Structural Case and Dependency Marking: A Neo-Jakobsonian View

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0. Introduction

This article investigates the hypothesis in (1):

(1) Structural objective (accusative) case is the morphological reflex of a higher order dependency between the subject and its sister.

We will use the term 'predicate' here to refer to the subject's sister. The hypothesis in (1) draws a crucial distinction between a dependency relation (between the subject and the predicate) and the morphological realization of that dependency relation (among other ways, through accusative case on a term of the predicate).

The hypothesis in (1) differs both from traditional approaches to the accusative case, where the accusative case expresses a dependency between the direct object and a transitive verb, as well as from views current within the generative framework, where the accusative is a function of construal of a noun phrase with a functional head (AgrO or little v).

1. Motivation

The hypothesis in (1) is motivated by observations regarding the distribution of elements marked with structural accusative case (section 1.1) and by generalizations about dependency relations in general (section 1.2).

1.1 The notion 'object'

In line with the tradition of generative syntactic analysis, we distinguish thematic roles (internal/external arguments) from grammatical functions (subject/object). In transitive clauses, the external argument has the grammatical function of subject, and the internal argument is the object, but elsewhere subjects may be internal arguments, as in (2a), and objects external arguments, as in (2b):

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(2) a. John was arrested (John = subject; internal argument of arrest)
b. We saw them arrest John (them = object; external argument of arrest)
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In many languages, a further discrepancy is apparent, in that the object need not or may not be adjacent to the verb it is an internal argument of. This separation of the object from the verb can be seen in object shift constructions in languages like Dutch (analyzed by Vanden Wyngaerd 1989 as involving A-movement, i.e. movement to a case-position):

(3) ..dat we **hem** niet zag-en (Dutch) that 1PL:NOM 3SG.MASC:ACC not see:PAST-PL '..that we did not see him.'

As shown in Zwart (2001), the shifted object may be found in a position where no local case licenser is around:

(4) ..dat ze **hem** niet schijn-t te ken-nen (Dutch) that 3SG.FEM:NOM 3SG.MASC:ACC not seem-3SG to know-INF '..that she doesn't seem to know him.'

In (4), the accusative object *hem* 'him' has been shifted into the matrix clause, across the matrix adverb *niet* 'not', where it is neither in the complement position of the verb it is the internal argument of (the embedded verb *kennen* 'know'), nor in construction with a functional head associated with accusative case (as the matrix verb *schijnen* 'seem' is unaccusative, lacking AgrO or the nondefective little v found in transitive constructions).

Other constructions in Dutch where the accusative lacks a local licenser include the copula construction in (5).

Since copulas are not (structural) case assigners, and are intransitive (lacking AgrO/little v), none of the standard mechanisms for accusative case licensing applies in (5). (Note that *hem* in (5) is not in any way focused; besides, the accusative cannot be used for emphatic/isolated pronouns in Dutch, unlike English.)

Welsh provides another potential case where structural accusative case cannot be a function of construal of the object with a transitive verb. Welsh direct objects show initial consonant lenition (soft mutation = SM) under certain conditions (discussed in Zwicky 1984, Harlow 1989, Borsley and Tallerman 1996, Roberts 1997). Most notable for our purpose is the observation that soft mutation does not take place when the verb and object are adjacent, as in (6a), but does when the verb is fronted (6b):

(6) a. roedd y ddynes yn prynu beic / *feic was the woman PROG buy:INF bike / _{SM}bike 'The woman was buying a bike.'

As argued by Zwicky (1984) and Roberts (1997), there is reason to believe that direct object mutation in Welsh is a form of structural case-marking, as the phenomenon is restricted to direct objects and verbal nouns. On the other hand, as noted by Harlow (1989) and Borsley and Tallerman (1996), it looks like direct object mutation is conditioned by an adjacent XP (rather than V), making it quite different from case-marking on all current views. On our

approach, both analyses are compatible: if case reflects a subject-predicate dependency, and if soft mutation is a phonological manifestation of case, it may be subject to an additional condition of adjacency of the triggering element (on our view, the subject) and the element realizing the dependency morphologically (the direct object). Hence the phenomenon shows up only if the verb is moved out of the way.

