

FOUR-WAY CASE SYSTEMS: ERGATIVE, NOMINATIVE, OBJECTIVE AND ACCUSATIVE*

In the context of an analysis of the four-way Case system of Nez Perce, this paper presents evidence for three claims concerning Case theory. First, ergative is not a structural Case like nominative or accusative; instead, ergative is a lexical Case like the dative. Second, contrary to the usual assumption that UG allows for only one structural Case for objects, there are, in fact, two structural object Cases available in UG: one, termed 'objective Case' here, is assigned/checked in Spec Agr-O and is associated with object agreement, if the language has object agreement. There is a limit of one objective Case per clause. The other, termed 'accusative Case' here, is assigned/checked by V inside VP and is never associated with object agreement. There may be more than one structural accusative Case per clause. The third claim is that the following descriptive generalization holds universally: in a clause with a lexically Cased subject (e.g., ergative or dative) the highest object cannot have structural accusative Case (although that object can have objective Case). That generalization and the facts that motivated Burzio's (1986) generalization are manifestations of a broader generalization governing the maximum number of accusative Cases that a verb can assign.

0. INTRODUCTION

The development of a theory of Case that accounts for nominative-accusative systems (e.g., Chomsky 1981, 1992) has stimulated a renewed interest in the long-standing question of how ergative-absolutive Case patterns are related to nominative-accusative systems and how typologically diverse Case patterns can be accommodated in a universal theory of Case. There have been a number of recent attempts to incorporate ergative-absolutive patterns into standard Case theory, without increasing the inventory of Cases available in Universal Grammar (UG). These attempts have proposed that ergative and absolutive are simply alternate names for nominative and accusative (e.g., Marantz 1981, 1984; Levin 1983; Levin and Massam 1985; Chomsky 1992; Murasugi 1992; and Bobal

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jik 1993).¹ While such 'alternate name' approaches to ergativity are conceptually appealing, this paper will present data from more complex ergative systems such as Nez Perce and Kalkatungu that show that ergative is distinct from both nominative and accusative Cases, a position that is taken in recent work such as Bok-Bennema (1991), Campana (1992), and Bittner (1994).

As an alternative, this paper will present arguments for an even simpler and more conceptually appealing way to integrate ergative Case into Case theory. Case theory already predicts the existence of a Case whose properties are exactly those of the ergative Case. Case theory includes, in addition to its inventory of structural Cases, a series of lexical (also called *inherent* or *quirky*) Cases that are assigned at D structure in conjunction with θ -role assignment. Dative Case is a lexical Case associated with goals/experiencers and lexical accusative Case is associated with themes. Note, however, that there is a missing Case in this series – the lexical Case associated with agents. This paper will present both empirical and conceptual evidence that ergative is this missing lexical Case.²

We will see that ergatives behave exactly like a lexical Case associated with agents should behave, if we use the actual behavior and distribution of the dative Case as a model of what a lexical Case is like, rather than relying on a stereotypical impression of how lexical Cases behave. Although the correlation between ergative Case and the agent theta role is not perfect, it is as close as the correlation between dative and goals/experiencers is. We will also see that the fact that ergative Case is limited to transitive clauses in the classic type of ergative language, but not in the active type, is evidence for, rather than evidence against, treating ergative as a lexical Case.³ The reason is that languages that allow dative subjects can be divided into exactly the same two types as languages that allow

¹ In some of these 'alternate name' proposals, ergative = nominative and absolutive = accusative, while in others the alignment of Cases is reversed. Although these proposals differ in their technical details, they all require a syntactic parameter of ergativity to alter the association between arguments and Case positions in different languages. There is another proposal in the literature that ergative is simply another label for genitive (Johns 1992). These and other alternative analyses of ergativity will be discussed in section 4.

² The idea that ergative is a lexical/inherent Case has been suggested in a number of recent works including Mahajan (1989), Laughren (1989, 1992), Harbert and Toribio (1991), and Woolford (1993). To my knowledge, however, this is the first systematic attempt to present a range of evidence for this position and to explain why several potential objections to this view are not valid.

³ Active or active-stative languages are characterized by the way they mark intransitive subjects. Rather than marking all intransitive subjects in the same way, as most languages do, active languages mark agentive or volitional intransitive subjects in the same way as they mark transitive subjects, but mark other subjects differently. In an active-type ergative language, agentive intransitive subjects are marked with ergative Case while non-agentive

ergative subjects: one type allows lexically Cased subjects in intransitive clauses and the other type does not. Finally, we will see that ergative and dative subjects have the same effect on the Case marking of objects and that this effect is typical of lexical Cases, but not structural Cases.

As for the identity of absolutive Case, the parallel behavior of absolutive objects in ergative constructions and nominative objects in dative subject constructions strongly suggests that absolutive is simply another name for the nominative Case (e.g., Bittner 1994; Bok-Bennema 1991; Campana 1992; Harbert and Toribio 1991; Mahajan 1989; Marantz 1984; and Mura-sugi 1992). Nevertheless, not all ergative languages assign absolutive/nominative Case to their objects. Some ergative languages have what has been called a three-way or tripartite Case system, where intransitive subjects are nominative, transitive subjects are ergative, and objects get a third Case (Heath 1976; Comrie 1978, 1991; Goddard 1982; Falk 1992). In fact, some ergative languages even have a four-way Case system, where transitive clauses may have a nominative or an ergative subject and transitive objects may also be marked with two distinct Cases. Based on a detailed analysis of two languages with four-way Case systems, Nez Perce and Kalkatungu, this paper will argue that both of these object Cases are structural Cases.

The existence of two structural object Cases in UG is, in a sense, anticipated by recent developments in Case theory. In Chomsky (1981), structural Case is assigned to objects inside the VP. Subsequent work on agreement, such as Kayne (1989) and Mahajan (1990), lead Chomsky (1992) to add a structural Case position for objects (Spec, Agr-O), associated with object agreement, paralleling the structural Case for subjects (Spec, Agr-S), associated with subject agreement.⁴ Although Mahajan (1990) argues that there are two structurally Cased object positions in Hindi (one in Spec, Agr-O and one inside VP), Chomsky (1992) suggests replacing the earlier VP-internal object Case position with the Spec, Agr-O position. This paper will present arguments that both structural Case

intransitive subjects are marked nominative. The marking pattern in active languages is also sometimes referred to as a split-intransitive system. Not all languages that have been described as active or split-intransitive in the typological literature are necessarily ergative, however. It is logically possible, and consistent with the theory of Case presented here, that some split-intransitive languages mark agent subjects with nominative Case and use a lexical Case such as the dative to mark non-agentive subjects. See Mithun (1991) for a detailed look at a range of active languages.

⁴ Chomsky (1992) replaces the notion of Case assignment with Case checking. The question of whether the analysis presented in this paper is compatible with Case checking will not be explored here.

positions for objects must be retained in the theory because there are languages such as Nez Perce and Kalkatungu that make use of both.⁵

The inventory of core Cases in UG thus argued for in this paper is summarized below (ignoring the genitive):

- (1) Structural Cases
 - a. Assigned/checked by Functional Heads
 - i. *nominative* – assigned/checked by Agr-S
(may be associated with subject agreement)
 - ii. *objective* – assigned/checked by Agr-O
(may be associated with object agreement)
 - b. Assigned/checked by Lexical Heads
accusative – assigned/checked by V, P
- (2) Lexical (Inherent, Quirky) Cases [not an exhaustive list]
 - a. *ergative* (associated with agents)
 - b. *dative* (associated with goals, experiencers)
 - c. *accusative* (associated with themes)⁶

This paper is organized as follows. The main body (sections 1 and 2) is an analysis of Nez Perce, an ergative language with a four-way Case system, based on data from Rude (1982, 1985, 1986a, 1988, 1991). It will be shown that the complexities of this four-way Case system, and its interaction with a two-way agreement system, can be accounted for in a straightforward manner within standard Case theory, with the two additions to the Case inventory proposed above: that ergative is a lexical Case and that there are two structural object Cases, one inside and one outside the VP.

With respect to the question of why the subject and object Cases are paired in Nez Perce (ergative-objective and nominative-accusative, but *ergative-accusative and *nominative-objective), it will be argued here that ergative-accusative patterns are universally prohibited by the same principle that prevents dative-accusative patterns. The other non-occurring

⁵ The proposal that there are two structural object Cases available in UG is also supported by data from languages such as Turkish and Palauan, where specific and non-specific objects get different Cases, occupy different positions, and/or differentially trigger object agreement (see Diesing 1992, de Hoop 1992, and Woolford 1995).

⁶ It is unfortunate that we do not have a different name for the lexical Case associated with themes. The label 'lexical accusative' gives the false impression that every structural Case should have a lexical equivalent and vice versa.

pairing in Nez Perce, nominative-objective, is allowed in other languages and it is argued to occur in languages where accusative Case assignment is optional.

Section 3 is an examination of two Australian languages with Case systems quite similar to Nez Perce. Thangu (Schebeck 1976) has a three-way Case system, with nominative, ergative, and objective, but not accusative. Kalkatungu (Blake 1982) has what initially appears to be a mismatch between a classic ergative-absolutive Case system and a nominative-accusative agreement system. Blake shows, however, that absolutive is not one Case, but two distinct abstract Cases which happen to look alike (but which can be distinguished by the agreement pattern), giving Kalkatungu at least a three way Case system. It is shown here that Kalkatungu actually has a four-way Case system, virtually identical to that of Nez Perce, except that all three of the structural Cases in Kalkatungu happen to be morphologically unmarked (and thus look alike on the surface). The typological differences between the Case systems of Nez Perce, Thangu, and Kalkatungu are shown to follow if these languages differ only in assigning ergative and dative Cases obligatorily or optionally. Section 4 is a brief review of previous approaches to ergativity, and section 5 is the conclusion.

1. THE FOUR-WAY CASE SYSTEM OF NEZ PERCE

Nez Perce is a Sahaptian language spoken in the northwestern U.S. The Case and agreement facts of Nez Perce are described in a series of articles by Rude (1982, 1985, 1986a, 1988, and 1991). This section will (i) present the Case facts of Nez Perce; (ii) analyze these data to the extent possible with existing theory; and then (iii) motivate and incorporate the two innovations that are needed to complete this analysis: the treatment of ergative as a lexical Case and the addition of a second structural object Case to the inventory available in UG.

Nez Perce uses two distinct Cases for subjects (nominative and ergative) and two for direct objects (objective and accusative).⁷ Nominative Case appears on intransitive subjects, as in (3):

⁷ The Case labels of ergative and objective correspond to Rude's labels. Rude does not gloss nominative or accusative Case because these are not morphologically marked. Nominative and accusative can be distinguished from each other by the fact that nominatives trigger subject agreement while accusatives trigger no agreement at all.

- (3) 'ipí + \emptyset hi + kú + yc.
he + NOM 3 + go + ASP

He went.

(Rude 1982, (19))

Transitive examples manifest one of two Case patterns: nominative-accusative or ergative-objective. The nominative-accusative pattern is shown in (4). Neither the nominative subject NP nor the accusative object NP has morphologically overt Case and only the nominative triggers agreement:⁸

- (4) Nominative-Accusative
 Háama + \emptyset hi + 'wí + ye wewúkiye + \emptyset .
man + NOM 3 + shoot + ASP elk + ACC

The man shot an elk.

(Rude 1988, (31))

The ergative-objective pattern shown in (5) has an ergative subject (marked with *-nm* or *-nim*), which triggers subject agreement, and a direct object marked with objective Case (*-ne*), which triggers object agreement:⁹

- (5) Ergative-Objective
 Háama + nm pée + 'wí + ye wewúkiye + ne.
man + ERG 3/3 + shoot + ASP elk + OBJ

The man shot an elk.

(Rude 1988, (30))

Thus it is clear from the Case morphology that ergative is distinct from both nominative and accusative, contra the assumption in the recent work cited in the introduction to this paper.

The other two logically possible combinations of subject and object

⁸ For theory-internal reasons connected with the relational grammar approach used in Rude (1982), the nominative-accusative construction is treated there as an antipassive. However, there is no antipassive morphology on the verb, nor any oblique Case morphology on the object, nor any other evidence that the nominative-accusative construction is an antipassive.

⁹ The agreement morphemes are portmanteau forms (e.g., the gloss 3/3 indicates a third person subject and a third person object). See section 2 for a more complete description of the agreement system of Nez Perce and the features encoded in these morphemes.

Contrary to the situation in more familiar ergative languages such as Hindi, there is no tense or aspectual difference associated with the choice between the nominative-accusative and ergative-objective Case patterns. Rude (1982, 1986a) shows that there is a difference in the topicality of the object, so that objective objects are generally of higher topicality than accusative objects. An object of high topicality is one that is established in current discourse. To the extent that high topicality is similar to the notion of specificity and reflected in syntax in the same manner, the proposal developed below is consistent with Diesing's (1992) proposal that specific objects move out of the VP while non-specific objects remain in the VP.

