

# Remarks and Replies



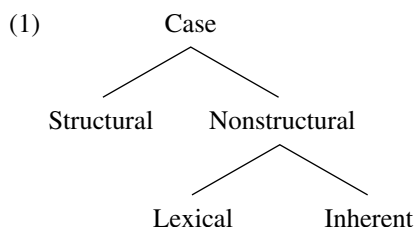
## Lexical Case, Inherent Case, and Argument Structure

*Ellen Woolford*

In addition to the division in Case theory between structural and non-structural Case, the theory must distinguish two kinds of nonstructural Case: lexical Case and inherent Case. Lexical Case is idiosyncratic Case, lexically selected and licensed by certain lexical heads (certain verbs and prepositions). Inherent Case is more regular, associated with particular  $\theta$ -positions: inherent dative Case with DP goals, and ergative Case with external arguments. Lexical and inherent Case turn out to be in complementary distribution with respect to  $\theta$ -positions: only themes/internal arguments may have lexical Case, and only external arguments and DP goals may have inherent Case. This complementary distribution can be accounted for under recent views of vP structure that place both external arguments and (shifted) DP goals outside the VP proper at the point at which nonstructural Case is licensed. Claims in the literature that the more regular datives and ergatives are actually structural Cases are based on faulty or misleading diagnostic tests.

*Keywords:* inherent Case licensing, ergative, dative, vP structure

Standard Case theory divides Case into two types, structural and nonstructural, which differ in their behavior and manner of licensing (Chomsky 1981, 1986). This article argues that the non-structural Cases further subdivide into two distinct types, lexical and inherent, which also differ in their behavior and manner of licensing.



I want to express my appreciation to Rajesh Bhatt, Hubert Haider, Kyle Johnson, Jóhannes Gísli Jónsson, Shigeto Kawahara, Min-Joo Kim, Manfred Krifka, Beatrice Primus, Peggy Speas, and the anonymous *LI* reviewers for interesting discussion of these issues, helpful comments on previous drafts, and assistance with the data.

Lexical and inherent Case fall together as nonstructural Cases because they behave alike and show themselves to be distinct from structural Cases under standard diagnostic tests (e.g., Case preservation under A-movement). However, there are at least **two important differences between these two types of nonstructural Case**. The first involves predictability; the second involves the  $\theta$ -positions with which each can be associated.

It has often been noted that some instances of nonstructural Case are truly idiosyncratic, while others are quite regular and predictable (Zaenen, Maling, and Thráinsson 1985, Yip, Maling, and Jackendoff 1987, Czepluch 1988, Holmberg and Platzack 1995, Wunderlich 1997, Blume 1998, Butt and King 1998, Maling 2002, Jónsson 2003). There is general agreement that the truly **idiosyncratic** Cases, such as the **dative in the Icelandic** example in (2), are **lexically selected** by individual verbs; it is thus appropriate to label these as instances of lexical Case.

- (2) *Bátnum hvolfdi.*  
 boat-DAT capsized  
 'The boat capsized.'  
 (Levin and Simpson 1981:(1b))

**Other** instances of nonstructural Case, such as the dative of ditransitive goals illustrated in (3), are much more **regular and predictable**, and fit the notion of inherent Case as Case that is inherently **associated with  $\theta$ -marking**. There is general agreement that the theory should capture this regularity in some way.

- (3) *Þeir gáfu konunginum ambáttina.*  
 they-NOM gave king-the-DAT slave-girl-the-ACC  
 'They gave the king the slave-girl.'  
 (Maling 2002:(44a))

Some scholars have concluded that the **regularity of these datives** indicates that they must really be **structural Cases**, since they do not fit the definition of idiosyncratic lexical Cases (Czepluch 1988, Wunderlich 1997, Blume 1998). Although this view is **not supported by standard diagnostic tests** (section 3), these scholars are nevertheless right to maintain that idiosyncratic datives and predictable datives are not the same kind of Case licensed in the same way. Similarly, **ergative** Case has also sometimes been characterized **as a structural Case** (Wunderlich 1997, Ura 2000, Davison 2004), although this conclusion is also **not supported by reliable diagnostic tests**. Ergative Case is inherently associated with a particular  $\theta$ -position, the external argument, and its syntactic behavior parallels that of inherent datives (section 3). **Ergative is an inherent Case** (Laughren 1989, 1992, Mahajan 1989, Harbert and Toribio 1991, Woolford 1993, 1997, 2001, Mohanan 1994, Butt 1995, Nash 1996, Massam 2002, Legate 2003).

- (4) **Two types of nonstructural Case**  
 Lexical Case: Idiosyncratic, lexically selected Case  
 Inherent Case: Case inherently associated with certain  $\theta$ -positions

The second major difference between the two types of nonstructural Case has to do with

the kinds of  $\theta$ -positions with which these Cases can be associated. The pattern turns out to be one of complementary distribution.<sup>1</sup>

(5) *Complementary distribution of lexical and inherent Case*

Lexical Case may occur on themes/internal arguments, but not on external arguments or on (shifted) DP goal arguments.

Inherent Case may occur on external arguments and on (shifted) DP goal arguments, but not on themes/internal arguments.

What accounts for this complementary distribution, and why do (shifted) DP goals pattern with external arguments instead of with themes/internal arguments in this respect? A rather natural account of this complementary distribution is possible if we take the view of vP structure proposed in works such as Baker 1997, Marantz 1989, and McGinnis 1996, 1998, 2001 under which not only agents, but also (shifted) DP goals, occupy a position outside the VP proper at the point at which nonstructural Case is licensed. Both agents and (shifted) DP goals are licensed by little/light v-type heads above the VP proper (McGinnis 1996, 1998, 2001), and the proposal here is that only these little/light v heads can license inherent Case. Only arguments that are inside the VP proper at the point at which nonstructural Case is licensed can be licensed for lexical Case by V.

(6) *Lexical and inherent Case licensing*

a. Lexical heads (e.g., V, P) license idiosyncratic lexical Case.

b. Little/light v heads license inherent Case.

The standard idea from Chomsky 1986 that nonstructural Case is licensed in connection with  $\theta$ -marking is maintained here, but updated in that this occurs in the vP structure or vP phase (Chomsky 2000), rather than at D-Structure.

