

## On Ergativity and Ergative Unergatives\*

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### Abstract

This paper articulates and defends a view of Ergativity rooted in Case Theory. The leading idea is that given two structural (i.e. as opposed to "semantic" or "inherent") Cases, languages must determine which will be realised on the sole argument of an intransitive clause. I claim that this is the result of a very simple parameter, the *Obligatory Case Parameter* and this is the sole systematic difference between Ergative and Nominative systems. Other differences between languages are the result of independent parameters which cut across the Ergative vs. Nominative dichotomy.

\* This paper is a substantially rewritten (and shortened) version of my syntax generals paper, "Ergativity, Economy and the Extended Projection Principle". The one significant part of that paper which has not made it into the present one is the technical working out of the Shortest Movement and Equidistance account of NP-raising which becomes relevant in §2. This appeared in joint work with Andrew Carnie (Bobaljik & Carnie 1992) and Dianne Jonas (Jonas & Bobaljik 1993, Bobaljik & Jonas 1993). Portions of the material incorporated into the present paper were presented at *WCCFL XI* (UCLA, 2/92: §1) under the title "Nominally Absolutive is not absolutely Nominative", the Ergativity Seminar at MIT (4/92) and at the annual meeting of the Australian Linguistics Society (Sydney, 7/92: §3) as "On Ergative Unergatives".

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## 0. Introduction. Ergative and Nominative Systems.

A system (eg. of case and/or agreement) is said to be *Ergative* if objects and the subjects of intransitive clauses form a natural class distinct from the subjects of transitive clauses<sup>1</sup>. This stands in contrast to the more familiar *Nominative* systems in which (intransitive and transitive) subjects form a natural class to the exclusion of objects. As a shorthand, I will adopt the terminology introduced in Dixon (1979): The argument corresponding to the *Agent* of a canonically transitive Agent-Patient verb will be called the *A-argument* (or simply, the *A*), and the argument corresponding to the *Patient* will be called the *O(-argument)*. This will be extended beyond strictly Agent-Patient verbs to all transitive verbs which mark their arguments after this pattern (1a). The sole argument of intransitive verbs will be called the *S(-argument)* (1b).

1. a Pat touched / saw / met Sam.  
A-argument O-argument
- b Dale ran / arrived / etc....  
S-argument

In these terms, then, the two systems can be characterised as in (2) after Dixon (1979:61):

2.	Nominative System	arg.	Ergative System
	Nominative	{ A S }	Ergative
	Accusative	O }	Absolutive

In Nominative systems, the S-argument patters with the A-argument, in opposition to the O-argument. Such systems are familiar from all over the world, and even in English such a pattern is seen in the case-marking of pronouns:

1 Hans Egede's manuscript grammar of Greenlandic written in 1739 is the first written source I am aware of which identifies the pattern now known as Ergative. This manuscript formed the basis for Paul Egede's subsequent *Grammatica Grönlandica Danico-Latina* published in 1750, one of the first published grammars of an Ergative language. For a discussion of the early history of the study of Greenlandic, see Bergsland & Rischel, eds (1986). The term "Ergative" in this sense is apparently fairly recent. It is conspicuously absent from Uhlenbeck (1916) and Sapir (1917), but by the late 1940's the term appears many times in Russian works. The earliest occurrence of the term I have found is in Kurylowicz (1946).

3. I / \*me saw \*she / her.  
I / \*me left

In Ergative systems on the other hand, it is the O-argument with which the S-argument pattern, in opposition to the A-argument. This agreement pattern is reported for many languages, of diverse genetic and geographic affiliation. The examples below are from Yup'ik (i.e. "Western Eskimo").<sup>2</sup>

4. a. Angute-m qusngiq ner-aa.  
man-ERG reindeer.ABS eat-[+trans].3s/3s  
'The man is eating (the) reindeer.'

- b. Qusngiq ner'-uq.  
reindeer.ABS eat-[-trans].3s  
'The reindeer is eating.'

"Split" systems also exist, where certain arguments, argument types, or tense/aspect combinations trigger an Ergative system while others trigger a Nominative system, internal to one language (Silverstein 1976, Kibrik 1985). I will not address these in this paper.<sup>3</sup>

The present paper is divided into three parts, largely independent of one another. Nonetheless, I believe that the three sections taken as a whole present (the beginnings of) a coherent picture of the nature of those properties which can be taken to characterise the phenomenon of Ergativity. There are numerous examples of different syntactic phenomena associated with individual Ergative languages, hence they do constitute a "heterogeneous class" (Bittner & Hale 1993), though by the same token, there is clearly a set of properties, which does delineate a class. I believe that the common properties derive from a common source, a single parameter, offered in §1-2. In §3, I examine one of the

<sup>2</sup> The unmarked word order of the Eskimo-Aleut languages is Subject-

Object-Verb, though most other combinations are possible.

The Eskimo branch of the Eskimo-Aleut language family is itself divided into two groups, Yup'ik and Inuit. The term "Eskimo" is often considered inappropriate to refer to the Inuit people of Canada, while "Inuit" is not inappropriate to refer the Yup'ik peoples of Alaska and Siberia. I use the term "Eskimo" here only in its technical sense to refer to the language family including both Inuit and Yup'ik languages, but excluding Aleut. Examples in this paper are drawn from both Inuit and Yup'ik, as indicated. For the most part, the main points of this paper hold of both groups, with exceptions noted where relevant. I have used the standard orthography for General Central Yup'ik (Reed et al. 1977) and for the Inuit languages I have used the romanised orthography standard in Eastern Canada, with N for the digraph "ng" (Mallon 1991), even for Greenlandic examples. The complex morphophonemics have been ignored in this paper.

<sup>3</sup> For some very recent treatments of such systems in Salish and Papuan languages, see Jelinek (1993) and Phillips (1993) respectively.

differences internal to the class of Ergative languages, and suggest how it may reduce to an independent parameter.

In the first section Ergativity itself as a phenomena is discussed in terms of Case Theory. I claim that an Ergative system results from a very simple parameter, which I will call the *Obligatory Case Parameter (OCP)*. The proposal is that the association of arguments with case and agreement features proceeds in the same manner in transitive clauses among the two language types. Given two *structural* Cases, the "higher" Case will always be assigned to an A-argument and the "lower" to the O. The source of parametric variation between systems is the selection of which Case is assigned to the S the sole argument of an intransitive clause. This proposal works out very simply in the framework of Chomsky (1991,1992), though the choice of framework is not crucial to the analysis of this section.

In the second section, I examine the properties of Ergative languages which identify a natural class of "subject", i.e. A and S arguments, even though these do not form a natural class for Case Theory. The data in this section is taken solely from Inuit and Yup'ik languages, though similar data can be found in other Ergative languages. I propose that the explanation for this is best sought in terms of the *Extended Projection Principle*. In this section, the framework is more relevant: I claim that the expression of the EPP as in Chomsky 1992, i.e. the feature-checking relationship between the head T and the NP argument which occupies its Specifier, provides the necessary theoretical tools to extend the conclusions of the first section.

Section 3 examines the well-known difference between two apparent types of Ergative systems. On the one hand are languages such as Yup'ik and Inuit which display a uniformly Ergative system – no S-argument ever surfaces with Ergative morphology. Opposed to this are languages such as Basque, and to a lesser degree Hindi, Georgian, and others, in which it appears that some S-arguments may or must have Ergative morphology while others have the expected Absolutive. Following work by Hale & Keyser and others (references below), I suggest that not all apparently intransitive verbs are formally intransitive for the purposes of Case Theory, the relevant claim being that unergative verbs are in a sense to be made precise below, transitive. The difference between the case patterns in the two types of Ergative languages is derived through parametric variation in the applicability of Incorporation (Baker 1988) and its interaction with Case Theory, an analysis sharing much with that of Laka (1993).

## **1. Ergativity:**

### **1.1 Analyses and an analysis.**

The generative literature on Ergativity abounds with analyses attempting to reconcile the well known Case and Agreement patterns of Ergative/Absolutive

languages with a constrained theory of Universal Grammar. With the notable exceptions of Levin & Massam's analysis of Niuean (Levin & Massam 1985, Massam 1985), and Marantz's (1991) morphologically-based approach, the majority of contemporary analyses within "GB" and related frameworks assume that the Absolutive case of the Ergative languages is the same structural case as the Nominative of Nominative languages<sup>4</sup>.

The Absolutive and Nominative Cases share two features in Ergative and Nominative systems. Firstly, as evident from (2), these are the Cases which are realised (at least abstractly) on some argument of all finite clauses, both transitive and intransitive. Secondly, both have a tendency to be morphologically the least marked case in a given system, though this is by no means universal (Dixon 1979:71ff). Under analyses such as those noted in the previous paragraph, which take Absolutive and Nominative to be two different labels of the same case, *intransitive* clauses in the two language types are predicted to be (in all relevant respects) isomorphic. The differences are solely in the Case/Agreement patterns of arguments of transitive clauses. The Ergative Case-marked A is taken to be a PP (Hale 1970), a genitive NP (Bok-Bennema 1991, Johns 1992), or a second structural case, dependent upon the assignment of the "Nominative" (i.e. Absolutive), analogous to the Accusative Case (Bittner forthcoming, Campaña 1992, Mursugli 1992, Bittner & Hale 1993).

In the spirit of Levin & Massam (1985), Massam (1985) and Marantz (1991), I am claiming that the opposite view can and should be maintained: that from the point of view of the locus or source of structural Case, the Ergative corresponds to the Nominative (in some sense the "higher" Case) and likewise the Absolutive and Accusative correspond, structurally. This approach implies that the arguments of transitive clauses across the language types pattern similarly, and thus that the differences lie solely in Case and Agreement in *intransitive* clauses.

In support of this claim, looking first at transitive clauses, I argue that the Ergative (A) NP stands in exactly the same relationship to the Absolutive (O) NP as the Nominative (A) does to the Accusative (O). Under this view, to whatever extent "subject" and "object" are coherent notions, then these labels apply in both language types to the A-argument and O-argument, respectively and the Case and Agreement paradigms reflect this.

The second implication of this claim is that intransitive clauses should pattern differently between the two language types. Intuitively, if the Absolutive Case is the same (abstract) Case as the Accusative then this claim amounts to a claim that the S- NP of intransitive clauses in Ergative languages is marked with the Accusative Case and that the Nominative is not realised.

<sup>4</sup> For some recent approaches along these lines, see Bittner 1992, Bittner & Hale 1993, Bok-Bennema 1991, Campaña 1992, Johns 1992, Mursugli 1992. Two recent analyses which share a number of assumptions with the present work are Urbanczyk 1992 (Nisgha) and Laka 1993 (Basque).

More formally, this hypothesis has two parts. Firstly, it is a necessary part of most theories (at least within the GB framework) that they admit of a statement along the lines of (5):

5. Case X is obligatorily assigned / checked.

where "Case X" refers to some abstract structural Case. Generally, Case X is taken without discussion to be Nominative and analyses of Ergativity which claim that Absolutive=Nominative retain this. However, in a framework which posits a distinction between two *structural* Cases (Nominative & Accusative) (i.e. as opposed to *inherent* or *semantic* Cases, cf.. Chomsky 1986), there is no *a priori* reason to assume that "Case X" is necessarily Nominative. I propose that this is a logical place for the introduction of a parameter of UG. Essentially, (5) requires that a structural Case be realised in all representations, whereas what I will call the *Obligatory Case Parameter* (6) allows for the parameterisation of *which* structural Case is assigned.