Case are not possible in Nez Perce: *nominative-objective and *ergative-accusative.

Ditransitive constructions manifest the same two Case patterns, with the addition of an accusative for the second object. In the nominative-accusative-accusative pattern, the nominative subject triggers subject agreement but neither object triggers agreement:

- (6) Nominative-Accusative-Accusative
 ʔáayat- \emptyset hi-ʔni-ye tíim'es- \emptyset háama- \emptyset .
woman-NOM 3-give-past book-ACC man/husband-ACC

The woman gave her husband a book.

(Rude, personal communication)

The ergative-objective-accusative pattern behaves like the transitive ergative-objective pattern shown above. The ergative subject triggers subject agreement, the goal object receives objective Case and triggers object agreement. The theme object receives accusative Case and triggers no agreement:

- (7) Ergative-Objective-Accusative
 ʔáayato-m péé-ʔni-ye tíim'es- \emptyset háama-na.
woman-ERG 3/3-give-past book-ACC man-OBJ

The woman gave the man a book.

(Rude, personal communication)

It is not possible to have more than one objective Case in a clause: *ergative-objective-objective. However, as in many familiar languages, it is possible to mark the goal with dative Case. When that happens, the theme gets objective Case and triggers object agreement, as if the goal were not present:

- (8) Ergative-Objective-Dative
 ʔáayato m péé ʔni ye haswaláya-na háama-na.
woman-ERG 3/3-give-past slave-OBJ man-DAT

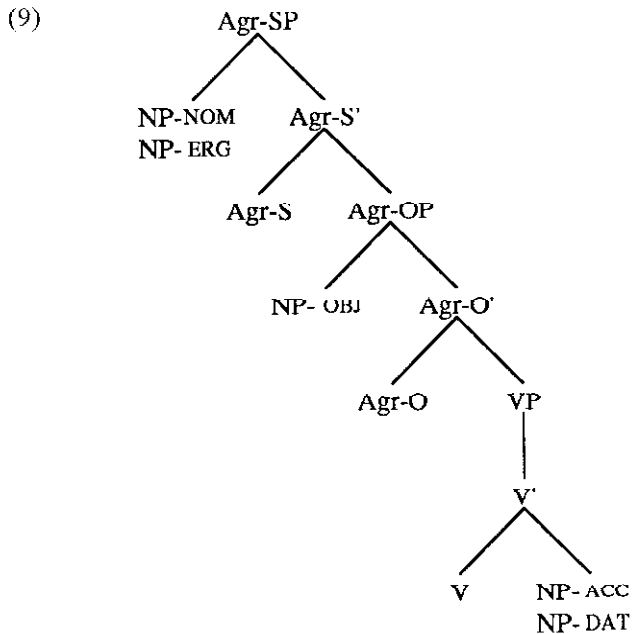
The woman gave the slave to the man.

(Rude, personal communication)

1.1. A Preliminary Analysis of Nez Perce

Let us begin the analysis of the Nez Perce system by associating its Cases with positions in the syntactic structure, with the help of the theory of agreement outlined in Chomsky (1992). Since nominative and ergative

subjects both trigger subject agreement, both types of subjects must move to Spec, Agr-S by the level of Logical form (LF), for agreement checking. Since objective objects trigger object agreement, objective objects must move to Spec, Agr-O by LF.¹⁰ The fact that accusative and dative objects trigger no agreement at all suggests that these objects remain in the VP. The tree in (9) summarizes the structural positions associated with NP's with these Nez Perce Cases under the proposed account (ignoring the effects of scrambling).¹¹



The structure in (9), which is motivated by the agreement pattern of Nez Perce, also gives us a start towards an account of the Case system. Nominative Case is assigned/checked in a Spec-head relation with Agr-S and objective Case is assigned/checked in a Spec-head relationship with

¹⁰ The theory of agreement in Chomsky (1992) does not require agreement morphemes to be generated in functional nodes. It is possible for fully formed verbs, complete with agreement morphemes, to be generated under the V node. The agreement checking takes place as the verb raises by head to head movement to Agr-O and Agr-S, which occurs at LF, if not before.

¹¹ Other nodes, such as Tense, have been omitted from the tree in (9) for simplicity. The word order of Nez Perce is extremely free (Rude 1982) and thus cannot be used to provide additional evidence for these structural relations. Moreover, if Case and agreement checking is not done until LF, as suggested in Chomsky (1992), the surface positions of subject and object need not conform to those indicated in this tree.

Agr O, as in Chomsky (1992). Accusative and dative Cases are assigned/checked by the verb.

This leaves the ergative Case. Section 1.2 below presents arguments that ergative is a lexical/inherent Case, assigned by the verb in association with theta role assignment, as suggested in Mahajan (1989), Laughren (1989, 1992), Harbert and Toribio (1991), and Bhatt (1994).¹² Lexical Case is retained when the subject moves to the external subject position. That movement is most likely due to the Extended Projection Principle (EPP), which requires the external subject position to be filled.¹³

Determining a position and Case assigner/checker for each Case is only part of the analysis of the four-way system of Nez Perce. We must also answer the question of why only certain combinations of subject and object Case are allowed, while other logically possible Case patterns are not. This aspect of the analysis is presented in sections 1.3 and 1.4, where it is argued that these patterns follow from universals of Case theory, interacting with the fact that ergative is a lexical Case.

1.2. *Ergative: a Lexical Case*

Treating ergative Case as a lexical Case is conceptually appealing because it allows us to integrate the ergative into Case theory without complicating the theory in any way. The notion of lexical Case already exists in Case theory and there is a gap in the current inventory of lexical Cases available in UG, because there is no lexical Case associated with agents. The ergative Case fills that gap.

¹² Several other researchers have expressed ideas that are very close to the view that ergative is a lexical Case. For example, Davison (1988) notes that verbs must be lexically marked as ergative subject verbs and she calls ergative an 'oblique, postpositional Case'. Falk (1991, 1992) notes that whether a verb assigns lexical Case or not depends on properties of the verb and he links the assignment of ergative Case to the assignment of the external θ -role. Massam (1994) argues that ergative in Niuean is not a structural Case, but a morphological Case assigned to Spec VP.

¹³ The forced movement of ergative subjects to the external subject position is paralleled by the forced movement of dative subjects to the external subject position in Icelandic (Andrews 1976; Zaenen, Maling and Thráinsson 1985). Thus, the behavior of ergative subjects parallels the behavior of dative subjects in this respect as well. However, lexically Cased subjects do not always move out of the VP (see section 1.2.1).

There are a number of proposals in the literature that try to maintain the standard idea that all NP movement is necessarily Case driven, by proposing that NPs with lexical Case also need structural Case (e.g., Cowper 1988; Freidin and Sprouse 1991; Harbert and Toribio 1991). Under that view, a dative subject in Icelandic or an ergative subject in Nez Perce would be forced to move to the external subject position in order to get nominative Case. Other scholars such as Harley (1995) argue for the position assumed here, that what drives the movement of lexically Cased subjects is the EPP.

To show that ergative is a lexical Case, we must show that it is theta-related; that is, that a verb cannot assign lexical Case to an NP unless that verb also assigns a θ -role to that NP (Chomsky 1986, p. 194). There has been a tendency, however, to assume that the association between particular lexical Cases and particular θ -roles is much stricter than it actually is. It is well known that ergative Case is associated with the agent θ -role, but that this association is not perfect (e.g., Comrie 1978; Kachru 1987; Blake 1994). Based on this fact, one can argue against the idea that ergative Case is some sort of direct marker of the presence of an agent (Comrie 1978); nevertheless, the correlation between ergative Case and agents is strong enough to justify the view that ergative is the lexical Case associated with agents. When we examine the actual degree of correlation between the dative Case and the goal/experiencer θ -role, we find that not all, nor only, NPs with this θ -role get marked with the dative. Although the class of verbs that mark their subjects with lexical dative Case is similar across languages, the membership in this verb class is not entirely predictable. For example, although Hindi and Malayalam both mark experiencer subjects with lexical dative Case, there are verbs such as 'know' that take a dative subject in Malayalam, but not in Hindi (Verma and Mohanan 1990). Although lexical Cases such as dative usually mark predictable θ -roles, there is enough idiosyncratic behavior involved to conclude that a verb's ability to assign a lexical Case to one of its arguments has to be specified in that verb's lexical entry (Mohan 1982; Zaenen and Maling 1984; Zaenen, Maling, and Thráinsson 1985).

Some scholars (e.g., Bok-Bennema 1991) accept the idea that there is an association between ergative Case and agents in the active type of ergative language where even intransitive agent subjects are marked with ergative Case, e.g., Basque (Levin 1989), Lhasa Tibetan (DeLancey 1985), but reject this idea for the classic type of ergative language where only transitive subjects get ergative Case, e.g., Inuit or Dyirbal. There is a feeling that if the ergative Case were really a lexical Case associated with agents, it would not be limited to transitive clauses. However, that is not a valid objection because this kind of typological split is, in fact, typical of a lexical Case. When we examine languages that allow dative subjects, we find that 'dative' languages divide into the same two types: those that allow dative subjects in intransitive clauses (such as Icelandic (Levin and Simpson 1981) and Malayalam (Mohan 1990)) and those that allow dative subjects only in transitive clauses (e.g., Japanese (Shibatani 1977) and Tabassaran (Kibrik 1985)). The fact that ergative languages divide into the same two types as 'dative' languages is

another parallel between ergative and dative, which lends further support to the idea that ergative is a lexical Case like the dative.¹⁴

Another reason that scholars have tended to assume that ergative must be a structural Case in classic ergative languages is the common assumption that ergative marks all transitive subjects, regardless of their thematic role. However, when we examine the Case marking patterns of ergative languages in more detail, we find that non-agentive subjects are often not marked with ergative Case. Instead non-agentive subjects may get dative Case (e.g., Hindi) or they may occur in intransitive constructions with a nominative subject and a lexically Cased or oblique object (e.g., Samoan (Mosel 1991)). According to Blake (1994), "there is often not much conflation of other roles with the agent" with respect to what is marked ergative, "often only a conflation of the perceiver of a few verbs like SEE/LOOK AT and HEAR/LISTEN TO" (p. 137).

To summarize, the association between the ergative Case and the agent θ -role is as strong as we would expect the association between a lexical Case and a particular thematic role to be. Let us now turn to other types of evidence that ergative is a lexical Case.

The striking similarity between ergative subject constructions and dative subject constructions has led a number of researchers to the conclusion that ergative is a lexical Case (e.g., Mahajan 1989; Laughren 1989, 1992; Harbert and Toribio 1991). Both ergative subjects and dative subjects typically occur with nominative objects and are impossible with structural accusative (first) objects. The fact that dative subjects cannot occur with structural accusative objects is one of the primary motivations for the Case assignment mechanism proposed in Yip, Maling, and Jackendoff (1987).¹⁵

¹⁴ The only proposal that I am aware of for why dative is prohibited in intransitive clauses is put forth in Shibatani (1977) for Japanese; but, unfortunately, that account does not extend to all languages that prohibit lexically Cased intransitive subjects. Shibatani attributes the ungrammaticality of intransitive clauses with dative subjects to a requirement that all clauses have a nominative Case. However, many languages that prohibit dative and/or ergative subjects in intransitive clauses allow them in transitive clauses, even when there is no nominative or even any other structural Case present. For example, both Walmatjari (Hudson 1978) and Tabassaran (Kibrik 1985) prohibit ergative and dative intransitive subjects, yet both languages allow transitive clauses with an ergative-dative pattern. Thus, no account that postulates an obligatory nominative, or even an obligatory structural Case, will work.

¹⁵ In Yip, Maling, and Jackendoff's (1987) account, ergative constructions require setting a parameter in the direction of mapping, but that parameter can be eliminated if ergative is a lexical Case like the dative.

The generalization that an ergative subject cannot be followed by a structural accusative object is noted in Bok-Bennema and Gross (1984), Bok-Bennema (1991), Harbert and Toribio (1991), Mahajan (1993), and Bittner (1994).

