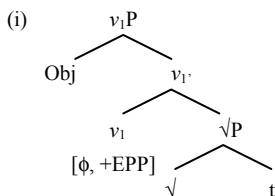
⁷ This question does not even arise for Chomsky, since he assumes that structural Case does not have to match anything in T and v : "[...] Case itself is not matched, but deletes under matching of ϕ -features" (Chomsky 2001:6). This implies that Case cannot be a probe. However, it is not clear to me why Case, which is an uninterpretable feature, does not have to match in order to be legible for the output.

⁸ Pesetsky and Torrego (2004:503) assume that there are two T projections in a clause: one in the inflectional domain (T_S) and the other in the verbal domain (T_O). They propose the following structure for a transitive vP :

(i) [v P SUBJ v [T_0 [V OBJ]]]

T_0 in (i) has ϕ -features and an interpretable T feature that licenses the matching feature of OBJ. On the other hand, v does not have any relation with OBJ and functions solely to introduce an external argument. Note that (i) corresponds to my ergative pattern in (6b), whose v_1 is a prototype of T_0 . If we attempt to couple Pesetsky and Torrego's theory of Case with the current proposal, we are forced to conclude that the accusative pattern does not have T_0 , but has a richer v that includes tense underspecification.

- 9 There is a potential problem with (9b): how is it possible for a presumably post-syntactic head movement to interfere with Agree triggered in narrow syntax? However, under the present conception of Agree (i.e., a relation between distant bundles of features that holds within a phase (v P or CP) throughout the whole derivational process including morphological merger and deletion), the problem would not arise. Relating uninterpretable features with interpretable ones, Agree makes the latter eligible for vocabulary insertion.
- 10 Additional parameterization might apply as to whether the ϕ -set of v_1 does or does not have an EPP-property (see Pesetsky and Torrego 2001:359). If it does, Obj moves, as shown in (i).



If we assume that A-movement deletes features (contrary to Agree, which does nothing but relate them), the theory predicts that the scenario in (i) will obviate morphological ergativity, because the deleted ϕ -set cannot be probed by Subj. Thus, a structure with two v heads above the root could be postulated even for English (see Bowers 2002 for motivation), but, importantly, English then has to be considered as an A-movement-language (i.e., all ϕ -sets have an EPP-property). For morphological ergativity to arise, arguments must be inert with regard to A-movement inside a complex v P. Only \bar{A} -movement—to the left periphery of the v P phase—is compatible with morphological ergativity. We can further speculate that syntactic ergativity arises whenever A-movement is absent not only inside v P but in a whole clause (i.e., syntactically ergative languages are \bar{A} -movement only).

- 11 According to Ruys (2000), WCO falls under a general theory of scope: “WCO arises in all cases where an operator needs to take scope over a pronoun, but fails to c-command it from an A-position” (p. 516).
- 12 *-sja* and *-s’* are allomorphs; *-s’* is used after vowels.
- 13 Filip (2000:65) defines both, *po-* and *na-*, as measure functions yielding quantized perfective predicates.
- 14 To be more precise, let me quote Timberlake (1976:547): “[...] the area north of a line which extends from the 56th parallel in the western central dialects to the 60th parallel in the northeastern dialects (Kuz’mína and Nemčenko 1971:map 1); the area includes, for example, Pskov, Novgorod, Leningrad, and Archangel, but not Moskow.”
- 15 North and Western Central Russian dialects also use non-agreeing participles with the suffix *-ši*, which is much more restricted in CSR. Because of space limitations, I will not tackle these participles in this paper, leaving them for another occasion. For an idea of what these participles look like, consider two examples:

- (i) [PRO_i podoi-v korov-u]_i, ja_i pošël spat’. CSR
 PRO milk.PERF-PARTIC cow-F.ACC I went to.sleep
 ‘After having milked the cow, I went to sleep.’

- | | | |
|------|---|-----------------------------|
| (ii) | U menja už korov-a podoi-v-ši.
at me.GEN already cow-F.NOM milk.PERF-PARTIC-ŠI
'I have already milked the cow.' | NR

(Lavine 2000:189) |
|------|---|-----------------------------|

In standard grammars of Russian, the verbal form *podoi-v* 'having milked' in (i) is called an "active past participle," which corresponds to the English perfective gerund. This participle is used in control constructions like the one in (i) (backward control in this case), where the matrix nominative subject controls the PRO Agent of the participle. In (ii), the suffix *-ši* is added to *podoi-v*. The verb is now used in an independent clause, where the Agent is expressed by the locative phrase composed of the preposition *u* 'at' and its nominal complement in the genitive Case.

- ¹⁶ CSR and NR participles also take genitive objects, specifically the partitive genitive as in (ia) and the genitive of negation as in (iia). However, both kinds of genitive can alternate with the nominative: compare the (a) examples with the (b) examples in (i)-(ii). I thus do not consider these instances of the genitive to be distinct Case patterns.

- | | | |
|---------|--|-------------------------|
| (i) a. | Kartošk-i ne prinese-n-o.
potato-F.GEN NEG bring.PERF-PARTIC-NEU
'No potatoes have been brought.' | NR

(K&N:62) |
| b. | U ej ne ostavle-n-o muk-a.
at her.GEN NEG leave.PERF-PARTIC-NEU flour-F.NOM
'She didn't leave any flour' ('She has consumed all the flour.') | NR

(K&N, fn. 76) |
| (ii) a. | Prinese-n-o grib-ov.
bring.PERF-PARTIC-NEU mushroom-PL.GEN
'Some mushrooms have been brought.' | NR

(K&N:60) |
| b. | Prinese-n-y grib-y.
bring.PERF-PARTIC-PL mushrooms-PL.NOM
'The mushrooms have been brought.' | CSR |

Lavine (2000:269-70) argues that the possibility of a nominative-genitive alternation is evidence that nominative/accusative objects in NR participial constructions license their Case structurally rather than inherently.

- ¹⁷ *Bat'ka* in (29c) (*bat'ki* in genitive) is a Belarussian word for *otec* 'father'. This suggests an influence of Belarussian dialects at least at the lexical level. In fact, K&N (p. 37) report that this pattern is less frequent than (29a) and (29b). The use of accusative objects in participial constructions is found particularly in those Russian dialects that are in contact with Belarussian and Ukrainian dialects.

- ¹⁸ This view is different from that adopted by Lavine (2000:253-4), who analyzes *-n/-t-* (*-no/-to* in Lavine's text) as aspectual markers that are attached to the verbal stem in the lexicon and then exocorporate from the verb, moving to Asp(ect)P at LF. Under my account, I could simply propose that *v_P* in Russian has a perfective meaning, while still analyzing *-n-* and *-t-* as person markers.

- ¹⁹ Lavine (2000:247) suggests that *u* 'at' + GEN in NR is an oblique ergative Case assigned by the morphemes *-no/-to*, which are affixed to the verb in lexicon.

- ²⁰ Benefactive reading might come from a specific kind of high applicative (see Pykkänen 2002:21).

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