6. *Obligatory Case Parameter (OCP)*<sup>5</sup>

- a. In N/A languages, CASE X is NOMINATIVE (=ERG)
- b. In E/A languages, CASE X is ABSOLUTIVE (=ACC)

Such a parameter has a very natural working out in the "Articulated IP" framework in which both structural Cases are reflexes of the SPEC,Head relationship in Functional AGR Phrases, at some level of representation (see, e.g. Pollock 1989, Chomsky 1991 and subsequent work). For reference, I present the tree in (7) modelled on Chomsky (1991), though I have called his AGR-S and AGR-O "AGR-1" and "AGR-2" respectively to avoid confusion with the "subject" and "object" mnemonics. I assume without discussion that all arguments are generated VP-internally.

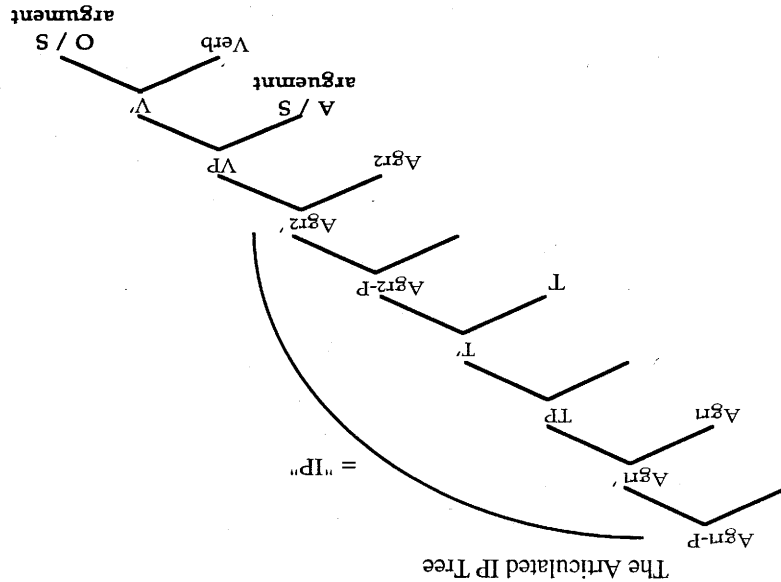
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<sup>5</sup> The formalisms in (5) and (6) are intentionally very similar to (one of) the "Conditions on Case Assignment" and the "Case Parameter" in Levin & Massam (1985) and Massam (1985). I think their general approach was correct. The analysis of §1 then, extends these ideas into a different framework, and takes a stand on some unresolved issues. One such issue is the predictions regarding non-finite clauses, as it is not clear what they would predict.

Recast, the OCP in this framework would be a parameterisation of which AGR (or AGR-Phrase) is "active" in intransitive constructions. In Nominative languages it is AGR-1 which is active, thus Nominative is realised on the S-argument, whereas in Ergative languages it is AGR-2 which is active, thus the Accusative (though called Absolutive) is realised. The Absolutive and Nominative Cases are thus similar only in that they are the obligatory Cases of the two language types. Presumably, the observed morphological tendency towards null morphology for these Cases is a reflection of this obligatory status.

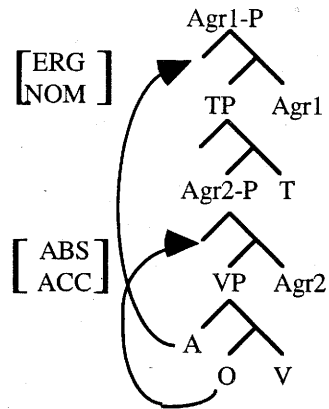
Combining the representation in (7) with the central hypothesis of the paper, i.e. the parameter in (6), the simplified derivation in (8) is the only possible derivation for transitive clauses in both Nominative and Ergative languages, whereas the representations of intransitive clauses will be either as in (9a) or (9b) depending upon the setting of the OCP. In both (8) and (9) I have omitted the role of TP, the locus (i.e. level) of movement of the V and NPs to the IP complex, and the nature of the non-active AGR-P in intransitive clauses. The first of these, the role of (Spec,TP) will become relevant when we turn to

AGR-1 = NOM ; ERG ; "subject" AGREEMENT  
 AGR-2 = ACC ; ABS ; "object" AGREEMENT



subject properties and the Extended Projection Principle in §2, the other details will not be considered in this paper<sup>6</sup>.

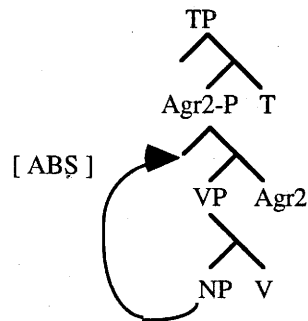
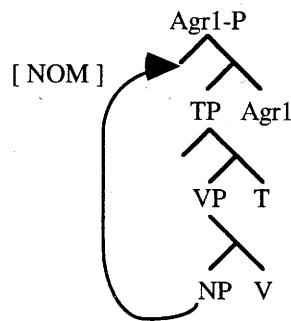
8. Transitive Clause



9. Intransitive Clause

a. NOM/ACC

b. ERG/ABS



Recall that the two predictions of this analysis are first, that the gross structure of transitive clauses is no different in Ergative languages (as a class) than it is in Nominative languages, and second that the structure of intransitive clauses is different. Data from Binding Theoretic phenomena support the first prediction

<sup>6</sup> Again, it is not crucial that the framework of Chomsky (1991,1992) be adopted for this analysis. However, if one does adopt this framework, the derivation in (8) is entailed, at least to the extent that the A and O will raise to Spec,Agr1 and Spec,Agr2, respectively, the reverse being impossible as a violation of Economy (the relevant principle here is Shortest Movement). I discuss this briefly in section 2, below, see also Chomsky (1992).



(§1.2), while the distribution of Case and Agreement in non-finite clauses in Eskimo languages supports the second (§1.3).

## 1.2 Argument asymmetries: $A > O$

The asymmetrical distribution of anaphoric and pronominal elements is considered one of the canonical diagnostics for the relative structural positions of arguments within a language. This is exemplified in part by the distribution of *-self* anaphors in English in (10), with the intended references indicated by indices:

10. a. Mary<sub>i</sub> saw herself<sub>i/\*j</sub> (... in the mirror).  
 b. \* Herself<sub>ij</sub> saw Mary<sub>i</sub> ...

Such asymmetries are generally presumed to be derived from Principles A and B of the Binding Theory (11):

### 11. *The Binding Theory* (Chomsky 1981: 188)

- A An anaphor must be A-bound in its governing category.  
 B A pronoun must be A-free in its governing category.

where  $\alpha$  binds  $\beta$  iff  $\alpha$  and  $\beta$  are co-indexed and  $\alpha$  c-commands  $\beta$ .

Such an account provides a ready explanation for the asymmetry in (10). In (10a), the anaphor *herself* must be bound (i.e. coreferent with) a c-commanding element in its governing category. The grammaticality on the coindexing where *herself* = *Mary* indicates that the position of the (A) Nominative in English c-commands that of the (O) Accusative. Example (10b) indicates by similar logic that this relationship is asymmetrical – the O does not c-command the A. Similar data are familiar from a wide spectrum of Nominative languages.

Anderson (1976) discusses the behaviour of a number of Ergative languages with respect to the distribution of anaphors and pronouns. I will discuss briefly a few canonical examples from some unrelated languages and then turn to a slightly more elaborate discussion of the Inuit languages.<sup>7</sup> In all the languages under

In the material presented at WCCFL XI (Bobaljik 1992), examples were included of “reflexives” in Niuean, building on data from Seiter (1979). The reflexive marker in Niuean, *nix*, is used independently as an emphatic marker, and its occurrence with pronouns to indicate coreference is apparently optional. The distribution in Niuean does appear to be at least partially sensitive to a “subject” versus “object” heirarchy, as more familiar instances of Binding phenomena. Ed Keenan pointed out the potential problem raised by Samoan, a related language, with a similar “reflexive” element, *lava*, also with a principal use as an emphatic marker. In Samoan, unlike Niuean, it would appear that the reflexive element can appear with either the absolutive or ergative argument of a transitive clause to indicate coreference, the distribution having more to do with

discussion, as in many other Ergative languages, the patterns consistently and unambiguously show that the asymmetry between the A-argument and O-argument of Nominative languages carries over straightforwardly to the Ergative languages. The conclusion we will be forced to is that the A asymmetrically c-commands the O in both systems, minimally at whatever level the Binding Conditions A and B hold.

### 1.2.1 Basque Reciprocals

The examples in (12) - (13) show that the reciprocal *elkar* 'each other' in Basque (a language isolate, The Basque Country (France and Spain)) may occur as an O argument of a transitive clause, where it is bound (i.e. c-commanded) by the Ergative A-argument (12a), but that it may not occur as the A-argument (12b). This is exactly the pattern exemplified by the English anaphor *herself* in (10) above.

12. a. mutil-ek elkar ikusi dute  
       boys-ERG ea.oth.ABS see AUX.3sA/3pE  
       "The boys saw each other."
- b. \* elkar-rek mutil-ak ikusi ditu(zte)  
           ea.oth-ERG boys-ABS see AUX.3pA/3sE(3pE)

As with anaphors in Nominative languages, the Basque reciprocal is illicit as the (Absolutive) S-argument of an intransitive clause (13a), though it is permitted as an oblique anteceded by the S-argument (13b).

13. a. \* elkar etorri dira  
       ea.oth.ABS come AUX.3pA  
       \* "Each other came"
- b. elkar-rekin etorri dira  
           (pro) ea.oth-COM come AUX.3pA  
           "They came with each other."
- (all examples from Hualde (1988:317))

We conclude that the A argument asymmetrically c-commands the O in Basque.

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precedence than dominance (cf. Keenan 1991). I am indebted to Mark Harvey who brought to my attention work by Ulrike Mosel, (especially Mosel 1992), which argues quite convincingly that the elements in question are not "reflexives" in the binding-theoretic sense at all, and that the anaphor versus pronoun distinction is not overtly detectable in Samoan, and by extension Niuean (cf. Chung 1989 on Chamorro). While Samoan is not a counterexample then to the generalisation in the text, neither is Niuean an example in favour of this generalisation.

## 1.2.2 Abkhaz Reflexive Agreement

Abkhaz (NE Caucasian: Abkhazia (formerly part of Georgia, in turn formerly part of the USSR), Turkey) does not typically show Case marking on nouns and pronouns, but has a relatively rich agreement system. Transitive verbs agree with both an A and an O for number and in the third person singular, gender. The agreement morphology displays an Ergative pattern: the O and S trigger the same set of agreement markers. Reflexives are formed with the noun -xe 'head' preceded by a possessive marker. The examples in (14) demonstrate this with 1s and 3sf. In both examples, the (non-overt) pronouns trigger Ergative agreement, while in both examples, the "reflexive" X's head triggers 3sn Absolutive agreement. For contrast I have given examples with different Absolutive agreement markers in (15).

14. a. l-xe y-l-ba-yl' 3sf-head(n) 3snA-3sfE-see-PRES  
"She sees herself."

- b. s-xe y-z-ba-yl' 1s-head 3snA-1sE-see-PRES  
"I see myself."

(examples from Anderson 1976, 16, attributed to G Dumézil)

15. a. ala lara d-a-ba-yl' dog(n) 3sfpron 3shuanaA-3snE-see-PST  
"A dog saw her."

- b. sara lara da-z-ba-yl' 1spron 3smpron 3shuanaA-1sE-see-PST  
"I saw him."

