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Unmarked Case*

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In typological work on Case, it is customary to distinguish between marked Case and unmarked Case. Unmarked Case is the Case that generally surfaces on the sole argument of an intransitive verb in a given language. One can then distinguish between nominative-accusative patterning of Case and ergative patterning on the basis of which argument of a transitive verb has the unmarked Case and which a marked Case. In a nominative-accusative system, it is the subject of a transitive verb that has unmarked Case, and the object has marked Case. In an ergative system, it is the other way around. Such an account can be found, for example, in Dixon (1979; 1994). The unmarked Case is generally referred to as NOMINATIVE, but for some ergative languages it has become traditional to call it ABSOLUTIVE.

The distribution of unmarked Case forms is particularly interesting in so-called split ergative languages. One pattern for such languages[1] is illustrated in (1).

(1)

	types of nominals		
	#1	#2	#3
subject of transitive	ergative	ergative	unmarked (nom)
subject of intransitive	unmarked (abs)	unmarked (nom)	unmarked (nom)
object (of transitive)	unmarked (abs)	accusative	accusative

This kind of distribution is particularly interesting because it raises important questions about the nature of unmarked Case. More specifically, it calls into question the very existence of unmarked Case as a uniform class. The distribution in (1) invites an analysis in which "unmarked Case" is merely a morphological quirk: nouns of type 3 have an irregular ergative form which is identical to the nominative, and nouns of type 1 have an irregular accusative.

This paper is a study of the question of the proper treatment of unmarked Case. In §1, we will examine arguments that unmarked Case nominals are syntactically ergative or accusative, along the lines outlined in the preceding paragraph. We will refer to this approach as the ERGATIVE/ACCUSATIVE ANALYSIS of unmarked Case nominals, and conclude that there are compelling reasons to adopt it. In §2, we examine arguments that unmarked Case is

*Jane Simpson and David Nash forced me to think more clearly about unmarked Case. I would like to thank them, and also Joan Bresnan and Asya Pereltsvaig for useful discussions of the issues. Needless to say, they cannot be held responsible for the use I have made of their comments.

[1]This pattern is found in many Australian languages. In Dyirbal, for example, type 3 corresponds to first and second person pronouns, type 2 corresponds to 'who/what' and (optionally) to nouns referring to people, and type 1 to all other nominals. This pattern is found in many Australian languages. In Dyirbal, for example, type 3 corresponds to first and second person pronouns, type 2 corresponds to 'who/what' and (optionally) to nouns referring to people, and type 1 to all other nominals.

syntactically relevant. We dub this the CASELESS ANALYSIS and decide that it is a well-argued-for analysis. The conclusions of these two sections are apparently in contradiction, and in §3 we reconcile them by outlining an approach in which Case is divided into two syntactic parts, Case specification and Case realization. We propose formalizations of this approach in a version of Government/Binding theory and in Lexical-Functional Grammar.

The concept "unmarked" as used by typologists involves an intended ambiguity, but one which it is important to disentangle before we proceed.[2] On one hand, it is the normal markedness concept: the nominative or absolutive is used in neutral contexts, such as citation forms of nouns, left dislocated constituents, etc. (Dixon 1979). However, in many languages the nominative or absolutive is unmarked in a more literal morphological sense: there is no nominative/absolutive Case morpheme. The crucial point is that it is the former notion of unmarked that is relevant here. While the widespread lack of morphological marking is significant, it is neither necessary nor sufficient for the Case form to be considered unmarked. This is particularly important when considering the paradigms of Indo-European languages with a rich Case system, such as Latin, Russian, or Icelandic. Note the following clarification by Dixon (1979: 72):[3]

> Generally, the case that is functionally (i.e. [featurally]) unmarked is also formally (i.e. phonologically) unmarked—i.e., it has zero realization; this is so for absolutive in Dyirbal and nominative in Telugu, among many examples. *Both* cases—ergative and absolutive, or accusative and nominative—may involve some non-zero desinence added to the basic nominal stem; i.e. both may be phonologically marked. In such languages, it is still usually true that the absolutive or nominative (that case whose scope includes the S [subject of intransitive] function) will be [*featurally*] unmarked. Thus, in Latin, a nominative form (e.g. *servus*) is grammatically unmarked with respect to accusative (e.g. *servum*); it is the nominative that is used in syntactically unmarked circumstances, such as citation. [fn omitted]

It also should be noted that Case marking splits are not limited to ergative languages. Many nominative-accusative languages display splits in the marking of accusative Case which follow the same patterns as splits in ergative languages (Falk 1998b). These splits are simply more striking in ergative languages, because they create the illusion that ergative languages have some nominative-accusative organization.

1. The ergative/accusative analysis

We begin with arguments for treating unmarked Case as a mere morphological quirk. Under this analysis, nominative and absolutive nominals are really ergative or accusative.