While nominative subjects occur with structural accusative objects, as in the Icelandic example in (10a), a dative subject cannot occur with a structural accusative object, as we see in (10b).¹⁶ Instead, the dative subject occurs with a nominative object:

- (10) Icelandic
 a. Konan þýddi bókina.
woman-NOM translated book-ACC
 The woman translated the book.
 (Yip, Maling, and Jackendoff 1987, p. 234)

¹⁶ Yip, Maling, and Jackendoff (1987, p. 232) argue that superficial exceptions to this generalization in Icelandic, such as the example below, which have a dative-accusative Case pattern, involve lexical rather than structural accusative Case:

- (i) Mér vantar hníf.
me-DAT lacks knife-ACC

One argument for this is the fact that when the verb occurs without its experiencer subject, the theme retains its (lexical) accusative Case, even though it is now the subject:

- (ii) Peningana vantar.
the.money-ACC is.lacking

Faroese also initially appears to present counterexamples to the claim that sentences with a dative subject cannot have a structural accusative object. Although related to Icelandic, Faroese differs from Icelandic in that most verbs that take the dative-nominative pattern in Icelandic appear with what is labeled in the literature as a dative-accusative pattern in Faroese:

- (iii) Mær líkar henda filmin.
me-DAT likes this film-ACC
 I like this film. (Barnes 1986, (12))

Moreover, there is evidence that the Case labeled accusative in Faroese is structural, rather than lexical, because it can be assigned by a matrix verb to an embedded subject in ECM constructions. If the Case in (iii) is really structural accusative Case, then we must conclude that the *Dat-Acc generalization is not universal. However, this Case may actually be objective (the Case assigned/checked in Spec, Agr-O) rather than accusative (the Case assigned by V inside VP). If so, then Faroese is not a counterexample to the generalization; rather, Faroese is like Nez Perce in lacking nominative objects and marking objects that follow lexically Cased subjects with objective Case.

Two other languages that are described as allowing dative-accusative patterns are Russian (Babby 1991) and Sinhala (Gair 1990). No attempt will be made to analyze either of these very complex Case systems here, but in general, languages reporting dative-accusative patterns will constitute counterexamples to the generalization in question only if the Case labeled accusative is neither a lexical Case nor structural objective Case. If there are genuine counterexamples, this may indicate that the principle behind this generalization is violable in the sense of Optimality Theory (Prince and Smolensky 1993), so that it does not appear to apply when it conflicts with other more highly ranked principles.

- b. *Baṁinū batnaḍi vcikin.*
*child-DAT recovered-from disease-NOM (*ACC)*

The child recovered from the disease.

(Yip, Maling, and Jackendoff 1987, p. 223)

We see the same pattern in both dative and ergative subject constructions in Hindi (Mahajan 1989, 1990, 1991). As in Icelandic, there are nominative-accusative constructions where the nominative triggers agreement and the object cannot:

- (11) Hindi
 Raam rotii khaataa
Ram(masc)-NOM bread(fem)-ACC eat(imp, masc)
 thaa.
be(past, masc)
 Ram (habitually) ate bread. (Mahajan 1989, (5))

But when the subject is either dative or ergative, the object becomes nominative and triggers agreement:¹⁷

- (12) Hindi
 Siitaa-ko larke pasand the.
Sita-DAT boys-NOM like be-past(plural)
 Sita likes the boys. (Mahajan 1991, (7))
- (13) Raam-ne rotii khaayii thii.
Ram-ERG bread(fem)-NOM eat(perf, fem) be(past, fem)
 Ram had eaten bread. (Mahajan 1990, p. 73)

If the ungrammaticality of a structural accusative object in a dative subject construction is due to the fact that dative is a lexical Case (as argued in Yip, Maling and Jackendoff 1987 and Woolford 1993), then this parallelism between dative and ergative subject constructions is further evidence that ergative is a lexical Case. (Exactly why constructions with a lexically

¹⁷ Alternatively, the object may be marked with *-ko*, if it is specific. If *-ko* were accusative Case, as it is traditionally labeled, and structural rather than lexical accusative, then sentences with a dative subject and a *-ko* marked object would be counterexamples to the generalization that dative subjects are not followed by structural accusative objects. However, if *-ko* is a lexical Case, as argued in Mahajan (1990), or objective Case, these would not be counterexamples.

Cascd subject believe as they do is an interesting question that will be addressed later in this paper.)¹⁸

Let us now consider two additional phenomena that might make one hesitate to accept the idea that ergative is a lexical Case: syntactic ergativity and split ergativity.

1.2.1. *Syntactic Ergativity*

The notion of syntactic ergativity goes back at least to Dixon (1972, 1979). Dixon distinguishes 'morphological ergativity', which involves only morphological Case marking, from 'syntactic ergativity'. A language is classified as syntactically ergative if it has syntactic rules that refer to or apply to ergative NPs or absolutive NPs. There is a general assumption in the typological literature that languages with syntactic ergativity are ergative in a deeper, more serious way – that their syntax is radically different from that of nominative-accusative languages. One might think that the claim that is being put forth in this paper (that what makes a language ergative is simply the ability of its verbs to assign a lexical/inherent Case associated with agents) could be compatible only with morphological ergativity – that is, ergativity confined to the Case marking pattern. However, that is not so. In fact, treating ergative as a lexical Case actually opens up new possibilities for explaining instances of syntactic ergativity, because it is well-known that NPs with lexical/inherent Case are syntactically 'inert' in many circumstances.

For example, if we examine the pattern of which objects can passivize in a language like German, we find something that looks very much like syntactic ergativity. In contrast to the pattern that we find in English, where only the first object passivizes, what we find in German is that only the accusative object passivizes, regardless of whether it is the first or second object (goal or theme):¹⁹

- (14)a. The girl gave the boy a book.
 b. The boy was given a book by a girl.

¹⁸ Note that the impossibility of a structural accusative object in a dative subject construction cannot be attributed to a requirement that all sentences have a nominative Case (which works well for Japanese (Shibatani 1977)), because Icelandic has no such requirement. Icelandic allows intransitive sentences with a dative subject and no nominative:

(i) Bátnum hvolfdi.
boat-Dat capsized

The boat capsized.

(Levin and Simpson 1981, (1b))

¹⁹ For a more complete discussion of the differences between the German and English passive constructions, see Woolford (1993).

- c. *The book was given the boy by the girl.²⁰
- (15)a. Das Mädchen schenkte dem Jungen ein Buch.
the girl/NOM gave the boy/DAT a book/ACC
 The girl gave the boy a book.
- b. *Der Junge wurde von dem Mädchen ein Buch
the boy/NOM was by the girl a book/ACC
 geschenkt.
given
 The boy was given a book by the girl.
- c. Ein Buch wurde dem Jungen von dem Mädchen
a book/NOM was the boy/DAT by the girl
 geschenkt.
given
 A book was given to the boy by the girl.

(Wilkinson 1983, (2))

The German pattern is strikingly like a typical syntactically ergative pattern. The syntactic process applies only to an NP with a particular Case, regardless of its syntactic position. However, no one has postulated that German is 'syntactically dative'. Instead, the answer is to be found in the fact that dative is a lexical/inherent Case and only structurally Cased objects 'passivize'. We may be able to explain many instances of syntactic ergativity in a similar way if the syntactic process involved applies only to structurally Cased NPs. That would produce a pattern in which the syntactic process applies only to absolutes and not to ergative NPs.

Other instances of syntactic ergativity may have a structural basis. Bittner and Hale (1996b) suggest that languages differ with respect to whether the nominative (absolute) NP moves out of the VP or remains in its base position. They argue that Dyirbal is syntactically ergative because *nominatives move out of VP, while ergatives remain inside the VP*. As a result, the nominative (absolute) behaves like a subject, because it is in a syntactic subject position, while the ergative NP is not. We might also expect differences among ergative languages depending on whether or not the ergative NP moves out of the VP. If the ergative NP remains in the

²⁰ The example in (14c) is grammatical in some dialects of English. See Woolford (1993) for an account of the relevant dialect differences.

VP, as Bittner and Hale suggest for Dyrirbal, it should have fewer subject properties than an ergative that moves to the external subject position and triggers subject agreement, as in Nez Perce. A difference of this sort can be found in the behavior and position of datives in Icelandic and German. Dative subjects are forced to move to the external subject position in Icelandic, but apparently not in German, and consequently, dative subjects in Icelandic have subject properties that datives in German lack (Cole et al. 1980; Zaenen and Maling 1983).

Thus, without actually providing accounts of the various instances of syntactic ergativity reported in the literature, this section has suggested several possible approaches to syntactic ergativity which are either compatible with, or actually depend upon, the idea that ergative is a lexical Case.

1.2.2. *Split Ergativity*

Does split ergativity present any problems for the idea that ergative is a lexical Case? To answer this question, let us consider some specific types of ergative splits.

Two types of ergative splits occur in Nez Perce. First, there is a split between the Case system and the agreement system. The Case system is ergative while the agreement system operates on a 'nominative-accusative' pattern. In the analysis of Nez Perce presented here, such a split between the Case and agreement systems presents no problem for the idea that ergative is a lexical Case. The Case system of Nez Perce includes two lexical Cases, ergative and dative, whereas the agreement system is purely structural, associated with the positions of Spec, Agr-S and Spec, Agr-O.²¹

A second way that Nez Perce qualifies as a split ergative language involves only the Case system. The Nez Perce Case system could be called a split system because it manifests both ergative-objective and nominative-accusative Case patterns. Under the analysis of Nez Perce presented here,

²¹ In Nez Perce, agreement is purely structural: ergative subjects trigger agreement simply because they are forced to move to the subject agreement position by the Extended Projection Principle. If Nez Perce had dative subjects, these would probably trigger subject agreement also. This brings up the question of why ergative and dative subjects do not trigger subject agreement in more familiar languages such as Hindi and Icelandic, where lexically Cased subjects also move to Spec Agr-S. There appears to be a generalization such that languages that allow nominative objects (such as Icelandic and Hindi) do not allow lexically Cased subjects to agree, even in intransitive constructions where no nominative object is present. Lexically Cased subjects appear to be able to agree only in languages where nominative Case and subject agreement are limited to Spec Agr-S and nominative objects are not possible.

this also presents no problem for the idea that ergative is a lexical Case, the claim is simply that verbs that can assign a lexical Case do so optionally in Nez Perce (see section 1.3.1.1).

Many familiar ergative languages limit ergative Case to a particular aspect, such as the perfective in Hindi. We know that there is no universal connection between perfective aspect and ergative Case because many ergative languages, such as Nez Perce, are not split with respect to aspect. Even in Hindi, the perfective aspect cannot be said to assign ergative Case because perfective aspect is only necessary but not sufficient for the occurrence of ergative Case. Some verbs, e.g. 'buy', never take an ergative subject, even in transitive perfective constructions (Comrie 1984, p. 858). Such lexical exceptions support the idea that the ability to assign lexical ergative Case is part of a verb's lexical entry.²²

Another type of split ergativity reported in the literature involves splits along the dimension of person. In Dyirbal, for example, first and second person pronouns show a nominative-accusative Case pattern, whereas the third person pattern is ergative. However, Goddard (1982) and Comrie (1991) argue convincingly that the Dyirbal person split is not deep; instead the first and second person pronouns simply do not show a morphological distinction between nominative and ergative forms (while the third person forms do not morphologically indicate the difference between the two structural Cases, nominative and objective). Evidence for Goddard and Comrie's view is the fact that pronouns behave as if they have nominative and ergative abstract Case and, in fact, *Wh* pronouns overtly show a three-way Case distinction (Dixon 1994, p. 85). If all reported instances of person splits with respect to ergativity turn out to involve abstract Case distinctions that do not always show up in the morphology, then there is no problem. If there are real person splits in the sense of marking different persons with different abstract Cases, then we want to know whether such splits involve only ergatives or whether they are seen with other lexical Cases, such as the dative. This question remains open at this point. Since we do not yet have a theory of person splits that would rule out the possibility that lexical Cases could be involved in such splits, we have no principled reason to rule out the possibility that ergative is a lexical Case.

²² It is widely believed that there is a historical explanation for the association between ergative Case and the perfective aspect in languages like Hindi, related to the fact that the ergative construction evolved from a passive construction in those languages (e.g., Allen 1964; Anderson 1977, 1988; Comrie 1978).

1.2.3. *Summary*

This section has shown that there is good evidence for the idea that ergative is a lexical Case associated with agents. We have seen that ergative Case is as closely associated with the agent θ -role as the dative Case is with the experiencer/goal role(s). In addition, we have seen that there are striking parallels between ergative and dative subject constructions. The two types of ergative languages (those that allow and those that prohibit ergative subjects in intransitive clauses) are paralleled by two types of 'dative' languages (those that allow and those that prohibit dative subjects in intransitive clauses). Moreover, neither ergative nor dative subject constructions allow a structural accusative object.

The view that ergative is a lexical Case has the advantage of simplicity, since Case theory already predicts the existence of a lexical Case associated with agents. Thus, no new Case mechanism needs to be added to the theory to assign/check ergative Case. Finally, this section has shown that phenomena such as syntactic ergativity and split ergativity do not constitute evidence against the idea that ergative is a lexical Case. Now let us return to the analysis of the Nez Perce Case system.