(Z. Sender, pc)

## 1.2.3 Inuit Reflexive Possessives

We see that in Abkhaz, as in Basque, the A asymmetrically c-commands the O for the purposes of the Binding Theory at least. As the remainder of the paper will deal principally with the Eskimo languages, in the next subsection, I will discuss in a little more depth the position of these languages with respect to the phenomena just seen, and I will show that even though Inuit lacks overt anaphoric elements in argument positions, it can still be shown to conform to the well known paradigms of the Binding Theory in the same way as all the other Ergative languages mentioned above.

Unlike Basque, and Abkhaz, there are no overt reflexive arguments in Yup'ik or Inuit, though there is a reflexive pronoun (Yup'ik: *elpen*- Inuit: *inmi*) which occurs in oblique positions (Bittner forthcoming). Simple reflexives in the language (e.g. *Mary saw herself*) are indicated by the use of intransitive morphology on a transitive verb (16b).

16. a. Jaani-up natsiq kapi-ja~a.  
J-ERG seal.ABS stab-[+trans].3s/3s  
"Jaani stabbed a seal."
- b. Jaani kapi-juq.  
J.ABS stab-[-trans] 3s  
"Jaani stabbed himself." [Inuktitut]

Inuit does, however, have possessive markers which, in the third person, alternate between a reflexive and a non-reflexive form. Thus:

17. a. Piita-up anaana-ni nagligi-ja~a. [Inuktitut]  
Piita-ERG mother-POSS.3s/refl/ABS love-3s/3s  
"Piita loves *his* mother." (his = Piita)
- b. Piita-up anaana~a nagligi-ja~a.  
Piita-ERG mother-POSS.3s/ABS love-3s/3s  
"Piita loves his mother." (\*his = Piita)

Such elements are familiar, of course, from the Scandinavian (Swedish *sin* vs. *hans*) and Slavic (Russian *svoj* vs. *ego*) languages<sup>8</sup>:

18. a. Ol'ga ljubit svoju mamu. [Russian]  
O.NOM loves her.REFL.ACC mother.ACC  
"Olga loves *her* mother." (her = Olga).
- b. Ol'ga ljubit ee< mamu.  
O.NOM loves her.ACC mother.ACC  
"Olga loves her mother." (\*her = Olga)

In Nominative languages, the distribution of these possessives in simple clauses is predictable from the Binding Theory, on the plausible assumption that the reflexive possessives are anaphors and that the non-reflexive forms are pronominals. The most straightforward prediction from the Binding Theory is that an anaphoric possessive should not be licit when (a part of) the matrix A, as it would not have a c-commanding antecedent. This is, of course, well known for these languages (e.g. for Russian as seen in (19a)). Given that the Ergative languages generally behave in the same way as the Nominative languages with respect to the Binding Theory, as just demonstrated for Basque, and Abkhaz, we would predict that the same would hold for Inuit – that the reflexive possessive should be illicit construed with the matrix Ergative (A) argument. Example (19b) shows that this is borne out:

<sup>8</sup> In colloquial Russian, there is a tendency to allow coreference with a subject even with a non-reflexive possessive marker as in (18b). It appears, at least for Central Yup'ik, that this same "looseness" is evidenced. Younger speakers seem to accept coreference with a third person non-referential marker. This could well be an effect of interference from English.

19. a. \* Svoja mama ljubit O'gu. her REFL.NOM mother.NOM loves O.ACC  
[Russian] "Her! mother loves Olga!"  
\* Anaana-mi Pita nagligija'a. mother.3s/REFL/ERG Pita-ABS loves  
[Inuktitut] "His! mother loves Pita!"  
b. \* Anaana-mi Pita nagligija'a. mother.3s/REFL/ERG Pita-ABS loves  
[Inuktitut] "His! mother loves Pita!"

More interestingly, a non-reflexive (i.e. pronominal) possessive contained in the A (SPEC,NP or SPEC,DP or whatever) neither c-commands nor is c-commanded by the position of the O, the two should be free to corefer or not without violating condition B (or C) of the Binding Theory. This is well known from e.g. Russian (20a) and holds just as well for Inuit (20b):

20. a. Be mama ljubit O'gu. her.NOM mother.NOM loves O.ACC  
[Russian] "Her! mother loves Olga!" (her = or ≠ Olga)  
b. Anaana-mi Pita nagligija'a. mother.3s/ERG Pita-ABS loves  
[Inuktitut] "His! mother loves Pita!" (his = or ≠ Pita)

This asymmetry is expected in Inuit of course, on the analysis of this section. The Binding Theory facts are parallel in Inuit and Russian since the relevant structures are the same.

It is a general characteristic of Ergative languages, or at the very least of Abkhaz, Basque and the Eskimo languages, that for the purposes of the Binding Theory, the hierarchical relation between A and O is the same as that found in the Nominative languages. For the latter languages, the relation is one of asymmetrical c-command, and there is no reason to suppose that the situation is any different in Ergative languages. We can thus only conclude, as others have noted (cf. esp. Anderson 1976), that the Ergative NP asymmetrically c-commands the Absolutive NP at whatever level the Binding Conditions hold.<sup>9</sup>

<sup>9</sup> Chomsky (1992 and fall lectures 1991) has suggested that as the Binding Conditions are conditions on interpretation, they can hold only at the interpretive interface (LF). If this is so, this would preclude accounts of Ergativity in which the Binding Conditions may be satisfied at one level (e.g. S-structure) and then the relationships between the arguments "undone" by subsequent (e.g. LF) movement. This also assumes that the Binding Theory holds of (derived) A-positions, and not of underlying, i.e. θ-positions (i.e. satisfaction of BT at D-structure is insufficient). This is supported by examples in which a derived subject may bind an anaphor which it c-commands, but which the base-position of the subject does not c-command (coreference indicated with underlines, the index notes the trace of raising):

In both language types, the subject of a transitive clause is in a position which asymmetrically c-commands the object.

It is important to note that this asymmetrical c-command relationship cannot be a relationship derived by A'-movement. That is, if one were to take the assumption seriously that Absolutive and Nominative are assigned in the same structural position – in SPEC,IP, then in order to account for both the descriptive fact that the unmarked word order of e.g. Inuit, Basque or Abkhaz is *ERG – ABS – V*, and the structural asymmetries implicated by the Binding Theoretic evidence presented above, one would have to posit movement of the Ergative A-argument across SPEC,IP to some higher position such as SPEC,CP or an adjoined position (Bok-Bennema 1991). Such movement, when coreferent elements are involved, is the canonical configuration for Weak Crossover effects, as exemplified in (21) and (22)<sup>10</sup>:

21. Weak Crossover I - Movement to SPEC,CP across SPEC,IP.

- a. Who<sub>i</sub> t<sub>i</sub> loves her<sub>i</sub> mother ?
- b. \* Who<sub>i</sub> does her<sub>i</sub> mother love t<sub>i</sub>  
(with the meaning – For which x : x's mother loves x)

22. Weak Crossover II - Topicalisation (Adjunction to IP)

- a. Her<sub>i</sub> teacher, Matilda<sub>i</sub> really admires t<sub>i</sub>.
- b. \* Matilda<sub>i</sub> , her<sub>i</sub> teacher really admires t<sub>i</sub>.

If the unmarked word order in transitive clauses in Ergative languages were derived by A'-movement of the A across the O in SPEC,IP, then we would expect either that all instances of coreference in transitive clauses in Ergative languages are ungrammatical, which is clearly not the case, or that they are all instances of the Weak Crossover configuration, but that Weak Crossover effects are not seen in these languages (as has been claimed for some Nominative languages). The data in (23)-(25) shows that Weak Crossover is indeed attested

- 
- i. They<sub>i</sub> seem to each other [ t<sub>i</sub> to like Bill ]. Chomsky (1986:183)

<sup>10</sup> This argument does not hold of the unmarked word order of any language which may be a "pronominal argument" language, in the sense of Jelinek (1984), as I will suggest that Inuit is. If the NPs do not themselves occupy the structural positions of arguments, then the movement which derives surface word order is not A-movement and thus not relevant for the Binding Theory or Weak Crossover (see Bittner & Hale 1993 for a related idea). Nonetheless, the argument must hold of the highest A-positions occupied (perhaps at LF - see previous note) by the A and O arguments, be they NPs, pronominals, or (phonetically null) *pro*. The arguments below are intended to highlight the point that the Binding Theoretic asymmetries cannot be due to A'-movement of the A across the O.

23. a. Nork maite du bere ama ?  
who-ERG love AUX.3s/A3SE his mother-ABS  
"Who! loves his! mother?"

i. Bere ama **nork** maité du ?  
his mother.ab.s who-ERG love AUX.3sA/3sE  
'Who<sub>i</sub> loves his<sub>i</sub> mother?'

movement and positions. There is a complicating factor in that the non-interrogative sentence corresponding to (23b) with a full NP is not fully grammatical:

This is reminiscent of, say, French, where for many speakers there are coreference restrictions independent of Weak Crossover where pronoun/NP distinctions play a role, even though the Binding Theory does not predict ungrammaticality.

Thanks once again to Javier Ormazabal and Myriam Uribe-Etxebarria for discussion of this, and for bringing the relevance of French to my attention.

- b. ?\* Nor maite du bere amak ?  
 who-ABS love AUX.3sA/3sE his mother-ERG  
 (intended: “*Who<sub>i</sub>* does *his<sub>i</sub>* mother love ?”)  
 [J. Ormazabal and M. Uribe-Etxebarria (p.c.)]
24. a. Atzo bere ama JONEK ikusi zuen  
 yesterday his mother.ABS Jon-ERG see AUX.3sA/3sE  
 ‘It was *John<sub>i</sub>* that saw *his<sub>i</sub>* mother saw.’  
 b. ?? Bere amak atzo JON deitu zuen.  
 his mother-ERG yesterday Jon.ABS call AUX.3sA/3sE  
 ?? (intended: ‘It was *John<sub>i</sub>* that *his<sub>i</sub>* mother called yesterday.’)  
 (Ortiz de Urbina 1986:131)

Another Ergative language which is claimed to display Weak Crossover effects is Nisgha, a Tsimshian language spoken in Western Canada (for discussion, cf. Belvin 1985 and for an analysis in a framework similar to the one adopted here, Urbanczyk 1992).

25. a. næ-t ?æn-sip<sup>l</sup>ən-s nɔx<sup>w</sup>-t [Nisgha]  
 who-3E REL-love-DM mother-3s  
 “*Who<sub>i</sub>* loves *his<sub>i/j</sub>* mother ?”  
 b. næ-gat † ti-sip<sup>l</sup>ən-s nɔx<sup>w</sup>-t  
 who-one ND FOC-love-DM mother-3s  
 \* “*Who<sub>i</sub>* does *his<sub>i</sub>* mother love ?”  
 “*Who<sub>i</sub>* does *his<sub>j</sub>* mother love?” (Belvin 1985, Urbanczyk 1992)

Many analyses of Ergativity acknowledge the Binding Theoretic asymmetries. Various mechanisms are proposed for dealing with these facts and with the Weak Crossover facts, to varying degrees of success. One approach is to claim that the part of the grammar which underlies Weak Crossover (e.g. the Bijection Principle) is sensitive only to s-structure, and that LF A'-movement of the Ergative subject across the Absolutive object should not trigger Weak Crossover effects. This cannot be maintained, though, as can be demonstrated by, e.g. English examples with multiple wh-movement:

26. a. Which breeder said that *which* dog recognised *it's* owner ?  
 OK with intended coreference, marked by underlining  
 b. Which breeder said that *it's* owner abandoned *which* dog ?  
 ?\* with intended coreference

The fact that (26b) triggers a Weak Crossover violation, even though the offending configuration is not established until the wh-word raises at LF,



demonstrates that the Bijection Principle cannot be restricted to s-structure positions<sup>12</sup>.