1.1. Simplicity of Case-marking rules

The most obvious argument for the ergative/accusative analysis is that it simplifies the Case marking rules. If we return to the pattern in (1), for example, Case marking in a transitive clause can be stated simply as (2).

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[2] I would like to thank Nigel Vincent (p.c.) for reminding me of the need to make this distinction.

[3] A terminological clarification of the clarification. Dixon refers to the kind of markedness I'm interested in as "functional" or "morphological," whereas the actual form of the morpheme is "formal" or "phonological." It seems to me that the label "morphological" is more appropriate for the second notion of unmarked. In order (I hope) to avoid confusion, I have replaced Dixon's "morphologically" with "featurally."

(2) Subjects are marked with ergative Case.
Objects are marked with accusative Case.

Otherwise, the rule for such a language would have to be something like (3).

(3) Subjects are marked with ergative Case if they are type 1 or 2; unmarked if they are type 3.
Objects are marked with accusative Case if they are type 2 or 3; unmarked if they are type 1.

For languages with other split patterns, other Case marking rules would be required.

The Case marking rules in (2) are simpler than those in (3) and appear to be less arbitrary. Under the assumptions of most theories of language, the analysis in (2) is therefore preferable to the one in (3).

1.2. Case agreement phenomena

More interesting, and more compelling, is an array of Case agreement phenomena that seem to show fairly conclusively that unmarked Case nominals actually bear syntactic Case features. Phenomena of this kind form the heart of Goddard's (1982) argument for an ergative/accusative analysis of unmarked Case nominals. We will review two constructions discussed by Goddard in the Australian language Diyari.

One such construction is the expression of inalienable possession. In Diyari, the possessor and possessee are marked with the same Case, plausibly through some percolation mechanism. Note the following examples (Goddard's (2,3)).

(4) a. ṉulu [ŋaṉa maṛa] ṇanda- ṇa.
3sgERG.NFEM 1sgACC hand.ABS hit- PART
'He hit my hand.'

b. [yini milki] ɟanma- yi- l̪a.
2sgNOM eye.ABS be.open- PRES- NEW.INFO
'Your eyes are open now.'

As Goddard observes, the "absolutive" head nouns cannot have the same Case features, because in one case the agreeing form is accusative and in the other it is nominative. The most plausible analysis is that 'hand' in (4a) is syntactically accusative, and that the accusative form of this word happens not to have a suffix. A similar argument can be made from determiners (identical to third person pronouns) (Goddard's (4,5)).

(5) a. [ṉawu kaṇa] wapa- yi.
3sgNOM.NFEM person.ABS go- PRES
'The man is going.'

b. ṉulu pulaṉa [ṉiṉa putu] yiŋki- ṇa
3sgERG.NFEM 3duACC 3sgACC.NFEM thing.ABS give- PART
wara- yi.
AUX- PRES
'He gave them that thing.'

Similar facts can be found in other languages. Note the ergative Case marking on the secondary predicate in the following example from Dyirbal (Bittner and Hale 1996b).[4]

(6) Midi- ŋgu ŋaja palan yibi bura- n.
small- ERG I.NOM that woman see- NFUT
'When I was little, I saw that woman.'

Constructions of this kind form a very compelling argument. It is clear that a grammatical analysis of Case agreement will be much more complex, and less natural, if we do not assume that superficially Caseless nominals can be formally Case marked.

1.3. Plausibility of Case syncretism

Another argument due to Goddard is that Case syncretism is a well-known phenomenon. While this does not necessarily mean that this is the correct analysis for absolutive nominals, it does make such an analysis plausible.

To make the argument, Goddard cites part of the nominal paradigm in Polish.

	Masculine			Feminine	Neuter
	Animate		Inanimate		
Nominative	*syn*	*kot*	*dom*	*bab-a*	*lat-o*
Accusative	*syn-a*	*kot-a*	*dom*	*bab-ę*	*lat-o*
Genitive	*syn-a*	*kot-a*	*dom-u*	*bab-y*	*lat-a*
	'son'	'cat'	'house'	'woman'	'summer'

Goddard observes that traditional analyses of Polish accept an across-the-board formal distinction between nominative, accusative, and genitive Cases. This is true despite the phonetic identity between accusative and genitive in the masculine animate, and between nominative and accusative in the neuter and the masculine inanimate. Such inflectional syncretism is a widespread phenomenon, and analyzing split ergativity in those terms brings it into the realm of the familiar.

As an argument that this is the correct analysis for absolutive nominals, this is rather weak. It assumes that the conventional analysis for Polish should be extended to split ergative languages. However, this is only one possible conclusion to draw. It is equally possible that it is split ergative languages that are analyzed correctly, and that Polish should be reanalyzed in such a way that forms like *dom* and *lato* are always nominative (unmarked). A third possibility is that the similarity between the situations in Polish and split-ergative languages is superficial, and that the conventional analysis of each is correct.