Section 1 focuses on the literature and evidence supporting the conclusion that lexical and inherent Case are two distinct types of nonstructural Case and that these are in complementary distribution with respect to the  $\theta$ -positions in which they occur. The proposal for capturing this complementary distribution is presented in section 2. Section 3 reviews and evaluates a range of diagnostic tests for distinguishing structural and nonstructural Case, and shows that the reliable diagnostics class the inherent dative and ergative with the nonstructural Cases. This section also points out certain interfering factors that can produce misleading results on such diagnostic tests.

## 1 Lexical and Inherent Case in Complementary Distribution

It is well established in the Icelandic and German literature on Case that agent subjects never take idiosyncratic Case (Andrews 1982, Yip, Maling, and Jackendoff 1987, Sigurðsson 1989, Grimshaw 1990, Fanselow 2000, Jónsson 2003). In Icelandic, agent subjects take structural Case,

<sup>1</sup> This generalization is new as stated here, but it encompasses several more restricted generalizations that are well established in the literature (section 1). This article is limited in scope to the Cases that mark direct DP arguments; it does not address the interesting problem of what Cases mark indirect arguments and adjuncts.

which is nominative under normal conditions (excluding exceptional Case-marking (ECM) situations), whereas the verbs that lexically select an idiosyncratic Case on their subjects do not have agent subjects/external arguments.

- (7) a. Bátnum hvolfdi.  
 boat-DAT capsized  
 'The boat capsized.'  
 (Levin and Simpson 1981:(1b))
- b. Bátinn rak á land.  
 boat-ACC drifted to shore  
 'The boat drifted to the shore.'  
 (Jónsson 2003:(66a))
- c. Jóns nýtur ekki lengur við.  
 John-GEN enjoys not longer at  
 'John is no longer available.'  
 (Jónsson 2003:(1c))

With respect to ditransitive goals, it has been repeatedly observed in the Icelandic and German literature that DP goals do not take idiosyncratic lexical Case (Yip, Maling, and Jackendoff 1987, Czepluch 1988, Holmberg and Platzack 1995, Fanselow 2000, Jónsson 2003). They typically take inherent dative Case in Icelandic and German, but never idiosyncratic lexical Case. It is important to note that this generalization concerns DP goals alone and does not extend to PP goals, which take whatever Case the particular P licenses in the language. We can see the contrast in Case on DP and PP goals in the following pair of Icelandic examples, where the DP goal takes inherent dative Case in the double object version in (8a), while the goal inside the PP in the version in (8b) gets genitive Case because that is the lexical Case that this particular preposition, *til* 'to', licenses:<sup>2</sup>

- (8) a. Ég skilaði henni peningunum.  
 I returned her-DAT the money-DAT
- b. Ég skilaði peningunum til hennar.  
 I returned the money-DAT to her-GEN  
 (Zaenen, Maling, and Thráinsson 1985:(42a), (43a))

Czepluch (1988) and Fanselow (2000) have observed that in German, idiosyncratic Case is limited to the lowest, theme argument in ditransitive constructions; it cannot occur on the agent/external argument, or on the DP goal argument. This is essentially the first of the two generalizations stated in (9).

<sup>2</sup> The theme in (8), 'money', gets lexical dative Case, idiosyncratically licensed by the verb 'return'.

(9) *Complementary distribution of lexical and inherent Case*

Lexical Case may occur on themes/internal arguments, but not on external arguments, or on (shifted) DP goal arguments.

Inherent Case may occur on external arguments and on (shifted) DP goal arguments, but not on themes/internal arguments.

Turning now to the second generalization, we have seen examples of inherent dative Case on (shifted) goal arguments in (3) and (8a), and Levin (1989) shows that external arguments take **inherent ergative Case** in languages such as **Basque**.

## (10) Gizona-k kurritu du.

man-ERG **run** AUX

'The man ran.'

(Levin 1989:(33))

## (11) Miren-ek atea ireki du.

Miren-ERG door-NOM **open** AUX

'Miren opened the door.'

(Levin 1989:(20))

**Verbs without external arguments do not take ergative Case in Basque.**

## (12) Ni etorri naiz.

I-NOM **come** AUX

'I came.'

(Levin 1989:(8))

(13) Ni-ri zure oinetako-a-k- $\emptyset$  gustatzen zaizkit.

I-DAT your shoes-DET-NOM **like** AUX

'I like your shoes.'

(Austin and López 1995:12)

In contrast, it appears that themes/internal arguments never get inherent Case. The reason for thinking this is true is that crosslinguistically, **there appears to be no language that predictably marks all or most of its themes with a nonstructural Case** (confirmed by reliable diagnostic tests such as Case preservation under A-movement). Although Burzio (1986) claimed that themes get inherent accusative Case when they occur as the second object in the double accusative construction, that claim had only theory-internal motivation: to explain how the second object gets accusative Case in the passive under the assumption that passive verbs cannot license structural Case. That assumption is unnecessary under more recent views of Burzio's Generalization (see Burzio 2000 and a summary of related work in Woolford 2003a), and the Case of second objects is argued to be structural in Baker 1988 and Woolford 1993. There appears to be **no independent motivation for an inherent accusative Case** (as a regular, predictable form of nonstructural accusative Case, distinct from the idiosyncratic lexical accusative).

If the claim in (9) is true, that lexical Case and inherent Case are in complementary distribu-

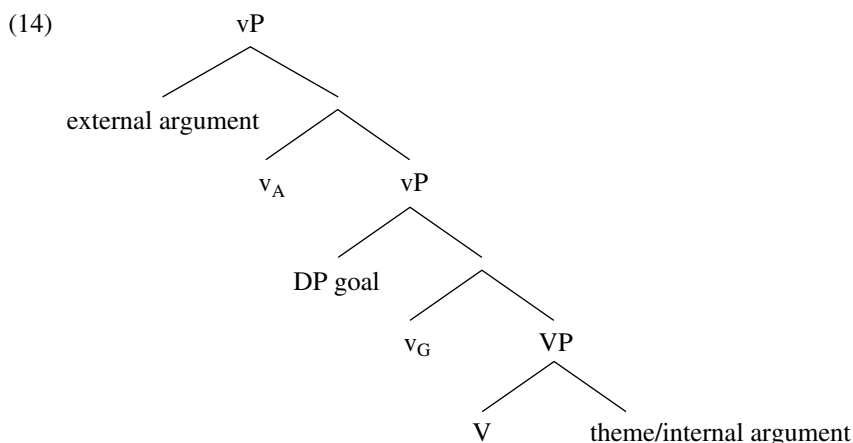
tion with respect to the  $\theta$ -positions these Cases can mark, we need to account for it. The next section presents one possible account building on recent proposals concerning vP structure.