The point of the discussion here is simply that under the analysis I offer, the Binding relations in the Ergative languages look the same as their Nominative equivalents because they are the same. These facts require nothing further than what is independently motivated from the extensive work on more familiar (Nominative) languages. In the next section, I discuss a perhaps surprising prediction of the analysis at hand along these lines.

### 1.3 On the Behaviour of Non-Finite Clauses

In Nominative languages in general, the subject (A or S) of a Tenseless ([-T]) clause (e.g., gerund or infinitive) cannot be marked Nominative, nor can it trigger agreement with the verb. Unless it receives Case from elsewhere (Exceptional Case Marking, complementisers like *for*, etc.), then it is restricted to what is generally called PRO. That this element is in some abstract sense present in the construction as can be seen by coreference phenomena and the like, but it cannot surface as a lexical NP, due presumably to its lack of Case. The O, on the other hand, is subject to no such restrictions conditioned by the valence of [T]. Briefly: the arguments which would in tensed clauses receive Nominative Case are in tenseless clauses barred from receiving Case or triggering Agreement, while Accusative arguments may receive Case and trigger agreement in both tensed and tenseless environments. This is summarised in (27), and relevant examples are given in (28) from English, and in (29) and (30) from Miskitu (Misumalpan: Nicaragua, Honduras) and Swahili (Bantu: E. Africa), respectively, Nominative languages which show subject and object agreement on the verb.

27. Case & Agreement in non-finite clauses: N/A languages
- |    |   |
|----|---|
| a. | NOMINATIVE argument: *Case, *Agreement [A-, S-argument] |
| b. | ACCUSATIVE argument: Case Agreement [P-argument]        |

28. John tried { PRO { \*John { \*him } to { leave. congratulate himself/Archibald/...

29. [+T] Utiya luki-sa [yang mai kaik-ri] / [yang wa-ri] U(name) think-3s [I 2sACC see-I.PAST] / [I go-IPAST] "Utiya thinks [that I saw you.]" / [that I went]"

<sup>12</sup> In this I agree with Campana (1992:53) who makes essentially this point, with Basque data from Bobaljik (1992). However, his argument rests on the the wh-arguments being in situ at s-structure. The wh-words in question are in fact in the *galdegaia*, cf. note 11 above, and the data cannot be taken to make the point without a more intricate analysis of Basque syntax.

[-T] Utilya [ mai kaik-aia ] want-sa. Utilya [ w-aia ] want-sa.  
 U [ 2sACC see-INF ] want-3s [ go-INF ]  
 "Utilya wants to see you." "Utilya wants to go."  
 [Tom Green, p.c.]

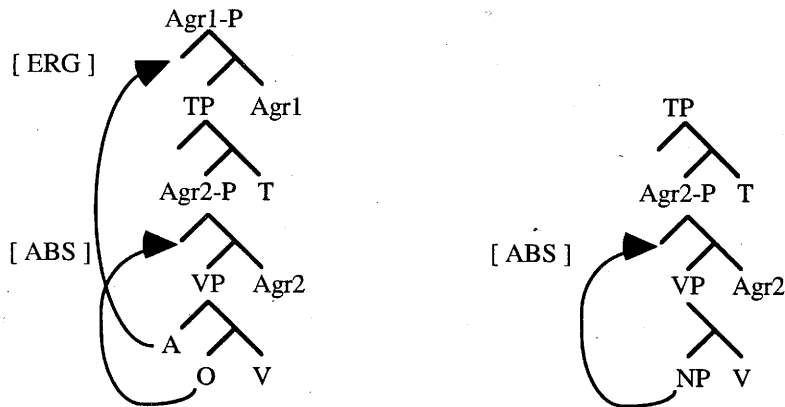
30. Ni-na-taka ku-ki-soma (kitabū hiki).  
 I-pres-want KU-7Obj-read (7book 7this)  
 "I want to read it/ this book"

(Vicki Carstens, pc)

Within the AGR-based framework adopted here, the common hypothesis is that AGR-1 is in some non-trivial sense defective in the environment of [-T]. Thus, as Nominative Case and Agreement are seen as reflexes of the SPEC,Head relationship with this head, when it is defective, this relationship cannot license Case or Agreement.

Recalling the central thesis of this paper, that Absolutive Case is the relationship in AGR-2, I proposed the transitive and intransitive derivations in (8) and (9b), repeated here, for Ergative languages.

31. a. Transitive Clause b. Intransitive Clause



If we extend the hypothesis that AGR-1 is in some sense "defective" in the environment of [-T] to these structures, we would predict that transitive infinitives in Ergative languages should behave like their Nominative counterparts. That is, as the derivation in (31a) is supposed to be that for Nominative languages as well as Ergative languages, the A-argument, which in a tensed clause would be marked for Ergative [=SPEC,Head in AGR-1] should not be allowed to receive Case or trigger Agreement in the [-T] clause, just as in Nominative languages. Also parallel to Nominative languages, the O which is marked Absolutive via its association with AGR-2 should not have any special

restrictions peculiar to [-T] environments. It should show Case and trigger Agreement.

The intransitive derivation for Ergative languages in (31b) is different from the Nominative intransitive derivation in that the S-argument receives (Absolutive) Case in Spec,AGR-2. If it is AGR-1 which is defective in a non-finite environment then the prediction is: in intransitive clauses the S-argument should be free to realise (Absolutive) Case and Agreement. Thus corresponding to (27) for Nominative languages, my analysis would predict (32) for Ergative languages. The key point to note is the difference in the (predicted) behaviour of the S-argument (the sole argument of intransitive clauses) in the two language types.

### 32. Case and Agreement in Non-Finite Clauses: E/A languages

- a. ERGATIVE argument: \*Case \*Agreement [A-argument]
- b. ABSOLUTIVE argument: Case Agreement [P-,S-argument]

Many languages use subjunctive clauses and/or nominalised forms to express what in the Indo-European languages and others is expressed by means of a non-finite form of the verb, and this prediction is thus the harder to test.<sup>13</sup> Nonetheless, the Inuit and Yup'ik languages do have a non-finite verb form, indicated by the "mood"-morpheme *-(l)lu-*, which is used in more or less the constructions we would expect non-finite forms, that is, as a complement to verbs like "promise" (with subject control) and with gerundive (e.g. "while") clauses. Here we have here a potential test case for the prediction just discussed.<sup>14</sup>

13 I would argue, for example, that the Lezgian and Abkhaz "infinitives" advanced in Mursugi (1992) fall into the class of nominalisations used to express tenseless complements. The "infinitives" in question are the more nominal "masdar" familiar from many Caucasian languages, as she mentions for Abkhaz. Note that there is not one "infinite" form in these languages, but rather one such form corresponding to each of several tenses (eg, future, past, ...) and so it is clear that they are for independent reasons to be considered distinct from the "non-finite" forms discussed here.

More interesting are the Mayan languages which are claimed to lack transitive infinitives altogether, having only intransitive infinitives (Craig 1977, England 1983, Campaña 1992, Mursugi 1992...). It would appear that *neither* structural Case (Ergative or Absolutive) is available in non-finite clauses in Mayan, nor are aspectual or directional affixes (Campaña 1992:69). Assuming for argument's sake that these are not nominals or gerunds, the restriction to intransitives is not unexpected if the licensing requirements on PRO (see §2) will permit only one instance of PRO per clause. In intransitives, the S will be PRO, but in transitive clauses, neither structural case being available, only one argument could be PRO and the other will not be licensed in any form.<sup>14</sup> This mood is far more common in Inuit than it is in Yup'ik. The agreement patterns are the same, however.

One caveat: 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 leaning towards the view that Inuit is typologically akin to “polysynthetic” languages such as Walpiri, (Jelinek 1984) or Mohawk (Baker in prep)<sup>15</sup>. This view would maintain that the agreement morphemes are themselves the arguments of the verb (clearly the case historically, cf. Bergsland 1962), or that they license a null pro in the argument position. The overt NPs are related to these arguments by a relation reminiscent of “clitic doubling” in the Romance languages:

33. Jo lo vido a Juan [Spanish]  
 I him saw to Juan  
 ‘I saw him, Juan’ = I saw Juan
34. Joanasi taku-ja-ra [Inuktitut]  
 Joanasi-abs see-INDIC-1s/3s  
 ‘Joanasi, I saw him.’ = I saw J.

For this reason, consideration of the distribution of lexical NPs is potentially misleading, and we restrict ourselves to the agreement morphology (i.e. the pronominal system). The West Greenlandic examples in (35 a and b) show that, in Inuit, the transitive side of the prediction in (32) is clearly borne out.

35. a. Miiqqat [ Junna ikiu-ssa-llu-gu ] niriursui-pput.  
 children [PRO Junna.ABS help-FUT-LLU-3sABS ] promise IND.3pABS  
 ‘The children promised to help Junna.’  
 (Bittner forthcoming:6)
- b. aːuti-rujug-sːuaq aavir-sːuaq uniar-lu-gu tiki-lir-suq  
 man-very.big-ABS [PRO whale-big-ABS trail-LLU.3s] come-begin-PRT  
 ‘... the big man who began to come [trailing the big whale ] ...’  
 (simplified, from Bergsland 1955)

In these examples, the embedded clauses are non-finite, as indicated by the morpheme *-llu-*, underlined in the glosses, and furthermore the verbs bearing this marker agree only with the (Absolutive) O-argument of their clause. In both examples, pronominal morphology corresponding to the A-argument is illicit in the lower clause, i.e., it corresponds to PRO<sup>16</sup>. For instance, by examining the Case and Agreement morphology, we see unambiguously that in (35b) the NP

<sup>15</sup> For a variety of reasons, Baker (in prep) would not classify Eskimo languages as “polysynthetic” in the strict, technical sense in which he uses the term. In particular, though agreement is clearly in some sense pronominal, these languages do not satisfy his “Morphological Theta Criterion”. A thorough discussion is well beyond the scope of this paper.

<sup>16</sup> I will turn to the issues of control and coreference in these clauses in the next section.

*avutitjuḡḡuag* 'the big man' is in the matrix clause. It is marked Absolutive and so syntactically cannot be the A of the embedded, transitive clause. Further the embedded verb *unitariḡu* 'trail-LLU-3s' shows agreement only with the O *aavirḡuag* 'whale'. Contrast (35b') which shows agreement for 3rd person A- and P-arguments:

35. b' ... uniam-ma-gu 'because he was trailing it' (e.g. 3sERG/3sABS agreement)

The argument corresponding to the Ergative argument in a [+T] clause is disallowed in a [-T] clause in Inuit, as expected. Turning to the intransitives, the prediction in (32) is again borne out.

36. a. Mitigat qiti-ssa-llu-tik  
children [pro<sub>3p,refl</sub> dance-FUT-LLU-3p-REFL] promise-IND.2s  
'You promised to come'  
(Bitner, forthcoming:7)

- b. agi-ssa-vlu-tik ugar-put  
pro<sub>3p</sub> [pro<sub>3p,refl</sub> come-FUT-LLU-3p-REFL] say-IND.3p  
'they said (of themselves) that they would like to come'  
lit: 'they said (of themselves) they to come'  
(Woodbury 1975, 84 attributed to Kleinschmidt 1851)

Unlike the transitive verbs, which cannot show agreement for an A, as (36) shows, the embedded non-finite intransitive verbs show agreement for an S-argument (Absolutive). Indeed, it is the hallmark of the non-finite morphology of Inuit that absolutive agreement morphology is obligatory, while ergative agreement morphology is prohibited<sup>17</sup>. This is exactly the correlation predicted in (32).