1.3. *Nez Perce Case Patterns*

Section 1.1 established syntactic positions for the two subject Cases (nominative and ergative) and the two object Cases (objective and accusative) of Nez Perce. This section will address the question of why only certain combinations of these subject and object Cases are allowed. The goal of this section will be to show how the complex distribution of Case patterns in Nez Perce follows from universal aspects of Case theory, combined with only minimal language-specific information.

We will begin with the transitive Case patterns, postponing discussion of ditransitives and intransitives.

1.3.1. *Transitive Case Patterns*

In Nez Perce, if the subject is ergative, the object must be objective, not accusative. If the subject is nominative, the object must be accusative, not objective:

- (16) Transitive Case Patterns in Nez Perce
 - A. Occurring Patterns
 - 1. Nominative Accusative
 - 2. Ergative Objective

B. Prohibited Patterns

1. *Nominative Objective
2. *Ergative Accusative

Why should the subject and object Cases be paired in this manner? The answer to this question can be summarized as follows. When a verb marks its subject with a lexical Case, such as ergative, that verb cannot assign structural accusative Case to its object. This is a universal generalization, introduced above in section 1.2 and discussed in more detail in the sections that follow. Because the object is denied structural accusative Case, it must get Case outside the VP. In Nez Perce, such objects move to Spec, Agr-O where they get objective Case and trigger object agreement. The result is an ergative-objective construction.

In contrast, nothing blocks the assignment of structural accusative Case in nominative-accusative constructions. Thus, when the subject is nominative, the object gets accusative Case inside the VP and is thus not free to move to Spec, Agr-O for objective Case.

Let us examine these two transitive constructions in more detail.

1.3.1.1. *Ergative-Objective Constructions*

Nez Perce verbs can appear with either a nominative or an ergative subject in transitive clauses. I propose that Nez Perce verbs optionally mark their subjects with lexical ergative Case:²³

- (17) verb < A, T >
 |
 (crg)

If the option of assigning ergative Case to the subject is selected, the verb assigns that lexical Case at D-Structure, before the subject moves out of the VP (to obey the EPP).

We discussed above, in section 1.2, the effect that a lexically Cased subject has on the Case of the object. We saw that dative constructions in Icelandic and dative and ergative constructions in Hindi never take structural accusative objects. While such constructions in Icelandic and

²³ As we will see in section 3, one source of diversity within ergative languages stems from the fact that ergative is obligatorily assigned in some languages, but only optionally assigned in others. Languages with dative subjects also differ in a parallel fashion. In Icelandic, verbs that take dative subjects do so obligatorily, whereas in Japanese, verbs that take dative subjects may also appear with nominative subjects. Although ergative Case assignment is marked as optional in the verb's lexical entry, other factors such as the topicality of the object favor one Case pattern or the other (see Rude 1982, 1986a, 1988). In that sense, ergative assignment is not purely optional.

Hindi generally have nominative objects, as we saw, several different Cases can follow an ergative subject in different constructions in different languages:²⁴

- (18) Cross-Linguistic Ergative Patterns:
- a. Ergative – Nominative
 - b. Ergative – Dative
 - c. Ergative – Objective
 - d. *Ergative – Structural Accusative

Thus one cannot predict exactly what object Case will appear with an ergative subject; one can only be sure it will not be structural accusative:

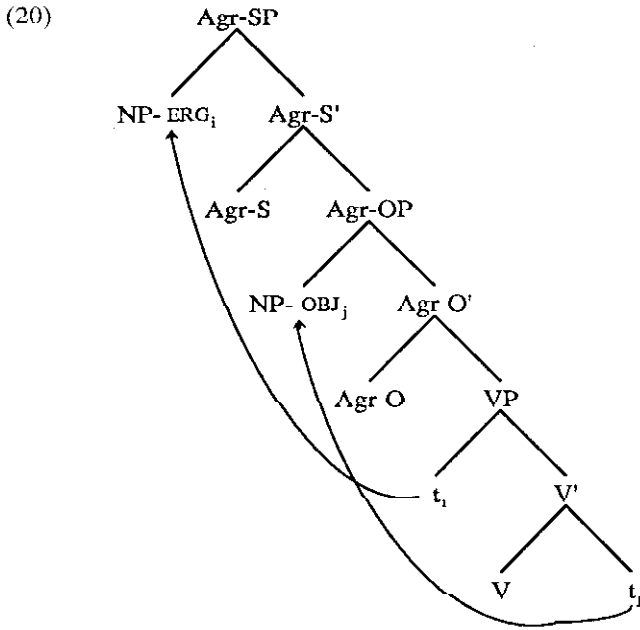
- (19) Generalization: lexically Cased subject →
*structural accusative object

Let us postpone any discussion of what causes this apparently universal generalization until later in this paper and focus now on the effect this generalization has in Nez Perce.

When the subject is ergative, the verb is unable to assign structural accusative Case to its object, because of the generalization in (19). As a result, the object must move out of the VP in search of Case. The external subject position is full; it is occupied by the ergative subject. Nez Perce lacks any mechanism for assigning nominative Case to objects (contra what appears to be possible in Hindi), so there is only one option left in Nez Perce. The Caseless object must move to Spec, Agr-O for objective Case (where it triggers object agreement):²⁵

²⁴ This paper will not explore the interesting question of why such cross-linguistic variation exists. There are several possible reasons why Nez Perce differs from Hindi in not assigning nominative Case to objects in constructions with a lexically Cased subject. Nez Perce may simply lack whatever the mechanism is that allows nominative Case to be assigned to objects in languages like Hindi.

²⁵ The question of why the ergative subject does not simply remain in its base position, while the object moves to the external subject position to get nominative Case, is an interesting one. Bittner and Hale (1996b) suggest that the ergative subject can remain in the VP in only one type of ergative language, exemplified by Dyirbal, but not in other ergative languages.



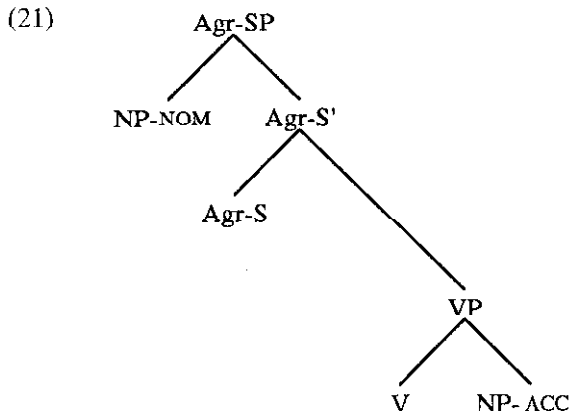
There is no way to derive the ungrammatical ergative-accusative construction in Nez Perce without violating the generalization in (19). Note, however, that accusative must be a structural Case in Nez Perce. If Nez Perce had a lexical accusative Case, nothing would block ergative-accusative constructions. As we saw in section 1.2, data from Icelandic shows that a lexically Cased subject can be followed by an accusative object, if that object has lexical accusative Case. The fact that the generalization in (19) links the verb's ability to assign structural accusative Case to the sort of subject the verb has reminds us of Burzio's (1986) generalization. It will be argued below that both generalizations are manifestations of a single broader generalization.

Let us now turn to constructions with a nominative subject.

1.3.1.2. *Nominative-Accusative Constructions*

If a verb does not take the option of assigning lexical ergative Case to its subject, the result is a nominative-accusative construction. The subject moves to Spec, Agr-S, where it gets nominative Case. The generalization in (19) does not interfere with the verb's ability to assign structural accusative-

ative Case to its object, and thus the object gets Case inside the VP and remains there. (Recall that accusative objects trigger no agreement.)



Since accusative must be a structural Case in Nez Perce (or else ergative-accusative constructions would occur, as explained above), the theory must allow two structural object Cases: one in Spec, Agr-O, associated with object agreement, and one inside the VP, not associated with object agreement.

Under this account, the ungrammaticality of sentences with a nominative-objective Case pattern in Nez Perce is attributed to the notion that accusative Case assignment is obligatory in Nez Perce, unless intertered with by the generalization in (19). However, the nominative-objective pattern is not universally prohibited. It occurs in many languages with both subject and object agreement. It is proposed here that nominative-objective patterns are produced in languages where verbs simply lack the ability to assign structural accusative Case, and probably also in languages where verbs assign their accusative Case optionally.²⁶

Now that we have seen the basic ideas of the proposed account demonstrated with respect to transitive constructions, let us turn to ditransitive constructions.

²⁶ For example, it is likely that the Case of specific objects in Turkish is objective, while the Case of non-specific objects is accusative (see de Hoop 1989; Ene 1991). If so, then Turkish has nominative-objective sentences as well as nominative-accusative ones. This difference between Nez Perce and Turkish would be produced if accusative Case assignment is obligatory in Nez Perce, but only optional in Turkish, so that Turkish objects have the option of staying in VP or moving to Spec, Agr-O for Case. See Woolford (1995) for an analysis of a similar situation in Palauan.

1.3.2. *Ditransitive Constructions*

For verbs that take three arguments (agent, goal, and theme), there are four possible Case patterns:

- (22) Ditransitive Case Patterns in Nez Perce
- A. Occurring Patterns (Agent Goal Theme)
- | | | |
|---------------|------------|------------|
| 1. Nominative | Accusative | Accusative |
| 2. Nominative | Dative | Accusative |
| 3. Ergative | Objective | Accusative |
| 4. Ergative | Dative | Objective |
- B. Prohibited Patterns (Agent Goal Theme)
- | | | |
|----------------|------------|------------|
| 1. *Nominative | Objective | Objective |
| 2. *Nominative | Objective | Accusative |
| 3. *Nominative | Accusative | Objective |
| 4. *Nominative | Dative | Objective |
| 5. *Ergative | Accusative | Accusative |
| 6. *Ergative | Accusative | Objective |
| 7. *Ergative | Objective | Objective |
| 8. *Ergative | Dative | Accusative |

Nominative subject ditransitive constructions can be analyzed in the same way that transitives with a nominative subject are: the verb assigns Case to both objects inside the VP and, thus, neither object is free to move to Spec, Agr-O for objective Case.²⁷

Ergative ditransitive constructions can also be analyzed the same way as transitive ergative patterns, using the generalization in (19), repeated here:

- (19) lexically Cased subject > *structural accusative object

For ergative subject constructions with a dative goal, the application of this generalization is straightforward. The one object that would be accusative in the absence of a lexically Cased subject is denied accusative Case when the subject is lexically Cased:

- (23)a. nominative dative accusative
 b. ergative dative objective (*accusative)

Note, again, that it is crucial that there be no lexical accusative Case available for themes in Nez Perce, even when a goal is present. If lexical

²⁷ It is assumed here that one verb can assign structural accusative Case to two objects, perhaps with the help of an applicative morpheme.

accusative Case were available for the theme in (23b), then that construction would be grammatical with an accusative object.

For ergative subject constructions without a dative goal, we have to decide how to interpret the generalization in (19). Should we interpret it as denying structural accusative Case to all objects (strong interpretation) or merely to one particular object (weak interpretation)? Given the superficial similarity between the generalization in (19) and Burzio's (1986) generalization, one might think that the answer must be the strong interpretation. However, we will see arguments in the next section that the correct interpretation for the generalization in (19) and, in fact, for Burzio's generalization, is actually the weak interpretation. For now, however, let us try it both ways.

Under the strong interpretation of the generalization in (19), accusative Case should disappear from both objects in a double accusative construction if we assign lexical ergative Case to the subject. But what actually happens is that accusative Case disappears only from the first (thematically highest) object:

- (24)a. nominative accusative accusative
 b. ergative objective accusative

This same problem is faced when one applies Burzio's (1986) generalization to double object passives or to psych-verb constructions with two internal arguments. The standard approach to this difficulty has been to claim that the second object gets lexical/inherent accusative Case, rather than structural accusative Case (Burzio 1986; Belletti and Rizzi 1988).²⁸ However, if we propose that the theme actually has inherent Case in the pattern in (24b), we will have to add something to the theory to prevent themes from getting lexical/inherent Case in the pattern in (23b) or in transitive ergative constructions. That is, we would need to limit the appearance of lexical accusative Case to just those instances where the strong interpretation of the generalization in (19) makes the wrong prediction.

The generalization in (19) works best if we take the weak interpretation, under which 'object' refers only to what is sometimes called the 'primary' or 'real' object. In a double accusative construction, this is the object with the higher thematic role (goal > theme). Under this weak interpretation of the generalization in (19), we get the correct prediction that it is only

²⁸ Baker (1988) and Woolford (1993) argue against stipulating inherent accusative Case in such situations.

the thematically highest object that is denied structural accusative Case when the subject gets lexical Case:

- (25)a. nominative accusative accusative
 b. ergative objective accusative
 c. *ergative accusative objective
 d. *ergative objective objective

Under the weak interpretation of the generalization in (19), nothing interferes with the verb's ability to assign structural accusative Case to the second object in the pattern in (25b).