## 2 Licensing Nonstructural Case in vP Structure

All Case licensing is technically structural, in the sense that all Case licensing is done by heads in a local structural configuration. While structural Case is licensed on a purely structural basis, nonstructural Case is licensed in connection with  $\theta$ -marking (Chomsky 1986). Nonstructural Case is licensed at a level prior to structural Case licensing, although the identity of this level has changed: D-Structure has been eliminated from the theory, but there are modern equivalents in argument structure, vP structure or the vP phase (Chomsky 2000), in terms of an initial level where  $\theta$ -marking and nonstructural Case licensing take place.

In vP structure, the external argument is licensed in a little/light v projection above the VP proper (Hung 1988, Chomsky 1995, Kratzer 1996). This little/light v head also licenses ergative Case to the external argument, following Massam (2002) and Legate (2003), who implement and update the view from Woolford 1997 that ergative Case is the inherent Case associated with agents.

Since DP goals behave like external arguments, and not like internal arguments, in taking the regular sort of nonstructural Case (inherent dative Case) and not the irregular sort (lexical Case), the question arises of whether we can capture the  $\theta$ -relatedness of the inherent dative in a way that parallels the treatment of the ergative Case. Under the view of vP structure proposed by McGinnis (1996, 1998, 2001), developing work by Marantz (1989), we can. McGinnis generates DP goals in the specifier of another little/light v head, located just above the VP proper (see (14)). This little/light v is labeled here as  $v_G$ , to distinguish it from the higher little/light v that licenses external arguments ( $v_A$ ).



If this little/light v licenses inherent dative Case, then we have a theory in which what distinguishes inherent Case from other sorts of Case is licensing by a little/light v.

Although McGinnis base-generates DP goals in the position shown in (14), many scholars take the view that DP goals are generated inside the VP proper in the position of PP goals (see, e.g., Baker 1988, 1997, Larson 1988). However, this view does not exclude the idea that (shifted) DP goals get Case outside the VP proper. Baker (1997) argues that when no P is present to license Case on goals, they move out of the VP for Case, to the specifier of a head located below the little/light v that licenses external arguments.<sup>3</sup>

Under the view of vP structure in (14), what the two types of nonstructural Case have in common is that they are both licensed to  $\theta$ -positions in vP structure. What distinguishes the two types of nonstructural Case is the kind of head that licenses them: the more regular inherent Cases are licensed by little/light v heads in vP projections above the VP proper, while the idiosyncratic lexical Cases are licensed by V, inside the VP proper.

(15) *Nonstructural Case licensing*

- a. Lexical Case is licensed only by lexical heads (e.g., V, P).
- b. Inherent Case is licensed only by little/light v heads.

We now have a possible account of the observed complementary distribution of lexical and inherent Case: lexical Case is limited to themes/internal arguments because only these are inside the VP proper at the point at which V licenses lexical Case; inherent Case is limited to arguments licensed by little/light v heads, because only these heads have the ability to license inherent Case.<sup>4</sup>

### 3 Diagnostics for Structural and Nonstructural Case

This section reviews the diagnostic tests to distinguish structural and nonstructural Case. We will see that not all such tests that have been used in the literature are entirely reliable: some are based on incorrect assumptions, some are actually diagnostics for something else, and some can be used with confidence only if one is aware of interfering factors that produce misleading results on these tests in some languages. Once we limit ourselves to data from reliable diagnostic tests, we find no evidence that the inherent Cases (the regular dative and the ergative Case) are actually structural Cases.

#### 3.1 Case Preservation under A-Movement

Perhaps the most well-known diagnostic test to distinguish structural from nonstructural Case involves Case preservation under A-movement (passive, raising). If the Case of an argument is preserved under A-movement, that argument has nonstructural Case. In contrast, an argument

<sup>3</sup> For concreteness, Baker assumes that this position is the specifier of Aspect Phrase, following Travis (1992).

<sup>4</sup> Readers may wonder why not all languages mark external arguments with ergative Case and/or DP goals with dative Case. An answer consistent with the Minimalist Program (Chomsky 2000) would be that languages differ with respect to whether one or both little/light v heads have the capacity to license inherent Case. An alternative answer explored in Woolford 2001 is that languages differ with respect to whether faithfulness to the nonstructural Cases is more important than using the less marked structural Cases.

with structural Case will change its Case after movement to whatever structural Case is licensed in the position to which that argument moves.

This diagnostic test indicates that all Icelandic datives are nonstructural Cases (Zaenen and Maling 1984, Zaenen, Maling, and Thráinsson 1985, Jónsson 1996). We see this in Icelandic passive constructions, where the regular dative on DP goals remains dative when the sentence passivizes.

- (16) a. Þeir skiluðu Maríu bókinni.  
 they returned Mary-DAT book-the-DAT  
 'They returned the book to Mary.'  
 (Jónsson 1996:137)
- b. Maríu var skilað þessari bók.  
 Mary-DAT was returned this book-DAT  
 (Jónsson 1996:139)

Datives are also preserved in the passive in German.<sup>5</sup>

- (17) a. Sie hilft ihm.  
 she helps him-DAT
- b. Ihm wird geholfen.  
 he-DAT is helped  
 (Haider 1985:68)
- (18) a. Dann hat Hans der Erna einen Kuss gegeben.  
 then has Hans the Erna-DAT a kiss-ACC given  
 'Then Hans gave Erna a kiss.'
- b. Dann ist der Erna ein Kuss gegeben worden.  
 then is the Erna-DAT a kiss-NOM given been  
 'Then Erna was given a kiss.'  
 (Czepluch 1988:92)

Case preservation under A-movement in passives confirms that even the regular dative of DP goals is a nonstructural Case. What of the ergative Case? Unfortunately, we cannot use the passive

<sup>5</sup> German has another passivelike construction called the *recipient passive*, which is sometimes cited as evidence for the view that the German dative is a structural Case (e.g., Wunderlich 1997). In contrast to the standard passive in (ia), which preserves the dative, the recipient passive in (ib) has no dative argument.

- (i) a. ... dass ihm ein Buch geschenkt wurde.  
 that him-DAT a book-NOM presented was  
 '... that he was presented a book.'
- b. ... dass er ein Buch geschenkt kriegte.  
 that he-NOM a book-ACC presented got  
 '... that he got presented a book.'  
 (Haider 1985:98)

However, according to Czepluch (1988:93) and Haider (1984, 1985), the (ib) construction has a different structure wherein the subject is base-generated as an argument of the higher verb, *kriegen*, rather than of the lower passive verb. If so, this is not an example of Case change under A-movement.



test on the ergative Case because the external argument disappears in the passive (or is realized as an adjunct) rather than undergoing A-movement.