#### 1.4 Summary

I have proposed that the systematic difference between Ergative and Nominative Case and Agreement systems results from a single parameter, the *OCP*. The proposal entails that the structure of transitive clauses in the two language types are isomorphic, while differences obtain only in intransitive clauses, in the movement of arguments to Case positions. This was seen to make the correct predictions for Binding Theoretic phenomena in a number of Ergative languages. Additionally, a surprising prediction regarding the distribution of Case and Agreement in intransitive clauses was seen to be confirmed by data from the Eskimo languages. We now have the core of an analysis of the phenomenon of

<sup>17</sup> Fortescue (1984:297) suggests that there are occasional rare forms with apparently plural first or second person Ergative morphology, e.g. endings such as *-tigu*, gh gives no examples. The distribution of such forms is unclear at best. Fortescue (pc) suggests that they are late, analogical forms and are not generally accepted in the standard literary language.

Ergativity. In the next two sections, I extend and refine the proposals of this section to account for subject properties which cut across Case divisions and to discuss variation in between Ergative languages in the behaviour of intransitive clauses.

## **2. Subject Properties in Ergative Systems and the EPP**

There are two things which I have referred to in passing in the preceding sections, but which I have laid aside without comment. One is a more empirical issue, more or less independent of the specific theoretical framework adopted: the unifying features of “subjects” (i.e. A and S, as opposed to O) in Ergative languages. The other is theory-internal: the role of TP and its Specifier in the derivation. I believe that adopting the framework of Chomsky (1992) allows us to relate these questions, and to provide a unified answer. While §1 was more or less independent of a particular framework, the present section is not, and to the extent that the analysis is fruitful, it may be taken as support of the general direction of the framework. I will first sketch very briefly the range of empirical data to be accounted for in this section, and then flesh out the relevant parts of the theory. There are aspects of the analysis I will offer which will have to be fleshed out in more detail in subsequent work, but I feel the direction is promising.

### **2.1 Subject Properties.**

In terms of Case and Agreement, the defining characteristic of Ergative languages is that S and O are treated as a natural class (Absolutive), distinct from A (Ergative). Nonetheless, as alluded to above, there are a number of properties in Ergative languages which do appear to be sensitive to a unified class of “subject”, i.e. A and S, excluding O. These properties generally fall into two intuitively related categories, binding and control<sup>18</sup>.

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<sup>18</sup> One other “subject property” which picks out the natural class of “subjects” (S+A), and which cuts across the Ergative vs. Nominative dichotomy, and which I will not discuss here. This is the curious fact that in quite a few languages, (wh-) extraction of subjects behaves differently from other Cases of extraction. A well known case is the *que* / *qui* alternation in wh-complementisers in French (Rizzi 1990), and similar phenomena in various Germanic languages (Haegeman 1983, Zwart 1993). Similar asymmetries are found in Ergative languages as well: eg., Yimas (Foley 1991, Phillips 1993). Note that this does not appear to hold in the Mayan languages (Campana 1992). There are others as well which will not be discussed here. The point is that the analysis I am offering does provide a structural correlate of “subject”, i.e. Spec,TP even if this does not correlate with the position in which the “subject” receives / checks Case.

## 2.1.1 Binding.

In §1 we saw that standard binding tests involving reciprocals, reflexives, and the like clearly show that A asymmetrically c-commands O in Ergative languages to the extent that such tests are feasible. That is, the 'subject' asymmetrically c-commands the 'object' for the purposes of the Binding Theory. This, of course, is unsurprising if, as I have claimed, the structure of transitive clauses is the same in both Nominative and Ergative systems. Interestingly, the Eskimo languages have a reflexive element which is not clause-bound. In §1.3 we saw this morpheme in its use as the marker of reflexive possessive "4th person" agreement. When used with subordinate verbs, this agreement marker indicates coreference with a higher subject, where by "subject" is meant A or S depending upon the transitivity of the clause. The marker cannot be used to indicate coreference with the O of a higher clause.

37. a. Kaali-p      tatigi-mmani      tuqgissisima-vu-q.  
       [Kaali-ERG pro trust-DPST.4S ] stay.calm-IND-3s  
       'He stayed calm because Kaali trusted him' Him=he, Him≠Kaali  
       [Bittner forthcoming:5]

- b. Savaati-mi      illisara-lu-ni      miirtuvigigi-lir-manni  
       sheep(pl)-4s recognize-LLU-4s bleat.at-begin-DPST.3p/4s  
       mistiga-aq      quillili-lir-lu-ni  
       feel-IND.3s tears.well-begin-LLU-4s  
       'When his sheep, recognizing him, began to bleat at him, he felt  
       tears coming to his eyes.'  
       [Fortescue 1984:147]

As the last example in (37) shows, the subject with which a lower argument is coreferent need not be the subject of the next higher clause, it may be any c-commanding subject, but not an object. This can be seen by focusing on the verb *illisaraluni* 'recognizing him'. This verb is non-finite (i.e. -LLU-), and thus its subject is controlled by the immediately higher subject. It is the sheep who are bleating, while recognizing. The next higher verb is thus the next verb *miirtuvigigi-lir-manni* 'because they were beginning to bleat at him'. The (pro) object of the verb *illisaraluni* is "4th" person singular, the reflexive 3rd person. Yet the antecedent is not the subject of the next higher clause, but rather the subject of the matrix, indicative clause (italicised) *mistigaq* 'he began to feel [i.e. tears...]'<sup>19</sup>.

19 This is one of the many reasons for discounting the idea that the 4th person (-ni etc...) is a Switch-Reference marker (contra Finer 1985). Switch reference is generally a relation between the subjects of two clauses, one of which is immediately superordinate to the other. Switch reference is also generally a subject-to-subject relationship. The "4th" person in Inuit is non-local (37b) and may also mark an embedded object as being coreferent with some higher subject. Additionally, while markers of Switch reference generally mark

### 2.1.2 Control

The second range of phenomena which appear to pick out a unified class of subjects across transitive and intransitive clauses is control, mentioned above in the context of Inuit non-finite clauses. As noted then, there is a requirement in non-finite clauses that the subject be coreferent with the subject of the next higher clause<sup>20</sup>. In the case of transitive non-finite clauses, this is not noteworthy on the analysis presented here. That is, the A of a non-finite transitive clause is restricted to a null, non-agreeing, obligatorily controlled argument – PRO. However, we saw that the S of a non-finite, intransitive clause did trigger agreement, in other words, the S is licensed in non-finite clauses. This was predicted on the analysis so far, in that the S, like the O, is dependent upon the lower Agr for Case, while it is Agr1 which is sensitive to the [ $\pm$ finite] distinction. What is not predicted on the account so far, is that even agreeing, absolutive, S arguments in non-finite clauses are subject to the same control restrictions as apparent PRO in transitive clauses.

We have two related problems for the account so far. The first problem is the problem of subject-orientation of long-distance anaphora. Whatever the relevant notion is, presumably c-command, the null hypothesis would be that Spec,Agr2 would bear the same relation to a long distance anaphor in an embedded clause, regardless of whether an S or an O occupies Spec,Agr2. The fact is that an S, on the account above in Agr2, can serve as an antecedent, while an O in the same position cannot, apparently in virtue of there being a subject in Spec,Agr1. Were this distinction to be in the opposite direction, we could appeal to some instantiation of Relativised Minimality (Rizzi 1990), but even that option is closed. The second problem is sort of the reverse of the first one. In transitive non-finite clauses, PRO must be controlled, while in intransitive, it is overt, agreeing pronouns which must be controlled. The descriptive generalisation, if the account in §1 is correct, is that it is the highest argument of the non-finite clause, the A or the S, overt or otherwise, which must be controlled. In what follows, I will sketch briefly a solution to both of these problems, which is rooted in Chomsky's (1992) solution to a theoretical anomaly: what forces, in a transitive clause, the A to raise to Spec,Agr1 and the O to Spec,Agr2?

Chomsky's (1992) solution to this problem involves a reinterpretation of Rizzi's (1990) Relativized Minimality, expressed in terms of a requirement of Shortest Movement. Economy constrains movement so that the target must be no farther than the first appropriate landing site. Given the hypothesis that the

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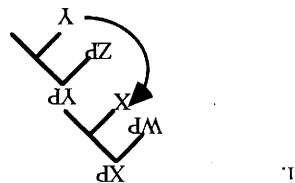
simple coreferent versus disjoint, irrespective of person, the markers in the Eskimo languages may only be used in the third person. The standard first and second person markers are used for both main and embedded clauses. All told, the 4th person in Eskimo languages looks suspiciously similar to Long Distance Anaphors in languages like Icelandic, and very little like standard switch reference markers (Finer 1985).

<sup>20</sup> Or non-disjoint more likely. It may also be PRO<sub>arb</sub> in appropriate contexts.

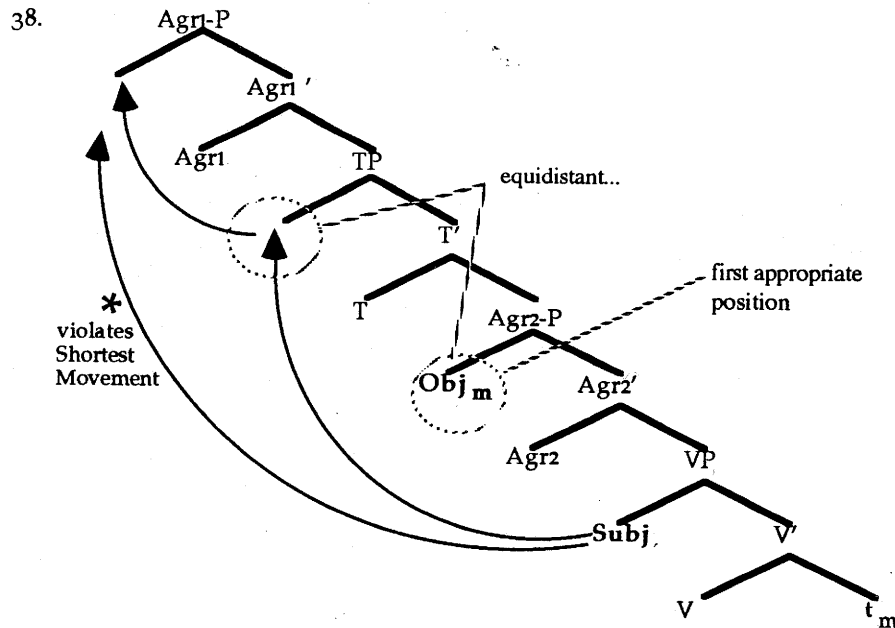


subject is base-generated internal to the VP, an obvious problem is that raising of the O to Spec, Agr2 should violate Shortest Movement. To circumvent this, Chomsky suggests that under certain conditions, two consecutive specifier positions, in this case Spec, Agr2 and Spec, VP may be *equidistant* from lower positions<sup>21</sup>. By definition, if two Specs are equidistant, then neither is further than the other, and to make a long story short, exactly one appropriate Spec position can be skipped without entailing a Shortest Movement violation just in case the movement in question targets the specifier of the immediately dominating phrase. Concretely, the O may skip Spec, VP just in case it moves to Spec, Agr2. In turn, this entails that subsequent raising of the A across the O in Spec, Agr2 *must* involve Spec, TP. As illustrated below, Spec, Agr2 is the first appropriate (in this case A-) position for the A argument. The mechanism which renders Specs equidistant will only ever render two consecutive specifiers equidistance, thus maximally Spec, TP and Spec, Agr2. The A may raise to Spec, TP in this case, as it is equidistant with the first appropriate position for Spec, VP, while raising directly to Spec, Agr2 will violate Shortest Movement as it would be to a position farther than the first appropriate position. The derivation of a transitive clause in both Nominative and Ergative languages, abstracting away from the effects of the Strict Cycle Condition, is given in (38):

21 The "certain conditions" for Chomsky 1992, are head to head raising and adjunction. Thus, given (i):



then relative to the Chain formed by raising Y to X, i.e. CH = {Y, t}, both WP and ZP stand in the same relation (Spec, Head) to this Chain. These positions, then, are to count as *equidistant* from lower positions. See also Branigan 1992, Jonas & Bobaljik 1993, Watanabe 1993 among many others for expressions of this view. In Bobaljik 1993, I have argued that the correlation of equidistance with verb movement is empirically inadequate, in addition to a technical problem of locality alluded to in Chomsky (1992:n17). In Bobaljik (1993) I propose a slightly different definition of equidistance, with no appeal to movement. I propose that WP and ZP (in (i)) are inherently *equidistant* from lower positions by virtue of their local relationship with the head X. The two versions of *equidistance* are entirely equivalent for the purposes of this paper.



