

Morphological and Abstract Case

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This article examines the relationship between abstract and morphological case, arguing that morphological case realizes abstract Case features in a postsyntactic morphology, according to the Elsewhere Condition. A class of *prima facie* ergative-absolutive languages is identified wherein intransitive subjects receive abstract nominative Case and transitive objects receive abstract accusative Case; these are realized through a morphological default, which is often mislabeled as absolutive. Further support comes from split ergativity based on a nominal hierarchy, which is shown to have a morphological source. Proposals that case and agreement are purely morphological phenomena are critiqued.

Keywords: ergativity, Warlpiri, Niuean, Enga, Hindi, Pama-Nyungan, Icelandic, inherent Case, quirky Case, morphological case, abstract Case

1 Introduction

This article explores the relationship between abstract Case and morphological case. I argue that abstract Case features are determined syntactically and realized in a postsyntactic morphological component. This morphological realization of abstract Case features is governed by the Elsewhere Condition (Anderson 1969, Kiparsky 1973, Halle and Marantz 1993, Halle 1997), resulting in an imperfect relationship between syntax and morphology, but one that is as faithful as possible given the morphological resources of the language. The data used in the argumentation come primarily from ergative languages.

I identify a class of *prima facie* ergative-absolutive languages in which absolutive—that is, a case that groups together intransitive subjects and transitive objects—does not exist, either as an abstract Case or as a morphological case. Instead, the “absolutive” is the default morphological realization of abstract Case features, used when no realization of the specific Case feature is available. This morphological default is inserted for both nominative Case on the intransitive subject and accusative Case on the transitive object. The situation is thus entirely parallel to that

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Glosses in some examples have been regularized for clarity. In Pama-Nyungan language examples, *rC* indicates a retroflex consonant, *Ch* indicates a dental consonant, *Cy* indicates a palatal consonant, and *ng* is the velar nasal. In Indo-Aryan language examples, capitalization indicates a retroflex sound, and repetition of vowels indicates length.

of English nouns, for which nominative Case on the subject and accusative Case on the object are both morphologically realized by a (null) default. I refer to this class of ergative-absolutive languages as *absolutive as a morphological default* (ABS = DEF).

Not all ergative-absolutive languages fall into this class. For other languages, the standard identification of absolutive with nominative is appropriate (see, e.g., Murasugi 1992, Bittner 1994, Bittner and Hale 1996a,b, Ura 2001). At times, I highlight the contrasts in behavior between ABS = DEF languages and these *absolutive as nominative* (ABS = NOM) languages.

Note that for neither of these classes of ergative-absolutive languages is the concept ‘‘absolutive’’ meaningful. One may reasonably question whether the concept is meaningful in any ergative-absolutive language. I conjecture that it is not, that the absolutive is a spurious generalization that has been obscuring a variety of interesting case-marking patterns. Verifying this conjecture for the full range of ergative-absolutive languages, however, is well beyond the scope of this article.

My explication of ABS = DEF languages includes languages that show an ergative split based on a nominal hierarchy. This type of split ergativity has generated diverse proposals: functional (e.g., Moravcsik 1978, Comrie 1989, Dixon 1994), diachronic (e.g., Garrett 1990, Lightfoot 1999), and syntactic (e.g., Jelinek and Carnie 2003, Kiparsky 2004, Carnie 2005a, Alexiadou and Anagnostopoulou 2006). I show that this type of split ergativity requires a morphological explanation.¹

The theoretical framework employed here incorporates a broadly minimalist syntax bifurcating toward phonetic interpretation at PF and semantic interpretation at LF. Two types of abstract Case features are assigned in the syntax: (a) inherent Case (in the sense of Chomsky 1986), assigned to a DP in its merged position, which is also the position that determines thematic interpretation (Hale and Keyser 1993, 2002, Chomsky 1995, 2000, 2001, 2004); (b) structural Case, assigned on the basis of closest c-command to a DP in an A-position²—thus, I apply Chomsky’s (2000, 2001, 2004) Agree operation to Case. Morphology is situated on the branch leading toward PF. I adopt Late Insertion of functional items (see Halle and Marantz 1993, Marantz 1995, Chomsky 2001, 2004; see also Anderson 1992, Beard 1995, for related theories): phonological material is inserted in the morphology to realize bundles of syntactic features. This Vocabulary Insertion proceeds according to the Elsewhere Condition; thus, the lexical item that realizes the largest subset of the syntactic features is inserted.

Section 2 provides evidence for languages in which absolutive is a morphological default. It considers the available case morphemes, DPs without abstract Case, absolutives in nonfinite clauses, additional absolutive DPs, and agreement patterns. The existence of the ABS = DEF class constitutes the first demonstration of the close but imperfect relationship between abstract Case and morphological case. Section 3 extends this analysis to explain split ergativity based on the nominal hierarchy in Pama-Nyungan languages; DP-internal case mismatches are shown to be

¹ See Aissen 2003 for a morphological approach using Optimality Theory.

² Not m-command.

particularly revealing. Section 4 contrasts the proposed analysis with purely morphological analyses of agreement and case, arguing that in fact syntax plays a crucial role. Section 5 concludes.

2 The Natures of Absolutive Case

In this section, I provide evidence for ABS = DEF languages—languages in which T assigns nominative Case to the intransitive subject (S) and v assigns accusative Case to the transitive object (O). In this class of ergative-absolutive languages, nominative case morphology and accusative case morphology are lacking. Thus, when Vocabulary Insertion applies, the Elsewhere Condition determines that both nominative and accusative abstract Case are realized through a morphological default, the “absolutive,” since no more specific compatible lexical item is available. In this section, I discuss four such languages: Warlpiri (Pama-Nyungan, South-West, Ngarga), Niuean (Austronesian, Polynesian, Tongic; data from Seiter 1980, Massam 2006), Enga (Trans-New Guinea, West-Central; data from Lang 1973, Li and Lang 1979, Van Valin 1981), and Hindi (Indo-Aryan; data from Mahajan 1990, Mohanan 1994).³ These contrast with ABS = NOM

³ For alternative analyses of ergativity in these languages, see these works, among others: for Warlpiri, Simpson 1991, Bittner and Hale 1996a,b; for Niuean, Massam 2006; for Enga, Li and Lang 1979, Van Valin 1981; and for Hindi, Mahajan 1990, 2000, Mohanan 1994, Butt and King 2004, Davison 2004, Anand and Nevins 2006.

A reviewer asks about the relationship between the analysis proposed here and Bittner and Hale’s analysis. For Bittner and Hale, absolutive is nominative, where both are analyzed as the lack of Case (more specifically the lack of a Case projection, KP). This is perhaps similar to the present approach, which considers absolutive to be morphology that does not realize Case features, although on the present account absolutes do have Case. A significant difference between Bittner and Hale’s analysis and the proposed analysis is that on Bittner and Hale’s analysis, all absolutes are licensed identically, through government by C (or the Case head K in gerunds). On the analysis proposed here, absolutive on S is licensed by T, whereas absolutive on O is licensed by v. This distinction becomes important in gerunds, which lack T but contain v. See section 2.3 for discussion. Licensing of ergative is also different in the two systems: in Bittner and Hale’s system, ergative is licensed by I (T), whereas in the system proposed here, ergative is inherent Case licensed by v. This contrast is also important in gerunds, which lack T but contain v; see section 2.3. Bittner and Hale’s system does not provide for a nonidentical relationship between abstract Case and morphological case, and thus their system could not extend to the data considered in section 3.

While Bittner and Hale claim that the subject is licensed in situ in Warlpiri, there is evidence for a grammatical subject (as distinct from the thematic subject) (see, e.g., Hale 1983, Simpson and Bresnan 1983, Bittner and Hale 1996a, Legate 2002b, 2003b). Thus, Bittner and Hale propose EPP-driven movement of the single argument of unaccusative verbs to adjoin to VP, the position where they generate thematic subjects. This is also the position that they associate generally with the requirement of the Extended Projection Principle that clauses must have subjects. On the present assumption that the EPP requirement is associated with Spec,TP, this means that subjects in Warlpiri raise to Spec,TP (see also Legate 2002b, 2003b). Bittner and Hale provide one argument that this position is located inside VP (other arguments concern the posited coindexation relationship between I and V): that absolutive subjects may take scope below VP-level adverbial preverbs, (i). Such data are compatible with EPP-driven movement to Spec,TP, on the now-standard assumption that A-movement may undergo reconstruction.

- (i) *Kurdu jinta ka yarda-yula-mi.*
child one.ABS PRES.IMPERF again-cry-NONPAST
 ‘Again, some child is crying.’ *or*
 ‘There is some child who is again crying.’
 (Bittner and Hale 1996a:567)

Finally, the two types of ergative language identified by Bittner and Hale (1996a)—*raising* and *transparent*—do not correspond to the two types of ergative language discussed here—ABS = DEF and ABS = NOM. For Bittner and Hale, the defining characteristic is that *raising* languages like Inuit exhibit syntactic ergativity, while *transparent* languages like Warlpiri do not. The availability of syntactic ergativity, however, seems to cut across my two types. For example, Dyirbal, famous for its syntactic ergativity, is classified as an ABS = DEF language on my analysis. See Legate 2007 for an analysis of Dyirbal morphological and syntactic ergativity within the framework proposed here.

languages, in which absolutive corresponds to abstract nominative Case, assigned by T to both S and O.⁴ An ABS = NOM language that I mention for purposes of contrast is Georgian (Kartvelian; data from Harris 1981, Hewitt 1987).

For both types of ergative-absolutive language, I follow Woolford (1997), among others, in claiming that ergative is inherent Case, licensed by the *v* that introduces the external argument (see Bowers's (1993) PredP, Collins's (1997) TrP, and Kratzer's (1996) VoiceP; also see Chomsky 1995, Marantz 2001). This approach straightforwardly accounts for the generalization that ergative is found only on underlying external arguments (Marantz 1991; see section 4.1 for related discussion). For additional argumentation that ergative is inherent, see Woolford 1997; see Legate 2006b and Woolford 2006 for ergative assignment by *v*. Inherent-Case-marked DPs may raise to satisfy the EPP feature of T, thus accounting for the standard observation that the ergative *c*-commands the absolutive (see, e.g., Anderson 1976, Bobaljik 1993, Legate 2002b, 2003b).

I locate the distinction between the two types of ergative-absolutive languages in the lexical entries of the *v* heads:⁵ in ABS = DEF languages, transitive *v* assigns accusative Case, whereas in ABS = NOM languages, it does not.⁶

As an aside, notice that for these ABS = DEF languages, nominative Case is not assigned in transitive clauses: the subject receives inherent ergative Case from *v*, and the object receives structural accusative Case from *v*. This apparently contradicts the claim that nominative Case on T is an uninterpretable feature that must be checked for the derivation to converge (see Chomsky 1995). An adequate, but unsatisfying, approach would be to suggest that (finite) T comes in two varieties, one with the nominative Case feature and one without, and that the correct T must be chosen for the derivation to converge. The approach adopted here is that Case is not an uninterpret-

⁴ A reviewer asks about locality issues in the assignment of nominative Case to the object past the intervening inherent-Case-marked subject. I assume that after T locates the ergative subject and raises it to Spec,TP to satisfy the EPP, T continues to search from the position of the thematic subject. This *continuation* of search is more economical than repeating the search on the portion of the tree previously examined. It is invoked previously, for example, in Legate 2003a, 2004, and is related to approaches in Anagnostopoulou 2003, Anand and Nevins 2006 (which refers to 'punting'), Chomsky 2000, 2001, 2004, and Hiraiwa 2001 (which invokes simultaneity).

⁵ A reviewer suggests that the distinction need not be defined for a language in its entirety; a language may exhibit multiple *v* heads with different properties.

⁶ A reviewer observes that the proposed analysis must stipulate that in ABS = DEF languages, transitive *v* assigns ergative whereas intransitive *v* does not. As mentioned in the text below, this distinction between transitive and intransitive verbs is found in many ergative languages, but not all. In some ergative languages, inherent ergative is assigned to all thematic subjects, regardless of transitivity; such languages are often labeled 'active-stative' or 'split-S.' Given the language variation on this point, any analysis of ergativity must posit extra mechanisms to allow for both possibilities. In the minimalist framework I assume, language variation is handled by positing differences in the properties of functional items, like *v* (see, e.g., Chomsky 1995, Borer 2005). In the markedness-based theory of ergativity developed by Marantz (1991), discussed in section 4.1, the posited trace of object noun incorporation into unergative verbs 'counts' as a distinct position for case assignment in some languages but not others (see also Laka 1993). In Optimality Theory approaches (the reviewer mentions Woolford 2003), the variation is handled through positing constraints and reranking them across languages. For example, Woolford (2003) analyzes the distinction between Icelandic, which has nominative objects with nonnominative subjects, and Faroese, which has accusative objects with nonnominative subjects, by positing a constraint punishing multiple DPs within a single case-checking domain and ranking this above (Faroese) or below (Icelandic) a constraint punishing accusative case (although this approach does not extend to passives in Faroese, as she notes). The choice between these approaches to language variation seems to be the choice between frameworks.

able feature on functional heads. When merged into the derivation, T probes down the tree for a DP with an unvalued Case feature. If one is found, T values the feature to nominative. If none is found, the derivation continues unaffected. This approach is in the spirit of both Case assignment in Government-Binding Theory (e.g., Chomsky 1981) and recent work that interprets Case as an interpretable feature of a functional head (see Pesetsky and Torrego 2001, Svenonius 2001).

The claim that ergative Case is assigned in ABS=DEF languages in clauses in which nominative/absolutive Case is not also runs counter to the intuitions of many researchers (as reflected to varying degrees in Yip, Maling, and Jackendoff 1987, Marantz 1991, Bittner and Hale 1996a,b, among others) that ergative is dependent on nominative/absolutive. However, this intuition is empirically problematic, as evidenced by (a) split-S languages, in which unergative subjects bear ergative Case (while unaccusative subjects bear nominative/absolutive) (e.g., Laz (Blake 1994), Central Pomo (Mithun 1991)); (b) languages that show overt ergative and accusative morphology in transitive clauses in the absence of any nominative/absolutive (among many others, Djapu and Margany (Pama-Nyungan, discussed in section 3), Nez Perce (Rude 1988, Woolford 1997, Carnie and Cash Cash 2006), Kham (West Tibetan; Bittner 1994:13–14), Cashinawa (Panoan, from Peru; Dixon 1994)).

In this section, I consider five characteristics of the ABS=DEF languages: available case morphemes, Caseless DPs, cases in nonfinite contexts, additional absolutes, and Case-agreement interactions. I demonstrate that the proposed analysis explains the behavior of these languages in all five areas.

2.1 Case Morphemes

My approach to ABS=DEF languages is that the intransitive subject and the transitive object bear the same morphological case only because the languages lack nominative case morphology and accusative case morphology. Here, I present the case paradigms from Warlpiri, Niuean, Enga, and Hindi illustrating these lacunae.⁷

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| <p>(1) <i>Warlpiri</i> (based on Hale, Laughren, and Simpson 1995)⁸</p> <p>[ergative] ↔ -rlu/-ngku</p> <p>[dative] ↔ -ku</p> <p>[allative] ↔ -kurra</p> <p>[ablative] ↔ -ngurlu</p> <p>[locative] ↔ -rla/-ngka</p> <p>[translative] ↔ -karda</p> <p>[case] ↔ -∅ (= “absolutive”)</p> | <p>(2) <i>Hindi</i> (based on Mohanan 1994:60)</p> <p>[ergative] ↔ -ne</p> <p>[dative] ↔ -ko</p> <p>[instrumental] ↔ -se</p> <p>[genitive] ↔ -kaa</p> <p>[locative₁] ↔ -mē</p> <p>[locative₂] ↔ -par</p> <p>[case] ↔ -∅ (= “absolutive”)</p> |
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⁷ For the Georgian paradigm, see Aronson 1982:460.

⁸ -ngku and -ngka appear on stems of two moras.