### 3.2 *Misleading Results on the Passive Test in Intransitives*

Just as medical diagnostic tests sometimes yield false or misleading results, so there are specific circumstances in which the A-movement diagnostic test will produce false or misleading results. The passive diagnostic test is based on the assumption that nonstructural Case is *always* preserved under A-movement; however, it turns out that this assumption breaks down in certain languages that have contexts in which nonstructural Cases are prohibited.

Some languages prohibit the dative Case in intransitive constructions. One such language is Japanese.<sup>6</sup> In Japanese, verbs augmented by a morpheme meaning ‘can’ take a dative subject. We see this in the transitive construction in (19a). But the same augmented verb *cannot* take a dative subject in an intransitive clause; instead, it must take a nominative subject, as in (19b–c) (Shibatani 1977).<sup>7</sup>

- (19) a. Taroo-ni eigo-ga hanaseru.  
Taro-DAT English-NOM speak-can  
‘Taro can speak English.’  
(Shibatani 1977:806)
- b. \*Akatyan-ni moo arukeru.  
baby-DAT already walk-can  
‘The baby can walk already.’  
(Shibatani 1977:807)
- c. Akatyan-ga moo arukeru.  
baby-NOM already walk-can  
‘The baby can walk already.’  
(Shibatani 1977:807)

In Japanese, this prohibition on datives in intransitives can interfere with the reliability of the passive as a diagnostic test for nonstructural Case, producing a false result. If one applies this diagnostic test in the active-passive pair in (20), the fact that the dative on the goal in (20a)

<sup>6</sup> Another such language is Basque, where datives may occur in transitive clauses as in (i), but where there are no intransitive verbs with dative subjects (Manandise 1988, Austin and López 1995).

- (i) Ni-ri zure oinetako-a-k gustatzen zaizkit.  
I-DAT your shoes-DET-NOM like AUX  
‘I like your shoes.’  
(Austin and López 1995:(38a))
- (ii) Ni kezkatzen naiz.  
I-NOM worry AUX  
‘I worry.’  
(Austin and López 1995:(38b))

<sup>7</sup> According to Shibatani (1977:807) and Dubinsky (1992), the ban on datives in intransitives in Japanese holds in matrix clauses, but not embedded clauses.

disappears when the sentence is passivized **would seem** to indicate that this **dative** must be a **structural** Case. **But** the reason the dative on the goal disappears in (20b) is **simply** that the construction becomes **intransitive in the passive**.<sup>8</sup>

- (20) a. John-ga Mary-ni soodansita.  
 John-NOM Mary-DAT consult-PAST  
 'John consulted Mary.'  
 b. Mary-ga John-ni soodans-(r)are-ta.  
 Mary-NOM John-DAT consult-PASS-PAST  
 'Mary was consulted by John.'  
 (Kuno 1973:347)

When we **control** for this interfering factor **by beginning with a ditransitive** construction, as in (21a), which produces a transitive in the passive, we see that the goal remains dative, as in (21b).<sup>9</sup>

- (21) a. John-ga Mary-ni sono hon-o okutta.  
 John-NOM Mary-DAT that book-ACC send-PAST  
 'John sent Mary that book.'  
 b. Mary-ni sono hon-ga okur-are-ta.  
 Mary-DAT that book-NOM send-PASS-PAST  
 'Mary was sent that book.'

### 3.3 Raising

Raising is another instance of the A-movement diagnostic test. In **Icelandic, datives are preserved under raising**, just as they are under passivization (Zaenen and Maling 1984, Zaenen, Maling, and Thráinsson 1985, Jónsson 1996).

- (22) Barninu batnaði veikin.  
 child-DAT recovered-from disease-NOM  
 'The child recovered from the disease.'  
 (Yip, Maling, and Jackendoff 1987:223)  
 (23) Barninu virðist [t hafa batnað veikin].  
 child-DAT seems [t to-have recovered-from disease-NOM]  
 'The child seems [t to have recovered from the disease].'  
 (Andrews 1982:464)

Raising is an applicable diagnostic test for the ergative Case as well, although not all ergative languages have raising. **Tongan** does, with **one raising verb *lava* 'be possible'** or 'be able, manage'

<sup>8</sup> The *by*-phrase marked with *-ni* is an adjunct. Although this morpheme looks the same as the dative Case morpheme, this fact is unrelated to the disappearance of the dative on the goal.

<sup>9</sup> I would like to thank Shigeto Kawahara for providing these Japanese examples.

(Chung 1978). Ergative Case is preserved under movement in this raising construction (Chung 1978, Hendrick 2004).

- (24) 'E lava [ 'o ako 'e Pita 'a e lea faka-Tonga].  
 AUX possible/can COMP learn ERG Peter ABS the language Tongan  
 'Peter can learn Tongan.'  
 (Hendrick 2004:(52))
- (25) 'E lava 'e Pita [ 'o ako 'a e lea faka-Tonga].  
 AUX possible/can ERG Peter COMP learn ABS the language Tongan  
 'Peter can learn Tongan.'  
 (Hendrick 2004:(53))

Assuming that this Tongan raising construction involves A-movement, we have good evidence that ergative is not a structural Case.<sup>10</sup>

### 3.4 Nonnominative Subjects of Tensed Clauses

Another diagnostic test for nonstructural Case is Case preservation in the external subject position, where nominative is normally licensed. This is one type of evidence used to identify nonstructural Cases in Icelandic.<sup>11</sup>

- (26) a. Bátnum hvolfdi.  
 boat-DAT capsized  
 'The boat capsized.'  
 (Levin and Simpson 1981:(1b))
- b. Bátinn rak á land.  
 boat-ACC drifted to shore  
 'The boat drifted to the shore.'  
 (Jónsson 2003:(66a))
- c. Jóns nýtur ekki lengur við.  
 John-GEN enjoys not longer at  
 'John is no longer available.'  
 (Jónsson 2003:(1c))

It appears that no structural Case can ever take priority over nominative on the subject of a tensed clause.<sup>12</sup> If this is a reliable diagnostic, it indicates that ergative is also a nonstructural Case.

<sup>10</sup> Otsuka (2000) argues that Tongan raising is actually an instance of  $\bar{A}$ -movement, although that conclusion is partially based on the assumption that ergative is a structural Case. If this raising construction does involve  $\bar{A}$ -movement, it would not serve as a diagnostic test to distinguish structural and nonstructural Case.