Summarizing, there is reason to believe that the direct object, marked with structural accusative case, is not always in a position where its case may be ascribed to a local configuration with a case-marking head.

1.2 Dependency relations in general

As discussed in Zwart (2006), there is reason to believe that subject-verb agreement needs to be described in terms of a higher order subject-predicate dependency as well. Typological research shows that agreement with the subject may be realized on a range of predicate-internal elements. These include verbs or auxiliaries that are adjacent (7a) and nonadjacent (7b) to the subject, pronouns or clitics which may (8a) or may not (8b) be adjacent to the verb, multiple predicate internal elements (9), and even objects (10):

- (7) a. **Jan wandel-t** in het bos
 John walk-3sG in the forest
 'John is walking in the forest.'
 - b. ..dat **Jan** in het bos **wandel-t** that John in the forest walk-3sG '..that John is walking in the forest.'
- (8) a. u bru la? **pen-yep u** u psñ (Bhoi Khasi) 3SG.MASC man PAST cause-die AGR 3SG.MASC snake 'The man killed a snake.' (Nagaraja 1997:352)
 - b. u bru **pīnyap** psəñ **u** (Nongtung Khasi) 3SG.MASC man cause-die snake AGR 'The man killed a snake.' (Nagaraja 1997:355)
- (9) **Juma a**-li-kuwa **a**-ngali **a**-ki-fanya kazi (Swahili) Juma₁ SU₁-PAST-be SU₁-still SU₁-PROG-do work 'Juma was still working.' (Carstens 2003:395)
- (10) na-pa-xa'm a-p-sa' apa'-**m** ux^wa'l' tukwe'-**m** xa'-pa-ču'
 1SG-soul DEM-2AGRS sky DEM-2AGRS 2SU-SUB-carry

 san
 (Coahuilteco)
 FUT

'(that) you will carry my soul to heaven' (Troike 1981:663)

Since subject agreement in these examples is invariably marked on a predicate internal element, we may generalize that subject agreement expresses a subject-predicate

dependency, realized on a term of the predicate.

Typological observations suggest that reflexivity (self orientation of an event) is likewise a property of the predicate, morphologically expressed on one of the predicate's terms: objects of various types (pronouns, designated pronouns, body part noun phrases, elements meaning *self*), nonthematic reflexive elements, clitics, verbs, auxiliaries, secondary predicates, and adverbs (see Geniušienė 1987, Schladt 2000, and Zwart 2005).

From this perspective, we may conceive of structural accusative case as one of a range of morphological devices marking the dependency of the predicate with respect to the subject. Importantly, in all these cases the element realizing the dependency in its morphology is not itself a dependent in the dependency relation. It is just a term utilized by the dependent predicate for the morphological expression of its dependency.

2. Jakobson on the system of cases

In his discussion of the Russian case system, Jakobson (1935) stresses that case is morphology, not syntax (a view currently shared by few within generative grammar, but see Marantz 1992 for an exception). Cases are organized in marked/unmarked oppositions, such that the marked member expresses some meaning, and the unmarked member signifies the absence of such a marking. Jakobson distinguishes three types of meaning: the core meaning (*Gesamtbedeutung*), the principal meaning (*Hauptbedeutung*), and the special meaning (*Sonderbedeutung*). The principal meaning is the one you might most commonly encounter, whereas the core meaning is a more abstract statement of the meaning from which the principal meaning derives.

Concerning the accusative, Jakobson observes that "the meaning of the accusative is so closely associated with the action, that it may only be governed by a verb" (1935 [1966:57], author's translation). At the same time, "the accusative by itself signifies that some element is ranked higher on the hierarchy of grammatical functions [Satzbedeutungen], i.e. unlike the nominative, it conveys the existence of such a hierarchy" (1935 [1966:60]). Itake Jakobson's discussion to imply that the former quote describes the accusative's principal meaning, and the latter its core meaning.

If so, we may paraphrase Jakobson as saying that the accusative is the morphological expression of dependency with respect to the subject. A minimalist implementation of Jakobson's analysis would have to refer to the derivational process (Merge), where structure is created by a bottom-up procedure, recursively merging two constituents as sisters. If we take dependency to be a function of Merge (in the spirit of Epstein et al. 1998, where all syntactic relations are taken to be a function of Merge), it would have to be the case that dependency with respect to the subject is a function of the predicate, rather than of the direct object contained within the predicate.