However, as a plausibility argument added to the statements of Case marking rules and the facts of Case agreement this carries some weight. Showing that an exotic phenomenon is nothing more than a new case of a familiar phenomenon represents a step forward in our understanding of the nature of language.

[4]Bittner and Hale gloss the pronoun as ergative, although the form is identical to the one used for intransitive subjects. They state that distinction between nominative and ergative is "masked". They thus assume the analysis under discussion in this section.

1.4. Concluding remarks: the ergative/accusative analysis

What we have seen in this section, based largely on the arguments made by Goddard, that unmarked Case nominals (at least in split-ergative languages) are formally Case marked. The apparent lack of Case can plausibly be treated as a case of morphological syncretism.

2. The Caseless analysis

We turn now to arguments that unmarked Case reflects something deeper than morphophonology. The thrust of these arguments will be that syntax must recognize unmarked Case as being distinct from marked Cases.

2.1. The nature of unmarked Case

We begin with a general look at what the concept of unmarked Case means. Although most generative approaches to Case do not recognize unmarked Case as distinct from marked Case, the various arguments that have been made over the years must be considered.

The concept of nominative as unmarked Case has a long history. For example, Jespersen (1924: 107) quotes Sweet as having written in 1876 that

> [i]t is a curious fact, hitherto overlooked by grammarians and logicians, that the definition of the noun applies strictly only to the nominative case. The oblique cases are really attribute-words, and inflexion is practically nothing but a device for turning a noun into an adjective or an adverb.

This is an early statement of an argument that was later developed in greater detail by Jakobson (1936). Jakobson developed a feature system for the Cases of Russian[5] based on what he saw as their basic properties. In keeping with his general approach to markedness, a feature value [–f] does not mean the opposite of [+f]; instead, it represents neutrality with respect to the property represented by [f]. Jakobson's analysis of nominative Case is '–' for all features. That is to say, nominative is the maximally unmarked Case, essentially with no properties of its own. Other Cases mark their NPs as dependents; a nominative NP need not be a dependent of something else. The nominative is thus "the only possible vehicle of the **pure naming function**" (p. 67/342). In more modern terms, the nominative is the citation form. This is essentially the same concept of unmarked Case as Sweet's.

Essentially the same concept is discussed by Dixon (1979), who extends it to the absolutive of ergative languages. He shows that ergative Case involves positive marking of a nominal as being the subject of a transitive, while the absolutive is unmarked, used in situations where there is no syntactic marking.

Generative linguists of all theoretical inclinations have generally not recognized unmarked Case. Instead, nominative Case and accusative Case have been considered parallel to each other. However, alternative accounts of citation forms, dislocated forms, etc., have not appeared, and arguments against the notion that nominative/absolutive is unmarked have not been put forward.

Occasional generative accounts have made use of the notion of unmarked Case. In a GB-related framework, Bittner and Hale (1996a) propose that nominative and absolutive are Caseless nominals. This Caselessness is a crucial element in the analysis of Case systems in

[5]That Jakobson was working on Russian Cases is significant. In Russian, as in other Indo-European languages that retain major portions of the PIE Case system, nominative is marked morphologically. This did not prevent Jakobson from treating nominative as featurally (syntactically) unmarked.

their framework. In an LFG analysis, Andrews (1982) argues that nominative nominals should be treated as lacking a value for the CASE feature on the grounds of the use of nominative forms for left-dislocated constituents and nonagreeing predicate modifiers in Icelandic, as well as the lack of quirky nominative. However, approaches of this kind are the exception in generative work.

While lack of morphological marking is not criterial, it is striking that nominative and absolutive often *are* unmarked morphologically. An analysis of nominative and absolutive as unmarked predicts this as the simplest situation: since no features are needed, there need not be a morpheme. Under the ergative/accusative analysis, it is a coincidence that the allomorphy of these two Cases so frequently includes a Ø allomorph.

2.2. The predictability of Caselessness

If unmarked Case were merely a case of morphological syncretism, we would not expect it to be predictable cross-linguistically. However, as typologists have observed, it is predictable.

Silverstein (1976) observed that there is a regularity to splits in Case marking. He stated the regularity in terms of a hierarchy of NP types, in which pronouns outrank lexical NPs, animate NPs outrank inanimate NPs, and so on. He observed that NPs higher on the hierarchy tend to be marked accusative and not ergative, while NPs lower on the hierarchy tend to be marked ergative and not accusative.

Goddard (1982) acknowledges part of the regularity (the part pertaining to accusative Case), and attributes a meaning of 'human' to the accusative Case marking. By doing so, Goddard retreats from the pure ergative/accusative analysis. He acknowledges that there is a sense in which absolutive objects are not fully accusative. The Ø marking is not just an allomorph of the accusative morpheme; it is the absence of an accusative morpheme.