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| <p>(3) <i>Niuean</i> (based on Seiter 1980:28–37)⁹</p> <p>[ergative] ↔ e / proper names, pronouns</p> <p>[ergative] ↔ he</p> <p>[locative] ↔ i / proper names, pronouns</p> <p>[locative] ↔ he</p> <p>[possessive] ↔ ha/a / proper names</p> <p>[possessive] ↔ ha / pronouns</p> <p>[possessive] ↔ he</p> <p>[case] ↔ a / proper names, pronouns
(= “absolutive”)</p> <p>[case] ↔ e (= “absolutive”)</p> | <p>(4) <i>Enga</i> (based on Lang 1973:xxiv–xxvi, Li and Lang 1979:312)</p> <p>[ergative] ↔ -me/-mi¹⁰</p> <p>[possessive] ↔ -nya</p> <p>[vocative] ↔ -oo</p> <p>[comitative] ↔ -pa / dual</p> <p>[comitative] ↔ -pipa / plural</p> <p>[locative] ↔ -nya/-sa/-ka</p> <p>[temporal] ↔ -sa/-nya/-pa</p> <p>[case] ↔ -∅ (= “absolutive”)</p> |
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These languages thus indeed lack nominative and accusative case morphology, and so cannot faithfully realize abstract nominative or accusative Case features determined in the syntax. In these paradigms, I have assumed that the case form standardly referred to as absolutive/nominative is the morphological default realizing no features beyond [case]. In the next section, I provide evidence for this claim.

2.2 Caseless DPs

In this section, I provide support for the status of the absolutive as a morphological default in Warlpiri, Niuean, Enga, and Hindi. This comes from constructions in which no abstract Case features are assigned to a DP (the DP escaping the Case Filter by virtue of appearing in an \bar{A} -position).¹¹ One such construction is hanging-topic left-dislocation, in which a topical DP is base-generated adjoined to the clause and thus fails to receive abstract Case (see, e.g., Anagnostopoulou, Van Riemsdijk, and Zwarts 1997 for discussion). Since the syntax does not provide the morphology with specific Case features to realize on hanging topics, they must receive default case morphology.¹² Thus, I predict that hanging topics appear in absolutive in Warlpiri, Niuean, Enga, and Hindi.¹³ This prediction is borne out. In Warlpiri, hanging topics appear in absolutive case

⁹ The ergative *e* on proper names and the “absolutive” *e* on common nouns are historically distinct and are standardly considered synchronically distinct as well. The ergative *he*, locative *he*, and possessive *he* on common nouns should be analyzed as a single morpheme, but this is not crucial for the present discussion. See Legate 2006a.

¹⁰ The ergative is also used for the instrumental; this is a common syncretism in ergative languages (and true also of Warlpiri). See Legate 2006a.

¹¹ See Schütze 2001 for discussion; the notion of morphological default case employed here corresponds to what Schütze refers to as “Elsewhere Insertion.”

¹² In some languages, hanging topics agree in case with the associated clause-internal DP, optionally or obligatorily. When such case agreement occurs, the construction is unrevealing as to the default morphological realization of Case. Thus, I focus on hanging topics without case agreement.

¹³ A reviewer wonders about hanging-topic left-dislocation in Georgian. Lea Nash (pers. comm.) indicates that the construction is not found in Georgian. However, the Georgian facts are not crucial to the point I am making here. My point is that the hanging-topic left-dislocation data support my claim that in Warlpiri, Niuean, Enga, and Hindi the absolutive is the morphological default. I have no data regarding the morphological default, if any, in Georgian, and make no claims on this matter.

(see Legate 2002b, 2003b for further discussion of the hanging-topic left-dislocation construction in Warlpiri). This is illustrated in (5); the hanging topics *ngarnkamarda* ‘pink cockatoo’ and *kakalyalya* ‘pink cockatoo’ both appear in absolutive. The associated position in the clause is filled by *ngula* ‘that’, which bears ergative case morphology.

- (5) Ngarnkamarda, kakalyalya, ngula-ngku-ju ka nga-rni
 pink.cockatoo.ABS pink.cockatoo.ABS that-ERG-TOP PRES.IMPERF eat-NONPAST
 watiya-warnu – watiya-ngarnarra – miyi-ji.
 tree-from tree-dweller.ABS fruit.ABS-TOP
 ‘The pink cockatoo eats those acacia seeds.’
 (Warlpiri Dictionary Project 1993)

Hanging topics in Niuean also bear absolutive (see Seiter 1980:116–118 for discussion). In (6), the hanging topic *fifine ia* ‘that woman’ is preceded by the absolutive marker. In contrast, the associated position in the clause is filled by *ia* ‘she’, which is preceded by the ergative marker.

- (6) Ko e fifine ia, to fakaata: mai e ia ke uta e au e motoka: haana.
 PRED ABS woman that to let DIR1 ERG she SUBJ take ERG I ABS car her
 ‘That woman, she’ll let me take her car.’
 (Seiter 1980:117)

Clear data from Enga are lacking; however, Lang (1973) provides a possible example. In (7), *pelyámo dóko* ‘the one who is going’ appears to be a hanging topic, adjoined to the main clause *óngo akáliaka* ‘that is definitely a man’. If so, the hanging topic is absolutive, as predicted.¹⁴

- (7) Pe-ly-á-mo dóko óngo akáli-aka.
 go-PRES-3SG-AUG DET.ABS DET man-EMP
 ‘That is definitely a man, the one who is going.’
 (Lang 1973:xxvii)

Finally, hanging topics in Hindi also bear absolutive (Dwivedi 1994:30–33). In the following example, the hanging topic *vo aurat* ‘that woman’ is absolutive, whereas the pronoun in the associated clause-internal position, *usse* ‘her’, bears comitative:

- (8) vo aurat, ali samajhte hai ki sudha-ne us-se baat kiyaa
 DEM woman.ABS Ali.ABS thinks that Sudha-ERG her-COM matter.ABS do.PERF
 thaa.
 be.PAST
 ‘That woman, Ali thinks that Sudha talked to her.’
 (Dwivedi 1994:31)

Thus, in all four languages, DPs lacking abstract Case are morphologically absolutive.

¹⁴ Unfortunately, the associated position in the clause also bears absolutive; thus, a case agreement analysis cannot be ruled out. See footnote 12.

In the following section, I provide evidence from nonfinite contexts demonstrating a split in licensing between absolutive case on the intransitive subject and absolutive case on the transitive object.

2.3 Cases in Nonfinite Contexts

A core aspect of my proposal for ABS = DEF languages is that the abstract Case assignment on the intransitive subject (S) and transitive object (O) differ, despite the identical morphological case marking.¹⁵ Specifically, the abstract Case on S is nominative, whereas the abstract Case on O is accusative. This makes a strong prediction for nonfinite contexts: absolutive on S should become unavailable, since it is abstract nominative and thus dependent on finite T; in contrast, absolutive on O should remain available, since it is abstract accusative and thus independent of T. I demonstrate that this prediction is borne out for three of the ABS = DEF languages, Warlpiri, Enga, and Hindi. For the fourth language, Niuean, I note that the prediction cannot be tested. Finally, I contrast the behavior of absolutive in nonfinite contexts in these ABS = DEF languages with the behavior of absolutive in the ABS = NOM language Georgian, where absolutive is lost uniformly on S and O.

First, consider Warlpiri. Warlpiri exhibits nonfinite contexts consisting of a nominalized verb phrase.¹⁶ In (9)–(11), these phrases express contemporaneity and so are most naturally translated into English through finite *while*-clauses. In these nonfinite phrases in Warlpiri, S cannot be absolutive.¹⁷

- (9) a. *Kurdu-lpa manyu-karri-ja [ngati-nyanu
 child.ABS-PAST.IMPERF play-stand-PAST [mother-ANAPH.ABS
 jarda-nguna-nja-rlarni].
 sleep-lie-NONFIN-OBV.C]
 ‘The child was playing while his mother was asleep.’
- b. *Ngarrka-patu-rlu ka-lu-jana puluku
 man-PAUC-ERG PRES.IMPERF-3PL.SUBJ-3PL.OBJ bullock.ABS
 turnu-ma-ni [kurdu parnka-nja-rlarni].
 group-CAUSE-NONPAST [child.ABS run-NONFIN-OBV.C]
 ‘The men are mustering cattle while the children are running.’

¹⁵ Independent support for a distinction between absolutive on S and absolutive on O comes from Aldridge (2004), who proposes that in certain Austronesian languages absolutive is assigned by T to S but by v to O. However, Aldridge’s analysis is purely syntactic and thus cannot account for the data considered here; in particular, the role of morphological realization based on the Elsewhere Condition is crucial for the data in section 2.4 on additional absolutive DPs, and for the Pama-Nyungan split-ergativity data in section 3. Thank you to John Whitman for pointing out the relevance of Aldridge’s work.

¹⁶ See Nash 1986 and Simpson 1991 for evidence of nominalization. One piece of evidence comes from reduplication: nonfinite forms of the verb undergo both the verbal reduplication pattern (reduplication of the first two syllables) and the nominal reduplication pattern (reduplication of the entire stem). Another piece of evidence is that nonfinite clauses bear case suffixes.

¹⁷ Simpson (1991:107) reports that rare examples are found, but that such phrases are judged ungrammatical. This judgment is shared by my consultants, who unequivocally rejected absolutive subjects in nonfinite phrases.

Instead, S must bear dative case; thus, these sentences become grammatical when the dative case suffix is added, yielding *ngatinyanuku* and *kurduku*, respectively. In contrast, O uniformly bears absolutive and may not bear dative, as shown by *miyi* ‘food’ in (10).

- (10) Ngarrka-patu-rlu ka-lu-jana puluku turnu-ma-ni,
 man-PAUC-ERG PRES.IMPERF-3PL.SUBJ-3PL.OBJ bullock.ABS group-CAUSE-NONPAST
 [karnta-patu-ku/karnta-patu-rlu miyi/*miyi-ku purra-nja-puru].
 [woman-PAUC-DAT/woman-PAUC-ERG food.ABS/*FOOD-DAT COOK-NONFIN-TEMP.C]
 ‘The men are mustering cattle while the women are cooking the food.’

Transitive subjects (A) may bear either ergative or dative, apparently in free variation. (11a) illustrates use of ergative on the A *ngatinyanu* ‘his mother’, and (11b) illustrates use of dative on the A *karnta* ‘woman’.

- (11) a. Kurdu-lpa manyu-karri-ja, [ngati-nyanu-rlu karla-nja-rlarni].
 child.ABS-PAST.IMPERF play-stand-PAST [mother-POSS-ERG dig-NONFIN-OBV.C]
 ‘The child was playing while his mother was digging (for something).’
 (Laughren 1989:(44a))
 b. Nyalali-rli ka warlu yarrpi-rni, [karnta-ku kurdu-ku miyi
 girl-ERG PRES.IMPERF fire.ABS kindle-PAST [woman-DAT child-DAT food.ABS
 yi-nja-rlarni].
 give-NONFIN-OBV.C]
 ‘The girl is building a fire while the woman is giving food to the baby.’
 (Hale 1982:(139b))

This striking split in behavior between absolutive on S and absolutive on O is explained on the present proposal. In nonfinite clauses, absolutive is not available for S, because in this context it corresponds to abstract nominative Case licensed by finite T; however, it is available for O, because in this context it corresponds to abstract accusative Case licensed by *v*. Ergative, being assigned by *v*, is also independent of finite T and so also available in nonfinite clauses. Dative is available on A and S because these phrases are nominalized (see footnote 16). The subjects of nominals in Warlpiri bear dative, like *Jakamarra* ‘Jakamarra’ in the following example:

- (12) [Jakamarra-ku jaja-nyanu-rlu] ka-ju paka-rni.
 [Jakamarra-DAT maternal.grandmother-ANAPH-ERG] PRES.IMPERF-1SG.OBJ hit-NONPAST
 ‘Jakamarra’s grandmother hits me.’
 (Laughren 2002:106)

Given the variation between dative and ergative on A, I propose that nominalization occurs above *v* (by merger of a D head), either immediately before or immediately after the introduction of the external argument.¹⁸

¹⁸ Mary Laughren (pers. comm.) notes that some speakers only allow the dative. For those speakers, nominalization must occur immediately above *v*.

Let us now consider the case patterns found in Enga nonfinite clauses. Like Warlpiri, Enga exhibits a distinction between the licensing of absolutive on S and the licensing of absolutive on O in nonfinite clauses. Absolutive is available for O in nonfinite clauses in Enga; see *yólé* ‘wages’ in (13a) and *dokosáa* ‘doctor’ in (13b).

- (13) a. Baa-mé [yólé nyá-la-nya] kalái pi-ly-a-mó.
 he-ERG [wages.ABS get-*INFIN-DESID*] work.ABS do-PRES-3SG.SUBJ-PRT
 ‘He works to get wages.’
 (Li and Lang 1979:317)
- b. Akáli dokó-mé [dokosáa dokó kánj-a-nya] más-í-á.
 man DET-ERG [doctor DET.ABS see-*INFIN-DESID*] think-PAST-3SG.SUBJ
 ‘The man wanted to see the doctor.’
 (Li and Lang 1979:319)

However, absolutive is not available for S. To express an overt S, a finite complement clause must be used in place of the infinitival.¹⁹

- (14) Namba-mé [émba Wápaka pú-p-í lá-o] mási-ly-o.
 I-ERG [you.ABS Wabag go-PAST-2SG utter-COMP] think-PRES-1SG
 ‘I want you to go to Wabag.’ (lit. ‘I want that you go to Wabag’)
 (Li and Lang 1979:317)

For Niuean, on the other hand, the predicted behavior of absolutive in nonfinite clauses cannot be tested. The relevant clause type is typically referred to as the ‘subjunctive’ in Niuean, and its status as finite or nonfinite is not settled. Regardless of how this issue is resolved, the clauses cannot be used to test the prediction in Niuean, since all cases are available: ergative on A (*tama* ‘child’) and absolutive on O (*akau* ‘tree’) in (15a), and absolutive on S (*Pita* ‘Pita’) in (15b).²⁰

- (15) a. Kua kamata [ke hala he tama e akau].
 PERF begin [SBJV cut ERG child ABS tree]
 ‘The child has begun to cut down the tree.’
 (Massam 2006:(21))
- b. Maeke [ke nofo a Pita i Tuapa].
 possible [SBJV stay ABS Pita at Tuapa]
 ‘Pita can stay at Tuapa.’
 (Massam 2006:(19))

¹⁹ Unfortunately, data are not available on overt A in nonfinite clauses.

²⁰ Diane Massam (pers. comm.) points out that like Warlpiri, Niuean has a construction involving nominalization. This potentially could be used to test the prediction; however, Massam notes that the facts are unclear and that fieldwork has proven difficult, since many speakers dislike the construction.

Finally, the prediction can be tested in Hindi, and it is borne out. In Hindi nonfinite nominalized clauses, absolutive on S is not available; instead, S bears genitive (Mohanana 1994:78). This is illustrated in (16) for S *raam* ‘Ram’.

- (16) [raam-ke baiThne]-par maã-ne usko khaanaa diyaa.
 [Ram-GEN sit.NONFIN]-LOC mother-ERG him.DAT food.ABS give.PERF
 ‘When Ram sat down, Mother gave him food.’
 (Mohanana 1994:78)

Genitive is characteristic of the subjects of nominals in Hindi, as illustrated by *anuu* ‘Anu’ in (17).

- (17) anuu-kii puraani kitaab
 Anu-GEN old book.ABS
 ‘Anu’s old book’
 (Mohanana 1994:13)

In contrast, O that bears absolutive in finite clauses also bears absolutive in nonfinite clauses, and does not bear genitive (Mohanana 1994:78). This is illustrated in (18) for the object *darvaazaa* ‘door’.

- (18) ilaa-ne [raam-ke darvaazaa kholne]-par anu-ko DaãTaa.
 Ila-ERG [Ram-GEN door.ABS open.NONFIN]-LOC Anu-DAT scold.PERF
 ‘Ila scolded Anu on Ram’s opening the door.’
 (Mohanana 1994:186)

A in these nonfinite contexts also bears genitive case.