In other words, upon merger of the subject to the predicate, the predicate is marked as a dependent of the subject. Agreement and accusative case may then be viewed as two ways of marking the dependency of the predicate with respect to the subject. This seems a straightforward minimalist implementation of Jakobson's analysis of the structural case system.

3. Case as a function of Merge.

The derivational approach to syntax and morphology adopted here entails that features relevant to morphological realization are acquired in the course of a derivation. A verb expressing person agreement with the subject, for instance, does not have a person feature

when entering the derivation. Only when the subject and the predicate are merged, does the predicate acquire a person feature. Inevitably, the approach presupposes that morphology is realized postsyntactically (cf. Halle and Marantz 1993).

The idea is that Merge is invariably asymmetric, yielding an ordered pair rather than a set (see Zwart 2004, 2006). The operation Merge immediately creates a dependency, where the nondependent element may share features with the dependent element (see also Koster 1987). In our example, the predicate acquires the feature [person] from the subject, with the appropriate value. Since the predicate is a phrase, it needs to rely on one (or more) of its terms for the morphological expression of the acquired feature. The term selected for expression of [person] on a predicate typically is the head of the predicate: an auxiliary or verb.

While the specifics of feature realization need to be spelled out in more detail, it is perhaps useful to point out that the system under consideration requires no recourse to uninterpretable features. This seems to me to be a desirable consequence, as the presence of uninterpretable features on syntactic objects is only motivated by the need to help the derivation along: uninterpretable features require elimination, triggering movement and feature checking (Chomsky 2001). It seems to me that abandoning the concept of uninterpretable features, along with the probe-goal system of feature valuation associated with it, promises considerable rewards in terms of theoretical simplicity and economy.

Applied to case-marking, the system implies that noun phrases do not (as in the system of Chomsky 2001) enter the derivation with (unvalued, uninterpretable) case features. If the proper configurations are not created, noun phrases will be realized without case, i.e. in the nominative. This explains the nominative morphology on noun phrases presented in isolation (Zwart 1988). It also explains the nominative morphology on subjects, which are not (part of) dependent categories. The system under consideration, thus, allows us to generalize over various uses of the default case, fully in line with Jakobson (1935).

At the point in the derivation where the subject is merged to the predicate, the predicate is automatically marked as a dependent category. Let us stipulate that the predicate acquires a feature [dependent], which may or may not be realized morphologically. The particular morphological realization, then, is dependent on the attributes and values of the feature [dependent]. With person agreement, the person feature of the subject appears to be simply shared with the predicate. With case, sharing may be involved as well, witness the morphology of secondary predicates (e.g. Maling and Sprouse 1995). However, dependency marking of predicates through case typically takes the form of adversative marking, in the sense that values of a structural case opposition are distributed over the dependent-nondependent pair. Thus, where the subject by default has the features of the unmarked member of the structural case opposition, the predicate acquires the features of the marked member, hence referred to as [dependent case], which it then realizes on one of its terms, the direct object.

The idea that structural accusative case is a function of subject-predicate merger raises a host of questions which we are unable to address in the confines of this paper. Some, however, may be mentioned briefly.

First, we know that accusative case may show up in the absence of an overt nominative subject, for instance in control complement clauses:

(11) John tried [to kiss **me**]

Continuing to assume (contra Boeckx and Hornstein 2004) that control complement clauses contain an empty PRO subject, our approach leads us to conclude that PRO has nominative case features. This is in line with the null case hypothesis of Martin (1996), albeit that 'null case' now must be understood as a phonologically null variant of a regular structural case (rather than a special case; see Andrews 1982 for an early similar conclusion).

We also know that accusative objects show up in gerunds with genitive rather than nominative subjects:

(12) [John's kissing **me**] shocked everyone

This range of phenomena may be captured if we acknowledge the genitive as the noun phrase internal structural subject case, as seems reasonable. This would imply that the accusative is in a structural case opposition with both the nominative and the genitive.