However, stating that accusative (and ergative) Case marking have some additional element of meaning is not enough. As Goddard states it, this meaning is an arbitrary fact about some class of languages. But the cross-linguistic evidence points to something more systematic. One promising approach, favored by Jakobson (1936), Dixon (1979), Falk (1998), and others, is that the most natural subject in discourse is definite and animate and the most natural object is indefinite and inanimate. The overt Case marking then serves to mark noncanonical (subjects and) objects. Goddard argues against such an approach on the grounds that text counts do not support the notion of naturalness.[6] At worst, the Silverstein hierarchy is a stipulation of Universal Grammar. But whatever the underlying cause, the crosslinguistic distribution of Caselessness is systematic. This is not consistent with an analysis that treats unmarked Case as mere allomorphy.

2.3. The syntactic relevance of Caselessness

2.3.1. Agreement

In many languages, the verb agrees with a single argument. The conventional wisdom is that this argument is the subject. However, it turns out that it is generally a nominal with unmarked Case that triggers this kind of agreement.

One of the most striking examples of this is Hindi-Urdu (henceforth Hindi). In Hindi, both the subject and the object of a transitive clause can be either marked with a Case clitic (ergative or accusative) or unmarked (nominative). Agreement is with the subject if it is

[6]One could question whether the evidence of text counts is relevant, but it doesn't matter for present purposes.

nominative, otherwise with the object if it is nominative, otherwise neutral. Note the agreement patterns in the following examples from Butt (1993) (her (4)).

(7) a. naadyaa xat lik^{h}- tii hai.
Nadya(F).NOM letter(M).NOM write- IMPF.FSG be.PRES.3SG
'Nadya writes a letter.'

b. naadyaa ne xat lik^{h}- aa hai.
Nadya(F) ERG letter(M).NOM write- PERF.MSG be.PRES.3SG
'Nadya has written a letter.'

c. naadyaa ne ci$\underline{t}$t^{h}ii lik^{h}- ii hai.
Nadya(F) ERG note(F).NOM write- PERF.FSG be.PRES.3SG
'Nadya has written a note.'

d. naadyaa ne ci$\underline{t}$t^{h}ii ko lik^{h}- aa hai.
Nadya(F) ERG note(F) ACC write- PERF.MSG be.PRES.3SG
'Nadya has written a (particular) note.'

Another language in which agreement is demonstrably related to bearing unmarked Case is Icelandic, although there are some complications.[7] Verbs agree with nominative subjects but not with nonnominative subjects (Andrews 1990 (1a,2c)).

(8) a. Stelpurnar hláu.
the.girls.PL.NOM laughed.PL
'The girls laughed.'

b. Verkjanna gætti ekki.
the.pains.PL.GEN was.noticeable.SG not
'The pains were not noticeable.'

Furthermore, in constructions with nominative objects, the verb agrees with the object optionally (obligatorily in passives) (Andrews 1990 (57b,c) and discussion on p. 211).

(9) a. Stráknum líkar / líka slíkir bílar.
the.boy.DAT likes / like such cars
'The boy likes such cars.'

b. Honum voru gefnir peningarnir.
him.DAT were given.NOM.MASC.PL the.money.NOM.MASC.PL
'He was given the money.'

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[7]There are basically two complications. One is the optionality of agreement with a nominative object of an active verb. The second is that in a Raising-to-Object/ECM construction with a participle in the subordinate clause, the participle agrees with the accusative subject. This is exemplified in the following example from Andrews (1990) example (6a).

(i) Ég tel strákana (hafa verið) kitlaða.
I believe the.boys to.have been tickled.ACC.MASC.PL
I believe the boys to have been tickled.

It should be noted that agreement with an accusative is also attested in Gujarati, according to Comrie (1984). Gujarati has the same basic agreement pattern as Hindi, but if there is no nominative, agreement is with the accusative object. It may be that agreement with accusatives is permitted by UG as a parametric alternative to neutral agreement.

Even English can be argued to have nominative agreement rather than subject agreement. The evidence is rather subtle, which reinforces the idea that it is the result of aspects of UG rather than some parochial language-specific rule. The one environment in which agreement is with something that is not in subject position is the existential construction.

(10) a. There is/*are a hamster in the cage.
b. There are/*is three hamsters in the cage.[8]

Unlike other nominals that trigger agreement, in modern English the postverbal position in existentials is accusative, not nominative.

(11) a. There is him.
b. *There is he. [* on the existential reading; ?? as locative inversion]

In English, pronouns (aside from *you* and *it*) exhibit a distinction between nominative and accusative forms; lexical nouns do not. Following the logic of the analysis we are piecing together, let us suppose that lexical nouns are never accusative. This would follow the Silverstein-style pattern for Case split: lexical nouns are less likely to be marked accusative than pronouns. A consequence would be that, if agreement is with the nominative, we should expect to find agreement with a postverbal lexical noun but not with a postverbal pronoun. This prediction is borne out. (Since the postverbal nominal in these examples is definite, these are grammatical only on a list reading.)

(12) a. There are the linguists.
b. There is/*are us.
c. There is/*am me.
d. There is/*are them.