The situation is different for intransitive clauses. When there is only one argument raising out of the VP to Spec of one Agr for Case checking, then Shortest Movement will not be violated regardless of whether or not the S moves through intervening specifiers on its way to check features in whichever Spec,Agr the OCP dictates (i.e. on the assumption that Specifiers are freely generated and a specifier only counts as a first appropriate position if it is present in the derivation – Chomsky 1992)<sup>22</sup>.

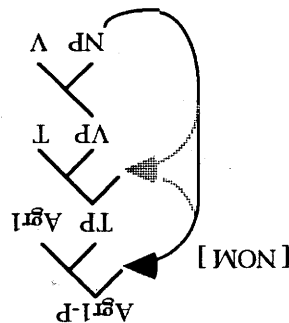
Focus for the moment on the Spec of the obligatory Agr (1 in Nominative languages, 2 in Ergative ones), and Spec,TP. Let us assume that in addition to the Case (i.e. case and agreement) features which are properties of the Agr heads and which are thus checked in the Spec,Head relation to these heads, the head T

<sup>22</sup> There is no contradiction here: Only filled specifiers count for determining which Specifier must count as *the first appropriate position*, hence the subject may raise as far as it pleases if there are no intervening filled specifiers. In particular, in an intransitive clause, the subject may raise from Spec,VP directly to Spec,AgrS if Spec,AgrO and Spec,TP are not generated at the relevant point in the derivation. *Equidistance* is defined structurally in terms of heads (or head Chains - see the previous note). Only two consecutive specifier positions (present or potential) will ever be equidistant from lower elements. In (38), Spec,AgrO is the first appropriate position for the subject in Spec,VP. Only Spec,TP - the Spec of the next higher Head could possibly be *equidistant* with Spec,AgrO from Spec,VP. The highest position (Spec,AgrS) is inaccessible for the subject if Spec,AgrO is present / filled unless the subject cycles through Spec,TP, a requirement of transitive subjects only.

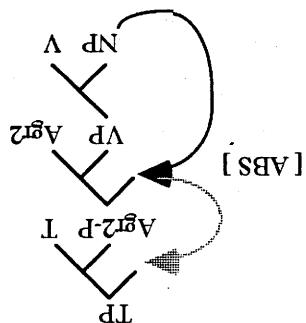
has a set of nominal features which must be checked with some NP again in the Spec,Head relationship. This is not implausible, and is assumed (sometimes implicitly) in much of the recent work in this framework (see esp. Chomsky 1992, Bures 1993, Bobaljik & Jonas 1993). These authors have proposed that the Extended Projection Principle, i.e. the requirement that every clause have a subject, is stated over the nominal features of T, which must be checked at or by s-structure.

For Nominative languages, this added assumption merely reduces a redundancy in the representation, and is not very interesting. Whether or not the S passes through Spec,TP in the course of the derivation, it will end up in Spec,Agri at LF if not before (39a). For Ergative languages on the other hand, there is a difference: if T has no features to be checked, then the S should not raise past Spec,Agri2, being prohibited from spurious movement by Economy considerations. Yet if T does have features to check, then the S will have to raise to Spec,TP by or at LF (39b). On this view, there is a unifying characteristic of both S and A to the exclusion of O in Ergative languages, namely it is precisely the class of "subject" arguments which check features in Spec,TP in addition to the case features they check in Spec,Agri/2. I will suggest presently how this characteristic might account for the "subject properties" discussed at the outset of this discussion, but first, one loose end must be tied up.

39. a.

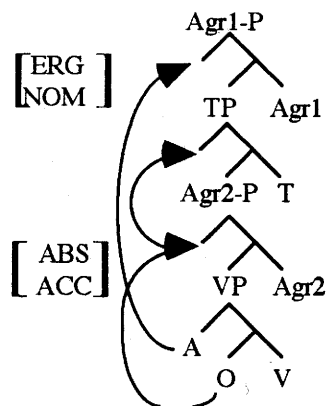


b.



For this analysis to work, we must be sure that O in principle cannot check features in Spec,TP after it has checked Case features in Spec,Agri2, even though raising from Spec,Agri2 to Spec,TP is exactly what I am proposing for S in Ergative languages. The derivation to be excluded is (40):

40.



This hypothetical derivation is in fact excluded as an instance of a shortest movement violation. Recall that even with the notion of equidistance, at most one appropriate Specifier may be skipped by a particular application of Move- $\alpha$ . While raising of the O in (40) violates nothing, subsequent raising of the A to Spec,Agr1 would have to cross two filled Specifier positions<sup>23</sup>.

We now have a structural property which uniquely characterises the set of A and S, i.e. the “subjects”, namely the checking of features in the Spec,Head relation with T°. Though I will not provide detailed analyses here on Long Distance Anaphora or of Control Theory, I will sketch how this property could interact with those modules of the grammar to account for the observed subject properites in Ergative languages.

Anaphora in general has been shown to display properties very similar to NP-movement. It is an idea attributable originally to Lebaux 1983, picked up in Chomsky 1986 and characterising one school of thought in the analyses of LDA (Pica 1991, Huang & Tang 1991, ...) that anaphora is LF-movement. The suggestion in some of the literature is that Long Distance Anaphors at LF raise and adjoin to INFL. Such an approach is very clearly compatible with the ideas of this section, if we assume that the relevant part of INFL to which the anaphor adjoins is not Agr, but the head T. The subject-oriented characteristic of the LDA is due to the fact that it must check or inherent features in T, and thus will

<sup>23</sup> The situation is slightly more complicated if the A raises overtly directly to Spec,AgrS, and the O then raises at LF (i.e. the situation suggested for English by Chomsky). If Bobaljik & Jonas (1993) are correct, though (see also Epstein 1992), expressing the EPP as a requirement that T check its features in a Spec,Head relationship at s-structure will suffice to rule this out. In the case where only the A raises overtly, i.e. to Spec,Agr1, the head T° will have to raise overtly and adjoin to Agr1 in order to check features overtly. It will then not be able to check features again with an O raising to Spec,TP, even though such raising is in and of itself not prohibited.

have the same features as the argument which has checked features in Spec,TP, i.e. the subject, regardless of what AgrP that argument checked Case features in.

The interaction with Control Theory is a little less obvious, though the ideas of Borer (1986, 1989) and Huang (1984) are interesting in this respect. For both of these authors, Control theory, and indeed the pro vs. PRO distinction, reduce to the nature of feature identification and in particular, the claim that (for them) I raises at LF to some head in the c-commanding clause. While the technical details are not trivial, one could well imagine something of this sort to be involved with T'. If T raises to the higher clause to check features with the controller, then the subject properties of control are accounted for, as is the locality requirement not evidenced in the Binding Theoretic data.

While I have not been able to flesh out analyses of the processes involved, I have shown that the framework of Chomsky (1992) does provide a plausible means of analysing the effects of the cluster of properties which do single out a class "subject" in Ergative languages, while maintaining that the differences in Case and Agreement which single out a class of absolutes (S and O) result from a structural account of case. I proceed now to one final section before closing the paper.

### 3. On Ergative Unergatives

It is common among analyses of Ergativity to characterise the Ergative system in terms of transitive versus intransitive patterns, as in the discussion so far. Apparent deviations in transitive clauses from the pattern in (2) in both Nominative and Ergative languages such as Dative subjects and objects, are safely relegated to the phenomena of "quirky" case on which there is an extensive literature, especially on Icelandic, Russian, etc. Of deeper concern are apparent variations in case/agreement patterns in intransitive clauses in some Ergative languages. As noted above, it is not my intention to address here the phenomena of "split" Ergativity. Independent of this, however, a number of Ergative languages seem to show a "mixed" system: some S-arguments are marked Absolutive (as expected) while others are Ergative (unexpected). Perhaps the best-known example of this type of language is Basque, though Hindi, Georgian and a number of Australian languages behave in a similar manner. Thus while transitive clauses show the typical Ergative (A) / Absolutive (O) pattern, only some S bear Absolutive (41a) while others obligatorily bear Ergative (41b).

41. a. une-a etorri da  
 kid-the.ABS arrive  
 'The kid arrived'

(Laka 1990:14)

- b. Nik hitz-egin dut.  
1sERG "speak" UKAN.(3A).1E  
'I spoke.'

(Uribe-Etxebarria 1989:1)

Not all Ergative languages behave in this way. The Eskimo languages never allow an Ergative subject to cooccur with a verb inflected intransitively. The contrast can be seen in (42) with a verb that can be either transitive (*Jon ate it*) or intransitive (*Jon ate*)<sup>24</sup>.

- |     |   |   |
|-----|---|---|
| 42. | Basque  | Yup'ik  |
| a.  | Jon-ek jaten du.<br>Jon-ERG eat AUX<br>'Jon ate.' or<br>'Jon ate it.' | b. John-am ner-aa.<br>John-ERG eat-3s/3s<br>'John ate *(it).' |
|     |   | c. John ner'-uq<br>John-ABS eat-3s<br>'John ate (*it).'       |

Both Basque and Yup'ik are pro-drop languages, thus (a) and (b) can be interpreted as having a (null) *pro* specific direct object. In Basque, (a) may also be intransitive, and the change in transitivity entails no change in the agreement or case marking. The S argument (*Jonek*) is still Ergative. In Yup'ik, the verb *ner-* 'to eat' is also compatible with an intransitive reading, however (b) cannot have this reading. The intransitive entails a shift in both agreement and case marking, the S being the only argument, there is only one agreement morpheme on the verb, and the S must be in the Absolutive Case.

The key to understanding this variation in my view draws on an insight dating back at least to the "generative semantics" of the early 70's, seen in its most recent incarnations in the work of Walinska de Hackbeil (1986) and Hale & Keyser (1986,1991). The leading idea of this work is that not all apparent intransitive verbs are underlyingly (or in the lexicon) one-place predicates. While there are a number of aspects to this notion, the claim which is relevant here is that unergative (more or less agentive) predicates, as opposed to

<sup>24</sup> It is a well known fact about such "indefinite object deletion" verbs that there are certain restrictions on the implied direct object of, say, *eat* in sentences such as 'John ate', and that this can not mean simply that John performed an act of eating. Thus in the example below, (ii) may refer to the event described by (i), but (iii) may not refer to this event, it may only refer to an event in which the dog ate hay or whatever it is that dogs eat generally:

- i. The dog ate my homework.
- ii. The dog ate it.
- iii. The dog ate.

unaccusative (patientive) predicates are in fact transitive, i.e. they take both an internal and an external argument. On this view, the variation between Basque & Eskimo is that in the former, this underlying transitivity is manifest in the overt syntax and morphology (the Ergative case and agreement for unergative 'S' arguments), while in Eskimo the internal argument of unergative predicates is *incorporated* (Baker 1988) into the verb stem, the resulting verb being intransitive<sup>25</sup>. Before turning to the relevant data, a brief word on the technical aspects of the analysis is in order.