<sup>11</sup> As with the passive test discussed above, this diagnostic will also give a false result in Japanese intransitive constructions, where no Case can take priority over nominative.

<sup>12</sup> The idea that nominative takes priority over accusative forms the basis of much recent work on deriving the effects attributed to Burzio's Generalization, such as the fact that unaccusative subjects take nominative rather than accusative Case. See the papers in Reuland 2000 and an overview of this and other recent work on this topic in Woolford 2003a.

Ergative can be preserved on the subject of a tensed clause in languages such as Basque, even though the structural Case licensed to this position is nominative.

- (27) Ni etorri naiz.

I-NOM come AUX

'I came.'

(Levin 1989:(8))

- (28) Gizona-k kurritu du.

man-ERG run AUX

'The man ran.'

(Levin 1989:(33))

### 3.5 Allowing Nominative Objects

Another diagnostic test involves nominative objects. Nominative objects are possible in languages such as Icelandic only when the subject has nonstructural Case.<sup>13</sup>

- (29) Barninu batnaði veikin.

child-DAT recovered-from disease-NOM

'The child recovered from the disease.'

(Yip, Maling, and Jackendoff 1987:223)

We can see that a structural accusative subject blocks nominative licensing to the object if we look at ECM constructions in Icelandic. What concerns us here is the contrast in the Case of the object in the embedded clauses in the following examples. When the ECM subject has dative Case, as in (30), a nominative object is allowed (for many speakers), but no speaker allows a nominative object in a sentence like (31) with a structural accusative subject (Jónsson 1996).

- (30) Hann hafði talið [Jóni hafa verið gefnir þessir sokkar].

he-NOM had believed [John-DAT to-have been given these socks-NOM]

(Jónsson 1996:170)

- (31) Ég hafði talið [Maríu vita svarið].

I-NOM had believed [Mary-ACC to-know the answer-ACC]

(Jónsson 1996:166)

This diagnostic provides another piece of evidence that ergative is not a structural Case. In ergative languages such as Basque, ergative subjects behave like dative subjects in allowing nominative objects.

<sup>13</sup> We now know that nominative Case licensing is not limited to Spec,IP, but may also be licensed under c-command (Chomsky 2000).

- (32) Miren-ek atea ireki du.  
 Miren-ERG door-NOM open AUX  
 'Miren opened the door.'  
 (Levin 1989:(20))
- (33) Ni-ri zure oinetako-a-k-Ø gustatzen zaizkit.  
 I-DAT your shoes-DET-NOM like AUX  
 'I like your shoes.'  
 (Austin and López 1995:12)

A factor that can interfere with the application of this diagnostic test in certain languages, however, is that in *some languages* (e.g., Faroese and Nez Perce) *nominative licensing to objects is blocked when any subject is present*, regardless of the Case of that subject (see Woolford 2003b).

### 3.6 *θ-Relatedness*

One difference between structural and nonstructural Case is that the nonstructural Cases are licensed in connection with  $\theta$ -marking (Chomsky 1986), whereas structural Cases are not. Thus,  *$\theta$ -relatedness has often been used as a diagnostic for nonstructural Case*, and the literature contains statements to the effect that dative is the nonstructural Case associated with goals and ergative is the nonstructural Case associated with agents (e.g., Woolford 1997). Although certainly true in a sense, these statements, if taken strictly and literally and applied as a diagnostic tool, would *incorrectly diagnose all nonstructural Cases as structural Cases*. Let us look at this problem with respect to the dative Case. Although dative is closely associated with goals, it is *not true that the dative marks all and only goals*. As we saw above, PP *goals in Icelandic* are marked not with the dative, but with the *genitive*.

- (34) Ég skilaði peningunum til hennar.  
 I returned the money-DAT to her-GEN  
 (Zaenen, Maling, and Thráinsson 1985:(43a))

In addition, as (35) and (36) illustrate for Basque and Icelandic, arguments with other thematic roles besides goals can be *marked with the dative Case*, including benefactives, *experiencers*, and *even themes* (if the dative is lexically selected).

- (35) Ni-ri zure oinetako-a-k-Ø gustatzen zaizkit. (Dative Experiencer)  
 I-DAT your shoes-DET-NOM like AUX  
 'I like your shoes.'  
 (Austin and López 1995:12)
- (36) Þeir skiluðu Maríu bókinni. (Dative Theme)  
 they returned Mary-DAT the book-DAT  
 'They returned the book to Mary.'  
 (Jónsson 1996:137)

We do not want to interpret the fact that the dative Case marks neither all goals, nor only goals, as evidence that the dative fails a diagnostic test for nonstructural Case.

The situation is similar with respect to the **ergative** Case. The ergative Case is  $\theta$ -related in the sense that it marks external arguments, but **many languages allow more than just agents** to be **mapped to the external argument** position. For example, the subject of **experiencer** object constructions like the one in (37) is not strictly an agent, but rather a cause or causer in some sense (Grimshaw 1990, Croft 1993, Pesetsky 1995, Pylkkänen 2000, Barðdal 2001), but it is nevertheless an external argument according to works such as Pesetsky 1995, Bouchard 1995, and Baker 1997.

(37) **Michael** **angered** me.

The fact that this argument is marked with ergative Case in languages such as Basque is consistent with the view that this kind of subject is an external argument.

(38) Mikelek      ni      haserretu    izan.  
 Michael-**ERG** I-NOM **angry**-PERF AUX  
 'Michael angered me.'  
 (Manandise 1988:118)

Similarly, **instruments** can be external arguments in languages such as English.

(39) The **key** **unlocked** the door.

Again, the fact that such subjects are also marked with ergative Case in Basque is consistent with their identification as external arguments.<sup>14</sup>

(40) Giltzak    atea      ireki    zuen.  
 key-**ERG** door-NOM **open** AUX  
 'The key opened the door.'  
 (Uriagereka n.d.:(30b))

Just as with datives, as discussed above, we do not want to interpret the fact that the ergative

<sup>14</sup> Not all languages allow instruments as external arguments; in Japanese, for example, the equivalent of example (39) is ungrammatical (Watai 1996). See Van Voorst 1996 for an interesting discussion of similar differences between Dutch, French, and English. Other **works on how grammar maps meaning or thematic roles to syntactic argument positions** include Zubizarreta 1987, Baker 1988, 1997, Rappaport and Levin 1988, Pinker 1989, Grimshaw 1990, Jackendoff 1990, Dowty 1991, Van Valin 1991, Croft 1993, **Hale and Keyser 1993**, Zaenen 1993, Bouchard 1995, Levin and Rappaport Hovav 1995, Pesetsky 1995, Van Valin and Wilkins 1996, Butt and Geuder 1998, Krifka 1999, Primus 1999, Ritter and Rosen 2000, Maling 2001, and Harley 2002. Helpful reviews and summaries of a number of these approaches can be found in Bouchard 1995 and Van Valin and Wilkins 1996. The prediction here is that to the extent that there are crosslinguistic differences in the range of arguments that can be mapped to each position in vP structure, we should expect to see corresponding differences in the range of arguments that are marked with the nonstructural Cases associated with these positions in vP structure.