This is an otherwise strange distribution of agreement. It would not work to say that the postverbal nominal agrees in number but not person, because it is always the verb form is singular in all these examples. However, it follows from what seem to be principles of UG if nominals superficially unmarked for Case really are unmarked.[9]

One final example is Modern Hebrew, which seems to display a similar array of facts, although some of the details are murky. Like English, Hebrew does not have the usual kinds

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[8]Of course, (i) is grammatical.
(i) There's three hamsters in the cage.
This seems to be a matter of register; neutral third person singular agreement seems to be possible only in less formal styles of English. Since the discussion here is going to focus on whether *are* is grammatical, the treatment of sentences like (i) is irrelevant.

[9]An interesting residual problem with the English is the status of *it* and *you*. The question is whether they, like lexical nouns, are never accusative, or whether these are legitimate cases of morphological syncretism. I don't know of any way to test for the status of *it*. On the other hand, the existential construction suggests that *you* can be accusative:
(i) There is/*are you.
This is a positive result. As observed by Falk (1998), the Silverstein hierarchy would lead us to expect that *you* should take accusative Case.

of constructions that allow one to tease apart nominative Case and subjecthood as the trigger for agreement. However, evidence can be gleaned from possessive sentences. Possessive sentences in Hebrew have the structure: 'be' – possessor (in the dative) – possessed.

(13) a. haya le- rina sefer.
be.PAST.3MSG DAT- Rina book
'Rina had a book.'
b. haya li keev roš.
be.PAST.3MSG DAT.1SG ache head
'I had a headache.'

Historically, the possessed nominal was the subject. It thus was unmarked for Case and triggered agreement on the verb. Such usage is still considered normative. However, in actual spoken Hebrew, the possessed nominal appears to have been reinterpreted as an object. This means that it is marked with accusative Case; in accordance with Hebrew's implementation of the Silverstein hierarchy, accusative Case only surfaces on definite nominals.

(14) haya le- rina et ha- sefer.
be.PAST.3MSG DAT- Rina ACC the- book
'Rina had the book.'

As observed by Ziv (1976), the presence or absence of accusative Case is correlated with the absence or presence of agreement (Ziv's (11) and (17)).

(15) a. hayta li mexonit kazot.
be.PAST.3FSG DAT.1SG car(F) such
b. ?haya li mexonit kazot.
be.PAST.3MSG DAT.1SG car(F) such
'I had such a car.'

(16) a. ?hayta lanu et ha- mexonit hazot od kše-
be.PAST.3FSG DAT.1PL ACC the- car(F) this still when-
garnu be- tel aviv
live.PAST.1PL in- Tel Aviv
b. haya lanu et ha- mexonit hazot od kše-
be.PAST.3MSG DAT.1PL ACC the- car(F) this still when-
garnu be- tel aviv
live.PAST.1PL in- Tel Aviv
'We had this car when we were living in Tel Aviv.'

If we idealize the judgments[10] and read the question marks as asterisks, the result again clearly correlates agreement with the absence of Case.

It should be noted that Ziv reaches a different conclusion concerning the Hebrew facts.

[10]Two possible explanations for the uncertainty of the judgments reported by Ziv. One, Ziv's explanation, is that we are observing syntactic change in progress, and the fuzziness is a result of the transitional stage the language is in now. An alternative explanation might be the influence of prescriptive norms, which are very strong in Hebrew. Both explanations seem to me to be plausible, and in either case I think that idealizing the judgments is legitimate.

She denies that agreement can be tied to Caselessness, and claims that the possessed nominal is still a grammatical subject in Modern Hebrew. Her reason for treating subjecthood and not Caselessness as a trigger for agreement is based on the behavior of some unaccusative verbs in what she characterizes as "colloquial (or perhaps slangy)" Hebrew (p. 141). The sole direct argument of an unaccusative verb in Hebrew can be either preverbal (the usual position for subjects) or postverbal (the usual position for objects). In the colloquial style in question, when the argument is postverbal (with a subset of the unaccusative verbs) it can be marked accusative.

(17) (Ziv (31))

a. parca šam et hasrefa haxi gdola bair.
broke.out.3FSG there ACC the.fire(F) the.most big in.the.city
'The biggest fire in the city broke out there.'

b. kara šam et oto haason gam bašana šeavra.
happened.3MSG there ACC same the.disaster(M) also in.the.year that.passed
'The same disaster occurred there last year too.'

Even when marked accusative, the argument triggers agreement (cf. (17a)). Ziv's analysis is that these are inverted subjects which are irregularly marked accusative: thus agreement is triggered by subjecthood and not by Caselessness. However, as we have seen with Gujarati and Icelandic (fn 7), it is possible in languages where there is a clear correlation between Caselessness and agreement for some accusative nominals to nevertheless serve as agreement triggers. While the phenomenon certainly merits further study, it seems that the facts are broadly in accordance with the claim that it is lack of Case marking that triggers agreement in Hebrew. As for the claim that the possessed nominal is the subject in Modern Hebrew, it is based on a construction that Ziv analyzes as Raising (her (21) and (22)).