I will adopt the broad outlines of the framework of Hale & Keyser (1986, 1991), in which they suggest that there is a level of lexical syntactic structure which feeds the syntax<sup>26</sup>. At this level, there is a one-to-one correspondence between structural configuration and certain primitive syntactic concepts, CAUSATION, AFFECTATION and the like. To take a concrete example, CAUSATION is

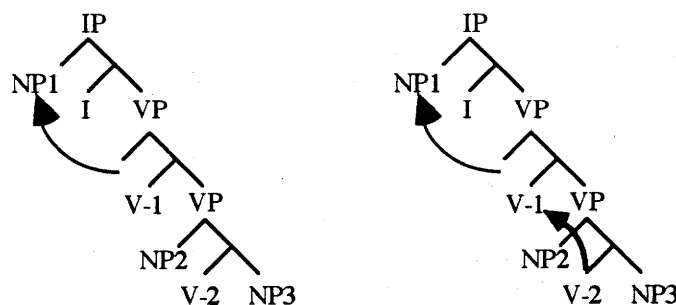


associated with the relation  $\begin{array}{c} \text{V} \\ \swarrow \searrow \\ \text{VP} \end{array}$ . In some languages or constructions, such as English make- or let- "causatives", this configuration can be seen on the surface (43a), while in other constructions, the relation is more abstract. Building on work by Larson (esp. Larson 1988) the double object constructions in English are proposed to be derived from a CAUSATION structure such that, for example *give* can "mean" something like NP<sub>1</sub> CAUSE NP<sub>2</sub> to have NP<sub>3</sub> (43b):

25 This view of the parameterisation among Ergative languages is also expressed in Laka (1993) which is for the most part entirely consistent with the analysis presented here.

26 The properties of this level are not entirely articulated, though in this work is to be found many of the ideas of Generative Semantics reincarnated. As Chomsky (class lectures, fall 1991) has noted, the analysis of Hale & Keyser may be retained without recourse to the additional level of structure if the traditional notion of D-structure is abandoned in favour of the operation Generalised Transformation as the sole means of structure creation. A formal discussion of this would of course be a paper in itself.

43.

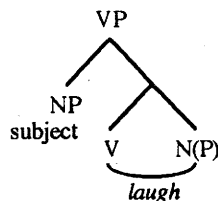


Pam made Sam eat Spam.      Pam gave Sam Spam.  
 NP1 V-1 NP2 V-2 NP3      NP1 V NP2 NP3

Note that a difference between the causative in (a) and the “double object verb” in (b) is that in the latter there is only one overt verb. In spirit following Larson (1988), it is assumed that V-2 raises and incorporates into V-1 in the syntax. It is worth emphasising that for Hale & Keyser, it is not that the verb *give* raises from V-2 to some null verb in V-1 (à la Larson), nor is it the case that some null element in V-2 raises and adjoins to the verb *give* in V-1 (cf. Pesetsky 1993). Rather it is the combined, complex element composed of an abstract V-1 and an abstract V-2 which is spelled out by the morphology as, in this case, the verb *give*.

Extending these ideas, Hale & Keyser suggest that unergative verbs can be seen as having a derivation such as that for *laugh* in (44):

44.



Just as with the case of *give* in (43b), it is not the case (at least in English) that an N *laugh* incorporates into a null verb, nor the other way around, but rather it is the combination of the verb and the N in (44) which derives the lexical item *laugh*.

It is in this sense that unergative verbs are taken to be underlyingly transitive. They are derived from a structure which involves nominal arguments of the verb. I propose that in Eskimo, the process schematised in (44) is an overt process of incorporation. The result of this is that the NP which incorporates does not need



structural Case, and the only argument which must bear structural case raises to the Spec of Agr2, realising Absolutive Case by the OCP. In Basque, there is no overt incorporation in these constructions. There are therefore two arguments which must bear structural case and the derivation parallels that of a transitive clause. The reason the S argument of an unergative clause patterns together with the A argument (i.e. subject) of a transitive clause is that in terms of the structural case assignment, unergatives are transitive.

To maintain this analysis, it is necessary to demonstrate the plausibility of three points. First, it must be shown that the apparent anomalies in case-marking reduce to a dichotomy between derived and non-derived subjects, and that only the latter may display Ergative case. Second, I must demonstrate that the clauses with Ergative subjects are formally transitive in their syntax as well as their case and agreement morphology. Finally, I must demonstrate that the incorporation analysis for the languages which prohibit Ergative case on unergative subjects has independent plausibility. These will be the goals of the next three subsections.

### 3.1 Ergative S-arguments?

Examining a number of Ergative languages, Marantz (1991:3) observes the following generalisation:

45. *Marantz's Generalisation* (Marantz 1991:3)

No Ergative Case on a non-thematic subject

By "non-thematic" here is intended those subjects which are seen as "derived" in the generative literature, i.e. those which are underlyingly THEME/PATIENT arguments; underlying complements of the verb.

Marantz's generalisation is clearly supported by the relevant data from Basque, a point discussed in detail by Levin (1983) and much subsequent work (Ortiz de Urbina 1986, Uribe-Etxebarria 1989, Laka 1990 among others). Verbs which take a single THEME/PATIENT argument uniformly require Absolutive case and appear with the intransitive auxiliary:

46. a.

Ume-a etorri da.

kid-the ABS arrived [-trans] AUX.3A

'The kid arrived'

(= (41a), above)

b.

Ate-a ireki da.

door-the ABS open [-trans] AUX.3A

'The door opened'

(Levin 1983:301)

On the other hand, the putatively intransitive verbs which require Ergative case are fairly consistently verbs with a non-THEME argument, generally AGENTIVE. Such verbs occur with the same auxiliary which occurs with transitive verbs, and

in the form agreeing with the Ergative subject and inflected invariantly for a third person singular Absolutive object:

47. a. Nik hitz-egin dut.  
1sg.ERG speak [+trans]AUX.3A/1E  
'I spoke' (Uribe-Etxebarria 1989:1)
- b. Jonek jaten du.  
Jon.ERG eat [+trans]AUX.3A/3E  
'Jon ate' / 'Jon ate it' (Levin 1983:308)

Similarly, in Hindi, the class of "intransitive" verbs which may occur with Ergative subjects is restricted to a subset of agentive verbs. Subjects of unaccusative verbs may never bear Ergative case, contrast (48) and (49):

48. a. kutte bhoNke  
dogs.ABS barked.m.pl  
'The dogs barked.'
- b. kuttoN ne bhoNkaa  
dogs ERG barked.m.sg  
'The dogs barked.'
49. siitaa (\*ne) aayii  
Sita.ABS (\*ERG) arrived  
'Sita arrived.' (Mahajan 1990:74)

As Marantz discusses, this generalisation holds across unrelated Ergative languages. The conclusion is that the distribution of Ergative case on putatively intransitive subjects is indeed tied to the distinction between derived and non-derived subjects. The subjects which may bear Ergative case are transitive and unergative verbs. This is at the least consistent with the claim of this section, to wit the assumption that unergative verbs are syntactically transitive.

### 3.2 Unergatives are transitive

The putatively intransitive verbs which surface with Ergative subjects are the unergative verbs in language after language, as noted in the previous section. Hale & Keyser (1986) have suggested for English, that such verbs are underlyingly transitive, along the lines discussed at the beginning of this section. As Case-marking is sensitive to derived relations, for the analysis I am suggesting to be maintained, the verbs (in those languages) which permit Ergative subjects must also be associated with an Absolutive element as well, else the Obligatory Case would fail to be realised, in violation of the OCP.

In Basque, this is in fact the traditional view, and in the generative literature is expressed by Levin (1983), Ortiz de Urbina (1986), Uribe-Etxebarria (1989), Laka (1990,1993) among others.

Basque shows agreement with both the Ergative subject and the Absolutive object. As noted above, the auxiliaries occurring with unergative verbs invariably occur in the form agreeing for a third person singular object. As Basque is a pro-drop language, the lack of an overt NP cannot be taken as any indicator of (in)transitivity.

With respect to morpho-syntactic characteristics, the Basque verbs which require Ergative subjects fall roughly into two classes, one group consisting of simple verbs (*jaien* 'eat', *esan* 'say, tell' ...) and the other consisting of verbs formed with an abstract noun and the verb *egin* 'do/make' (50) (also (41b) above - the root *hitz* is the noun for 'word'):

50. Haurr-ak negar-egin zuen.  
child-ERG tear(ABS)-do [+trans] AUX.3A/3E  
'The child cried.'

The latter class receives a ready account if one assumes that the abstract noun is the complement of the verb *egin* 'do/make'. This explains the formal similarity with clauses with a concrete object of *egin* (51)<sup>27</sup>:

51. Nik etxea egin dut.  
1sERG house(ABS) [+trans] AUX.3A/1E  
'I made the house.'  
(Levin 1983:303)

One indication of the structural 'objecthood' of the abstract noun in such constructions is that it may occur in partitive case in negated clauses, typical of objects of transitive clauses:

52. Haurr-ak ez zuen negar-ik egin.  
child-ERG NEG [+trans] AUX.3A/3E tear-PART do  
'The child didn't cry.'  
(Ortiz de Urbina 1986:71)

Also, this abstract noun may be 'stranded' when the verb fronts, such as in certain question constructions:

53. Nork egin du lan?  
who-ERG do [+trans] AUX.3A/3E work.ABS  
'Who (has) worked?'  
(Laka 1993:153)

<sup>27</sup> There is one important difference between "object" nouns like *hitz* 'word' which form unergatives, and true object NPs such as *etxea* 'house' in (51). In the latter, the NP must have a determiner (the suffix *-a*) or be associated with a quantifier, and the NP may be complex. In the cases of the unergative verbs, the noun must not be modified and cannot take a determiner. Laka (1993) derives this from the OCP on assumptions for the most part consistent with the present paper. See Uriba-Etxebarria (1989) for discussion of some of the more subtle aspects of this class of verbs.

The second class of unergative verbs, the apparent monomorphemic verbs without *egin*, also display syntactic transitive behaviour. I claimed above that the abstract noun, often glossed as a part of the verb, is syntactically the direct object of the verb *egin* 'do/make' and bears the Absolutive Case associated with the verb. Not surprisingly, such constructions are incompatible with an independent Absolutive direct object, such as the demonstrative in (54a) (contrast the oblique demonstrative in (54b)), or the cognate object in (54c). The simple verbs, by contrast, do allow Absolutive objects, but these are restricted to cognate objects (54d).

54. a. \* Nik hori hitz-egin dut.  
1sERG that.ABS word-do UKAN.3A.1E  
(\* I told you that.)  
(Uribe-Etxebarria 1989:1)
- b. Nik hitz-egin dut (zu-re-kin) hor-taz.  
1sERG word-do UKAN.3A.1E (2s-GEN-WITH) that-ABOUT  
'I talked (with you) about that.' (G. Elordietta, pc)
- c. \* Emakumea-k amets hau amets egin du.  
woman-ERG dream this.ABS dream-do AUX.  
(‘The woman dreamed this dream.’)
- d. Emakumea-k dantza hau dantzatu du.  
woman-ERG dance this.ERG dance AUX  
'The woman danced this dance.'  
(Laka 1993:154, attributed to M. Uribe-Etxebarria)

Overt, Absolutive complements of these verbs are limited essentially to cognate objects<sup>28</sup>. I assume that the complement NP when there is no overt cognate object, of these verbs is a *null*, cognate object. Many of the verbs of the this class in Basque are verbs with both a “transitive” and “intransitive” use. As Basque is a pro-drop language, examples such as (55b) are therefore ambiguous in Basque, between a reading with a pronominal, unexpressed object corresponding to English “it” (55b') and a reading with a non-specific, unexpressed object, sort of “something for eating”<sup>29</sup>(55b'')

55. a. Jonak sagarra jaten du  
Jon-ERG apple.ABS eat [+trans]AUX.3A/3E  
'Jon ate the apple.'