- (19) [ilaa-ke anuu-ko ciDhaane]-par . . .
 [Ila-GEN Anu-DAT tease.NONFIN]-LOC
 ‘On Ila’s teasing Anu, . . .’ (‘When Ila teased Anu, . . .’)
 (Mohanana 1994:75)

Ergative is not available in Hindi, since, unlike in Warlpiri, assignment of ergative depends on the presence of perfective aspect.²¹ Perfective aspect is lacking in these adjunct phrases marked with *par*, eliminating the possibility of ergative Case. Hindi does exhibit another type of nonfinite clause containing perfective aspect, which is marked with the ‘conjunctive’ marker *kar*. If such clauses allowed an overt subject, we would expect ergative to be possible on their transitive subjects. Unfortunately, they exhibit obligatory subject control and so cannot be tested.²²

²¹ Davison (2004) demonstrates that this requirement is syntactic, not semantic. Thus, counterfactual clauses with imperfective aspect but perfective interpretation do not allow ergative.

²² See Davison 1981, among others, for discussion of *kar*-clauses; see section 4.1 and references therein for discussion of obligatory control.

To summarize, in Warlpiri, Enga, and Hindi absolutive case on S is lost in nonfinite clauses, while absolutive case on O is retained. This split in the behavior of absolutive arguments is unexpected under any theory that provides a uniform source for absolutive. However, this split is predicted under the current proposal that absolutive in these languages is a morphological default: absolutive on S masks abstract nominative Case, which is dependent on finiteness and so lost in nonfinite contexts; absolutive on O masks abstract accusative Case, which is independent of finiteness and so retained in nonfinite contexts.

The split in behavior of absolutive arguments in nonfinite contexts in these ABS=DEF languages is in striking contrast with the behavior of absolutive arguments in nonfinite contexts in Georgian, an ABS=NOM language. In Georgian, both absolutive on S and absolutive on O correspond to abstract nominative Case (and are correctly referred to in the traditional literature as nominative, rather than absolutive). Thus, absolutive is uniformly lost in nonfinite contexts; no split in behavior is found. A relevant nonfinite verb form in Georgian is the nominalized verb (traditionally termed the ‘masdar’).²³

The nominalized verb does not allow absolutive, either on S or on O. Instead, S and O are marked genitive. Two examples follow: in (20a), the O *datv* ‘bear’ is marked genitive; in (20b), the S *tamad* ‘tamada’ is also marked genitive.

- (20) a. [Dativ-is mok'vla am t'qeši] ak'r3alulia.
 [bear-GEN killing.NOM this woods.in] forbidden.it.is.I.2
 ‘Killing bears in this woods is forbidden.’
 b. [Tamad-is damtknareba supraze] uzrdelobaa.
 [tamada-GEN yawning.NOM table.on] rudeness.it.is.I.2
 ‘It is rude for the *tamada* to yawn at the table.’

A appears as the complement of a postposition *mier* ‘by’; this is shown by *monadir* ‘hunter’ in (21).

- (21) [Monadir-is mier (datv-is) mok'vla] ak'r3alulia.
 [hunter-GEN by (bear-GEN) killing.NOM] forbidden.it.is.I.2
 ‘The killing (of bears) by hunters is forbidden.’
 (Harris 1981:157)

Thus, the nominalized verb involves nominalization of the verb alone, which then combines with its arguments as a noun rather than a verb. This is in contrast to what we find in Warlpiri and Hindi, where nominalization applies at a higher level, after the verb has combined with the object and *v*. The proposed analysis explains why nominalization cannot take place at the verb phrase level as it does in Warlpiri and Hindi: in Georgian, this would leave O without abstract Case, since O is dependent on finite T for Case.²⁴

²³ Another is the infinitive (traditionally termed the ‘future participle in adverbial case’), used for purpose clauses with PRO subjects. In these as well, O cannot bear absolutive and must instead bear genitive (see, e.g., Hewitt 1987: 155).

²⁴ Further research is required to explain the inability of series I predicates to undergo higher nominalization; see the discussion of Georgian split ergativity in section 2.4.

In sum, in ABS=DEF languages (but not ABS=NOM languages), absolutive on S and absolutive on O are licensed distinctly, as shown by their distinct behavior in nonfinite clauses. In the following section, I present further evidence of the heterogeneity of the absolutive in ABS=DEF languages.

2.4 Prediction for Other DPs

Absolutive is standardly defined as a case that groups together intransitive subjects (S) and transitive objects (O). However, my analysis predicts a wider distribution of absolutive in ABS=DEF languages. Any DP bearing an abstract Case feature that lacks a distinct morphological realization will be realized as the morphological default, hence absolutive. Thus, absolutive appears on a range of DP types and on potentially more than one DP per clause. In this, ABS=DEF languages contrast sharply with ABS=NOM languages, in which absolutive is limited to one DP per clause, either S or O. Absolutive corresponds to nominative Case licensed by T in these languages, yielding its uniqueness. In this section, I consider the case patterns on objects of postpositions, objects in the double object construction, and applicative objects, and the case patterns resulting from split ergativity.

Beginning with Enga, we find the predicted wider distribution of absolutive. The objects of postpositions are absolutive, as are both objects in the double object construction. In (22), *énda* ‘woman’ is the object of the postposition *kandaó* ‘toward’ and appears in absolutive case.

- (22) Akáli dokó-mé [énda kandaó] píí le-ly-á-mo.
 man DET-ERG [woman.ABS toward] word.ABS say-PRES-3SG.SUBJ-PRT
 ‘The man is telling something to the woman.’
 (Li and Lang 1979:318)

In the double object construction in (23), both objects are absolutive, yielding two absolutive DPs in a single clause: *énda* ‘woman’ and *mená* ‘pig’.

- (23) Namba-mé énda dóko mená dóko maí-y-ó.
 I-ERG woman DET.ABS pig DET.ABS give-PAST-1SG.SUBJ
 ‘I gave the pig to the woman.’
 (Li and Lang 1979:312)

Similarly, in Niuean the object of (benefactive, comitative, and instrumental) prepositions appears in absolutive case.²⁵ Thus, in (24) *pene* ‘pen’ bears absolutive case as the object of the preposition *aki* ‘with’, and *tagata* ‘man’ bears absolutive as the object of the preposition *ma* ‘for’.

- (24) a. Ne tohitohi a Sione [aki e pene].
 PAST writing ABS Sione [with ABS pen]
 ‘Sione was writing with a pen.’
 (Massam 2006:33)

²⁵ Although when the object of a benefactive or comitative preposition is a proper name, the absolutive is - \emptyset . This seems phonologically motivated for benefactives, although not for comitatives. A reviewer correctly notes that the goal preposition *ke* is different in that it assigns its complement locative Case, which has a distinct morphological realization.

- b. Gahua a au [ma e tagata kō].
 work ABS I [for ABS man that]
 ‘I work for that man there.’
 (Seiter 1980:36)

Applicative objects in the instrumental advancement construction also bear absolutive. In (25), for example, the applicative object *akau* ‘club’ bears absolutive.

- (25) Ne ahu aki e ia e akau e tau toa.
 PAST slay with ERG he ABS club ABS PL hero
 ‘He slayed the heroes with a club.’
 (Massam 2006:35)

Notice that as a result of this case marking, the clause has two absolutive DPs, since the verbal object *toa* ‘hero’ is also marked absolutive.

For Hindi, it is well known that the case marking found on the subject and the case marking found on the object are independently determined. When the aspectual requirements for the assignment of ergative are not met, the transitive subject appears in absolutive; when the appropriate interpretive requirements for the assignment of dative are not met, the transitive object appears in absolutive. Multiple absolutives result, as in (26).

- (26) ravii kelaa khaa rahaa thaa.
 Ravi.ABS banana.ABS eat PROG be.PAST
 ‘Ravi was eating a banana.’
 (Mohanani 1994:63)

In Warlpiri as well, two absolutives may be found in a single clause. Whether the objects of postpositions bear absolutive is difficult to determine in Warlpiri. Warlpiri lacks independent postpositions; instead, it exhibits “semantic case” morphemes, which may be case morphemes or may be suffixal postpositions. If these are suffixal postpositions, their objects indeed appear in absolutive, as illustrated by *kurra* ‘to’ and *ngurlu* ‘from’.²⁶

- (27) a. ngurra-kurra
 camp.ABS-to
 ‘to camp’
 b. ngarna-ngurlu
 plant.base.ABS-from
 ‘from a root’
 (Warlpiri Dictionary Project 1993)

A clearer example is found in ergative splits based on nominal type. The pronouns *ngaju* ‘I’ and

²⁶ Double objects and applicative objects in Warlpiri receive dative Case, which has a distinct morphological realization (-*ku*).

case rather than ergative. In Hindi and Warlpiri, we saw that the case of the object is unaffected, resulting in two absolutes in a single clause. In Georgian, by contrast, the object's case cannot remain absolute: the absolute is unique. In series I, A bears absolute, so O cannot. Instead, O receives structural dative Case from *v*. This contrast between Case patterns in series I and series II is illustrated here:

(31) *Series I*

glex-i tesavs simind-s
 peasant-NOM he.sows.it corn-DAT
 'The peasant is sowing corn.'

(32) *Series II*

glex-ma datesa simind-i
 peasant-ERG he.sowed.it corn-NOM
 'The peasant sowed corn.'

In sum, in ABS = DEF languages, absolute is nonunique and exhibits a distribution wider than S and O. In the ABS = NOM language Georgian, on the other hand, the absolute is unique and limited to S and O. In the following section, I consider the interaction between Case and agreement.

2.5 Case-Agreement Interaction

In this section, I discuss the patterns of agreement in Enga, Niuean, Hindi, and Warlpiri, considering the relationship between these patterns and the proposed ABS = DEF analysis of these languages.

I adopt a framework in which agreement relationships are established in the syntax on the basis of closest c-command (see Chomsky 2000, 2001, 2004). Just like Case features, agreement features are realized in a postsyntactic morphology according to the Elsewhere Condition. Here, I focus on subject agreement. In the most basic instance, (finite) T enters into a relationship with the highest DP argument, which results in T bearing the ϕ -features of the argument, and the argument bearing the nominative Case feature.

An important situation to consider in the present context is one in which the external argument bears inherent Case and thus cannot receive nominative Case from T. Languages differ as to how this situation is treated, and this difference cuts across the ABS = DEF languages. In certain languages, inherent-Case-marked DPs do trigger agreement on T, even though they cannot receive nominative Case from T. In other languages, inherent-Case-marked DPs may not trigger agreement on T.²⁸

In an ABS = DEF language, if the inherent-Case-marked A may trigger agreement, both A (ergative) and S (nominative, realized morphologically by absolute) will trigger subject agree-

²⁸ The variation is potentially more fine-grained, with different inherent Cases behaving differently in a single language.

ment. O may either trigger no agreement or trigger distinct object agreement. This A/S subject agreement pattern is found in Warlpiri and Enga. In Warlpiri, A and S trigger subject agreement, and O triggers distinct object agreement. This is illustrated in (33), in which first person singular A and S trigger the subject agreement morpheme *-rna* in (33a) and (33b), while first person singular O triggers the object agreement morpheme *-ju* in (33c).

- (33) a. Ngajulu-rlu-rna-ngku nyuntu nya-ngu.
I-ERG-1SG.SUBJ-2SG.OBJ YOU.ABS see-PAST
'I saw you.'
- b. Ngaju-rna parnka-ja.
I.ABS-1SG.SUBJ run-PAST
'I ran.'
- c. Nyuntulu-rlu-mpa-ju ngaju nya-ngu.
you-ERG-2SG.SUBJ-1SG.OBJ I.ABS see-PAST
'You saw me.'

In Enga, A and S trigger subject agreement; O does not.²⁹ Thus, in (34a) and (34b), the first person singular A and S trigger the agreement morpheme *-ó*, while the first person singular O in (34c) fails to trigger agreement. Instead, the verb shows third person singular agreement, *mo*, with A.

- (34) a. Namba-mé énda dóko mená dóko maí-y-ó.
I-ERG woman DET.ABS pig DET.ABS give-PAST-1SG.SUBJ
'I gave the pig to the woman.'
(Li and Lang 1979:312)
- b. Nambá p-e-ó.
I.ABS go-PAST-1SG.SUBJ
'I went.'
(Li and Lang 1979:317)
- c. Baá nambá kand-e-á-mo-aka . . .
he I.ABS see-PAST-3SG-AUG-CONCESS
'Although he saw me . . .'
(Lang 1973:xxxv)

In an ABS = DEF language in which the inherent-Case-marked A may not trigger agreement, only S triggers subject agreement. This pattern is found in Niuean.³⁰ Plural S triggers a reduplica-

²⁹ Limited, distinct object agreement appears in Enga with benefactives. The benefactive marker on the verb is *-k* for first and second person beneficiaries, and *kamaí* for third person beneficiaries. This does not affect the discussion of subject agreement in the text.

³⁰ The agreement facts in Niuean are complicated by the existence of lexical exceptions; Seiter (1980:61–65) reports two verbs that allow agreement with A, and a small class of verbs that allow agreement with O (he provides two). See that work for details.

tive agreement morpheme on the verb in (35b,d), for the subjects *tau matua* ‘parents’ and *laua* ‘they two’. In (36), the plural As *maua mo Sione* ‘Sione and I’ and *tau fānau* ‘the children’, and the plural Os *tau mata afi* ‘matches’ and *tau fakatino* ‘pictures’, all fail to trigger agreement.

- (35) a. *Nofo agaia nakai e matua fifine haau i Mutalau?*
 live still Q ABS parent female your in Mutalau
 ‘Does your mother still live in Mutalau (village)?’
- b. *No-nofo agaia nakai e tau ma-matua haau i Mutalau?*
 PL-live still Q ABS PL PL-parent your in Mutalau
 ‘Do your parents still live in Mutalau (village)?’
- c. *Mate tuai a ia.*
 die PERF ABS she
 ‘She’s dead.’
- d. *Ma-mate tuai a laua.*
 PL-die PERF ABS they.DUAL
 ‘They are dead.’
 (Seiter 1980:62)
- (36) a. *Moua oti e maua mo Sione e tau mata afi.*
 get all ERG we.DUAL.EXCL with Sione ABS PL piece fire
 ‘Sione and I have already won all the matches.’
 (Seiter 1980:67)
- b. *Kua tā he tama e tau fakatino.*
 PERF draw ERG child ABS PL picture
 ‘The child has been drawing pictures.’
- c. *Volu nakai he tau fānau e fua niu?*
 grate Q ERG PL children ABS fruit coconut
 ‘Are the children grating (the fruit of the) coconut?’
 (Seiter 1980:70)

Let us now consider the most interesting pattern of the four, that of Hindi. Pretheoretically, Hindi is described as exhibiting agreement with the highest absolutive. In (37a), the absolutive S *raam* ‘Ram’ triggers agreement. In (37b), the absolutive A *ravii* ‘Ravi’ triggers agreement; notice that the O *roTii* ‘bread’ is also absolutive, but does not trigger agreement. Finally, in (37c), the A is ergative, so the highest absolutive is the O *roTii*, which triggers agreement.

- (37) a. *raam giraa.*
 Ram.M.ABS fall.PERF.M.SG
 ‘Ram fell hard.’
 (Mohanani 1994:71)
- b. *ravii roTii khaaegaa.*
 Ravi.M.ABS bread.F.ABS eat.FUT.M.SG
 ‘Ravi will eat bread.’
 (Mohanani 1994:104)

- c. ravii-ne roTii khaayii.
 Ravi.M-ERG bread.F.ABS eat.PERF.F.SG
 ‘Ravi ate bread.’
 (Mohanani 1994:103)

This pattern is initially surprising on the present analysis, since the abstract Case borne by the DP that triggers agreement is inconsistent. In (37a) and (37b), agreement is triggered by the subject, which bears nominative Case. In (37c), on the other hand, agreement is triggered by the object, which bears accusative Case. In fact, on this basis alone, the Case on absolutive objects like *roTii* in (37c) has been analyzed as nominative.

I propose that the pattern of agreement found in Hindi is similar in its essentials to the pattern found in Niuean in that DPs that bear inherent ergative Case do not trigger agreement. Where the languages differ is this: in Hindi, after the inherent-Case-marked DP fails to trigger agreement, T continues to search down the tree for a DP that may trigger agreement—that is, a DP with structural Case. In (37c), T finds the accusative object, which then triggers subject agreement, even though it has no other relationship with T. I refer to this as *aggressive agreement*.³¹

Evidence for aggressive agreement comes from two sources. First, we find that (pseudo)incorporated nominals trigger agreement in Hindi, even though such DPs crosslinguistically lack Case. (See, for example, Baker 1988 on the lack of Case on incorporated nouns and Massam 2001 on the lack of Case on pseudoincorporated NPs.) Thus, these nominals trigger agreement without bearing nominative Case or raising to Spec,T, simply on the basis of closest c-command.