(18) a. xaverim tovim yatxilu lihyot lo rak b- a- šana ha- baa.
friends good begin.FUT.3PL to.be DAT.3MSG only in- the- year the- next
'He will start having good friends only next year.'

b. carot lo regilot cfuyot lihyot la im hi titgareš.
troubles(F) un- usual foreseen.FPL to.be DAT.3FSG if she will.get.divorced
'She can expect to have unusual troubles if she gets divorced.'

At first glance, these look like Raising constructions. However, there is reason to think that this is the wrong analysis of these sentences. In the first place, they are grammatical only when placed in a discourse context appropriate for topicalization (Ziv, personal communication). This suggests that the sentence-initial position of the possessed nominal in these sentences is the result of topicalization, not raising. The only apparent problem with this is the agreement between the fronted possessed nominal and the verb. However, agreement is possible with the possessed nominal even if it remains within the lower clause (Ziv, personal communication); i.e. where it can be demonstrated that no raising has occurred. It thus seems

likely that these are simply topicalization structures, and thus provide no evidence that the possessed nominal is the subject.[11] The only factor that seems to be involved in triggering agreement is the lack of Case marking.

2.3.2. Other Syntactic Effects

Agreement is unquestionably the primary locus of syntactic sensitivity to Caselessness. It also may be the only one that has some basis in UG. However, there is a scattering of language-specific syntactic effects as well.

In Dyirbal, transitive subjects can be either ergative or unmarked (nominative) and objects can be either accusative or unmarked (absolutive). These splits are conditioned by the animacy hierarchy. While Dyirbal has free word order, unmarked word order distinguishes between nominals with marked Case and unmarked Case. Nominative (unmarked) agents precede the patient, while ergative (marked) agents follow it, as in the following examples from Dixon (1994).

(19) a. ŋuma yabu- ŋgu bura- n
father.ABS mother- ERG see- NFUT
'Mother saw father.'

b. ŋana nʸurra- na bura- n
we.NOM you.PL- ACC see- NFUT
'We saw you.'

c. ŋana jaja ŋamba- n.
we.all.NOM child.ABS hear- NFUT
'We heard the child.'

d. ŋana- na jaja- ŋgu ŋamba- n
we.all- ACC child- ERG hear- NFUT
'The child heard us.'

In the Nilo-Saharan language Päri (Andersen 1988), Case, agreement, and order all interact in the case of transitive subjects (Andersen's (5a, 7a))

(20) a. jòobì á- kèel ùbúrr- ì
buffalo COMPLETIVE- shoot Ubur- ERG
'Ubur shot the buffalo.'

b. ùbúr jòobì á- kèel- é
Ubur buffalo COMPLETIVE- shoot- 3sgSUBJ
'Ubur shot the buffalo.'

In (20a), the subject is marked with overt Case, appears finally, and does not trigger agreement on the verb. In (20b), which Andersen dubs topicalized, the subject has no overt Case, appears initially, and does trigger agreement.

The Dyirbal Topic Chaining construction is well known from the literature on ergativity. In Dyirbal the shared nominal in a string of coordinated clauses in which a nominal

[11]We thus agree with the analysis of Doron (1983), who also argues that the possessed nominal is not the subject. Doron also claims that Raising is impossible, and accounts for the agreement in the untopicalized structure in terms of cosuperscripting.

is missing from all but the first is the object (or subject of intransitive). This is true regardless of Case marking, and as Goddard (1982) quite rightly observes this construction in Dyirbal thus provides no support for a theory of unmarked Case. However, in the closely related language Yidin^{y}, Topic Chaining is sensitive to Case (Marantz 1984: 199). The chained nominal is the unmarked one, regardless of grammatical function. This is another case of a grammatical construction in which unmarked Case is syntactically relevant.

3. Analysis

3.1. Basic Analysis

The conclusions of the previous two sections are contradictory. On the one hand, it can be argued fairly conclusively that objects are accusative (and transitive subjects in ergative languages ergative) regardless of the superficial Case marking. On the other hand, syntax seems to be aware of the distinction between marked Case and unmarked Case, and shows this in agreement and sometimes in other language-specific constructions. We will now attempt to reconcile this contradiction. In this section, we will discuss a way to resolve the contradiction, without reference to any specific theoretical framework. In the following two sections, we will outline ways to incorporate the ideas of this section into the theoretical frameworks of Government/Binding theory (GB) and Lexical-Functional Grammar (LFG).