Case can mark external arguments that are not true agents as **evidence that ergative fails the diagnostic of  $\theta$ -relatedness** (contra Davison 2004).<sup>15</sup>

### 3.7 *Regularity: An Unreliable Diagnostic of Structural Case*

Much of the motivation for considering the dative of ditransitive goals to be a structural Case in works such as Czepluch 1988, Wunderlich 1997, and Blume 1998 is the regularity and predictability of this use of the dative, in contrast to the irregular lexical datives. Similarly, regularity also enters into the view that ergative is a structural Case (e.g., Wunderlich 1997, Davison 2004). However, regularity—or, more accurately, great irregularity—is only a reliable diagnostic to separate lexical Case from the more regular inherent and structural Cases. It is not a good diagnostic for distinguishing structural and nonstructural Case generally. Nevertheless, the work cited above is important and correct in insisting that the regular datives should not be licensed in the same manner as the irregular datives. **Now that we understand that there is a type of nonstructural Case that is quite regular** (the inherent Cases), and now that we can capture this regularity, this motivation for classing the regular datives and ergatives with the structural Cases is removed.

### 3.8 *Section Summary*

To conclude this section, no reliable diagnostic test identifies either the dative or the ergative Case as a structural Case. **The reliable diagnostic tests include** Case preservation under A-movement (passive and raising), Case preservation on the subject of a tensed clause, and compatibility with nominative objects. Using  $\theta$ -relatedness as a diagnostic is unreliable under an overly strict interpretation, requiring that each nonstructural Case mark all and only instances of one particular thematic role. Regularity is only a good test for distinguishing lexical Case from the two more regular types of Cases, inherent and structural; it is not a good diagnostic test for distinguishing structural Case from inherent Case.

We have also seen that in applying diagnostic tests, we must be aware of the possibility of **interfering factors** that can produce misleading results: for example, some languages **bar the dative and/or ergative Case from intransitive clauses**, and **not** all languages **allow nominative objects** when any type of closer subject is present in the clause.

## 4 Conclusion

This article has argued for a subdivision within the nonstructural Cases, distinguishing the truly irregular lexical Cases, which are lexically selected by individual verbs, from the more regular inherent Cases (the dative of DP goals and the ergative that marks external arguments). Both the

<sup>15</sup> Part of Davison's (2004) motivation for classing ergative with the structural Cases is her account of the aspectual split in Hindi, under which ergative is limited to the perfective aspect because that Case is licensed by the same head that licenses aspect. Although Davison assumes that this must be a functional head outside VP, so that the Case licensed by this head must be structural, there are **proposals in the literature for aspect heads inside vP structure** (e.g., Travis 1992). Thus, **Davison's proposal** for capturing this aspect split is **not in principle incompatible** with the conclusion argued for here, that ergative is a nonstructural Case licensed inside vP.

irregular lexical Cases and the more regular inherent Cases pass the diagnostic tests for nonstructural Case (at least those tests that are reliable), so that we must reject suggestions in the literature that the regular dative and ergative Cases are structural Cases.

Nevertheless, these two types of nonstructural Case do differ in their behavior and distribution to a degree that justifies licensing them in a different manner. In addition to the difference in their regularity, there is a complementary distribution with respect to what kinds of arguments can be marked with each type of nonstructural Case: lexical Case is restricted to themes/internal arguments and is never associated with external arguments or DP goals; in contrast, inherent Case is never associated with themes/internal arguments, but only with external arguments and DP goals. This complementary distribution can be captured in terms of vP structure if both external arguments and DP goals are licensed by light/little v heads (following McGinnis 1996, 1998, 2001), while internal arguments are licensed by V in the VP proper. The claim is that only little/light v heads license inherent Case, while only a truly lexical head such as V (or P) can license lexically selected Case.

- (41) *Lexical Case*: Idiosyncratic nonstructural Case, lexically selected by particular verbs, licensed by V inside the VP proper at vP structure.

*Inherent Case*: Relatively predictable nonstructural Case, licensed by little/light v heads above the VP proper at vP structure.

This proposal makes minimal changes in standard Case theory, preserving the idea that nonstructural Case is licensed in connection with  $\theta$ -marking at a level/phase prior to structural Case licensing (which is what enables nonstructural Case to be preserved in environments where structural Case is licensed). However, the view that nonstructural Case licensing takes place in D-Structure is updated so that nonstructural Case is licensed in vP structure (the vP phase).

This article has reviewed a range of diagnostic tests for structural Case which confirm that despite the relative regularity and predictability of ergative and some datives, these are never structural Cases. However, we have seen that there are diagnostic tests in use that are misapplied or simply unreliable, in addition to normally reliable tests that can produce misleading results in certain contexts in certain languages.

## References

- Andrews, Avery. 1982. The representation of Case in Modern Icelandic. In *The mental representation of grammatical relations*, ed. by Joan Bresnan, 427–503. Cambridge, Mass.: MIT Press.
- Austin, Jennifer, and Luis López. 1995. Nominative, absolutive and dative languages. In *NELS 25*, ed. by Jill N. Beckman, 1–15. Amherst: University of Massachusetts, GLSA.
- Baker, Mark. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, Mark. 1997. Thematic roles and syntactic structure. In *Elements of grammar*, ed. by Liliane Haegeman, 73–137. Dordrecht: Kluwer.
- Barðdal, Jóhanna. 2001. *Case in Icelandic: A synchronic, diachronic and comparative approach*. Lund: Lund University, Department of Scandinavian Languages.
- Blume, Kerstin. 1998. A contrastive analysis of interaction verbs with dative complements. *Linguistics* 36: 253–280.