- (38) a. raam-ne lakDii kaaTii.
 Ram.M-ERG wood.F cut.PERF.F
 ‘Ram did wood-cutting.’
 (Mohanani 1994:107)
- b. puure din maiN-ne (apne kamre meN) kitaab paRhii.
 whole day I-ERG (self’s room in) book.F read.F.SG
 ‘The whole day I read books (in my room).’
 (Dayal 2003:(23))

On incorporation in Hindi, see Mohanani 1994:106–117 and Dayal 2003.

The second piece of evidence for aggressive agreement comes from long-distance agreement (see Mahajan 1989, Butt 1995, and especially Bhatt 2005, where this argument is made quite carefully). In long-distance agreement, a matrix verb agrees with an embedded object, although the embedded object is Case-licensed in the embedded infinitival clause.

³¹ Thus, I concur entirely with Bhatt’s (2005) AGREE analysis, except for his assumption that it is the lack of overt case morphology on a DP that makes it eligible to trigger agreement in Hindi. On the present account, agreement relationships are determined in the syntax whereas morphological realization of Case is determined in a postsyntactic morphology on the PF branch of the derivation. Thus, case morphology cannot affect agreement relationships. See below for supporting evidence.

- (39) raam-ne [roTii khaa-nii] chaah-ii.
 Ram-ERG [bread.F.ABS eat-INFIN.F] want-PERF.F
 ‘Ram wanted to eat bread.’
 (Mahajan 1989:234)

Thus, in (39), the matrix verb *chaahii* ‘want’ bears feminine morphology, in agreement with the embedded feminine object *roTii* ‘bread’, even though *roTii* receives Case from the embedded verb *khaanii* ‘eat’.

In sum, agreement in Hindi is triggered by a structural-Case-marked DP, on the basis of closest c-command. No other relationship between the DP and T is required. Thus, the agreement patterns are fully compatible with the Case system proposed here.

To conclude this section: Agreement patterns in Warlpiri, Enga, Niuean, and Hindi reflect their Case patterns. In Warlpiri, Enga, and Niuean, although both S and O bear absolutive morphology, only S triggers subject agreement. Warlpiri and Enga differ from Niuean in that the latter disallows subject agreement triggered by A marked with inherent ergative Case. Finally, Hindi allows both S and O to trigger subject agreement, not because agreement is based on the notion “absolutive,” but because agreement is divorced from Case assignment, instead being based on closest c-command of a structural-Case-marked DP.

2.6 Summary

Warlpiri, Enga, Niuean, and Hindi are languages in which absolutive is a morphological default, inserted when a morphological realization of the abstract Case is lacking. Intransitive subjects (S) receive nominative Case whereas transitive objects (O) receive accusative Case, despite their identical absolutive morphology. These languages exhibit the following properties: (a) lack of nominative and accusative case morphology; (b) use of absolutive for DPs without abstract Case (like hanging topics); (c) loss of absolutive on S in nonfinite clauses that allow only a subset of cases, and concurrent maintenance of absolutive on O; (d) use of absolutive on other DPs marked with abstract Cases that lack a morphological realization, potentially resulting in multiple absolutives in a single clause; (e) subject agreement triggered by the surface subject (A/S), the nominative (S alone), or the highest DP with structural Case (aggressive agreement).

In the following section, I provide additional evidence for the distinction between morphological case and abstract Case in ergative-absolutive languages, from ergative splits in three Pama-Nyungan ABS = DEF languages.

3 Split Ergativity in Pama-Nyungan

3.1 Split Ergativity and the Default Absolutive

Pama-Nyungan languages commonly show split ergativity based on nominal type; thus, certain nominals may inflect according to an ergative-absolutive pattern, while others show a nominative-accusative pattern. An example is Gumbaynggir (Gumbaynggiric; Eades 1979), in which third person pronouns and nouns inflect on an ergative-absolutive pattern, first person dual (inclusive

Table 1

The nominal hierarchy (from Dixon 1994:85)

1st person pronouns	2nd person pronouns	Demonstratives 3rd person pronouns	Proper nouns	Common nouns		
				Human	Animate	Inanimate

and exclusive) and second person singular pronouns inflect on a nominative-accusative pattern, and all other pronouns, kinship terms, and section names show distinct inflection for each of ergative, nominative, and accusative. Beginning with Silverstein 1976, this type of split is standardly described as following a nominal hierarchy (see table 1), whereby nominals falling toward the left of the hierarchy are more likely to exhibit ergative marking while those falling toward the right are more likely to exhibit accusative marking.³²

This type of split may result from two distinct processes. One possibility is that abstract Case assignment depends on nominal type. On such an analysis, for example, inherent ergative Case may not be assigned to first person external arguments, which then must receive nominative Case. A second possibility is that abstract Case assignment is uniform throughout: ergative on A, nominative on S, and accusative on O; only the morphological realization of these abstract Cases varies across nominal types. I argue that the second possibility is realized in a number of Pama-Nyungan languages, including Djapu, Kugu Nghanhcara, and Margany. Case mismatch data, given below, provide striking evidence for the analysis.³³

Let us begin with Djapu (Yuulngu; data from Morphy 1983), a split ergative language with the split dependent on nominal type. Specifically, human and higher animate nominals exhibit

³² See section 3.2 for more discussion.

³³ After three revisions of this article, I found an excellent paper by Goddard (1982) in which the arguments in this section are refigured. Goddard looks at Dhalandji, Pitta Pitta, Diyari, Yidiny, Dyirbal, Kala Lagaw Ya, and the Yankunytjatjara dialect of Western Desert, arguing that they are languages with ergative-nominative-accusative Case but ergative-absolutive case marking. Unfortunately, Goddard's paper does not seem to have informed the recent theoretical discussion on this type of split ergativity. It is my hope that the importance of the data from Pama-Nyungan languages discussed in this section and in Goddard's paper will be recognized.

Goddard also mentions Warlpiri as follows:

A smaller number of languages, including Warlpiri, Walmatjari, and the Pintupi dialect of the Western Desert Language, have both nouns and pronouns showing two distinct forms only (one for S/O, one for A) and bound pronouns alone [agreement], of all the nominals, showing the converse two form split (i.e. S/A vs O). I will not address these types directly, though it may be possible to adapt the following argument to them also. (1982:179)

Section 2 above has shown that it is indeed possible and desirable.

Goddard's summary is exactly on the mark:

Another way of putting the point I am making here is that true absolutive case (i.e. a case value which applies to all nominals in S and O context) is very rare indeed. The whole thrust of this paper has been to show that what is usually called 'absolutive case' is not a CASE at all. Rather, 'absolutive' generally refers to a PATTERN OF CASE MARKING that occurs frequently in Australia. (1982:183)

—and indeed, as I have demonstrated in this article, outside of Australia as well.

the full range of ergative, nominative, and accusative case distinctions. In (40), the A *galkay* ‘sorcerer’ bears ergative, the O *ba:pa’ngalin* ‘father’ bears accusative, and the S *Ngarritj* appears in the unmarked nominative.

- (40) a. Mak rlinygu-n galka-y’ ba:pa-’ngali-n dharpu-ngal.
 maybe already-IM sorcerer-ERG father-KIN.PROP-ACC spear-PERF
 ‘Maybe a sorcerer has already speared your father.’
 (Morphy 1983:111)
- b. Ngarritj nha:-ma wa:yin-gu.
 Ngarritj.NOM see-UNM animal-DAT
 ‘Ngarritj is looking for animal(s).’
 (Morphy 1983:38)

All other nominal types exhibit a more impoverished paradigm. *Wh*-words (with the exception of *yol* ‘who’), determiners/demonstratives, lower animates, and inanimates all exhibit ergative-absolutive marking. This is illustrated in (41) for the A *dhandurrungdhu gatapangay* ‘buffalo’s horn’, the S *mutika* ‘... rirrakay’ ‘sound of a car’, and the O *bunhbu* ‘shelter’.

- (41) a. Dharpu-ngal ngarra-n dhandurrung-dhu gatapanga-y.
 pierce-PERF 1SG-ACC horn-ERG buffalo-ERG
 ‘The buffalo’s horn has pierced me.’
 (Morphy 1983:127)
- b. Mutika’ nhawi-yi-n rirrakay gärr-i-n dhupal.
 car.ABS whtsit-INCHO-PERF sound.ABS enter-PERF this.ALL
 ‘The sound of a car has gone into this [tape recorder].’
 (Morphy 1983:71)
- c. Ngali djäma bunhbu djamarrkulhi-w’.
 1DUAL.INCL.NOM make shelter.ABS children-DAT
 ‘We’ll make a shelter for the children.’
 (Morphy 1983:38)

Pronouns, on the other hand, show a nominative-accusative pattern. In (42), ‘he’ is the nominative *ngayi* when A or S, but the accusative *nganya* when O.

- (42) a. Mirlipi ngayi yurru dharpu-ma-n garapa-y.
 shoulder.blade.ABS he.NOM FUT pierce-UNM-IM spear-INSTR
 ‘He pierces the shoulder blade with a one-pronged spear.’
 (Morphy 1983:39)
- b. Wanha-ngumi ngayi?
 where-LOC he.NOM
 ‘Where is he?’
 (Morphy 1983:34)

- c. Yaka nhe nganya dhipali gurrunhu-rr barrku-ma.
 not you.NOM him.ACC that.ALL lay.down-POT far-ALL
 ‘Don’t put him down way over there.’
 (Morphy 1983:102)

In Djapu, all elements of a DP, whether continuous or discontinuous, must be marked for case and match in case. In (43a), all five elements of the DP bear dative morphology; in (43b), the two parts of the DP *birrka’mirr rdung’rtung* ‘palpitating thing’ match in absolutive and the two parts of the DP *ngurikal-yi yolnguwal* ‘that person’ both show oblique morphology.

- (43) a. nganapurru-nggalangu-w djamarrkurli-w’ yumurrku-w dhiya-ku Djapu-w
 1PL.EXCL-OBL.S-DAT children-DAT small.PL-DAT this-DAT Djapu-DAT
 ‘for these our small Djapu children’
 (Morphy 1983:123)
- b. Bala ngayi ga:rri-nya-mara-m birrka’mirr rdung’rtung
 then he.NOM enter-NMLZR-CAUSE-UNM anything.ABS palpitating.ABS
 ngurikal-yi yolngu-wal.
 that.OBL-ANAPH person-OBL
 ‘Then he puts some other palpitating thing into that person.’
 (Morphy 1983:40)

However, the combination of a demonstrative (ergative-absolutive) and a human noun (ergative-nominative-accusative) results in case mismatches. The DP *ngunhinydhi yolngun* ‘that person’ in (44) consists of a demonstrative marked as absolutive and a head noun marked as accusative. Similarly, the DP *dhuwa nhe* ‘this you’ combines a demonstrative marked as absolutive with a pronoun marked as nominative.

- (44) a. Wungay’ marrtji-nya ngunhi-ny-dhi yolngu-n
 honey.ABS go-PAST.NONINDIC that.ABS-PRO-ANAPH person-ACC
 wapirti-warrtju-na-puyngu-nha-ny weka-nha.
 stingray-spear.PL-NMLZR-INHAB-ACC-PRO give-PAST.NONINDIC
 ‘We would go and give honey to those people who were spearing stingrays (lit. ‘to those stingray-spearing people’).’
 (Morphy 1983:110)
- b. Dhuwa nhe yurru lili dha:parng rongiyi-rr.
 this.ABS you.NOM FUT HITHER unsuccessful return-UNM
 ‘YOU will return empty handed [but not I].’
 (Morphy 1983:84)

Such examples illustrate the absolutive as a morphological default for a subsection of the Djapu grammar: the demonstratives. Consider the lexical items that are relevant for the realization of *ngunhinydhi yolngun* ‘that person’. Although the demonstrative and the noun match in abstract

accusative Case features, these are realized distinctly in the morphology. First consider the realization of ‘person-ACC’. The noun is the invariant *yoŋgu* ‘person’; a noun suffix does exist that realizes the accusative Case feature on human nouns, *-nha*, and so this is inserted. When it comes to ‘that.ACC’, however, no lexical item is available that realizes the accusative Case feature on the demonstrative. This results in the insertion of the morphological default, *ngunhi*.³⁴

(45) *Nominal case suffixes*

[accusative] ↔ *-nha* / human
 [ablative] ↔ *-galngur* / human
 [oblique] ↔ *-gal* / human
 [originator] ↔ *-gungu* / human
 [ergative] ↔ *-dhu* / noun
 [dative] ↔ *-gu* / noun
 (elsewhere) ↔ \emptyset / noun

(46) *‘that’*

[ergative] ↔ *nguringi*
 [dative] ↔ *nguriki*
 [originator] ↔ *nguriking*
 [oblique] ↔ *ngurikal*
 [ablative] ↔ *ngurikalangungur*
 [associative] ↔ *ngurikalanguwuy*
 (elsewhere) ↔ *ngunhi*

In sum, ergative, nominative, and accusative are all assigned in Djapu. However, the lack of a morphological realization for the accusative Case feature in demonstratives results in the appearance of an ergative-absolutive pattern. Thus, absolutive as a morphological default is exhibited only in a section of the grammar.

Djapu is unlike Warlpiri, Enga, Niuean, and Hindi in exhibiting three distinct forms for a subset of the nominal types: the human and higher animate nouns. Kugu Nganhcara (Middle Paman; Smith and Johnson 2000) and Margany (Maric; Breen 1981) represent an intermediate step between the four ABS = DEF languages and Djapu. Kugu Nganhcara and Margany are like Warlpiri, Enga, Niuean, and Hindi in that no nominal type has distinct morphological realizations for all three of ergative, nominative, and accusative. They are like Djapu, however, in that although some nominal types show an ergative-absolutive pattern, other nominal types show a nominative-accusative pattern. In both Kugu Nganhcara and Margany, pronouns show nominative-accusative, while nouns, adjectives, and demonstratives show ergative-absolutive. However, case mismatches again indicate that all three Cases are indeed assigned in the syntax. These case mismatches result from the combination of pronouns, which inflect according to a nominative-accusative paradigm, and nouns, adjectives, and demonstratives, which inflect according to an ergative-absolutive paradigm.

In Kugu Nganhcara, case morphology is obligatory on the final element of the DP (Smith and Johnson 2000:388, 421–423).

(47) a. *nhila pama-ng*
 3SG.NOM man-ERG
 ‘the man’

³⁴ The forms in (45) and (46) are the underlying forms posited by Morphy; phonological considerations result in the surface pronunciations.

- b. *nhila pama yoko-ng*
 3SG.NOM man big-ERG
 ‘the big man’
- c. *pula pama yoko kuce-ng*
 3DUAL.NOM man big two-ERG
 ‘the two big men’
 (Smith and Johnson 2000:422)

In addition, pronouns and demonstratives obligatorily show case marking, through (partial) suppletion and encliticization (Smith and Johnson 2000:388, 396, 397).

Case mismatch results in Kugu Nganhcara from the optional placement of a pronoun initially in the DP.³⁵ This is seen in (47) and is further illustrated in (48) with the DPs *nhila pukpeng* ‘the child’, *nhunha kuyu* ‘the woman’, and *nhila pamang* ‘the man’.

- (48) a. *Nhila pukpe-ng nhunha kuyu yuku muka-ng-nha peka.*
 3SG.NOM child-ERG 3SG.ACC woman.ABS thing stone-ERG-3SG.ACC throw.at
 ‘The child threw a stone at the woman.’
 (Smith and Johnson 2000:390)
- b. *Nhila pama-ng nhingu pukpe-wu ku’a waa-ngu.*
 3SG.NOM man-ERG 3SG.DAT child-DAT dog give-3SG.DAT
 ‘The man gave a dog to the child.’
 (Smith and Johnson 2000:401)

Consider the DP *nhunha kuyu* ‘the woman’ in (48a), which combines an accusative pronoun with an absolutive noun.³⁶ This illustrates the absolutive as a morphological default for a subset of

³⁵ The examples provided by Smith and Johnson (2000) suggest that this may be an optional definiteness marker, and thus that the pronoun is perhaps evolving toward a determiner. More investigation is required to substantiate this speculation.