In the next section, we see how the generalization in (19) can be formulated in a way that is more conceptually appealing and will also encompass the aspects of Burzio's generalization that are universal.

1.4. *The Maximum Accusatives (Max. Acc.) Generalization*

There is an old observation that the number of accusative Cases a verb can assign always seems to be one less than the number of arguments that need structural Case. That observation covers intransitive verbs, regardless of whether they have an internal or an external subject: verbs with only one argument never assign structural accusative Case. Transitive verbs assign a maximum of one accusative Case. However, if one of the arguments of a transitive verb gets lexical Case, then that verb assigns no accusative Case. We have seen that this is true for transitive verbs with dative and ergative subjects. A ditransitive verb may assign up to two accusative Cases, but this number is reduced if one or more of its arguments gets lexical Case. We have seen this effect in Nez Perce ditransitives: a verb with no lexically Cased arguments assigns two accusatives, a verb with one lexically Cased argument (ergative or dative) assigns one accusative, and a verb with two lexically Cased arguments assigns no accusative Case:

- | (26) | Agent | Goal | Theme |
|------|------------|-------------------|-------------------|
| a. | nominative | <i>accusative</i> | <i>accusative</i> |
| b. | nominative | dative | <i>accusative</i> |
| c. | ergative | objective | <i>accusative</i> |
| d. | ergative | dative | objective |

Thus, this observation about the maximum number of accusatives that a

verb can assign goes a long way toward encompassing three superficially separate generalizations: (i) that no verb assigns structural accusative Case to its subject, (ii) that a verb without an external subject cannot assign structural accusative Case to its object (the observation that motivated Burzio's generalization), and (iii) that a verb with a lexically Cased subject cannot assign structural accusative Case to its object (the generalization in (19)). It seems reasonable to assume, therefore, that these three generalizations are actually manifestations of one broader generalization having to do with the maximum number of accusatives a verb can assign (or check).

Let us formulate such a generalization. We want it to express the fact that the maximum number of accusative Cases a verb can assign/check is equal to the number of arguments that verb has, minus the number of those arguments that get lexical Case or Case from a preposition, minus 1:²⁹

- (27) Max. Acc. Formula
 Max. Acc. = #Arguments - #Lexical Cases - 1

Verbs with one argument can assign a maximum number of 0 structural accusative Cases ($1 - 0 - 1 = 0$)³⁰ For verbs with two arguments, the maximum is 1 ($2 - 0 - 1 = 1$), unless the verb assigns a lexical Case, in which case the maximum is 0 ($2 - 1 - 1 = 0$). Verbs with three arguments, none of which receive lexical Case, can assign a maximum of 2 ($3 - 0 - 1 = 2$) structural accusative Cases. A ditransitive verb that assigns lexical Case to one of its arguments is limited to a maximum of 1 structural accusative Case ($3 - 1 - 1 = 1$). Finally, a ditransitive verb that assigns two lexical Cases cannot assign any structural accusative Cases ($3 - 2 - 1 = 0$).

Although (27) is still a descriptive generalization, it represents significant progress over having to stipulate the three generalizations described above. For intransitives, the Max. Acc. formula correctly predicts that structural accusative Case cannot be assigned to an external subject nor to an internal subject. For transitives and ditransitives, however, the Max. Acc. formula tells us only how many accusative Cases the verb can assign,

²⁹ For an analysis of why passives in languages like Ukrainian appear to violate Burzio's generalization (and this generalization), see Woolford (1993).

The Max. Acc. formula proposed here is a modification of a proposal in Falk (1992):

(i) Case-grid principle (parameterized): A verb that assigns n θ -roles may assign up to $\{n, n - 1\}$ Cases.

³⁰ Technically, the formula would produce a negative number for an intransitive verb that assigned a lexical Case to its one argument.

but it does not tell us which arguments will get those accusative Cases. The additional generalization we need to capture is that, when there is a choice of which of two or more arguments will go without structural accusative Case, it is always the argument with the higher thematic role that is denied structural accusative Case.³¹

There is a way to capture this additional generalization without adding anything to the Max. Acc. formula. If we allow the grammar to produce all of the logically possible derivations, each differing only in which argument is denied structural accusative Case, then we can use economy/locality considerations to select the best derivation. The best derivation will be the one with the shortest path between the argument that needs Case outside the VP and the position outside the VP from which Case is available. Under the standard assumption that the argument with the higher thematic role is also higher in the syntactic tree, the correct result will be produced.

The Max. Acc. formula can now replace the generalization in (19) that verbs with lexically Cased subjects do not assign structural Case to their (thematically highest) object. The Max. Acc. formula also accounts for the data that originally motivated Burzio's (1986) generalization: verbs with internal subjects cannot assign structural accusative Case to those subjects. However, the Max. Acc. formula does not encompass all aspects of the predictions that the original formulation of Burzio's (1986) generalization makes. For example, nothing in the Max. Acc. formula says that any verb must assign structural accusative Case, whereas Burzio's generalization states that any verb with an external subject does. But Burzio's generalization seems too strong in this respect; there are verbs in various European languages with an external subject that assign dative or some other lexical Case to their objects and there is no indication that these verbs assign structural accusative Case. In addition, the original formulation of Burzio's generalization (but not the Max. Acc. formula) rules out the possibility that some languages simply do not assign structural accusative Case at all, but evidence is presented in section 3 that this possibility exists. Replacing Burzio's Generalization with the Max. Acc. formula also eliminates the need to stipulate inherent accusative Case in situations where Burzio's generalization predicts that a verb should not be able to

³¹ For all the data considered here, the thematically higher θ -role is the one that goes without structural accusative Case. However, when the thematic hierarchy gives a different prediction than the aspectual hierarchy of Grimshaw 1990 (e.g., for psych verbs with theme subjects), it is the more prominent thematic role, in Grimshaw's sense, that actually goes without structural accusative Case. (See Woolford 1993.)

assign structural accusative Case to a second internal argument. Situations of this sort are discussed at length in Woolford (1993).

It seems likely that the Max. Acc. formula is a descriptive generalization, caused by some grammatical principle as yet unknown. This paper will not attempt to address the separate but interesting question of what accounts for this descriptive generalization, but the reader is referred to Woolford (1993), where it is proposed that this descriptive generalization is the result of an obligatory operation on argument structures called Accusative Case Blocking.³²

This completes the proposed account of the four-way Case system of Nez Perce, its relation to the two-way agreement system, and the account of the distribution of possible and impossible Case patterns. We have seen that this account uses standard Case theory, with a slightly expanded inventory of Cases: two structural Case positions for objects (inside and outside VP) and an additional lexical/inherent Case, ergative. The only other addition to Case theory that is necessary is the generalization expressed by the Max. Acc. formula.

The next section focuses on the details of the Nez Perce agreement system and justifies the conclusion that the agreement system manifests a subject-object pattern and not an ergative pattern.

2. NEZ PERCE AGREEMENT

All subjects in Nez Perce, regardless of whether they have ergative or nominative Case, trigger the same forms of person and number agreement. However, only objective objects trigger object agreement. Accusative objects trigger no agreement at all. These generalizations are easy to see with respect to number agreement, as shown in section 2.1. Section 2.2 establishes that the person agreement system also manifests the same subject-object pattern, even though person agreement involves portman-teau morphemes that combine information about both subject and object.

2.1. *Number Agreement*

Number agreement is expressed in two different ways in Nez Perce. Imperfect aspectual suffixes include a subject number feature and there are also

³² See Woolford (1993) for a discussion of complications that can arise in the passive constructions of the languages of the world that lead to superficial counterexamples to Burzio's Generalization and the Max. Acc. formula.

separate subject and object number morphemes (Rude 1982). Both systems show a consistent subject-object pattern.

The imperfective aspect morphemes shown below differ in form depending on whether the subject is singular or plural. Subjects of all kinds (intransitive or transitive, nominative or ergative) trigger this type of number agreement, but no objects do (Rude 1988):

- (28) Number agreement on imperfect aspectual suffixes (Rude 1982)
 -*se* singular subject
 -*sîx* plural subject

- (29)a. Hi + kú + **se**.
 3 + *go* + *ASP/SG*
 He/she is going.

- b. Hi + ku + **sîx**.
 3 + *go* + *ASP/PL*
 They are going. (Rude 1982, (2))

- (30)a. Péé + ke'nip + **se**
 3/3 + *bite* + *ASP/SG*
 He is biting it.

- b. Péé + ke'nip + **sîx**.
 3/3 + *bite* + *ASP/PL*
 They are biting it. (Rude 1982, (4))

The example in (30b) cannot mean 'He is biting them'. This form of number agreement is restricted to subjects.

In clauses with perfective aspect, subjects of all kinds may be marked plural by means of a separate plural number agreement morpheme, *pe*, which follows the person agreement morpheme (Rude 1982):

- (31)a. Hi + kú + **ye**.
 3 + *go* + *ASP*
 He went. (Rude 1982, (5))

- b. Hi + **pe** + kú + **ye**.
 3 + *PL-SUBJ* + *go* + *ASP*
 They went.

- (32) Pée + **pe** + ke'nip + e.
3/3 + *PL-SUBJ* + bite + *ASP*

They bit it. (Rude 1982, (6))

Plural objective objects are marked with a distinct plural number agreement morpheme, *nées*, which follows the subject number morpheme, *pe* (Rude 1982):

- (33) 'e + pe + **nées** + hexn + e
1/3 + *PL-SUBJ* + *PL-OBJ* + see + *ASP*

We saw them. (Rude 1985, p. 39)

- (34) Háama + nm hi + **néec** + 'wi + ye wewúkiye + ne.
man + *ERG* 3 + *PL-OBJ* + shoot + *ASP* *elk* + *OBJ*

The man shot the elk(plural). (Rude 1986a, (13))

Accusative objects never trigger number agreement.

2.2. Person Agreement

Like number agreement, the person agreement system of Nez Perce also reflects a subject-object pattern. Although there are no morphologically overt agreement morphemes for first or second person, we can observe a subject-object pattern in the overt third person agreement morphemes.³³

Intransitive third person subjects trigger the third person subject agreement morpheme, *hi*:

- (35) 'ipí + \emptyset **hi** + kú + ye.
he + *NOM* 3 + go + *ASP*

He went. (Rude 1982, (19))

This same agreement form occurs with transitive subjects. We see it with a nominative subject in (36). It is visible with ergative subjects when the objective object is first or second person (and the object agreement is morphologically null), as in (37):

³³ While it may seem counter to our usual expectations to find that third person agreement is morphologically marked, while first and second person agreement are not, English actually behaves like Nez Perce in this respect. Third person singular subjects in English trigger morphologically overt agreement on main verbs, while first and second person subjects do not.

- (36) Háama + \emptyset hi + 'wí + yc wewúkiyc + \emptyset .
man + NOM 3 + shoot + ASP elk + ACC
 The man shot an elk. (Rude 1988, (31))
- (37) Hi + táamyán + a 'áatway + nim.
3/1 | hit | ASP old-woman + ERG
 The old woman hit me. (Rude 1982, (29))

We also see this same third person subject agreement form with an ergative subject when the objective object is plural:

- (38) Háama + nm hi + nécc + 'wí + yc wewúkiyc + ne.
man + ERG 3 + PL-OBJ + shoot + ASP elk + OBJ
 The man shot the elk(plural). (Rude 1986a, (13))

The only situation in which a third person subject occurs, but we do not see this *hi* agreement morpheme, is when the objective object is third person singular. In this situation, we see a portmanteau agreement morpheme, *pée*:

- (39) 'ip + ním pée + hexn + e walás + na.
he + ERG 3/3 + see + ASP knife + OBJ
 He saw the knife. (Rude 1982, (34))

Objects never trigger the *hi* agreement form associated with subjects. In examples with a first or second person subject (where the morphological contribution of the subject agreement is null), third person objects with objective Case trigger the 'e agreement form, as in (40), which surfaces as 'a in (41) due to vowel harmony:

- (40) 'iin 'e + nées + hexn + e walás + na.
I 1/3 + PL-OBJ + see + ASP knife + OBJ
 I saw the knives. (Rude 1982, (32))
- (41) 'ee 'aw + 'yáaxn-o'qa ku's + pé weḵweqé + ne
you 2/3 + can-find places + in frog + OBJ
 titlúu + ne.
big + OBJ
 You can find a big frog in those places.
 (Rude 1982, (25), from Aoki 1979)

Accusative objects never trigger object agreement in Nez Perce, regardless of whether the accusative occurs as the single object in a sentence with a nominative-accusative Case pattern or as the second object in a sentence with either Case pattern. In the nominative-accusative example in (42), we see that the agreement form is *hi*, which is the form we find with an intransitive third person subject:

- (42) Kii héencku' céep + \emptyset hi + 'níp + e háacwal + \emptyset .
now again arrow + ACC 3 + take + ASP boy + NOM

Now the boy again took an arrow.