The key to understanding the nature of unmarked Case is to see Case marking as consisting of two parts. On the one hand, it is something that is specified (assigned/checked/ …) for nominals by lexical heads.[12] We will refer to this as CASE SPECIFICATION. On the other hand, it is an inflectional category of nouns. We will refer to this aspect of Case as CASE REALIZATION. Thus, an accusative nominal could be one for which accusative Case is specified or one on which it is realized (i.e. it is headed by a noun inflected with accusative Case). Conventional approaches to Case do not distinguish between these two aspects of Case; the assumption being that there is a mutual dependence between specification and realization. While the realization of accusative inflection on a nominal is apparently only licensed by the specification of accusative Case, the phenomenon of unmarked Case shows us that it is possible for a nominal to have Case specified and not realized.

We must assume that both Case specification and Case realization are visible to syntax[13]. That Case specification must be visible to the syntax is self-evident, since it happens under syntactic conditions. As for Case realization, we hypothesize, following Fillmore (1968) and Bittner and Hale (1996a,b) that Case is a functional head K, and that Case-marked nominals are distinguished categorially from nominals unmarked for Case; the former are KP, the latter DP (or NP). Absolutive objects, under such an account, are bare DPs that are specified for accusative Case. Similarly, nominative subjects of transitive clauses in ergative languages (such as pronouns in Dyirbal) are bare DPs that are specified for ergative Case. Agreement can be stated as being with a DP (and not a KP), and other syntactic properties sensitive to the marked/unmarked distinction can similarly be sensitive to category.

This kind of distinction between Case specification and Case realization is not possible under many approaches to Case. For example, in a Case-checking system such as that assumed in the Minimalist Program (Chomsky 1995), it is not possible for a nominal to have Case specified for it but not to actually realize it. If such a situation were to occur, the Case

[12]or by position, in some theories.

[13]In this respect, the distinction that I am drawing differs from the similar one drawn by Goddard.

feature of the head would not delete, and the derivation would crash because LF would have uninterpretable features. Similarly, in the theory of Bittner and Hale (1996), there is no distinction between a nominal being in a Case-binding configuration and being KP. However, as we will see in the next two sections, LFG and classical GB can accommodate this kind of duality.

We have not addressed the question of the distribution of KPs and DPs. As discussed earlier, some variant of the Silverstein hierarchy seems to be the correct approach; whether it is some arbitrary fact about UG or based in discourse grammar is an issue we will leave open. What is striking is that, while the basic principles seem to be universal, different languages seem to apply them in very different ways. This is a state of affairs that invites an analysis in terms of Optimality Theory. Aissen (1998) has proposed an OT formalization of (part of) the Silverstein hierarchy, based on harmonic alignment of different prominence scales. Among the scales are (21).

(21) a. Person scale: Local (1st/2nd person) > 3rd
b. Role scale: Agent > Patient
c. Relational scale: Subject > Object

Harmonic alignment of these scales yields partial constraint rankings such as (22).

(22) a. *Su/3 ≫ *Oj/3 (3rd person subjects are more marked than 3rd pers objects)
b. *Oj/Local ≫ *Su/Local

The individual constraints can be conjoined with *Ø, which penalizes the omission of morphological material. They are also ranked relative to *Struc, which penalizes the use of morphological content. As a first approximation for Dyirbal, for example, she proposes the constraint hierarchy (23).[14]

(23) $\{*Ø_K\&*Su/3, *Ø_K\&*Oj/Local\} \gg *Struc_K \gg \{*Ø_K\&*Su/Local, *Ø_K\&*Oj/3\}$

This means roughly "K-less third person subjects and K-less nonthird person objects are penalized more than including K, and including K is penalized more than K-less nonthird person subjects and K-less third person objects." While, as Aissen observes, more work is needed, this appears to be the correct direction in which to look, whatever the syntactic framework.

3.2. Government/Binding Theory

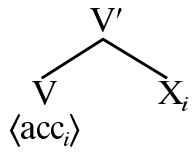
In classical GB, as described by Chomsky (1981), Case is specified by a lexical head for a nominal in the structural configuration defined as government. Case specification is thus a lexical property of heads. As a lexical property, Case marking resembles θ marking. Although it is generally not formalized as such, we can represent the Case-marking properties of a lexical head in a Case grid, parallel to the representation of θ marking properties in a θ grid.

The specification of Case is the transfer of features from the head to the argument. As with θ marking, this can be formally represented as coindexation. The specification of

[14]Aissen uses C for Case in the names of the constraints.

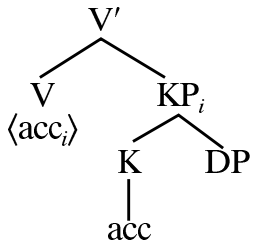
accusative Case on an argument can thus be represented as (24).

(24)

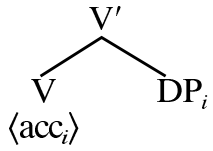


By virtue of being coindexed with the accusative features in the Case grid, X is syntactically accusative. However, X can be either a KP or a DP.

(25) a.



b.



In (25a), the object is “accusative”; in (25b) it's “absolutive”.

An analysis along these lines can serve as the basis for the observations made earlier. The agreement of the verb with a single argument, traditionally seen as the coindexation of INFL with the subject, can be stated as follows.