³⁶ A reviewer wonders if it is appropriate to label the noun *kuyu* ‘woman’ absolutive here, rather than caseless. I deem the absolutive label more appropriate for two reasons. First, the noun occupies a position that requires case morphology in the language: the final element of the DP. Second, a caseless analysis would fail to explain the full range of data—for example, the behavior of the pronouns, for which the nominative and stem forms are distinct.

The reviewer also asks about the relationship between this type of case mismatch and the patterns of syncretism found in Indo-European languages. Indeed, this relationship should be drawn. For example, Calabrese (2006) discusses Latin, where nouns of the first declension show syncretism between the genitive and the dative, while adjectives of the third declension show a morphological distinction between the genitive and the dative. Thus, when a third declension adjective modifies a first declension noun, the adjective shows the case of the DP more faithfully than the head noun (Calabrese 2006:9).

- (i) a. *tristis puellae*
 sad.GEN girl.GEN/DAT
 ‘of the sad girl’
- b. *tristí puellae*
 sad.DAT girl.GEN/DAT
 ‘to the sad girl’

On the present analysis of the Pama-Nyungan data, syncretisms like those found in Latin and the Pama-Nyungan case mismatch data are instances of the same phenomenon.

the grammar: the nouns. The grammar has the resources to realize the accusative Case feature on the pronoun; however, since the grammar lacks a morphological realization of the accusative Case feature on nouns, the morphological default must be inserted, the “absolutive.” The relevant morphemes follow:

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(49) <i>Nominal case suffixes</i></p> <p>[ergative] ↔ -ng(u)</p> <p>[dative] ↔ -na / kinship, proper</p> <p>[dative] ↔ -wu</p> <p>[ablative] ↔ -nam, -m³⁷</p> <p>[comitative] ↔ -ra</p> <p>[privative] ↔ -yi</p> <p>[locative] ↔ -ng(a), -n³⁸</p> <p>[vocative] ↔ -n</p> <p>(elsewhere) ↔ -∅</p> <p>(Smith and Johnson 2000:389)</p> | <p>(50) ‘3sg pronoun/determiner’</p> <p>[accusative] ↔ nhunha</p> <p>[dative] ↔ nhingu</p> <p>[ablative] ↔ nhingurumu</p> <p>[comitative] ↔ nhilara</p> <p>[privative] ↔ nhilayi</p> <p>[locative] ↔ nhilang(a), nhilan</p> <p>(elsewhere) ↔ nhila</p> <p>(Smith and Johnson 2000:397)</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The examples in (48) also illustrate the use of the nominative pronoun as a morphological default. For example, the DP *nhila pukpeng* in (48a) combines a nominative pronoun with the ergative noun. The grammar provides a morphological realization of the ergative Case feature on the noun, but since the pronominal series lacks a distinct ergative form, the morphological default pronoun must be inserted, the “nominative.”

Identical case mismatches are found in Margany, illustrating both absolutive as the morphological default for nouns, adjectives, and demonstratives, and nominative as the morphological default for pronouns. Three examples are provided here, showing the split DP ‘I’ in nominative and ‘young’ in ergative (51a); a DP ‘alone’ in ergative and ‘I’ in nominative (51b); and a split DP consisting of ‘he’ in nominative and ‘alone’ in absolutive (51c).

- (51) a. Matya ngaya balga-nnganda-la yurdi, nhang-a-nggu.
 before 1SG.NOM hit-HAB-PAST meat/animal.ABS young-ERG
 ‘I used to kill a lot of kangaroos when I was young.’
 (Breen 1981:307, 336)
- b. Gurruny-dyu ngaya dhumba:-nhi.
 alone-ERG 1SG.NOM build-REC.PAST
 ‘I built it on my own.’
 (Breen 1981:342)

³⁷ There is some variation in the use of allomorphs of the ablative, *-nam* being more likely with kinship and proper names (Smith and Johnson 2000:392). The dative appears as the stem for the ablative of kinship and proper names.

³⁸ These locative forms are in free variation (Smith and Johnson 2000:395).

- c. Nhula waba:-nhi gurrnyu.
 3SG.NOM GO-REC.PAST alone.ABS
 ‘He would go on his own.’
 (Breen 1981:349)

Again, these case mismatch data are explained by the lack of ergative morphology for pronouns and the existence of ergative morphology for nouns.³⁹

(52) *Nominal case suffixes*

[ergative] ↔ -nggu
 [dative] ↔ -gu
 [allative] ↔ -dhadi
 [ablative] ↔ -mundu
 [privative] ↔ -yi
 [locative-proximate] ↔ -bitya
 [locative-perlative] ↔ -marnrdi
 [locative] ↔ -ngga
 (elsewhere) ↔ -∅
 (Breen 1981:306–311)

(53) *‘1sg pronoun’*

[accusative] ↔ ngaha
 [genitive] ↔ ngatyu
 [dative] ↔ ngatyungu
 [instrumental] ↔ ngatyundu
 [locative] ↔ ngatyunda
 [locative-proximate] ↔ ngatyunbitya
 [allative] ↔ ngatyundhadi
 [ablative] ↔ ngatyunmundu
 (elsewhere) ↔ ngaya
 (Breen 1981:303)

To conclude this section, we have seen further evidence for absolutive as a morphological default from three split-ergative Pama-Nyungan languages: Djapu, Kugu Nganhcara, and Margany. In these languages, absolutive functions as a morphological default for a subset of the nominal types, leading to case mismatches when nominal types are combined. These three are exemplars of a large class of Pama-Nyungan languages exhibiting this behavior, a class that also includes Guugu Yimidhirr (Haviland 1979), Yidiny (Dixon 1977), Uradhi (Crowley 1983), the languages mentioned in footnote 33, and many others.

3.2 *Split Ergativity and the Nominal Hierarchy*

This type of split ergativity based on nominal type in Australian languages has figured prominently in the literature. Hence, in this section I briefly consider the implications of the data presented above for the analysis of the phenomenon.

Silverstein (1976) argues that these patterns of split ergativity reflect a nominal hierarchy:

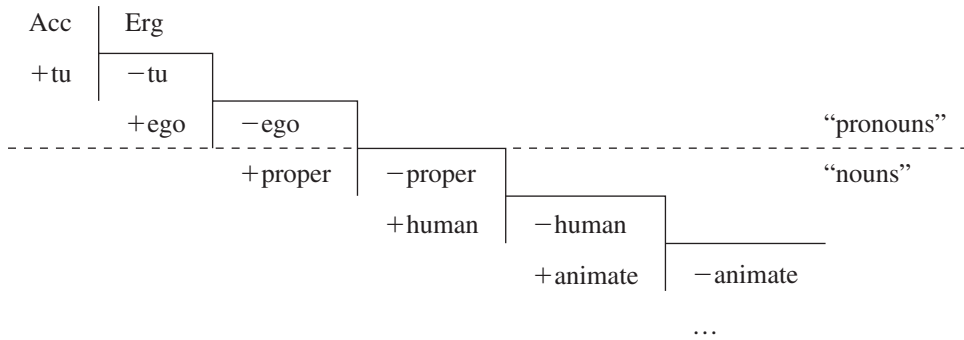
The noun phrases at the top of the hierarchy manifest nominative-accusative marking, while those at the bottom manifest ergative-absolutive case marking. Sometimes there is a middle ground which is a three-way system of O-A-S case-markings. (p. 113)

Working in a Jakobsonian tradition, Silverstein (1976:122) defines his hierarchy in terms of morphosemantic feature values, where DPs with minus values are more likely to have ergative

³⁹ A few phonologically conditioned allomorphs have been ignored for simplicity.

Table 2

Possibilities for simple lexical split of case marking (Silverstein 1976:122)



case marking, while DPs with plus values are more likely to have accusative case marking. A subset of the features defining his hierarchy follows:

- (54) *Person* *Number*
 ± 1 (“ego”) ± plural
 ± 2 (“tu”) ± restricted
 ± proper
 ± human
 ± animate

His hierarchy is partially reproduced in table 2.

Silverstein (1976) also comments that

[t]his hierarchy expresses the semantic naturalness for a lexically-specified noun phrase to function as agent of a true transitive verb, and inversely the naturalness of functioning as patient of such. (p. 113)

Proceeding naturally from this comment are a variety of functional analyses that tie the presence of case marking to the likelihood that a particular DP type will function as the subject or object (e.g., Moravcsik 1978, Comrie 1989, Dixon 1994). For example:

[T]he most natural kind of transitive construction is one where the A is high in animacy and definiteness, and the P [here, O] is lower in animacy and definiteness; and any deviation from this pattern leads to a more marked construction. . . . [T]he construction which is more marked in terms of information flow should also be more marked formally. (Comrie 1989:128)

Those participants at the left-hand end of the hierarchy are most likely to be agents, to be in A function, and those at the right-hand end are most likely to be patients, to be in O function.⁴⁰ It is plainly most natural and economical to “mark” a participant when it is in an unaccustomed role. (Dixon 1994:85)

Other researchers have pursued a diachronic approach, typically focusing on one aspect of the hierarchy (i.e., marking of ergative or of accusative; see, e.g., Garrett 1990, Lightfoot 1999). For

⁴⁰ This cannot be taken as a statistical fact; see Wierzbicka 1981, cited in Jelinek 1993.

example, Garrett (1990) argues that ergatives arise from the reanalysis of instrumentals and are thus more likely to appear on inanimates than on animates.

Regardless of the merits of these analyses, the discussion in the preceding section demonstrates that they are at best incomplete. Analyses based on functional or historical concerns do not explain the appearance of a marked case morphology on part of the DP, but not on other parts. The importance in the synchronic grammar of the availability of case morphemes and the relationship between abstract Case and morphological case must be recognized.

Recent theoretical works have proposed a variety of grammatical explanations for this type of split ergativity (see Kiparsky 2004, Carnie 2005a (building on Jelinek 1993), Alexiadou and Anagnostopoulou 2006). Although the details differ significantly, these analyses share the assumption that abstract Case is assigned in different ways to different types of nominals. In other words, when a DP in A function bears nominative rather than ergative, or when a DP in O function bears absolutive rather than accusative, these approaches provide motivations for a failure of abstract ergative/accusative Case assignment. In the preceding section, however, I argued that this type of split ergativity stems not from a difference in abstract Case assignment, but from a difference in morphological realization of abstract Case.

This is not to say that the differential Case assignment approach is uniformly incorrect. For some types of differential case marking, a differential Case assignment approach appears correct. Crucially, the two phenomena—split case marking resulting from differential morphological realization, and differential Case assignment—behave differently. As illustrated in the previous section, split case marking resulting from differential morphological realization has the following properties: (a) when a nominal fails to bear a marked case, there is no marked case form for that nominal in the language; (b) differential case marking may be based on properties of lexical items that do not project to the DP as a whole (see, e.g., the distinction between demonstratives and human nouns in Djapu discussed above); (c) differential case marking may not be based on elements outside the DP; (d) DP-internal mismatches in case morphology are possible. Split case marking based on differential Case assignment exhibits contrasting properties: (a) when a nominal fails to bear a marked case, there is typically a form of the marked case for that nominal in the language; (b) differential case marking may only be based on properties that project to the DP as a whole; (c) differential case marking may be based on elements outside the DP (e.g., the choice of verb); (d) DP-internal mismatches in case morphology are not possible.

Hindi objects exhibit the second type of split case system. In Hindi, objects bear either dative or absolutive (the latter being the morphological realization of abstract accusative Case; see section 2). The choice between the two depends on the animacy and specificity of the DP as a whole. An illustration follows:

- (55) ravii gaay / gaay-ko khariidnaa caahtaa hai.
 Ravi.ABS cow.ABS / cow-DAT buy.NONFIN wish.IMPERF be.PRES
 ‘Ravi wishes to buy a cow (with no particular cow in mind) / a particular cow.’
 (Mohanani 1994:80–81)

Obviously, the lack of dative morphology on *gaay* ‘cow’ on the nonspecific interpretation is not

due to the lack of an appropriate dative morpheme, since the dative morpheme appears on *gaay* in the specific interpretation. Furthermore, the choice between dative and absolutive depends on a property outside the DP: the choice of lexical verb. Mohanan (1994:81) reports that the alternation between dative and absolutive objects “is available only to the objects of those verbs that are neutral to the animacy of their objects.” She illustrates with the verb ‘write’.

- (56) *ilaa-ne yah khat / *is khat-ko likhaa.*
 Ila-ERG this.ABS letter.ABS / this.NONABS letter-DAT write.PERF
 ‘Ila wrote this letter.’
 (Mohanan 1994:81)

Even when the object of ‘write’ is specific, it cannot bear dative. Thus, the differential case marking on objects in Hindi is determined not by the morphology available to the lexical item itself, as in the Pama-Nyungan languages discussed above, but by the type of DP and the choice of verb. This type of differential case marking thus is conducive to an analysis based on differential Case assignment, unlike the Pama-Nyungan differential case marking.

In sum, the recent theoretical proposals regarding differential case marking based on the nominal hierarchy cannot be true for the Pama-Nyungan languages discussed above, since these involve uniform abstract Case assignment followed by differential morphological realization of the Case features. Such proposals may, however, be correct for a distinct class of differential case marking, briefly mentioned here, that plausibly involves differential Case assignment.

The final type of synchronic approach to be considered has been proposed by Aissen (1999, 2003). The core of Aissen’s analysis is the application of harmonic alignment in Optimality Theory (Prince and Smolensky 1993) to the following grammatical hierarchies:

- (57) a. Local > 3rd [Local = 1st, 2nd]
 b. Agent > Patient
 c. Subject > Nonsubject

The resulting constraints are then conjoined with a constraint punishing zero morphological realization, * \emptyset , and ranked with respect to a constraint punishing overt morphological realization, *STRUC. Thus, for example, the constraint ranking * \emptyset & *Su/3 [third person subject] >> *STRUC will result in third person subjects bearing case marking; the constraint ranking *STRUC >> * \emptyset & *Su/Local will result in local (first, second person) subjects bearing no case morphology.

Though couched in a different framework, Aissen’s approach shares with the one proposed here a focus on differential morphological marking rather than differential abstract Case assignment. Furthermore, although Aissen does not discuss abstract Case, it must be assumed to operate before constraint evaluation—the grammar must know *which* case should be marked/unmarked.⁴¹

⁴¹ Indeed, taking seriously the role of abstract Case solves a problem Aissen notes for her approach: that the subjects of intransitives in Dyirbal fail to bear ergative. This is a fact of abstract Case assignment rather than realization, and so appropriately falls outside the constraint ranking.

As it stands, Aissen's approach cannot account for the case mismatch data discussed in this section. The properties she employs in the constraints for determining case marking are properties of the DP as a whole— θ -role, grammatical relation, person—while the case mismatch data show that properties of the lexical items themselves are crucial. In addition, Aissen's approach provides for only faithful case marking, or no case marking at all (see Carnie 2005b for discussion). For the languages considered here, the default realization ("absolutive" or "nominative") is often nonidentical with the stem (for pronouns and demonstratives), casting doubt on whether "no case marking" is an appropriate characterization. This certainly does not seem the correct characterization for languages like Niuean, with overt "absolutive" case morphemes.

It is important to notice that Aissen's account does not link the realization of Case on a nominal type with the availability of case morphology for that nominal type. Thus, on this account it would be accidental that when a nominal fails to bear accusative morphology in object position, it also fails to bear accusative morphology in all other potential environments: as the object of an adposition, as an applicative object, in the double object construction, and so on.

I leave for others to determine whether and in what way Aissen's analysis may be modified to account for the data presented here.

In summary, the split ergative data considered in this section have significant implications for analyses of differential case marking based on the nominal hierarchy. Analyses that rely on differential Case assignment, while perhaps applicable to other types of differential case marking, cannot explain the Pama-Nyungan language data presented here. An analysis that focuses on differential morphological realization of abstract Case is required. The analysis proposed here meets this requirement. An alternative morphological analysis, proposed by Aissen (1999, 2003), though it may be amendable, is insufficient as it stands.

In the following section, I discuss in more detail the claim that both abstract Case and morphological case are required, in contrast to proposals in Marantz 1991 and subsequent works in that tradition, which argue for eliminating abstract Case.