(Rude 1982, (94), from Phinney 1934)

If the accusative object were triggering agreement, we would expect to see the portmanteau 3/3 *pée* form, as in (39). The fact that we find an intransitive agreement pattern indicates that the object is not contributing to the agreement in (42).

In nominative-accusative examples with a first or second person subject (where the contribution of the subject to agreement is null), we find that the agreement that surfaces is null, indicating that the accusative object does not agree. We do not find the 'e third person object agreement form that an objective object would trigger:

- (43) Kawá taʔc qáamsit | \emptyset | \emptyset | wiyáamk | o'
then soon qáamsit + ACC 1 + peel + ASP
 kaa \emptyset + túut + nu'.
and 1 + grind + ASP

Then soon I will peel and grind the qáamsit.

(Rude 1986a, (23), from Phinney 1934)

In ditransitive examples with both an objective and an accusative object, the verb agrees with the objective object only. By examining example (44) we can see that the accusative object does not trigger agreement. That example has the agreement pattern of an intransitive sentence. *hi*, indicating that only the subject is agreeing. The objective object does not contribute to the overt agreement in this example because it is first person, which triggers a zero agreement form. This example allows us to see that the accusative second object does not agree, because if it did, we would see the portmanteau *pée* form indicating a third person subject and object, but we do not. Instead, we see only the third person subject agreement form, *hi*:

- (44) Kaa qiyáaw'is nacó'x + \emptyset hi + nwíhna + 'ni + s.
and dried salmon + ACC 3/1 + leave + APPL + ASP
 and he has left me dried salmon.

(Rude 1986a, (79), from Phinney 1934)

In ditransitives with two accusative objects, neither object contributes to the agreement. We see this from the fact that such examples manifest only the subject agreement form, *hi*:

- (45) Kaa pist + \emptyset hi + 'naxpayk + óo + ya síteqs + \emptyset .
and father + ACC 3 + bring + DIR + ASP liver + ACC
 And she brought her father the liver.

(Rude 1982, (97), from Phinney 1934, p. 327)

Summarizing, then, we can identify the following subject agreement morphemes in contexts where there is no object agreement at all or no phonologically overt object agreement. These agreement morphemes are associated with all types of subjects, transitive and intransitive, and nominative and ergative:

- (46) Subject agreement
 \emptyset first and second person
hi third person

The object agreement morphemes that surface when subject agreement makes no morphological contribution are as follows. Only objects with objective Case trigger object agreement:

- (47) Object agreement (with objective objects only)
 \emptyset first and second person
 'e third person

However, since these morphemes compete for a single agreement morpheme slot, they are all portmanteau forms in the sense that they provide information about both the subject and the object. Thus, the features of the system as a whole are more accurately summarized as follows (see Rude 1986a, p. 127):³⁴

³⁴ There is one very interesting additional feature of the Nez Perce agreement system that is not discussed here, but which is described in detail in Rude (1986b). In an intransitive construction, the subject agreement can be replaced with what looks like the 'e object agreement morpheme, even though no object is present or implied. Instead, it is the possessor of the subject that optionally triggers this agreement.

(48)	subject	objective object
	∅	not 3rd
	'e	not 3rd
	hi	3rd
	pée	3rd
		no object, or object not 3rd
		3rd
		no object, or object not 3rd sg.
		3rd sg.

Despite the fact that these are all portmanteau forms, however, we can see that Nez Perce agreement does follow a subject-object pattern, as claimed in section 1, and not an ergative pattern paralleling the Case system. The purpose of this section was to establish that fact and to support the claim that both nominative and ergative subjects trigger subject agreement, but only objective objects trigger agreement, while accusative objects do not. This agreement pattern supports the claim in section 1 that the surface position of subjects, both nominative and ergative, in Nez Perce is Spec. Agr-S, while objective objects occupy Spec. Agr-O and accusative objects remain inside the VP.

In the next section, we will see that the analysis developed for Nez Perce extends to other languages with three- and four-way Case systems.

3. OTHER THREE- AND FOUR-WAY CASE SYSTEMS

This section discusses two languages from Australia, Thangu and Kalkatungu, which have Case systems similar to that of Nez Perce. The model developed in section 1 works well for both of these languages. Differences among the Case systems of these languages result from small differences in the Case-assigning properties of verbs.

3.1. *Thangu*

Thangu (northeast Arnhem Land) is an Australian language with a three-way Case system (Schebeck 1976). Intransitive subjects in Thangu have morphologically unmarked nominative Case, as in (49). Transitive subjects are marked with ergative Case and objects get a third Case, which corresponds to objective Case in Nez Perce:³⁵

- (49) Taykka + ∅ ɾakkun^yTin.
woman + NOM died
 Woman died. (Schebeck 1976, (11))

³⁵ The Case labels used here follow Schebeck (1976), except that what he labels 'accusative' is labeled here as 'objective', given that it corresponds to the objective Case of Nez Perce.

(50) Yūlŋu + ʔu taykka + Na puyan.

man + ERG woman + OBJ hit

Man hit woman.

(Schebeck 1976, (15))

In ditransitive constructions, the indirect object gets lexical dative Case, leaving objective Case for the theme object:

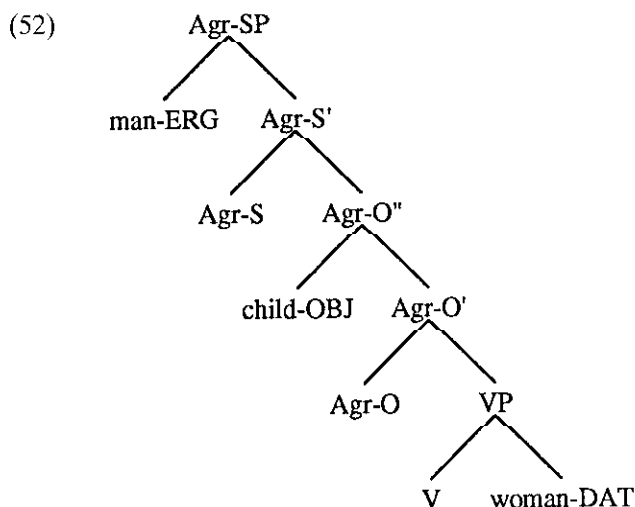
(51) Yūlŋu + Tu yūttu + Na kuŋan taykka + Ku.

man + ERG child + OBJ give woman + DAT

Man gave child to woman.

(Schebeck 1976, (18))

These examples all parallel ones discussed above in Nez Perce. The word order in Schebeck's examples even conforms to the predictions of the model developed for Nez Perce, wherein ergative and objective NPs are located outside the VP, while other arguments such as the dative remain inside the VP:³⁶



Let us now ask how the grammar of the three-way Case system in Thangu differs from that of the four-way system of Nez Perce. Since Thangu never manifests accusative Case, one might think that Thangu verbs simply lack the ability to assign structural accusative Case. Merely altering the grammar for Nez Perce in that way, however, would not produce the correct

³⁶ Despite the fact that the word order in Schebeck's examples conforms to the predictions of this model, word order cannot be used as strong evidence for this model, since word order in Australian Pama-Nyungan languages tends to be very free.

result for Thangu. If Thangu verbs lacked the ability to assign structural accusative Case, we would expect to find that all objects move out of the VP for Case. The result would be either an ergative-objective pattern (when the subject is marked ergative) or a nominative-objective pattern (when the subject is not marked ergative). But nominative-objective patterns apparently do not occur in Thangu.

The result we want is for verbs that assign ergative Case to their subjects in Thangu to do so obligatorily, rather than optionally, as in Nez Perce. We cannot force the subject to get ergative Case merely by creating a Case shortage by eliminating the accusative (contra Bok-Bennema 1991; see section 4). Instead, we need to mark the optionality (or lack thereof) of ergative Case assignment in the lexical entries:

(53)	Nez Perce	Thangu
	⟨ A, T ⟩	⟨ A, T ⟩
	(erg)	erg

What is interesting is that as a result of this lexical entry for Thangu verbs, accusative Case will never get a chance to surface in that language, even if Thangu verbs have the ability to assign structural accusative Case. The reason is that the presence of a lexically Cased subject precludes a structural accusative object, as we saw in section 1.

Ditransitive clauses always have a dative in Thangu. This difference between Thangu and Nez Perce can be attributed to a difference in whether dative Case is obligatorily or optionally assigned to goals:

(54)	Thangu	Nez Perce ³⁷
	⟨ A, G, T ⟩	⟨ A, G, T ⟩
	erg dat	(erg) (dat)

With two out of the three arguments marked for lexical Case, there will be no structural accusative Case available for the remaining argument, because of the Max. Acc. formula: $3(\text{arguments}) - 2(\text{with lexical Case}) - 1 = 0(\text{accusative Cases})$. As a result, the Case pattern of Thangu ditransitive sentences is always ergative-dative-objective.

³⁷ This lexical entry characterizes verbs such as 'give' in Nez Perce, but other verbs require the addition of an applicative morpheme before they can take two unmarked objects.

3.2. *Kalkatungu*

It has often been noted that it is rare to find languages with more than two distinctly marked morphological Cases for subjects and objects (ignoring the dative). In particular, it is common for languages to leave structural Cases unmarked when other factors such as word order or agreement distinguish between subjects and objects. As a result, the number of three- and four-way Case systems that exist has probably been underestimated in the typological literature, because a language with a three- or four-way Case system that does not morphologically mark any of its structural Cases would appear (on casual inspection) to have a simple two-way, classic ergative Case system. In fact, Goddard (1982) claims that most ergative languages in Australia actually have a three-way Case system.

An example of a language with a four-way Case system like that of Nez Perce, but where only the ergative Case is morphologically marked, is Kalkatungu, a Pama-Nyungan language of Australia (Blake 1982). Blake classifies the Case marking system of Kalkatungu as ergative-absolutive and the agreement system as nominative-accusative, but he notes that “the two systems between them yield a three-way distinction in case forms – one for S_i [intransitive subjects], one for A [transitive subjects], and one for O [objects]” (Blake 1982, p. 78). Intransitive clauses have nominative subjects and subject agreement suffixed to the verb, as in (55). Transitive clauses have ergative subjects, as in (56), and ergative subjects trigger the same subject agreement forms as nominative subjects do. Note that the subject agreement morpheme, *na*, is the same in both examples, despite the fact that one has a nominative subject while the other has an ergative subject.³⁸

- (55) Maṛapai + ∅ maḷta + ∅ iŋka + na + na.
women + NOM mob(=pl) + NOM came + PAST + 3plSUBJ
 The women came. (Blake 1982, (34))

- (56) Maṛapai + tu maḷta + yi ŋai + ∅
woman + ERG mob + ERG me + OBJ
 layi + na + ŋi + na makaṭi + tu.
hit + PAST + 1sgOBJ + 3plSUBJ hand + INSTR
 The women hit me with their hands. (Blake 1982, (35))

³⁸ Agreement in Kalkatungu “is optional in independent clauses except with the imperfect aspect marker, *mina*, or the perfect, *mpa*” (Blake 1982, p. 79). As in Nez Perce, some person-number combinations trigger zero agreement (first and third person singular subjects) and the overt subject and object agreement morphemes do not all freely co-occur.

Objects trigger a separate set of object agreement markers. As in Nez Perce, only the thematically highest direct object gets objective Case and triggers object agreement. In the example below, the first person goal object triggers object agreement, while the third person theme object triggers no agreement. Thus, although neither of these objects is marked with morphologically overt Case, the behavior of these objects suggests that they are marked with the same objective and accusative Cases that we saw in Nez Perce:³⁹

- (57) Maɾapai + tu an^ʷa + ŋi (ŋai + ∅) piipa + ∅.
woman + ERG gave + 1sgOBJ (me + OBJ) paper + ACC
 The woman gave me paper. (Blake 1982, (47))

If so, the Kalkatungu Case inventory is exactly the same as that of Nez Perce and Kalkatungu actually has a four-way Case system. The only relevant difference is that Kalkatungu lacks an overt morpheme for objective Case:

- (58)
- | | | |
|----------------------|-------------|---------------------------------|
| Nez Perce | | Kalkatungu |
| nominative: ∅ | (Subj. agr) | nominative: ∅ (Subj. agr) |
| ergative: <i>nim</i> | (Subj. agr) | ergative: <i>tu</i> (Subj. agr) |
| objective: <i>ne</i> | (Obj. agr) | objective: ∅ (Obj. agr) |
| accusative: ∅ | | accusative: ∅ |

The only other relevant difference between Kalkatungu and Nez Perce is that ergative Case is assigned obligatorily in Kalkatungu, as in Thangu, rather than optionally, as in Nez Perce:

- (59)
- | | |
|-----------|------------|
| Nez Perce | Kalkatungu |
| < A, T > | < A, T > |
| | |
| (erg) | erg |

As in Thangu, the result is that Kalkatungu has no nominative-accusative Case pattern. Unlike Thangu, but like Nez Perce, Kalkatungu allows double object constructions without a dative. As a result, we see accusative Case in ditransitive constructions such as (57).