- Bouchard, Denis. 1995. *The semantics of syntax: A minimalist approach to grammar*. Chicago: University of Chicago Press.
- Burzio, Luigi. 1986. *Italian syntax*. Dordrecht: Reidel.
- Burzio, Luigi. 2000. Anatomy of a generalization. In *Arguments and Case: Explaining Burzio's Generalization*, ed. by Eric Reuland, 195–240. Amsterdam: John Benjamins.
- Butt, Miriam. 1995. *The structure of complex predicates in Urdu*. Stanford, Calif.: CSLI Publications.
- Butt, Miriam, and Wilhelm Geuder, eds. 1998. *The projection of arguments: Lexical and compositional factors*. Stanford, Calif.: CSLI Publications.
- Butt, Miriam, and Tracy Holloway King. 1998. Licensing semantic Case. Paper presented at the Workshop on the Effects of Morphological Case, Utrecht, August 1998.
- 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, Mass.: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, Mass.: MIT Press.
- Chung, Sandra. 1978. *Case marking and grammatical relations in Polynesian*. Austin: University of Texas Press.
- Croft, William. 1993. Case marking and the semantics of mental verbs. In *Semantics and the lexicon*, ed. by James Pustejovsky, 55–72. Dordrecht: Kluwer.
- Czepluch, Hartmut. 1988. Case patterns in German: Some implications for the theory of abstract Case. In *McGill working papers in linguistics, special issue on comparative Germanic syntax*, ed. by Denise Fekete and Zofia Laubitz, 79–122. Montreal: McGill University, Department of Linguistics.
- Davison, Alice. 2004. Structural Case, lexical case and the verbal projection. In *Clause structure in South Asian languages*, ed. by Veneeta Dayal and Anoop Mahajan, 199–225. Dordrecht: Kluwer.
- Dowty, David. 1991. Thematic proto-roles and argument selection. *Language* 67:547–619.
- Dubinsky, Stanley. 1992. Case assignment to VP-adjoined positions: Nominative objects in Japanese. *Linguistics* 30:873–910.
- Fanselow, Gisbert. 2000. Optimal exceptions. In *The lexicon in focus*, ed. by Barbara Stiebels and Dieter Wunderlich, 173–209. Berlin: Akademie Verlag.
- Grimshaw, Jane. 1990. *Argument structure*. Cambridge, Mass.: MIT Press.
- Haider, Hubert. 1984. Mona Lisa lächelt stumm—Über das sogenannte deutsche ‘‘Rezipientenpassiv.’’ *Linguistische Berichte* 89:32–42.
- Haider, Hubert. 1985. The Case of German. In *Studies in German grammar*, ed. by Jindřich Toman, 65–101. Dordrecht: Foris.
- Hale, Kenneth, and Samuel Jay Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, ed. by Kenneth Hale and Samuel Jay Keyser, 53–109. Cambridge, Mass.: MIT Press.
- Harbert, Wayne, and Jacqueline Toribio. 1991. Nominative objects. In *Cornell working papers in linguistics* 9, ed. by Almeida J. Toribio and Wayne E. Harbert, 127–192. Ithaca, N.Y.: Cornell University, Department of Modern Languages and Linguistics.
- Harley, Heidi. 2002. Possession and the double object construction. *Linguistic Variation Yearbook* 2:29–68.
- Hendrick, Randall. 2004. Syntactic labels and their derivations. Ms., University of North Carolina, Chapel Hill.
- Holmberg, Anders, and Christer Platzack. 1995. *The role of inflection in Scandinavian syntax*. Oxford: Oxford University Press.
- Hung, Henrietta. 1988. Derived verbs and nominals in Malagasy. Ms., McGill University, Montreal.
- Jackendoff, Ray. 1990. *Semantic structures*. Cambridge, Mass.: MIT Press.
- Jónsson, Jóhannes Gísli. 1996. Clausal architecture and Case in Icelandic. Doctoral dissertation, University of Massachusetts, Amherst.

- Jónsson, Jóhannes Gísli. 2003. Not so quirky: On subject Case in Icelandic. In *New perspectives on Case theory*, ed. by Ellen Brandner and Heike Zinsmeister, 127–163. Stanford, Calif.: CSLI Publications.
- 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.
- Krifka, Manfred. 1999. Manner in dative alternation. In *WCCFL 18: Proceedings of the 18th West Coast Conference on Formal Linguistics*, ed. by Sonya Bird, Andrew Carnie, Jason D. Haugen, and Peter Norquest, 260–271. Somerville, Mass.: Cascadilla Press.
- Kuno, Susumu. 1973. *The structure of the Japanese language*. Cambridge, Mass.: MIT Press.
- Larson, Richard K. 1988. On the double object construction. *Linguistic Inquiry* 19:335–391.
- Laughren, Mary. 1989. The configurationality parameter and Warlpiri. In *Configurationality: The typology of asymmetries*, ed. by László Marác and Pieter Muysken, 319–366. Dordrecht: Foris.
- Laughren, Mary. 1992. Secondary predication as a diagnostic of underlying structure in Pama-Nyungan languages. In *Thematic structure: Its role in grammar*, ed. by I. M. Roca, 199–246. Berlin: Foris.
- Legate, Julie. 2003. Split ergativity in Warlpiri. Ms., Harvard University, Cambridge, Mass.
- Levin, Beth. 1989. The Basque verbal inventory and configurationality. In *Configurationality: The typology of asymmetries*, ed. by László Marác and Pieter Muysken, 39–62. Dordrecht: Foris.
- Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity: At the syntax–lexical semantics interface*. Cambridge, Mass.: MIT Press.
- Levin, Lori, and Jane Simpson. 1981. Quirky Case and lexical representations of Icelandic verbs. In *Papers from the Seventeenth Regional Meeting, Chicago Linguistic Society*, ed. by Roberta A. Hendrick, Carrie S. Masek, and Mary Frances Miller, 185–196. Chicago: University of Chicago, Chicago Linguistic Society.
- 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, Mass.: MIT, Department of Linguistics and Philosophy, MITWPL.
- Maling, Joan. 2001. Dative: The heterogeneity of the mapping among morphological case, grammatical functions, and thematic roles. *Lingua* 111:419–464.
- Maling, Joan. 2002. Verbs with dative objects in Icelandic. *Íslenskt mál* 24:31–105.
- Manandise, Esméralda. 1988. *Evidence from Basque for a new theory of grammar*. New York: Garland.
- Marantz, Alec. 1989. Relations and configurations in Georgian. Ms., University of North Carolina, Chapel Hill.
- Massam, Diane. 2002. Fully internal Cases: Surface ergativity can be profound. In *Proceedings of AFLA VIII: The Eighth Meeting of the Austronesian Formal Linguistics Association*, ed. by Andrea Rackowski and Norvin Richards, 185–196. MIT Working Papers in Linguistics 44. Cambridge, Mass.: MIT, Department of Linguistics and Philosophy, MITWPL.
- McGinnis, Martha. 1996. Projection and position. In *Proceedings of ConSOLE IV*, ed. by João Costa, Rob Goedemans, and Reuben van der Vijver, 203–220. Leiden: HIL.
- McGinnis, Martha. 1998. Case and locality in L-syntax: Evidence from Georgian. In *Papers from the UPenn/MIT Roundtable on Argument Structure and Aspect*, ed. by Heidi Harley, 139–158. MIT Working Papers in Linguistics 32. Cambridge, Mass.: MIT, Department of Linguistics and Philosophy, MITWPL.
- McGinnis, Martha. 2001. Semantic and morphological restrictions in experiencer predicates. In *Proceedings of the 2000 CLA Annual Conference*, ed. by John T. Jensen and Gerard van Herk, 245–256. Ottawa: University of Ottawa, Department of Linguistics, Cahiers Linguistiques d'Ottawa.
- Mohanan, Tara. 1994. *Argument structure in Hindi*. Stanford, Calif.: CSLI Publications.
- Nash, Léa. 1996. The internal ergative subject hypothesis. In *NELS 26*, ed. by Kiyomi Kusumoto, 195–209. Amherst: University of Massachusetts, GLSA.
- Otsuka, Yuko. 2000. Ergativity in Tongan. Doctoral dissertation, University of Oxford.
- Pesetsky, David. 1995. *Zero syntax*. Cambridge, Mass.: MIT Press.