4 The Necessity of Syntax in Case and Agreement

4.1 Case

In this article, I propose that abstract Case features are determined in the syntax and realized in a postsyntactic morphology. In contrast, in an influential paper Marantz (1991) argues that abstract Case should be eliminated and that case morphology should be determined entirely in the morphology.

Abstract Case was famously first proposed by Jean-Roger Vergnaud in a 1977 letter to Noam Chomsky and Howard Lasnik. The goal of Vergnaud's proposal was to explain the distribution of NPs in infinitivals. In a brilliant insight, Vergnaud framed the issue as the licensing of NPs with accusative Case, even when this Case is neutralized morphologically. He suggested that lexical NPs and *wh*-traces are Case-marked, but not PRO or NP-traces, and made the following proposal:

A structure of the form . . . [α . . . NP . . .] . . . , where NP is in the Governed Case and α is the first branching node above NP, is ungrammatical unless (i) α is in the domain of [–N] or (ii) α is adjacent to and in the domain of [–N]. (Freidin and Lasnik 2006:22)

In the three decades since then, the concept of abstract Case has been a dramatic success, producing a rich literature and substantial improvement in our understanding of human language. The concept of abstract Case has not, however, provided a satisfying explanation for the distribution of PRO. (For recent work on the distribution of PRO, see, for example, Chomsky and Lasnik 1995, Hornstein 1999, 2001, Landau 2000, 2003, Martin 2001.)

Against this background, Marantz (1991) has instead proposed a type of ‘‘antilicensing’’ condition, a condition that mandates the use of PRO.

- (58) ‘‘An NP argument is PRO iff not governed at S-structure by a lexical item or [+tense] INFL.’’ (p. 245)

The empirical motivation for the approach comes from Icelandic quirky Case. In Icelandic, a DP that receives an inherent Case cannot appear in a position in which structural Case is not licensed (i.e., the subject of a nonfinite clause that is not embedded under an exceptional-Case-marking predicate). Perhaps the most striking of these data (in that the use of PRO cannot be explained through properties of the matrix predicate) are nonfinite CPs in subject position, as discussed by Freidin and Sprouse (1991).

- (59) a. Að PRO batna veikin er venjulegt.
to PRO.DAT to.recover.from the.disease.NOM is usual
‘To recover from the disease is usual.’
b. *Að Jóni batna veikin er mikilvægt.
to Jon.DAT to.recover.from the.disease.NOM is important
(Freidin and Sprouse 1991:409)

The problem posed by Icelandic is further complicated by the fact that data from agreement on floating quantifiers and participles appear to show that structural nominative Case is in fact licensed in nonfinite clauses in Icelandic (Sigurðsson 1991). For example, in (60), *kosnir* ‘elected’ shows nominative case agreement with PRO; note that *kosnir* cannot be agreeing with the controller of PRO, *strákanum* ‘the boys’, since it bears dative.

- (60) Strákanum leiddist [að PRO verða kosnir í stjórnina].
the.boys.DAT bored [to PRO.NOM be.INF elected.NOM to the.board]
‘The boys were annoyed at being elected to the board.’
(Sigurðsson 1991)

The presence of a nominative object in a nonfinite clause, as in (59), makes a similar point (although see Sigurðsson 2000 and Alexiadou 2003 for an alternative analysis invoking a low source for the nominative).

Recent work by Svenonius (2005) is also relevant. Svenonius argues that in standard quirky object examples like (61a–c), the dative case on the object is actually structural Case. He shows

for example that although dative is retained in the passive, it is not in the unaccusative inchoative, middle, or adjectival form (data from Svenonius 2005).

- (61) a. Skipstjórinn sökkti skipinu.
 the.captain.NOM sank the.ship.DAT
 ‘The captain sank the ship.’
 b. Skipinu var sökkt af skipstjóranum.
 the.ship.DAT was sunk by the.captain.DAT
 ‘The ship was sunk by the captain.’
 c. Skipið sökk.
 the.ship.NOM sank
 ‘The ship sank.’

Svenonius argues that this pattern is due to the presence of the dative-assigning *v* head in the passive and its absence in the middle/adjective, and he relates this to the presence of an implicit subject in the passive but not the middle/adjective. (See Svenonius 2005 for details and additional arguments.) If Svenonius is right, then even structural-Case-marked DPs cannot appear in the subject position of nonfinite clauses in Icelandic.

- (62) a. Að PRO vera hjálpað er erfitt.
 to PRO.DAT to.be helped is difficult
 ‘To be helped is difficult.’
 b. *Að Jóni vera hjálpað er erfitt.
 to Jon.DAT to.be helped is difficult
 (Freidin and Sprouse 1991:410)

Let us take the Icelandic quirky Case data, and the three decades of struggle with PRO, to indicate that abstract Case does not neatly account for the distribution of PRO, at least on our present understanding. The question I would like to consider here is whether we should then proceed to dispense with abstract Case altogether. I submit that we should not. Abstract Case assigned in the syntax and realized in a postsyntactic morphology provides a better understanding of the distribution of cases than a purely morphological approach.

Let us begin with an outline of the morphological case assignment mechanisms proposed by Marantz (1991). Marantz states that a DP is realized in the highest case available to it in the following hierarchy (1991:247):

- (63) *Case realization disjunctive hierarchy*
 a. Lexically governed case
 b. ‘‘Dependent’’ case (accusative and ergative)
 c. Unmarked case (environment-sensitive)
 d. Default case

Lexically governed case includes inherent Case and the Icelandic-style quirky Case. Dependent case is assigned under government by a complex head formed by the verb and I (1991:248).

- (64) Dependent case is assigned by V + I to a position governed by V + I when a distinct position governed by V + I is
- a. not ‘‘marked’’ (not part of a chain governed by a lexical case determiner),
 - b. distinct from the chain being assigned dependent case.
- Dependent case assigned up to subject: ergative
 Dependent case assigned down to object: accusative

Unmarked case is the catchall case assigned to DPs in a particular environment: for example, nominative in IP or genitive in DP. Finally, default case is realized on DPs in positions in which abstract Case would not be assigned.

Although it was important to attempt a purely morphological analysis, I deem the experiment unsuccessful. The morphological approach must rely upon syntactic mechanisms, rendering it minimally different from the standard syntactic approach; it does not yield additional empirical coverage or theoretical insight; and it sacrifices Vergnaud’s link between the syntactic licenser and the case borne by the DP.

Although case is determined in the morphological component on Marantz’s (1991) approach, it is determined through purely syntactic mechanisms. Such an analysis is available, since Marantz assumes⁴² that the input to the morphological component is a syntactic structure.⁴³ While this allows the morphological assignment of case to be syntactic in nature,⁴⁴ it does raise questions about the claim that case is morphological rather than syntactic. Consider the extent to which syntactic mechanisms are required in determining morphological case in Marantz’s (1991) system. As cited above, the licensing mechanisms for ergative and accusative case require government by the verb and I, and the case is assigned either upward or downward in the syntactic hierarchical structure.⁴⁵

Syntactic structure also plays a role in the assignment of unmarked case.

Unmarked case may be sensitive to the syntactic environment; for example, in a language, GEN may be the unmarked case for NPs inside NPs (or DPs) while NOM may be the unmarked case inside IPs. (Marantz 1991:247)

The role of syntax in unmarked-case assignment must in fact be broader than this suggests. In ABS = NOM languages like Georgian, only one DP per IP may bear nominative. Furthermore, which DP bears the unique nominative is determined on the basis of syntactic structure: it is the highest DP in the IP that does not bear inherent Case. This indicates that nominative is not a catchall for DPs within an IP. Instead, like the dependent cases, nominative must be assigned to a DP by a unique case-assigning head—hence, on the basis of syntactic structure.

⁴² As do I, following the Distributed Morphology framework (see, e.g., Halle and Marantz 1993).

⁴³ Specifically, the structure of the derivation at the point of bifurcation to PF and LF; this point is referred to as Spell-Out (previously S-Structure).

⁴⁴ The same reliance on syntax is found in Bobaljik’s (2006) morphological determination of agreement; see section 4.2 below.

⁴⁵ These syntactic mechanisms should likely be updated and be modified to allow for VP-internal subjects, but making these adjustments should be a minor issue.

Lexical case is also assigned on the basis of syntactic structure: government by a lexical-case-assigning lexical item. In addition, Woolford (2006) argues that inherent Case (Marantz's "lexical" case) must be decomposed into two types: (a) lexical Case, idiosyncratic Case assignment to internal arguments based on the choice of predicate; (b) inherent Case, systematic Case assignment to external arguments and goals, based on the structural position of these DPs in the specifier of a vP projection. The empirical distinction Woolford identifies is syntactic and would require adding more syntactic mechanisms to Marantz's system: "lexical" case that is assigned to a DP chain with a tail in the specifier of certain vPs.

Furthermore, when a DP is assigned a case on the basis of these syntactic mechanisms, the DP may not be occupying the appropriate position in the morphological component. To correctly assign case to DPs that have undergone \bar{A} -movement, the morphology must have access to the distinction between A- and \bar{A} -chains. Only with this distinction can an obvious ordering argument be avoided: since case is determined by the position of a DP prior to a syntactic operation (\bar{A} -movement), case features must also be determined syntactically.

Although Marantz does not discuss this consideration, the morphological determination of case must also share with the present account a distinction between two layers of case assignment, one more abstract than the other. On the current proposal, case is determined in two steps: abstract Case features are assigned in the syntax, and then these Case features are realized in the morphology. In sections 2 and 3, I demonstrated that these two layers of case determination are indeed required. Specifically, ABS = DEF languages, including the Pama-Nyungan ABS = DEF languages that show DP-internal case mismatches, illustrate the need for a distinction between an abstract level of Case and its surface realization. To account for these data, the single-step approach presented in Marantz 1991 would need to be modified to incorporate both an abstract level of case assignment and its morphological realization. The morphological determination of case proposed in Marantz 1991 thus is not preferable on grounds of simplicity.

In addition, the analysis in Marantz 1991 fails to achieve the empirical coverage of the system proposed here—that is, standard syntactic determination of Case followed by morphological realization. As just noted, the morphology must access the distinction between A- and \bar{A} -chains, to sidestep the ordering argument that case is assigned before \bar{A} -movement, \bar{A} -movement is syntactic, therefore case assignment is syntactic. However, access to A- and \bar{A} -chains does not solve the ordering paradox for DPs that have undergone A-scrambling. A-scrambling of the object above I (T) does not change the case it bears. On a syntactic analysis, this is expected: the case on the object is determined before scrambling. However, for an analysis like Marantz's in which case is assigned in a postsyntactic morphological component, correct case assignment becomes nontrivial.

In addition, in Marantz's system the morphological determination of case is motivated by the Ergative Case Generalization, which is claimed to be morphological.⁴⁶

⁴⁶ As evidence, Marantz notes that both ergative and nominative subjects in Georgian trigger subject agreement. Assuming that agreement is identical to syntactic licensing, this leads to the conclusion that the distinction between ergative and nominative case must be morphological rather than syntactic. See section 2.5 for an alternative analysis of such data.

(65) *Ergative Case Generalization*

Even when ergative case may go on the subject of an intransitive clause, ergative case will not appear on a derived subject.

(Marantz 1991:236)

Noting the similarity to Burzio's Generalization, Marantz proposes that all case assignment is morphological. He later points out that the analysis predicts that predicates with two internal arguments will be exceptions to Burzio's Generalization (one internal argument serving as a case competitor for the other), and he gives examples in which the prediction is borne out. (The examples involve applicative constructions, which likely have an additional case-assigning head.)

(66) *Kichaga*

'M-ká n-ã-ĩ-lyì-í-ò k-èlyâ.

food AGR_S-AGR_O-eat-BEN-PASS wife

'Food is being eaten for the wife.'

(Marantz 1991:239)

However, Marantz's system identically predicts exceptions to the Ergative Case Generalization; indeed, his paper includes examples that seem to exhibit the requisite properties, yet do not bear out the prediction.⁴⁷

(67) *Georgian*

Es saxl-i ivane-s a-u-šendeb-a.

this house.NOM Ivan-DAT PREVERB-built-INFL

'This house was built for Ivan.'

(Marantz 1991:235)

In contrast, the analysis adopted here straightforwardly captures the generalization. Ergative is an inherent Case assigned by *v* along with an external θ -role assigned to the DP base-generated in its specifier. Thus, only thematic subjects bear ergative Case.

Marantz (1991:240) goes on to say that "[i]f abstract Case is sufficiently distinct from morphological case, then Case theory might be entirely superfluous." However, the data discussed here indicate that abstract Case and morphological case, though not identical, are tightly intertwined. If a morphological realization of an abstract Case feature is available, it must be inserted. Only when a morphological realization of a particular abstract Case is not available do we find a distinction between abstract Case and morphological case. Indeed, as the case mismatch data in section 3 showed, the requirement that abstract Case features be realized in the morphology as fully as possible cannot be overridden, even if the parts of a single DP end up bearing different morphological cases. An example from Kugu Nganhcara is repeated here.

⁴⁷ Note that dative on objects in Georgian often behaves like accusative. The ideal test case would be an ergative language that had both a passive and a double object construction in which both DPs bore accusative. My system predicts that if one passivized a double object construction in such a language, the subject would bear nominative/absolute; Marantz's predicts that it would bear ergative. Unfortunately, I have yet to find a test language.

- (68) Nhila pukpe-ng nhunha kuyu yuku muka-ng-nha peka.
 3SG.NOM child-ERG 3SG.ACC woman.ABS thing stone-ERG-3SG.ACC throw.at
 ‘The child threw a stone at the woman.’
 (Smith and Johnson 2000:390)

Similarly, the distinction between abstract Case and morphological case in Warlpiri, Niuean, Enga, and Hindi discussed in section 2 (whereby abstract nominative Case and abstract accusative Case are realized morphologically as the default absolutive) is possible only because these languages lack distinct morphological realizations of accusative and nominative Case features. We do not find wanton dissociation between abstract Case and morphological case.

This leads us to the core difficulty with a theory like the one Marantz (1991) proposes, which is also the core distinction between such a theory and the one proposed here. A theory like Marantz’s claims that there is no relationship between the morphological case borne by a DP and its syntactic licenser (i.e., the governor that allows it to escape the antilicensing condition in (58)). That is, it denies Vergnaud’s insight. In doing so, it throws the baby out with the bathwater. As a general rule, the morphological case borne by a DP is determined by its syntactic licenser. Sometimes, this is determined by the category of the licenser: DPs licensed by ([+tense] I (T) bear nominative, DPs licensed by verbs bear accusative, DPs licensed by nouns bear genitive or dative. Other times, it is determined by the lexical item itself: for example, in Georgian, a DP syntactically licensed by the postposition *semdeg* ‘after’ bears genitive, whereas a DP licensed by the postposition *tana* ‘at/near’ bears dative. If syntactic licensing and morphological case are unrelated phenomena, such robust generalizations are lost.

To summarize: Marantz 1991 (and subsequent work in the tradition) proposes that case is determined purely in the morphology. Abstract Case is eliminated, and a distinct mechanism of syntactic antilicensing is proposed. The model encounters significant empirical problems. It also closely resembles the standard analysis in that the mechanisms used to assign case are entirely syntactic, and two levels of case must be posited, one more abstract than the other. The main distinction lies in the untenable claim that case morphology is unrelated to the syntactic licenser.

4.2 Agreement

In section 2.5, I demonstrated that the proposed analysis of ABS = DEF languages explains the agreement patterns found in Warlpiri, Enga, Niuean, and Hindi. The explanation assumes an analysis of agreement in which agreement features are established in the syntax on the basis of a structural relation, closest c-command, and are subsequently realized in the morphology.

In contrast, Bobaljik (2006), following Marantz (1991), argues that agreement is a purely morphological phenomenon. Bobaljik claims that agreement must track morphological case and therefore must also be determined exclusively in the morphology. In the previous section, I pointed out serious difficulties with the assumption that case marking is determined exclusively in the morphology. Let us then focus on the claim that agreement must track morphological case.