<sup>28</sup> And sentential complements. For some speakers, demonstratives are also permitted, but I have not found a consistent set of judgements to form a reliable pattern, yet...

<sup>29</sup> See note 24, above.

- b. Jonək jəten du.  
Jon-ERG eat [+trans] ALX.3A/3E

b'. 'Jon ate it.'  
b''. 'Jon ate' [i.e. something for eating]

(Levin 1983:310)

For Basque, it is fairly clear that the putatively intransitive verbs which occur with Ergative subjects behave as transitive verbs with respect to a number of syntactic phenomena, supporting the approach advocated here.

For Hindi, the same is true. The apparently intransitive verbs which permit an Ergative subject are a class of verbs which allow cognate objects<sup>30</sup>. However, such cognate objects, which bear Absolutive case, are acceptable only when the subject is marked Ergative:

56. a. Anup-ne [kaafi-zorkii chiiNk] chiiNkii.  
Anoop-ERG very-loud sneeze.ABS sneezed  
'Anoop sneezed a very loud sneeze.'  
b. \* Anup [kaafi-zorkii chiiNk] chiiNkii.  
Anup.ABS very-loud sneeze.ABS sneezed

(U Lahiri, p.c.)

This seems to pattern with the availability of Absolutive demonstratives in Basque, the idea being that the cognate objects are the direct object of a transitive verb with an Ergative subject, thus they are not licensed with an intransitive clause as discerned by the Absolutive subject.

Similar arguments may be made from other languages as well. In Bandjalang (Australian New South Wales), relying on Austin (1982), we again find that a small class of apparently intransitive verbs requires Ergative subjects<sup>31</sup>. These verbs are all agentive and what he calls "semantically cognate object" verbs, recalling the similar classes in Basque and Hindi<sup>32</sup>, eg:

57. Mali-yu dandaygam-bu yartbi-mi.  
that-ERG old.man-ERG sing-PAST.DEF  
'That old man sang.'

(Austin 1982:38)

30 Uipal Lahiri points out, p.c. that the class of verbs with optionally Ergative subjects is actually quite small, perhaps restricted to a set of verbs of "noise-making": *bhoNke* 'bark', *chiiNkii* 'sneeze' ...  
31 Like many Australian languages, Bandjalang displays a pronoun/NP split in Ergativity. Thus pronouns display Nominative case marking, while NPs display Ergative case marking.  
32 The verbs in Bandjalang which take Ergative subjects are: *yartbi* 'sing', *ngartti* 'dance', *birtma* 'yaww', *wulbi* 'make noise', *jumma* 'smoke (cigarettes)', *banma* 'put on (clothing)', *jaiuba* 'urinate', *ginyjamma* 'defecate'.

That this class of verbs is syntactically transitive as well as morphologically, is evidenced by the fact that these verbs may undergo antipassivisation, a process restricted to transitive verbs by which the transitive subject becomes formally intransitive, and the direct object, if expressed, is marked obliquely.

58. Ngay gala juuma-le-ela.  
 1sNOM this.NOM smoke-AP-PRES  
 'I here am smoking (a cigarette).' (Austin 1982:38)

Data from a variety of constructions in a number of languages shows that (unergative) verbs occurring with Ergative subjects may fruitfully be analysed as transitive clauses on the surface. This supports the first part of the claim, and accounts for the occurrence of Ergative case and agreement, and in particular demonstrates that these constructions are not exceptions to the pattern of Ergative Case and Agreement given in (2).

### 3.3 Incorporating Inuit Intransitive

The final point to be considered before the analysis presented here can be considered plausible is an account of the languages in which no intransitive subjects, unaccusative or unergative, surface with Ergative case. At the beginning of this section, I suggested that this may be attributed to the process of Incorporation (i.e. à la Baker 1988). As discussed there, Hale & Keyser (1986,1991) suggest that this process is exemplified by unergative verbs in English. On their analysis, an unergative verb like *walk* is derived from a transitive structure by a process of incorporation, whereby (the head of) the underlying direct object adjoins to the head of the verb phrase, the meaning of the underlying structure something akin to "do/make a walk(ing action)", a view which has resurfaced periodically in the linguistic literature.

In Inuit, intransitive verbs, even unergative verbs, uniformly permit only Absolutive subjects. If this does result from overt incorporation, then, this is hardly surprising as all incorporation structures are formally intransitive in the language. As in many other languages, the case and agreement patterns in the following (West Greenlandic) examples are immutable:

59. a. Palasi niqu-tur-puq [incorporation]  
 minister.ABS meat-"eat"-[+trans].3sA  
 'The minister is eating/ate meat'
- contrast
- b. Palasi-p niqu niri-vaa [transitive]  
 minister-ERG apple.ABS eat-[+trans].3sA/3sE  
 'The minister is eating/ate the meat.' [Rischel 1971:231]

The potential objection to the hypothesis at hand is that it relies on incorporation being obligatory for unergatives. An often expressed view is that

That this class of verbs is syntactically transitive as well as morphologically, is evidenced by the fact that these verbs may undergo antipassivisation, a process restricted to transitive verbs by which the transitive subject becomes formally intransitive, and the direct object, if expressed, is marked obliquely.

58. Ngay gala juuma-le-ela.  
 1sNOM this.NOM smoke-AP-PRES  
 'I here am smoking (a cigarette).' (Austin 1982:38)

Data from a variety of constructions in a number of languages shows that (unergative) verbs occurring with Ergative subjects may fruitfully be analysed as transitive clauses on the surface. This supports the first part of the claim, and accounts for the occurrence of Ergative case and agreement, and in particular demonstrates that these constructions are not exceptions to the pattern of Ergative Case and Agreement given in (2).

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The potential objection to the hypothesis at hand is that it relies on incorporation being obligatory for unergatives. An often expressed view is that

incorporation is an optional process with semantic and discourse factors playing a role, pairs such as (59) being adduced in favour of this.

For Inuit, especially, along with the proliferation of words for snow, this "traditional wisdom" is likely based on a misinterpretation. Examining the transitive, non-incorporating example, (59b), we see that the verb for 'eat' is *niri-* [plus inflection]. In the incorporating example (59a), the stem glossed as 'eat' is *-inq-*. This is not an accident of the example, but is in fact the general case in Inuit. As Rischel (1971) and Sadock (1980, 1985, et seq) have pointed out, proponents of the 'optionality' view of incorporation would have to maintain that all the pairs of incorporating and non-incorporating stems were suppletive, with no morphological relationship to each other. Even harder to account for would be the fact that such "pairs" are not pairs at all in anything beyond a very rough semantic sense. Thus while *niri-* in (59b) clearly means 'eat', the uses of *-inq-* are much more general (Bergsland 1955: §52 glosses this as "use"). Ex. (60a) does not mean 'She is eating a parka', though it is perfectly grammatical with the meaning 'She is wearing a parka'.<sup>33</sup> Likewise, (60b) does not mean 'She is eating hands'. Again, this is not an accident of the specific examples, but representative of the Eskimo languages.

60. a. *akug-tur-inq* parka-TUQ[-trans].3SA  
           'She is wearing a parka.'  
           [Yup'ik, Jacobson 1984:576]  
       b. *as̥as̥-inq-puq* hand-TUQ[-trans.1SA]  
           'She is using her hands.'  
           [WG, Bergsland 1955:98]

The putative alternations in the Eskimo languages are neither morphologically nor semantically related in any regular fashion. The conclusion one is forced to is that they are simply different verbs. Some verbs in Inuit do not incorporate (e.g. *niri-* 'eat'), while others do (e.g. *-inq-* 'use, consume'). Note that all verbs which incorporate, do so obligatorily. The possible objection from optionality does not arise.

The conclusion of this section is that the idea that unergatives are underlyingly transitive is, if not robustly supported, at least not obviously falsified. Hale & Keyser (1986, et seq) have suggested that the apparent surface intransitivity of unergative predicates is derived by incorporation of the complement of the verb into the verb, perhaps at a level of Lexical Relational Structure, prior to D-structure. Extending this, I have suggested that this may be a point of

33 In some dialects of Yup'ik, the combination of *qayaq* 'kayak' + *tur-* (the cognate of the morpheme under discussion) has become lexicalised to mean 'to go seal-hunting' (Jacobson 1984:576). Interestingly, this seems to be undergoing a semantic shift, at least in General Central Yup'ik. Two younger informants, both native speakers, though who speak predominantly English now, both offered "I am eating kayaks" for *qayarturtina* (qayaq-TUQ[-trans].1SA), and one of these informants suggested that it was semantically incongruous with the noun *iti* 'tea', as one "does not chew tea". For these speakers, likely due to the influence of English, the verb has shifted to mean *eat*.



parameterisation among languages. In Nominative languages, the effects of such a parameter would not be readily apparent in the Case and Agreement patterns: as both A and S are Nominative, we cannot tell by a cursory examination whether a given predicate is transitive or intransitive on this basis. The parameter has much more readily observable consequences for Ergative languages. In languages like Basque, there is no incorporation in unergatives, hence they are formally transitive predicates from the view of Case Theory – the subject (apparently an S, though underlyingly an A) is Ergative. However, in languages like Inuit, there is incorporation in all unergative predicates, of the type proposed by Hale & Keyser. Hence, like other incorporation structures, the derived, intransitive subjects are Absolutive.

### Concluding Remarks

In this paper, I have addressed a number of issues which fall under the general rubric of Ergativity. In the first section, I proposed that those properties which are truly characteristic of Ergative systems (essentially only the Case and Agreement patterns), are derived from a simple parameter, the *OCP* which determines which of the two structural Cases must be realised when there is only one argument visible for Case Theory. The second section discusses phenomena which single out a class of “subjects” independent of Case and Agreement marking (i.e. S and A). I proposed that these derive from an interpretation of the Extended Projection Principle within the framework of Chomsky (1992). The theory independently requires that some argument raise to or through Spec,TP independent of Case-checking requirements. This position offers a natural characterisation of a “subject position”. The third section explored a difference between two types of Ergative languages, exemplified by Basque and the Eskimo languages, respectively. The difference in Case-marking of apparent (S) subjects of unergative verbs can be derived by independent parameterisation of the process of incorporation, if we adopt the position offered by Hale & Keyser and others, that unergative predicates are at some underlying level, two-place, i.e. transitive.

There does exist a phenomena of Ergativity as a system of Case and Agreement, hence languages may be said to be (minimally) either Ergative or Nominative. In my view, the difference is relatively superficial, resulting from a single parameter affecting NP-movement for Case in intransitive clauses. When the effects of this are accounted for, we see that the syntax of Ergative languages is not radically different from the syntax of Nominative languages. There are, to be sure, interesting differences between, say Inuktitut, Basque, English and Bandjalang, but most of these differences are independent of the Ergative or nominative character of each language.

This paper is preliminary. There remain a number of potential problems, and I have not attempted to survey all the various languages which have been claimed to be Ergative. Nonetheless, I hope that this paper has suggested some interesting directions to pursue in future work...

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