- Pinker, Steven. 1989. *Learnability and cognition: The acquisition of argument structure*. Cambridge, Mass.: MIT Press.
- Primus, Beatrice. 1999. *Case and thematic roles: Ergative, accusative, active*. Tübingen: Max Niemeyer.
- Pylkkänen, Liina. 2000. On stativity and causation. In *Events as grammatical objects: The converging perspectives of lexical semantics and syntax*, ed. by Carol Tenny and James Pustejovsky, 417–422. Stanford, Calif.: CSLI Publications.
- Rappaport, Malka, and Beth Levin. 1988. What to do with theta roles. In *Syntax and semantics 21: Thematic relations*, ed. by Wendy Wilkins, 7–37. New York: Academic Press.
- Reuland, Eric, ed. 2000. *Argument and Case: Explaining Burzio's Generalization*. Amsterdam: John Benjamins.
- Ritter, Elizabeth, and Sara Rosen. 2000. Event structure and ergativity. In *Events as grammatical objects: The converging perspectives of lexical semantics and syntax*, ed. by Carol Tenny and James Pustejovsky, 187–238. Stanford, Calif.: CSLI Publications.
- Shibatani, Masayoshi. 1977. Grammatical relations and surface Cases. *Language* 53:789–807.
- Sigurðsson, Halldór. 1989. *Verbal syntax and Case in Icelandic*. Lund: University of Lund.
- Travis, Lisa. 1992. Inner aspect and the structure of VP. *Cahiers de Linguistique de L'UQAM* 1:130–145.
- Ura, Hiroyuki. 2000. *Checking theory and grammatical functions in Universal Grammar*. Oxford: Oxford University Press.
- Uriagereka, Juan. n.d. Government restrictions and Basque movement. Ms., University of Maryland, College Park.
- Van Valin, Robert D., Jr. 1991. Another look at Icelandic Case marking and grammatical relations. *Natural Language & Linguistic Theory* 9:145–194.
- Van Valin, Robert D., Jr., and David P. Wilkins. 1996. The case for “effector”: Case roles, agents and agency revisited. In *Grammatical constructions: Their form and meaning*, ed. by Masayoshi Shibatani and Sandra Thompson, 289–322. Oxford: Clarendon Press.
- Voorst, Jan van. 1996. Some systematic differences between the Dutch, French, and English transitive construction. *Language Sciences* 18:227–245.
- Watai, Fumiko. 1996. Two subject positions and a functional category predicate. Master's thesis, University of Calgary, Alberta.
- Woolford, Ellen. 1993. Symmetric and asymmetric passives. *Natural Language & Linguistic Theory* 11: 679–728.
- Woolford, Ellen. 1997. Four-way Case systems: Ergative, nominative, objective, and accusative. *Natural Language & Linguistic Theory* 15:181–227.
- Woolford, Ellen. 2001. Case patterns. In *Optimality-theoretic syntax*, ed. by Géraldine Legendre, Sten Vikner, and Jane Grimshaw, 509–543. Cambridge, Mass.: MIT Press.
- Woolford, Ellen. 2003a. Burzio's Generalization, markedness, and constraints on nominative objects. In *New perspectives on Case theory*, ed. by Ellen Brandner and Heike Zinsmeister, 301–329. Stanford, Calif.: CSLI Publications.
- Woolford, Ellen. 2003b. Nominative objects and Case locality. In *Formal Approaches to Slavic Linguistics: The Amherst meeting 2002*, ed. by Wayles Browne, Ji-Yung Kim, Barbara H. Partee, and Robert A. Rothstein, 539–568. Ann Arbor: Michigan Slavic Publications.
- Wunderlich, Dieter. 1997. Cause and the structure of verbs. *Linguistic Inquiry* 28:27–68.
- Yip, Moira, Joan Maling, and Ray Jackendoff. 1987. Case in tiers. *Language* 63:217–250.
- Zaenen, Annie. 1993. Unaccusativity in Dutch: Integrating syntax and lexical semantics. In *Semantics and the lexicon*, ed. by James Pustejovsky, 129–161. Dordrecht: Kluwer.
- Zaenen, Annie, and Joan Maling. 1984. Unaccusative, passive, and quirky Case. In *Proceedings of the Third West Coast Conference on Formal Linguistics*, ed. by Mark Cobler, Susannah MacKay, and Michael T. Wescoat, 317–329. Stanford, Calif.: CSLI Publications.

- Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language & Linguistic Theory* 3:441–483.
- Zubizarreta, Maria Luisa. 1987. *Levels of representation in the lexicon and in syntax*. Dordrecht: Foris.

*Department of Linguistics*  
*University of Massachusetts*  
*Amherst, Massachusetts 01003*  
*woolford@linguist.umass.edu*  
*<http://people.umass.edu/ellenw/>*