We can conclude, then, that the same formal model accounts for the basic Case and verbal agreement patterns of Nez Perce, Thangu, and Kalkatungu, with the differences among these languages (in terms of the

³⁹ Blake does not gloss morphologically unmarked Cases, so the proposed labels have been added to these examples.

range of Case patterns they allow) being confined to language-particular differences in whether verbs optionally or obligatorily assign particular Cases:

- (60) Typological Variation
- A. Nez Perce: ergative Case assignment: optional
dative Case assignment: optional
 - B. Thangu: ergative Case assignment: obligatory
dative Case assignment: obligatory
 - C. Kalkatungu: ergative Case assignment: obligatory
dative Case assignment: optional

4. PREVIOUS ACCOUNTS OF ERGATIVE SYSTEMS

This section contains brief discussions of a few of the major theoretical approaches to ergative Case systems in the linguistic literature, referring the reader to the original sources for the details of these accounts.

One popular proposal is that ergative is another name for nominative or accusative Case (e.g., Marantz 1981, 1984; Levin 1983; Levin and Massam 1985; Chomsky 1992; Murasugi 1992; and Bobaljik 1993). This can handle the textbook variety of ergative-absolutive system, but cannot be extended to more complex ergative systems. We have seen that in Nez Perce, the ergative Case is clearly distinct from all of the structural Cases for subjects and objects. The point that such 'alternate name' proposals cannot be generalized to all ergative languages is also made in Bittner and Hale (1996a). Moreover, treating ergative as a structural Case (nominative or accusative) fails to capture the parallelism between dative subject constructions and ergative-absolutive constructions described in section 1.

Among the approaches to ergativity that recognize ergative as a distinct Case, we can distinguish two major variants (in addition to the view argued for here that ergative is a lexical Case). Under one proposal, ergative is another name for genitive (Johns 1992). Under other proposals, ergative is a distinct structural Case (e.g., Bok-Bennema 1991; Bittner and Hale 1996a).

Johns' (1992) approach requires a view of Eskimo sentence structure that differs radically from the sort of structure that is usually assumed for ergative languages, even by other Eskimo scholars such as Bok-Bennema (1991) and Bittner (1994). What Bok-Bennema and Bittner analyze as a transitive sentence with an ergative subject and a nominative object, as sketched in (61a) below, Johns (1992) analyzes as a copular construction, where the nominative theme is the syntactic subject, while the ergative =

genitive NP is the possessor of an object NP with an empty head, as in (61b):

- (61)a. The woman ERG saw the bird NOM.
 b. The bird-NOM is the woman's-GEN seen one.

Johns' account is motivated by the fact that it is difficult to tell the difference between nouns and verbs in Eskimo languages and there is a tradition, which Johns follows, of analyzing these as non-distinct. If Johns is right, then Eskimo languages are not really ergative languages at all, since they do not make use of an ergative Case. Johns' account cannot be extended to all ergative languages, however, because the ergative and genitive Cases are morphologically distinct in many such languages.⁴⁰ Even for languages such as Nez Perce, in which the ergative and genitive Cases do look alike, Johns' approach makes the wrong predictions. In contrast to the situation in Eskimo languages where nominative objects trigger subject agreement, it is ergative subjects that trigger subject agreement in Nez Perce. Moreover, semantic objects do not have nominative Case nor do they occupy the subject position in Nez Perce, as Johns claims for Eskimo; instead Nez Perce objects trigger object agreement and get objective Case. Thus the standard view of ergative sentences reflected in (62a) is appropriate for Nez Perce, rather than Johns' view of ergative sentences in Eskimo, as in (62b):

- (62)a. The woman-ERG saw the bird-OBJ.
 b. The bird-NOM is the woman's-GEN seen one.

Let us now briefly examine approaches that treat ergative as a new/additional structural Case, such as Bok-Bennema (1991) and Bittner and Hale (1996a). Although Bok-Bennema (1991) treats ergative as a lexical Case in those ergative languages that allow ergative subjects in intransitive clauses (active languages), she treats ergative as a structural Case in the classic type of ergative language. Her basic idea is that there is no need for ergative Case in nominative-accusative languages because objects can get Case inside the VP, while subjects can get nominative Case outside the VP. What makes a language ergative is the inability of verbs to assign structural Case. In ergative languages, transitive clauses have two arguments that require Case, but neither can get Case inside VP. One NP can get nominative Case, but the other NP has to get some other Case,

⁴⁰ In fact, it is quite common for the ergative and instrumental Cases to look alike, while genitive is distinct (Dixon 1994).

such as an oblique or ergative assigned by a special rule (Bok-Bennema 1991, p. 23).⁴¹

A key difference between Bok-Bennema's approach and the approach argued for in the present paper has to do with the direction of the causal relationship between ergative subjects and the impossibility of a structural accusative object. For Bok-Bennema, "ergativity is always a consequence of the impossibility of Case assignment to a direct object NP by the governor of this NP" (p. 21). In the present paper, the causal relationship is reversed. The presence of an ergative subject (or a dative subject) causes the impossibility of assigning structural accusative Case to the object.⁴² Under Bok-Bennema's view, we would never expect to find ergative Case except in clauses with a Case shortage. However, there are many sorts of situations in the languages of the world in which ergative is used in situations where nominative is available, but unused. In Hindi, for example, ergative Case appears on subjects even when the object is not usurping the nominative Case, but is instead marked with the *-ko* Case that Mahajan (1990) labels as dative:⁴³

- (63) BaccoN-ne siitaa-ko dekhaa
children-ERG Sita-DAT see(perfective-masc.sg.)
 thaa.
be(past-masc.sg.)

The children had seen Sita (fem. name).

(Mahajan 1990, p. 73)

Nez Perce is also a counterexample to the Case shortage view of why ergative subjects do not occur with structural accusative objects. As we have seen, there are two structural Case positions available outside VP in Nez Perce and thus, even if structural accusative were not available, there would be no need to resort to ergative Case. Instead, we would see nominative-objective constructions. Moreover, we cannot claim that the reason that ergative is assigned to subjects in Nez Perce is that verbs cannot assign accusative Case, because we know that verbs can assign

⁴¹ Bok-Bennema's analysis assigns ergative Case by a mechanism similar to the mechanism that assigns genitive Case in NPs, but her analysis is otherwise unlike that of Johns (1992).

⁴² There are probably particular situations in particular languages in which an ergative subject is the only choice available because of a Case shortage. The claim here is that this is by no means a universal condition for the appearance of ergative Case.

⁴³ This argument goes through if *-ko* is dative, as in Mahajan's gloss, or accusative, as traditionally labeled, or even objective. The important point is that *-ko* is not nominative, which is clear because the NP marked with *-ko* does not trigger agreement.

structural accusative Case in Nez Perce, in nominative-accusative constructions.

Bittner and Hale (1996a) propose something much like Bok-Bennema's view that ergative is assigned only when there is a shortage of Cases. In Bittner and Hale's view, ergative is a structural Case assigned by a functional head, but ergative Case is not available unless "this functional head is activated by a Case-competitor for the subject" (p. 13). Simple, classic ergative-absolutive constructions work as in Bok-Bennema's approach: when the object usurps the nominative Case, ergative becomes available to the subject. However, Bittner and Hale are aware that there are many (surface) counterexamples to the idea that ergative is used only when nominative has already been used. In fact, they have to deal with more potential counterexamples than Bok-Bennema, because they consider even the ergative Case in active languages to be structural. Thus, they have to explain why ergative can be assigned to an intransitive subject, even though nominative Case should be available.

Bittner and Hale answer the question of why ergative Case can be used in intransitive clauses with agent subjects by claiming that such clauses are actually transitive. For other situations in which there is no overt Case-competitor, they extend the notion of a Case-competitor "to certain instances of adjoined nominal heads, D or N, which can be thought of as 'pseudo co-arguments'" (1996a, p. 34). For Nez Perce, they propose "that the object of an ERG-ACC construction [labeled as an ERG-OBJ construction in the present paper] must have a complex NP-shell structure" (1996a, p. 52). The reader is referred to Bittner and Hale (1996a) for the details of these analyses, which are complex and embedded in a new theory of Case.

Although it is difficult to argue against Bittner and Hale's proposal on empirical grounds, because their theory appears rich enough to handle the diversity of ergative systems that occur, there are two conceptual reasons to prefer the proposal that ergative is a lexical Case. One is simplicity. The lexical Case approach requires no additions to Case theory and no special syntactic structures. A second conceptual argument in favor of the lexical Case approach is the fact that it captures the parallel between ergative and dative subject constructions.⁴⁴

⁴⁴ The very interesting work of Bittner and Hale (1996b) on types of ergative languages still stands if ergative is a lexical Case as argued here.

5. CONCLUSIONS

This paper presents an account of the four-way Case system of Nez Perce, which is relevant to the more general question of how ergative Case systems work and how they are related to nominative-accusative systems. The Nez Perce data clearly show that ergative Case cannot be equated with nominative or accusative Case. Instead, the Nez Perce data strongly support the idea that ergative is a lexical/inherent Case, as suggested in Mahajan (1989), Laughren (1989, 1992), Harbert and Toribio (1991), and that there is no parameter of ergativity, other than the fact that verbs in some languages have the ability to assign lexical ergative Case to their subjects, while others do not.

The Nez Perce data is also relevant to the question of the inventory of object Cases in UG. Nez Perce has two distinct structural Cases for objects (cf. Hindi (Mahajan 1990)), indicating that Case theory needs both a Case assigned in Spec, Agr-O (that may be associated with object agreement) and a structural Case assigned inside VP that is not associated with object agreement.

Nez Perce does not allow ergative-accusative Case patterns. In fact, the ergative-accusative Case pattern appears to be universally barred (although ergative-objective Case patterns are common). More generally, verbs with lexically Cased subjects (ergative or dative) cannot assign structural accusative Case to their thematically highest object. That generalization is one manifestation of a broader generalization, which also encompasses the facts that motivated Burzio's (1986) generalization, concerning the conditions that determine how many structural accusative Cases a verb can assign, if any.

Nez Perce does not allow nominative-objective Case patterns, but there is no universal prohibition against these. Languages which do not assign Case inside the VP, or do so only optionally, may manifest the nominative-accusative pattern.

The Case system of Nez Perce is shown to be quite similar to that of two Australian languages with three- and four-way Case systems: Thangu and Kalkatungu. The typological differences among these languages is shown to be the result of a difference in whether ergative and/or dative Case assignment is optional or obligatory.

REFERENCES

- Allen, W. Sidney: 1964, 'Transitivity and Possession', *Language* 40, 337-343.
Anderson, Stephen: 1977, 'On Mechanisms by Which Languages Become Ergative', in C.