(26) Coindex INFL with the highest DP in the clause.

Other instances where the syntax distinguishes between marked and unmarked Case can be similarly handled. However, the DP objects are associated with the feature of accusative Case, by virtue of being coindexed with the accusative position in the Case grid.

The concept of unmarked Case does raise two interesting questions about the Case Filter. The first question is a consequence of the splitting of Case marking into Case specification and Case realization. Since the Case Filter requires every overt nominal to have Case, we need to determine whether what counts is Case specification or Case realization. The second question is the status of subjects in nominative-accusative languages: since Case is neither specified nor realized on such nominals, we need to determine how they can pass the Case Filter.

It seems clear that the relevant concept of Case that is required by the Case Filter has to be Case specification, not Case realization. If this is the correct concept, absolutive objects do not pose a problem. Even though they do not realize Case (i.e. they are DPs), they have accusative Case specified. Similarly, nominative subjects in ergative languages are specified for ergative Case but do not realize it. They also do not pose a problem if the Case Filter merely requires specification.

More serious is the problem of subjects in nominative-accusative languages. One promising idea is the one proposed by Baker (1988: 115–116). Baker suggests that in the syntax what is required is the coindexation of nominals with V (or INFL). This coindexation must then be interpreted at PF as either Case or agreement. Under the assumptions of classical GB, and under (26) above, the subject is coindexed with INFL; this coindexation is interpreted as agreement. Under Baker's proposal, then, the agreement of INFL with the subject is sufficient to allow the subject to pass the Case Filter.

One final comment is in order about the application of the notion of unmarked Case to GB. The original justification for treating Case marking as a SPEC-head relation was that SPEC-head is the configuration of nominative Case assignment. If the approach outlined here is correct and nominative nominals are unmarked for Case, there is no direct evidence for Case ever being assigned in a SPEC-head configuration.

3.3. Lexical-Functional Grammar

The unification-based architecture of LFG makes the adaptation of the proposed account practically effortless. The features of a particular element need not come from the constituents that it comprises. An object, for example, will have the accusative Case feature if it is morphologically marked with accusative Case: the lexical entry of the head includes the equation (27a). But it is also possible for an object to have the accusative Case feature if the lexical entry of the verb has the equation (27b), without actual accusative morphology.[15]

(27) a. $(\uparrow \text{CASE}) = \text{ACC}$
b. $(\uparrow \text{OBJ CASE}) = \text{ACC}$

It is thus possible within the existing architecture of LFG for a nominal unmarked for Case to nevertheless bear accusative Case features in f-structure. General Case-assignment rules and Case agreement phenomena are accounted for automatically.

On the other hand, if lexically Case marked nominals are KPs,[16] c-structure allows us to distinguish unmarked nominals. For example, the preferred linear ordering of subjects and objects[17] in Dyirbal can be captured by the LP statements (28), with a. taking precedence over b.

(28) a. $\text{DP} < \text{KP}$
b. $\phi^{-1}\ (\text{SUBJ}) < \phi^{-1}\ (\text{OBJ})$

As for agreement, the evidence we have brought would require a more complex statement than is generally assumed in LFG. Instead of equations like (29a), what is needed is codescription in terms of both c-structure and f-structure, as in (29b) (where ϕ is the function mapping c-structures into f-structures and L is the function labeling nodes in c-structure).

(29) a. $(\uparrow \text{SUBJ NUM}) = \text{PL}$
b. $(\uparrow \phi(L^{-1}(\text{DP}))\ \text{NUM}) = \text{PL}$

To summarize, in an LFG analysis Case specification is an f-structure phenomenon

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[15]I am assuming for concreteness that the verb assigns Case, but nothing significant in the analysis would change if constituents bearing the object function were marked $(\downarrow \text{CASE}) = \text{ACC}$.

[16]On functional categories in LFG, see Bresnan (in preparation). As Bresnan has reminded me (personal communication), the implementation of Case as a functional head in LFG has to be consistent with the Lexical Integrity Principle. This can be done in languages where Case is a bound morpheme by treating the Case-marked nominal as a member of category K.

[17]I am assuming (contra Marantz 1984 and Manning 1996) that agents are subjects and patients objects in transitive clauses in Dyirbal. See Falk (in preparation) for discussion from the perspective of LFG.

(the feature CASE) while Case realization is a c-structure phenomenon (the functional category K).

4. Conclusion

In this paper, we have seen that the traditional notion of unmarked Case is one that a theory of Case must be able to express. Absolutive Case and split ergativity cannot be analyzed as simple morphological syncretism.

Furthermore, we have shown that the facts of unmarked Case call for an analysis in which Case marking is factored into the specification of Case on a nominal by an external element and the realization of Case structurally on the nominal itself. This kind of approach can be handled under some syntactic theories of Case but not others. In particular, it is difficult to see how it could be incorporated naturally into the Minimalist Program.

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