In Bobaljik’s system, the morphological determination of agreement consists of two parts: a syntactic locality condition and an accessibility hierarchy. The syntactic locality condition states

that “[t]he finite verb agrees with the highest accessible NP in its domain” (2006:3), where the “domain” consists of the clause plus the edge of the next clause down, and “highest” refers to the syntactic structure. Whether a DP is accessible to agreement is determined on the basis of a hierarchy that restates Moravcsik’s (1978) hierarchy (subject > object > indirect object > adverb) in terms of morphological case rather than grammatical function: “default case” (nominative/absolutive) > “dependent case” (accusative/ergative) > dative case (lexical). Thus, if a DP bearing morphological dative case triggers agreement, so will DPs bearing accusative, ergative, nominative, and absolutive. Similarly, if a DP bearing accusative or ergative triggers agreement, so will DPs bearing nominative or absolutive.

The proposed locality condition differs from the present model in two respects: it is based on the notion “highest in the clause,” rather than on the notion “closest c-command to an agreeing head”; and it is claimed to operate in a postsyntactic morphology, rather than in the syntax.⁴⁸ The substantive difference in predictions thus pertains to a(n accessible) DP that moves in the syntax to a position above an agreeing head.⁴⁹ On Bobaljik’s approach, this DP should trigger agreement as the highest DP in the morphological component. On the analysis proposed here, such a DP should trigger agreement only if it is the highest DP c-commanded by the agreeing head at the point in the syntactic derivation when the agreeing head performs its search. A concrete example is found in Hindi scrambling, which moves a DP above T. As the present analysis predicts, agreement is triggered by the absolutive subject, even when an absolutive object has scrambled above it.⁵⁰

- (69) kitaabē anil becegaā.
 book.F.PL.ABS Anil.M.ABS sell.FUT.M.SG
 ‘Anil will sell books.’

Let us turn now to the accessibility hierarchy proposed in Bobaljik 2006, whereby the ability of a DP to trigger agreement is determined by its morphological case: nominative/absolutive > accusative/ergative > dative. Bobaljik claims that this formulation is required because when grammatical function and morphological case dissociate, agreement is determined by morphological case rather than grammatical function. Thus, with regard to agreement, Bobaljik states:

- (70) “When case and GF [grammatical function] diverge, it is m[orphological]-case, not GF, that offers a more accurate typology.” (2006:8)

⁴⁸ The notion of a domain consisting of a single clause plus the edge of the lower clause is quite close to the notion of a phase (Chomsky 2000, 2001, 2004) (as recognized in Bobaljik 2006:3, fn. 4). I set aside this aspect of the locality condition, which is orthogonal to the distinctions discussed in the text.

⁴⁹ The data discussed in Bobaljik 2006 regarding domains involve long-distance agreement; for details, see Polinsky and Potsdam 2001 and Polinsky 2003 (for Tsez), Branigan and MacKenzie 2002 (for Innu-aimûn), Bhatt 2005 (for Hindi). These data consist of a DP in an embedded clause triggering agreement on a higher verb; for the first three languages, this agreement is facilitated by movement of the DP to the edge of the embedded clause. This type of example does not differentiate between Bobaljik’s morphological analysis and a closest c-command analysis, since the DP in the embedded clause is both the highest DP in the domain and the DP under closest c-command by the agreeing head.

⁵⁰ Thank you to Pranav Anand for help with the Hindi data.

Bobaljik provides two types of evidence for this claim. The first is the generalization that no language shows agreement only with an ergative DP. On Bobaljik's proposal, since absolutive/nominative are above ergative on the hierarchy, if a language shows agreement with ergative, it must also show agreement with nominative/absolutive. This generalization can also be captured without positing an accessibility hierarchy. All grammatical subjects enter a relationship with T and thus potentially trigger subject agreement. This agreement may be blocked if the grammatical subject bears an inherent Case, ergative or dative, and so cannot receive nominative Case from T. There is no impediment, however, to the triggering of agreement in the standard relationship resulting in T licensing nominative Case on the grammatical subject.⁵¹ Thus, we correctly predict not only that no language shows subject agreement only with ergative subjects,⁵² but also that no language shows subject agreement only with dative subjects.⁵³

The second piece of evidence that Bobaljik presents for his claim that agreement necessarily tracks morphological case is the agreement pattern found in Icelandic quirky Case constructions, mentioned in the previous section. These show agreement only with the nominative, which Bobaljik takes as evidence for morphological-case-based agreement. However, as discussed in section 2.5, the present account also explains the behavior of languages that show agreement with only the absolutive/nominative. This pattern of agreement straightforwardly obtains in an ABS = NOM language that disallows agreement with DPs bearing inherent Case features. The discussion of Hindi in section 2.5 illustrates a second possible source for absolutive/nominative agreement: aggressive agreement—that is, subject agreement that is not triggered by inherent-Case-marked subjects, but otherwise is triggered by the highest nominal regardless of Case assignment.

Thus, the evidence presented in Bobaljik 2006 does not support an analysis whereby agreement relationships are established on the basis of morphological case rather than syntactic structure. However, empirical evidence does support the analysis proposed here.

Consider the ABS = DEF languages Warlpiri and Enga. These show subject agreement with both ergative A and absolutive S, but no subject agreement with absolutive O (in Enga, O does not trigger agreement; in Warlpiri, it triggers distinct object agreement). They therefore exemplify the divergence of morphological case and grammatical function, wherein grammatical function determines agreement rather than case, in direct conflict with (70).⁵⁴ Such languages are permitted

⁵¹ A reviewer wonders how "grammatical subject" is defined, given that Bittner and Hale (1996a) reject EPP-driven movement to Spec,TP for Warlpiri. Bittner and Hale do, however, posit a grammatical subject position, differing with the present approach in identifying this position as adjoined to VP. See footnote 3 above for further discussion. However, the point made in the text regarding agreement would hold even of a language without the EPP. If in-situ DPs in such a language failed to trigger agreement, this would be true of ergatives as much as of nominatives. The result is the same: if ergatives agree, nominatives agree as well. See footnote 52 for related discussion.

⁵² A reviewer points out a potential source for ergative-only agreement. A language could have ergative-only agreement if it (a) exhibited only subject agreement, not object agreement; (b) allowed agreement with ergative subjects; and (c) lacked nominative subjects entirely. Property (c) is unattested, likely ruled out by considerations of Universal Grammar and acquisition.

⁵³ Since inherent Case marking may block agreement, we could formulate an accessibility hierarchy for agreement in terms of abstract Case rather than morphological case: structural > inherent. That is, if a language allows agreement with a DP bearing an inherent Case feature, it also allows agreement with a DP bearing a structural Case feature. However, this hierarchy is purely derivative and need not be stated anywhere in the grammar.

⁵⁴ Note that I take grammatical function to be a derivative notion (see McCloskey 1997).

in Bobaljik's system, with its claim that both absolutes and ergatives can trigger agreement, the object failing to trigger agreement because the ergative is higher. (Although it's difficult to argue that for a sentence like (71) in Warlpiri there isn't a parse for which the object (here, *janganpa* 'possum') is highest in the clause and therefore should trigger subject agreement.

- (71) *Janganpa-rna paka-rnu ngajulu-rlu nguna-nja-kurra.*
 possum.ABS-1SG.SUBJ chop-PAST I-ERG lie-1INFIN-OBJ.C
 'I chopped out a possum while it was sleeping.'
 (Hale, Laughren, and Simpson 1995:1438)

However, such languages do undermine the force of the claim in (70).

The ABS = DEF language Niuean presents additional difficulties. Subject agreement is triggered by only a subset of DPs bearing morphological absolute case: those that are intransitive grammatical subjects. The failure of objects to trigger subject agreement cannot be blamed on the presence of a higher accessible DP, because ergative DPs are not accessible (do not trigger subject agreement) in Niuean. Agreement is not determined by morphological case. Rather, it is determined by syntactic, abstract Case—nominative Case.

Indeed, problems arise for Bobaljik's system even in languages that show nominative/absolute agreement, the type of agreement that Bobaljik presents as an exemplar of morphological-case-based agreement. Consider Punjabi (e.g., Bhatia 1993, Butt 2005) and Marathi (Pandharipande 1997). These show basic case and agreement properties quite similar to those of Hindi, namely, split ergativity based on tense/aspect, and absolute agreement.

- (72) *Punjabi*
- a. *laRki muNDiā-nū mar-di ε.*
 girl.ABS boy.M.PL-DAT hit-PRES.F.SG be.PRES.3SG
 'The girl is hitting the boys.'
- b. *laRki-ne muNDiā-nū mar-ia si.*
 girl.F.SG-ERG boy.M.PL-DAT hit-PAST.M.SG be.PAST.3SG
 'The girl has hit the boys.'
 (Butt 2005:186)

- (73) *Marathi*
- a. *mulii gaaNii mhaNtaat.*
 girl.3PL.F.ABS song.3PL.N.ABS sing.PAST.3PL.F
 'Girls sing songs.'
- b. *mulii-ne gaaNii mhaTlii.*
 girl.3PL.F-ERG song.3PL.N.ABS sing.PAST.3PL.N
 'The girl sang songs.'
 (Pandharipande 1997:284)

Importantly for the current discussion, Punjabi and Marathi also exhibit split ergativity based on nominal type: in the perfective aspect, case morphology for first and second person pronouns in

A position is absolutive rather than the expected ergative. Crucially, such a DP does not trigger agreement, despite being the highest absolutive in its clause.

(74) *Punjabi*

- a. tū lakRi vaD-i.
 you.F/M.ABS wood.F.SG.ABS cut-PAST.F.SG
 ‘You (male or female) cut the wood.’
- b. tū kampuTar bech-ia.
 you.F/M.ABS computer.M.SG.ABS sell-PAST.M.SG
 ‘You (male or female) sold the computer.’
 (Butt 2005:187)

(75) *Marathi*

- mii/aamhii/tuu/tuumhii gaaNii mhaTlii.
 I.ABS/we.ABS/you.SG.ABS/you.PL.ABS song.3PL.N.ABS sing.PAST.3PL.N
 ‘I/We/You sang songs.’
 (Pandharipande 1997:131)

Therefore, the correct generalization is demonstrably not based on morphological case: agreement is triggered, not by the highest DP bearing absolutive case, but by the highest DP bearing structural abstract Case. In (74) and (75), the highest DPs bearing morphological absolutive bear abstract inherent ergative Case and thus do not trigger agreement. The data speak strongly against a purely morphological analysis of agreement.

In sum, Bobaljik proposes that agreement is determined by morphological case marking. In contrast, I have proposed here that agreement relationships are established in the syntax on the basis of closest c-command and realized in the morphology. Bobaljik’s proposal contains two parts: first, an accessibility hierarchy based on morphological case, determining which DPs are able to trigger agreement; second, a locality condition whereby the highest accessible DP in the clause at PF triggers agreement. It is exactly where Bobaljik’s theory and mine make different predictions that his theory’s predictions fail to be realized.

To conclude, these two subsections have supported the general approach taken in this article whereby case and agreement relationships are established in the syntax and realized in the morphology. To wait until the morphology to do case and agreement is to wait too long.

5 Conclusion

In this article, I argued that abstract Case and agreement relationships are established in the syntax and realized in the morphology, each language’s realization being as faithful as its morphological resources allow. The main empirical basis was a class of prima facie ergative-absolutive languages that lack absolutive both as an abstract Case and as a morphological case. What has been called the absolutive is instead the morphological default case, inserted when a specific realization of the abstract Case feature is unavailable. The proposed analysis was supported by differential case marking based on a nominal hierarchy, which was also shown to have a morphological source.

Finally, I argued that the analysis compares favorably with analyses in which all case and agreement are determined in the morphology.

References

- Aissen, Judith. 1999. Markedness and subject choice in Optimality Theory. *Natural Language and Linguistic Theory* 17:673–711.
- Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. *Natural Language and Linguistic Theory* 21:435–483.
- Aldridge, Edith. 2004. Ergativity and word order in Austronesian languages. Doctoral dissertation, Cornell University, Ithaca, NY.
- Alexiadou, Artemis. 2003. On nominative Case features and split agreement. In *New perspectives on Case theory*, ed. by Ellen Brandner and Heike Zinsmeister, 23–52. Stanford, CA: CSLI Publications.
- Alexiadou, Artemis, and Elena Anagnostopoulou. 2006. From hierarchies to features. In *Agreement systems*, ed. by Cedric Boeckx, 41–62. Amsterdam: John Benjamins.
- Anagnostopoulou, Elena. 2003. *The syntax of ditransitives: Evidence from clitics*. New York: Mouton de Gruyter.
- Anagnostopoulou, Elena, Henk van Riemsdijk, and Frans Zwarts, eds. 1997. *Materials on left dislocation*. Amsterdam: John Benjamins.
- Anand, Pranav, and Andrew Nevins. 2006. The locus of ergative Case assignment: Evidence from scope. In *Ergativity: Emerging issues*, ed. by Alana Johns, Diane Massam, and Juvénal Ndayiragije, 3–25. Dordrecht: Kluwer.
- Anderson, Stephen R. 1969. West Scandinavian vowel systems and the ordering of phonological rules. Doctoral dissertation, MIT, Cambridge, MA.
- Anderson, Stephen R. 1976. On the notion of subject in ergative languages. In *Subject and topic*, ed. by Charles N. Li, 1–24. New York: Academic Press.
- Anderson, Stephen R. 1984. On representations in morphology, case, agreement and inversion in Georgian. *Natural Language and Linguistic Theory* 2:157–218.
- Anderson, Stephen R. 1992. *A-morphous morphology*. Cambridge: Cambridge University Press.
- Aronson, Howard I. 1982. *Georgian: A reading grammar*. Columbus, OH: Slavica.
- Baker, Mark. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Beard, Robert. 1995. *Lexeme-Morpheme Base Morphology*. Albany, NY: SUNY Press.
- Bhatia, Tej K. 1993. *Punjabi: A cognitive-descriptive grammar*. London: Routledge.
- Bhatt, Rajesh. 2005. Long distance agreement in Hindi-Urdu. *Natural Language and Linguistic Theory* 23: 757–807.
- Bittner, Maria. 1994. *Case, scope and binding*. Dordrecht: Kluwer.
- Bittner, Maria, and Ken Hale. 1996a. Ergativity: Toward a theory of a heterogeneous class. *Linguistic Inquiry* 27:531–604.
- Bittner, Maria, and Ken Hale. 1996b. The structural determination of Case and agreement. *Linguistic Inquiry* 27:1–68.
- Blake, Barry J. 1994. *Case*. Cambridge: Cambridge University Press.
- Bobaljik, Jonathan David. 1993. On ergativity and ergative unergatives. In *Papers on Case and agreement II*, ed. by Colin Phillips, 45–88. MIT Working Papers in Linguistics 19. Cambridge, MA: MIT, Department of Linguistics and Philosophy, MITWPL.
- Bobaljik, Jonathan David. 2006. Where's ϕ ? Agreement as a post-syntactic operation. *Leiden working papers in linguistics* 3.2, ed. by Marjo van Koppen, Pepijn Hendriks, Frank Landsbergen, Mika Poss, and Jenneke van der Wal, 1–23. Available at http://www.lucl.leidenuniv.nl/content_docs/workingpapers/32/bobaljik_lwpil_3-2-2006.pdf.