- Li (ed.), *Mechanisms of Syntactic Change*, University of Texas Press, Austin, pp. 317–363.
- Anderson, Stephen: 1988, 'Morphological Change', in F. Newmeyer (ed.), *Linguistics: The Cambridge Survey, Volume 1. Linguistic Theory: Foundations*, Cambridge University Press, Cambridge, pp. 324–362.
- Andrews, Avery: 1976, 'The VP Complement Analysis in Modern Icelandic', in A. Ford, J. Reighard and R. Singh (eds.), *Papers from the Sixth Meeting of the North Eastern Linguistic Society, Montreal Working Papers in Linguistics* 6, 1–21. Reprinted 1990, in J. Maling and A. Zaenen (eds.), *Modern Icelandic Syntax*, Academic Press, San Diego, California, pp. 165–185.
- Aoki, Haruo: 1979, *Nez Perce Texts*, University of California Publications in Linguistics, vol. 90, University of California Press, Berkeley.
- Babby, Leonard: 1991, 'Noncanonical Configurational Case Assignment Strategies', *Cornell Working Papers in Linguistics* 9, 1–55.
- Baker, Mark: 1988, *Incorporation: A Theory of Grammatical Function Changing*, University of Chicago Press, Chicago.
- Barnes, Michael: 1986, 'Subject, Nominative, and Oblique Case in Faroese', *Scripta Islandica* 37, 13–46.
- Bellotti, Adriana and Luigi Rizzi: 1988, 'Psych-Verbs and θ -Theory', *NLLT* 6, 291–352.
- Bhatt, Rakesh Mohan: 1994, *Word Order and Case in Kashmiri*, unpublished Ph.D. dissertation, University of Illinois at Urbana-Champaign.
- Bittner, Maria: 1994, *Case, Scope, and Binding*, Kluwer, Dordrecht.
- Bittner, Maria and Ken Hale: 1996a, 'The Structural Determination of Case and Agreement', *Linguistic Inquiry* 27, 1–68.
- Bittner, Maria and Ken Hale: 1996b, 'Ergativity: Towards a Theory of a Heterogeneous Class', to appear in *Linguistic Inquiry* 27(4).
- Blake, Barry: 1982, 'The Absolutive: Its Scope in English and Kalkatungu', in P. Hopper and S. Thompson (eds.), *Syntax and Semantics, vol. 15: Studies in Transitivity*, Academic Press, New York, pp. 71–94.
- Blake, Barry: 1994, *Case*, Cambridge University Press, Cambridge.
- Bobaljik, Jonathan: 1993, 'On Ergativity and Ergative Unergatives', *MIT Working Papers in Linguistics* 19, 45–88.
- Bok-Bennema, Reineke: 1991, *Case and Agreement in Inuit*, Foris, Dordrecht.
- Bok-Bennema, Reineke and A. Gross: 1984, 'Ergativeit', *GLOT* 7, 1–49.
- Burzio, Luigi: 1986, *Italian Syntax*, Reidel, Dordrecht.
- Campana, Mark: 1992, *A Movement Theory of Ergativity*, unpublished Ph.D. dissertation, McGill University.
- Chomsky, Noam: 1981, *Lectures on Government and Binding*, Foris, Dordrecht.
- Chomsky, Noam: 1986, *Knowledge of Language*, Praeger, New York.
- Chomsky, Noam: 1992, 'A Minimalist Program for Linguistic Theory', *MIT Occasional Papers in Linguistics* 1, MIT Working Papers in Linguistics, MIT Cambridge, Massachusetts.
- Cole, Peter, W. Harbert, G. Hermon, and S. N. Sridhar: 1980, 'The Acquisition of Subjecthood', *Language* 56, 719–743.
- Comrie, Bernard: 1978, 'Ergativity', in W. P. Lehmann (ed.), *Syntactic Typology: Studies in the Phenomenology of Language*, University of Texas Press, Austin, Texas, pp. 329–394.
- Comrie, Bernard: 1984, 'Reflections on Verb Agreement in Hindi and Related Languages', *Linguistics* 22, 857–864.
- Comrie, Bernard: 1991, 'Form and Function in Identifying Cases', in F. Plank (ed.), *Paradigms*, Mouton de Gruyter, Berlin, pp. 41–55.
- Cowper, Elizabeth: 1988, 'What is a Subject? Non-nominative Subjects in Icelandic', in J. Blevins and J. Carter (eds.), *Proceedings of the North East Linguistic Society* 18, 94–108.

- Davison, Alice: 1988, 'Constituent Structure and the Realization of Agreement Features', *Chicago Linguistics Society* 24, 41–53.
- DeLancey, Scott: 1985, 'On Active Typology and the Nature of Agentivity', in Frans Plank (ed.), *Relational Typology*, Mouton, Berlin, pp. 47–60.
- Diesing, Molly: 1992, *Indefinites*, MIT Press, Cambridge, Massachusetts.
- Dixon, R. M. W.: 1972, *The Dyirbal Language of North Queensland*, Cambridge University Press, Cambridge.
- Dixon, R. M. W.: 1979, 'Ergativity', *Language* 55, 59–138.
- Dixon, R. M. W.: 1994, *Ergativity*, Cambridge University Press, Cambridge.
- Enç, Mürvet: 1991, 'The Semantics of Specificity', *Linguistic Inquiry* 22, 1–25.
- Falk, Yehuda: 1991, 'Case: Abstract and Morphological', *Linguistics* 29, 197–230.
- Falk, Yehuda: 1992, 'Suppress α ', *Linguistics* 30, 999–1030.
- Freidin, Robert and Rex A. Sprouse: 1991, 'Lexical Case Phenomena', in R. Freidin (ed.), *Principles and Parameters in Comparative Grammar*, MIT Press, Cambridge, Massachusetts, pp. 392–416.
- Gair, James W.: 1990, 'Subjects, Case and INFL in Sinhala', in M. K. Verma and K. P. Mohanan (eds.), *Experiencer Subjects in South Asian Languages*, Center for the Study of Language and Information, Stanford, pp. 13–41.
- Goddard, Cliff: 1982, 'Case Systems and Case Marking in Australian Languages: A New Interpretation', *Australian Journal of Linguistics* 2, 167–196.
- Grimshaw, Jane: 1990, *Argument Structure*, MIT Press, Cambridge, Massachusetts.
- Harbert, Wayne and Almeida Toribio: 1991, 'Nominative Objects', *Cornell Working Papers in Linguistics* 9, 127–192.
- Harley, Heidi: 1995, 'Abstracting Away from Abstract Case', in J. Beckman (ed.), *Proceedings of the North East Linguistic Society* 25, 207–221.
- Heath, Jeffrey: 1976, "'Ergative/Accusative" Typologies in Morphology and Syntax', in R. M. W. Dixon (ed.), *Grammatical Categories in Australian Languages*, Humanities Press, New Jersey, pp. 559–611.
- de Hoop, Helen: 1989, 'Case Assignment and Generalized Quantifiers', in J. Carter and R. Déchaine (eds.), *Proceedings of the North East Linguistic Society* 19, 176–190.
- de Hoop, Helen: 1992, *Case Configuration and Noun Phrase Interpretation*, unpublished Ph.D. dissertation, Groningen.
- Hudson, Joyce: 1978, *The Core of Walmatjari Grammar*, Institute of Aboriginal Studies, Canberra.
- Johns, Alana: 1992, 'Deriving Ergativity', *Linguistic Inquiry* 23, 57–87.
- Kachru, Yamuna: 1987, 'Ergativity, Subjecthood and Topicality in Hindi-Urdu', *Lingua* 71, 223–238.
- Kayne, Richard: 1989, 'Facets of Romance Past Participle Agreement', in P. Benincà (ed.), *Dialect Variation and the Theory of Grammar*, Foris, Dordrecht, pp. 85–103.
- Kibrik, A. E.: 1985, 'Toward a Typology of Ergativity', in A. Woodbury and J. Nichols (eds.), *Grammar Inside and Outside the Clause*, Cambridge University Press, Cambridge, pp. 268–323.
- Laughren, Mary: 1989, 'The Configurationality Parameter and Warlpiri', in László Marácz and Pieter Muysken (eds.), *Configurationality: The Typology of Asymmetries*, Foris, Dordrecht, pp. 319–366.
- Laughren, Mary: 1992, 'Secondary Predication as a Diagnostic of Underlying Structure in Pama-Nyungan Languages', in I. M. Roca (ed.), *Thematic Structure: Its Role in Grammar*, Foris Publications, Berlin, pp. 199–246.
- Levin, Beth: 1983, *On the Nature of Ergativity*, unpublished Ph.D. dissertation, MIT.
- Levin, Beth: 1989, 'The Basque Verbal Inventory and Configurationality', in L. Marácz and P. Muysken (eds.), *Configurationality*, Foris, Dordrecht, pp. 39–62.
- Levin, Juliette and Diane Massam: 1985, 'Surface Ergativity: Case/Theta Relations Re-examined', in S. Berman et al. (eds.), *Proceedings of the North East Linguistic Society* 15, 286–301.

- Levin, Lori and Jane Simpson: 1981, 'Quirky Case and Lexical Representations of Icelandic Verbs', *Chicago Linguistics Society* 17, 185–196.
- Mahajan, Anoop: 1989, 'Agreement and Agreement Phrases', in I. Laka and A. Mahajan (eds.), *MIT Working Papers in Linguistics* 10, 217–252.
- Mahajan, Anoop: 1990, *The A/A-Bar Distinction and Movement Theory*, unpublished Ph.D. dissertation, MIT.
- Mahajan, Anoop: 1991, 'Clitic Doubling, Object Agreement and Specificity', in T. Sherer (ed.), *Proceedings of the North East Linguistic Society* 21, 263–277.
- Mahajan, Anoop: 1993, 'On Some Typological Correlates of Ergativity', presented at the workshop on Theoretical Issues in Ergative Languages, Rutgers University, April 1993.
- Marantz, Alec: 1981, *On the Nature of Grammatical Relations*, Ph.D. dissertation, MIT.
- Marantz, Alec: 1984, *On the Nature of Grammatical Relations*, MIT Press, Cambridge, Massachusetts.
- Massam, Diane: 1994, 'Case Without Functional Projections', to appear in the Proceedings of the Canadian Linguistics Association.
- Mithun, Marianne: 1991, 'Active/Agentive Case Marking and Its Motivations', *Language* 67, 510–546.
- Mohanan, K. P.: 1982, 'Infinitival Subjects, Government, and Abstract Case', *Linguistic Inquiry* 13, 323–327.
- Mohanan, K. P. and Tara Mohanan: 1990, 'Dative Subjects in Malayalam: Semantic Information in Syntax', in M. Verma and K. P. Mohanan (eds.), *Experiencer Subjects in South Asian Languages*, Center for the Study of Language and Information, Stanford University, pp. 43–57.
- Mosel, Ulrike: 1991, 'Transitivity and Reflexivity in Samoan', *Australian Journal of Linguistics* 11, 175–194.
- Murasugi, Kumiko: 1992, *Crossing and Nested Paths: NP Movement in Ergative and Accusative Languages*, unpublished Ph.D. dissertation, MIT.
- Phinney, Archie: 1934, *Nez Percé Texts*, Columbia University Contributions to Anthropology, Volume 25, Columbia University Press, New York.
- Prince, Alan and Paul Smolensky: 1993, *Optimality Theory: Constraint Interaction in Generative Grammar*, RuCCS Technical Report #2, Rutgers University Center for Cognitive Science.
- Rude, Noel: 1982, 'Promotion and Topicality of Nez Percé Objects', in M. Macaulay et al. (eds.), *Proceedings of the Eighth Annual Meeting of the Berkeley Linguistics Society*, University of California, Berkeley, pp. 463–483.
- Rude, Noel: 1985, *Studies in Nez Percé Grammar and Discourse*, unpublished Ph.D. dissertation, University of Oregon.
- Rude, Noel: 1986a, 'Topicality, Transitivity, and the Direct Object in Nez Percé', *IJAL* 52, 124–153.
- Rude, Noel: 1986b, 'Discourse-Pragmatic Context for Genitive Promotion in Nez Percé', *Studies in Language* 10, 109–136.
- Rude, Noel: 1988, 'Ergative, Passive, and Antipassive in Nez Percé', in M. Shibatani (ed.), *Passive and Voice*, John Benjamins Publishing Company, Amsterdam, pp. 547–560.
- Rude, Noel: 1991, 'On the Origin of the Nez Percé Ergative NP Suffix', *IJAL* 57, 24–50.
- Schebeck, Bernhard: 1976, 'Thangu and Atjnjamathanha', in R. M. W. Dixon (ed.), *Grammatical Categories in Australian Languages*, Humanities Press, New Jersey, pp. 516–550.
- Shibatani, Masayoshi: 1977, 'Grammatical Relations and Surface Cases', *Language* 53, 789–809.
- Verma, Manindra K. and K. P. Mohanan: 1990, 'Introduction to the Experiencer Subject Construction', in M. Verma and K. P. Mohanan (eds.), *Experiencer Subjects in South Asian Languages*, Center for the Study of Language and Information, Stanford University, pp. 1–11.
- Wilkinson, Edwin: 1983, 'Indirect Object Advancement in German', in A. Dahlstrom et al.

- (eds.), *Proceedings of the Ninth Annual Meeting of the Berkeley Linguistics Society*, University of California, Berkeley, pp. 281–291.
- Woolford, Ellen: 1993, 'Symmetric and Asymmetric Passives', *NLLT* 11, 679–728.
- Woolford, Ellen: 1995, 'Object Agreement in Palauan: Specificity, Humanness, Economy and Optimality', Jill Beckman et al. (eds.), *University of Massachusetts Occasional Papers in Linguistics 18: Papers in Optimality Theory*, GLSA, Amherst, Massachusetts, pp. 655–700.
- Yip, Moira, Joan Maling, and Ray Jackendoff: 1987, 'Case in Tiers', *Language* 63, 217–250.
- Zaenen, Annie and Joan Maling: 1983, 'Passive and Oblique Case', in L. Levin et al. (eds.), *Papers in Lexical-Functional Grammar*, Indiana University Linguistics Club, Bloomington, pp. 159–191.
- Zaenen, Annie and Joan Maling: 1984, 'Unaccusative, Passive and Quirky Case', in M. Westcoat et al. (eds.), *West Coast Conference on Formal Linguistics* 3, 317–329.
- Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson: 1985, 'Case and Grammatical Functions: The Icelandic Passive', *NLLT* 3, 441–483.

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