- Borer, Hagit. 2005. *Structuring sense*. 2 vols. Oxford: Oxford University Press.
- Bowers, John. 1993. The syntax of predication. *Linguistic Inquiry* 24:591–656.
- Branigan, Phil, and Marguerite MacKenzie. 2002. Altruism, Ā-movement, and object agreement in Innu-aimûn. *Linguistic Inquiry* 33:385–407.
- Breen, J. G. 1981. Marganya and Gunya. In *Handbook of Australian languages*, ed. by R. M. W. Dixon and Barry J. Blake, 2:274–394. Amsterdam: John Benjamins.
- Butt, Miriam. 1995. *The structure of complex predicates in Urdu*. Stanford, CA: CSLI Publications.
- Butt, Miriam. 2005. *Theories of Case*. Cambridge: Cambridge University Press.
- Butt, Miriam, and Tracy Holloway King. 2004. The status of Case. In *Clause structure in South Asian languages*, ed. by Veneeta Dayal and Anoop Mahajan, 153–198. Dordrecht: Kluwer.
- Calabrese, Andrea. 2006. On absolute and contextual syncretism. Ms., University of Connecticut, Storrs.
- Carnie, Andrew. 2005a. A phase-geometric approach to multiple marking systems. In *Perspectives on phases*, ed. by Martha McGinnis and Norvin Richards, 87–102. MIT Working Papers in Linguistics 49. Cambridge, MA: MIT, Department of Linguistics and Philosophy, MITWPL.
- Carnie, Andrew. 2005b. Some remarks on markedness hierarchies. In *Psycholinguistic and computational perspectives*, ed. by Daniel Siddiqi and Benjamin V. Tucker, 37–50. Coyote Papers: Working Papers in Linguistics 14. Tucson: University of Arizona, Department of Linguistics.
- Carnie, Andrew, and Phillip Cash. 2006. Tree-geometric relational hierarchies and Nuumiipuuṭimṭ (Nez Perce) Case. In *Ergativity: Emerging issues*, ed. by Alana Johns, Diane Massam, and Juvénal Ndayiragije, 229–244. Dordrecht: Kluwer.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, Noam. 1986. *Knowledge of language*. New York: Praeger.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. by Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2004. Beyond explanatory adequacy. In *The cartography of syntactic structures*. Vol. 3, *Structures and beyond*, ed. by Adriana Belletti, 104–131. Oxford: Oxford University Press.
- Chomsky, Noam, and Howard Lasnik. 1995. The theory of principles and parameters. In Noam Chomsky, *The Minimalist Program*, 13–127. Cambridge, MA: MIT Press.
- Collins, Chris. 1997. *Local economy*. Cambridge, MA: MIT Press.
- Comrie, Bernard. 1989. *Language universals and linguistic typology*. Chicago: University of Chicago Press.
- Crowley, Terry. 1983. Uradhi. In *Handbook of Australian languages*, ed. by R. M. W. Dixon and Barry J. Blake, 3:306–428. Amsterdam: John Benjamins.
- Davison, Alice. 1981. Syntactic and semantic indeterminacy resolved: A mostly pragmatic account of the Hindi conjunctive participle. In *Radical pragmatics*, ed. by Peter Cole, 101–128. New York: Academic Press.
- Davison, Alice. 2004. Non-nominative subjects in Hindi/Urdu: VP structure and Case parameters. In *Non-nominative subjects*, ed. by Peri Bhaskararao and Karumuri Venkata Subbarao, 1:141–168. Amsterdam: John Benjamins.
- Dayal, Veneeta. 2003. A semantics for pseudo incorporation. Ms., Rutgers University, New Brunswick, NJ.
- Dixon, R. M. W. 1977. *A grammar of Yidiny*. Cambridge: Cambridge University Press.
- Dixon, R. M. W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Dwivedi, Veena. 1994. Syntactic dependencies and relative phrases in Hindi. Doctoral dissertation, University of Massachusetts, Amherst.
- Eades, Diana. 1979. Gumbaynggir. In *Handbook of Australian languages*, ed. by R. M. W. Dixon and Barry J. Blake, 1:244–361. Amsterdam: John Benjamins.

- Freidin, Robert, and Howard Lasnik, eds. 2006. *Syntax*. New York: Routledge.
- Freidin, Robert, and Rex A. Sprouse. 1991. Lexical Case phenomena. In *Principles and parameters in comparative grammar*, ed. by Robert Freidin, 392–416. Cambridge, MA: MIT Press.
- Garrett, Andrew. 1990. The origin of NP split ergativity. *Language* 66:261–296.
- Goddard, Cliff. 1982. Case systems and case marking in Australian languages: A new interpretation. *Australian Journal of Linguistics* 2:167–196.
- Hale, Ken. 1982. Some essential features of Warlpiri verbal clauses. In *Papers in Warlpiri grammar: In memory of Lothar Jagst*, ed. by Stephen M. Swartz, 217–315. Work Papers of SIL-AAB, Series A Volume 6. Berrimah, N.T.: SIL-AAB.
- Hale, Ken. 1983. Warlpiri and the grammar of non-configurational languages. *Natural Language and Linguistic Theory* 1:5–47.
- Hale, Kenneth, and Samuel Jay Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In *The view from Building 20*, ed. by Kenneth Hale and Samuel Jay Keyser, 53–109. Cambridge, MA: MIT Press.
- Hale, Ken, and Samuel Jay Keyser. 2002. *Prolegomenon to a theory of argument structure*. Cambridge, MA: MIT Press.
- Hale, Ken, Mary Laughren, and Jane Simpson. 1995. Warlpiri syntax. In *Syntax: An international handbook of contemporary research*, ed. by Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld, and Theo Vennemann, 1430–1451. Berlin: Walter de Gruyter.
- Halle, Morris. 1997. Distributed Morphology: Impoverishment and fission. In *PF: Papers at the interface*, ed. by Benjamin Bruening, Yoonjung Kang, and Martha McGinnis, 425–450. MIT Working Papers in Linguistics 30. Cambridge, MA: MIT, Department of Linguistics and Philosophy, MITWPL.
- Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In *The view from Building 20*, ed. by Kenneth Hale and Samuel Jay Keyser, 111–176. Cambridge, MA: MIT Press.
- Harris, Alice. 1981. *Georgian syntax*. Cambridge: Cambridge University Press.
- Haviland, John. 1979. Guugu Yimidhirr. In *Handbook of Australian languages*, ed. by R. M. W. Dixon and Barry J. Blake, 1:26–180. Amsterdam: John Benjamins.
- Hewitt, Brian George. 1987. *The typology of subordination in Georgian and Abkhaz*. Berlin: Mouton de Gruyter.
- Hiraiwa, Ken. 2001. Multiple Agree and the Defective Intervention Constraint in Japanese. In *Proceedings of the First HUMIT Student Conference in Language Research (HUMIT 2000)*, ed. by Ora Matushansky et al., 67–80. MIT Working Papers in Linguistics 40. Cambridge, MA: MIT, Department of Linguistics and Philosophy, MITWPL.
- Hornstein, Norbert. 1999. Movement and control. *Linguistic Inquiry* 30:69–96.
- Hornstein, Norbert. 2001. *Move! A minimalist theory of construal*. Oxford: Blackwell.
- Jelinek, Eloise. 1993. Ergative “splits” and argument type. In *Papers on Case and agreement I*, ed. by Jonathan David Bobaljik and Colin Phillips, 15–42. MIT Working Papers in Linguistics 18. Cambridge, MA: MIT, Department of Linguistics and Philosophy, MITWPL.
- Jelinek, Eloise, and Andrew Carnie. 2003. Argument hierarchies and the Mapping Principle. In *Formal approaches to function in grammar*, ed. by Andrew Carnie, Heidi Harley, and MaryAnn Willie, 265–296. Amsterdam: John Benjamins.
- Kiparsky, Paul. 1973. “Elsewhere” in phonology. In *A festschrift for Morris Halle*, ed. by Stephen R. Anderson and Paul Kiparsky, 93–106. New York: Holt, Rinehart and Winston.
- Kiparsky, Paul. 2004. Universals constrain change; change results in typological generalizations. Ms., Stanford University, Stanford, CA.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. In *Phrase structure and the lexicon*, ed. by Johan Rooryck and Laurie Zaring, 109–137. Dordrecht: Kluwer.

- Laka, Itziar. 1993. Unergatives that assign ergative, unaccusatives that assign accusative. In *Papers on Case and agreement I*, ed. by Jonathan David Bobaljik and Colin Phillips, 149–172. MIT Working Papers in Linguistics 18. Cambridge, MA: MIT, Department of Linguistics and Philosophy, MITWPL.
- Landau, Idan. 2000. *Elements of control*. Dordrecht: Kluwer.
- Landau, Idan. 2003. Movement out of control. *Linguistic Inquiry* 34:471–499.
- Lang, Adrienne. 1973. *Enga dictionary*. Canberra: Linguistic Circle of Canberra.
- Laughren, Mary. 1989. The configurationality parameter and Warlpiri. In *Configurationality: The typology of asymmetries*, ed. by Laci K. Maracz and Pieter Muysken, 319–353. Dordrecht: Foris.
- Laughren, Mary. 2002. Syntactic constraints in a ‘free word order’ language. In *Language universals and variation*, ed. by Mengistu Amberber and Peter Collins, 83–130. Westport, CT: Praeger.
- Legate, Julie Anne. 2002a. Split absolutive. Paper presented at The Ergativity Workshop, University of Toronto.
- Legate, Julie Anne. 2002b. Warlpiri: Theoretical implications. Doctoral dissertation, MIT, Cambridge, MA.
- Legate, Julie Anne. 2003a. Arguments and adjuncts in Warlpiri. Paper presented at the Linguistics Colloquium Series, New York University.
- Legate, Julie Anne. 2003b. The configurational structure of a nonconfigurational language. *Linguistic Variation Yearbook* 1:61–104.
- Legate, Julie Anne. 2004. Case, agreement, and ergativity. Paper presented at the Linguistics Colloquium Series, Cornell University, Ithaca, NY.
- Legate, Julie Anne. 2006a. The morphology of case syncretisms. Ms., Cornell University, Ithaca, NY.
- Legate, Julie Anne. 2006b. Split absolutive. In *Ergativity: Emerging issues*, ed. by Alana Johns, Diane Massam, and Juvénal Ndayiragije, 143–171. Dordrecht: Kluwer.
- Legate, Julie Anne. 2007. Syntactic ergativity in Dyirbal. Ms., Cornell University, Ithaca, NY.
- Li, Charles N., and Rainer Lang. 1979. The syntactic irrelevance of an ergative case in Enga and other Papuan languages. In *Ergativity: Towards a theory of grammatical relations*, ed. by Frans Plank, 307–345. New York: Academic Press.
- Lightfoot, David. 1999. *The development of language: Acquisition, change, and evolution*. Oxford: Blackwell.
- Mahajan, Anoop. 1989. Agreement and agreement phrases. In *Functional heads and clause structure*, ed. by Itziar Laka and Anoop Mahajan, 217–252. MIT Working Papers in Linguistics 10. Cambridge, MA: MIT, Department of Linguistics and Philosophy, MITWPL.
- Mahajan, Anoop. 1990. The A/A-bar distinction and movement theory. Doctoral dissertation, MIT, Cambridge, MA.
- Mahajan, Anoop. 2000. Oblique subjects and Burzio’s Generalization. In *Arguments and Case: Explaining Burzio’s Generalization*, ed. by Eric Reuland, 79–102. Amsterdam: John Benjamins.
- Marantz, Alec. 1991. Case and licensing. In *Proceedings of the Eighth Eastern States Conference on Linguistics*, ed. by German Westphal, Benjamin Ao, and Hee-Rahk Chae, 234–253. Columbus: Ohio State University, Department of Linguistics. Reprinted in *Arguments and Case: Explaining Burzio’s Generalization*, ed. by Eric Reuland, 11–30. Amsterdam: John Benjamins (2000).
- Marantz, Alec. 1995. A late note on Late Insertion. In *Explorations in generative grammar*, ed. by Young-Sun Kim, Byung-Choon Lee, Kyoung-Jae Lee, Hyun-Kwon Yang, and Jong-Yurl Yoon, 396–413. Seoul: Hankuk.
- Marantz, Alec. 2001. Words. Paper presented at the 20th West Coast Conference on Formal Linguistics, University of California, Santa Cruz.
- Martin, Roger. 2001. Null Case and the distribution of PRO. *Linguistic Inquiry* 31:141–166.
- Massam, Diane. 2001. Pseudo noun incorporation in Niuean. *Natural Language and Linguistic Theory* 19: 153–197.
- Massam, Diane. 2006. Neither absolutive nor ergative is nominative or accusative. In *Ergativity: Emerging issues*, ed. by Alana Johns, Diane Massam, and Juvénal Ndayiragije, 27–46. Dordrecht: Kluwer.

- McCloskey, James. 1997. Subjecthood and subject positions. In *Elements of grammar*, ed. by Liliane Haegeman, 197–235. Dordrecht: Kluwer.
- Mithun, Marianne. 1991. Active/Agentive case marking and its motivations. *Language* 67:510–546.
- Mohanan, Tara. 1994. *Argument structure in Hindi*. Stanford, CA: CSLI Publications.
- Moravcsik, Edith. 1978. On the distribution of ergative and accusative patterns. *Lingua* 45:233–279.
- Morphy, Frances. 1983. Djapu, a Yolngu dialect. In *Handbook of Australian languages*, ed. by R. M. W. Dixon and Barry J. Blake, 3:1–188. John Benjamins: Amsterdam.
- Murasugi, Kumiko G. 1992. Crossing and nested paths: NP movement in accusative and ergative languages. Doctoral dissertation, MIT, Cambridge, MA.
- Nash, David. 1986. *Topics in Warlpiri grammar*. New York: Garland.
- Pandharipande, Rajeshwari V. 1997. *Marathi*. London: Routledge.
- Pesetsky, David, and Esther Torrego. 2001. T-to-C movement: Causes and consequences. In *Ken Hale: A life in language*, ed. by Michael Kenstowicz, 355–426. Cambridge, MA: MIT Press.
- Polinsky, Maria. 2003. Non-canonical agreement is canonical. *Transactions of the Philological Society* 101: 279–312.
- Polinsky, Maria, and Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language and Linguistic Theory* 19:583–646.
- Prince, Alan, and Paul Smolensky. 1993. Optimality Theory: Constraint interaction in generative grammar. Technical report 2, Center for Cognitive Science, Rutgers University, New Brunswick, NJ.
- Rude, Noel. 1988. Ergative, passive, and antipassive in Nez Perce. In *Passive and voice*, ed. by Masayoshi Shibatani, 547–560. Amsterdam: John Benjamins.
- Schütze, Carson. 2001. On the nature of default Case. *Syntax* 4:205–238.
- Seiter, William. 1980. *Studies in Niuean syntax*. New York: Garland.
- Sigurðsson, Halldór Ármann. 1991. Icelandic Case-marked PRO and the licensing of lexical arguments. *Natural Language and Linguistic Theory* 9:327–363.
- Sigurðsson, Halldór Ármann. 2000. The locus of Case and agreement. *Working Papers in Scandinavian Syntax* 65:65–108.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In *Grammatical categories in Australian languages*, ed. by R. M. W. Dixon, 112–171. Canberra: Australian Institute of Aboriginal Studies.
- Simpson, Jane. 1991. *Warlpiri morpho-syntax: A lexicalist approach*. Dordrecht: Kluwer.
- Simpson, Jane, and Joan Bresnan. 1983. Control and obviation in Warlpiri. *Natural Language and Linguistic Theory* 1:49–64.
- Smith, Ian, and Steve Johnson. 2000. Kugu Nganhcara. In *Handbook of Australian languages*, ed. by R. M. W. Dixon and Barry J. Blake, 5:357–489. Oxford: Oxford University Press.
- Svenonius, Peter. 2001. Case and event structure. In *Syntax of predication*, ed. by Nina Zhang, 1–21. ZAS Papers in Linguistics 26. Berlin: Zentrum für Allgemeine Sprachwissenschaft.
- Svenonius, Peter. 2005. Case alternations in the Icelandic passive. Ms., University of Tromsø.
- Ura, Hiroyuki. 2001. Case. In *The handbook of contemporary syntactic theory*, ed. by Mark Baltin and Chris Collins, 334–373. Oxford: Blackwell.
- Van Valin, Robert D., Jr. 1981. Grammatical relations in ergative languages. *Studies in Language* 5:361–394.
- Warlpiri Dictionary Project. 1993. Warlpiri dictionary. Ongoing work with numerous contributors. Machine-readable data files, deposited in the Aboriginal Studies Electronic Data Archive (ASEDA) of the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS). Available at <http://www1.aiatsis.gov.au/ASEDA>.
- Wierzbicka, Anna. 1981. Case marking and human nature. *Australian Journal of Linguistics* 1:43–80.
- Woolford, Ellen. 1997. Four-way Case systems: Ergative, nominative, objective, and accusative. *Natural Language and Linguistic Theory* 15:181–227.

- Woolford, Ellen. 2003. Burzio's Generalization, markedness, and locality constraints on nominative objects. In *New perspectives on Case theory*, ed. by Ellen Brandner and Heike Zinsmeister, 301–329. Stanford, CA: CSLI Publications.
- Woolford, Ellen. 2006. Lexical Case, inherent Case, and argument structure. *Linguistic Inquiry* 37:111–130.
- Yip, Moira, Joan Maling, and Ray Jackendoff. 1987. Case in tiers. *Language* 63:217–250.

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