No less relevant are cases where the object is marked by a case other than the accusative. Setting aside the inherent cases, which fall outside the scope of the proposal, this occurs for instance in negative clauses in Russian (Pesetsky 1982:40):

- (13) a. Ja polučal pis'ma (Russian)

 1SG:NOM receive:PAST letter:ACC.PL

 'I received the letters.'
 - b. Ja ne polučal pisem

 1SG:NOM NEG receive:PAST letter:GEN.PL

 'I did not receive any letters.'

From the perspective adopted here, where case is a function of dependency created by Merge, we might say that merger of the negative marker *ne* creates a dependency between *ne* and its sister, marked by genitive case morphology on a term contained within the dependent category. (This ignores the complication that replacement of the accusative by the genitive is optional, though not without interpretational effects, cf. Pesetsky 1982:66.)

4. Burzio's Generalization

The proposal has an interesting consequence in that it derives the underived part of Burzio's Generalization (Burzio 1981).

Burzio's Generalization states a connection between the presence of an external argument and the assignment of accusative case, such that (i) no accusative can be assigned in the absence of an external argument, and (ii) no external argument can exist when no accusative case can be assigned. The second clause of the generalization is easily derived by the Case Filter of Chomsky (1981:49), stating that every lexical noun phrase must have case: if no accusative case is assigned to the internal argument, it must raise to subject position to receive nominative case, which is then no longer available to license an external argument. The first clause, however, remained unexplained within the Government and Binding framework, as it essentially stipulates that passive and unaccusative verbs cannot assign accusative case.

No such stipulation is needed on the approach contemplated here, where structural accusative case is *never* assigned by the verb. In the absence of an external argument, only the internal argument is available for realizing the grammatical function of subject. Once the

internal argument is merged to the predicate as its subject, it is no longer available as a predicate internal noun phrase to be marked accusative as a function of the subject-predicate dependency (see section 3).

Interestingly, we now predict the existence of a well-known class of counterexamples to Burzio's Generalization, involving double object unaccusative verbs, such as Dutch *opvallen* 'strike'. As (14) shows, these do involve accusative objects:

In (14), the use of the perfective auxiliary *be* signals that *opvallen* 'strike' is unaccusative; *dat* 'that' is the raised subject, and *mij* 'me' a predicate internal accusative pronoun. Similar data can be provided with passives of ditransitive verbs, as discussed by Woolford (1993):

The problem posed by the phenomena illustrated in (14) and (15) is that the unaccusative and passive verbs are apparently capable of assigning accusative case; hence inability to assign case (or 'case absorption') cannot be what triggers raising to subject. On our proposal, raising to subject is never triggered by case considerations (cf. Chomsky 2001:17), and the accusative is a morphological marking of the subject-predicate dependency on a predicate internal noun phrase. The proposal therefore predicts the observed behavior of double object unaccusatives and ditransitive passives.

The second clause of Burzio's Generalization (if no accusative case, then no external argument) loses much of its significance if structural accusative case is never assigned by a verb. If the accusative case is the morphological expression of subject-predicate dependency, the situation described in the protasis ('if no accusative case') arises only if there is no subject. Hence we derive that if there is no subject, then there is no external argument, the validity of which is irrelevant if all clauses must have a subject (the Extended Projection Principle of Chomsky 1982:10). (As we will see below, absence of accusative case for objects also arises in an ergative case marking system, but then the consequence that no external argument exists is simply false.)

The approach to accusative case proposed here also accounts for the behavior of structures like (4), where the accusative object *hem* 'him' appears in a clause built on the unaccusative verb *schijnen* 'seem'. In an earlier discussion (Zwart 2001:552), I pointed out that the accusative here seems to be due to the presence of a transitive verb in the embedded clause, so that Burzio's Generalization must be taken to apply not to a single clause, but to the entire restructuring complex. Now a simpler account is available: the accusative morphology of *hem* 'him' is simply due to the circumstance that *hem* is contained within a predicate dependent of the subject *ze* 'she'.

5. Consequences for ergativity.

The neo-Jakobsonian approach taken here has one further interesting consequence. Since case is morphology, expression of a subject-predicate dependency through case requires a

certain organization of case forms in a paradigm. In other words, there has to be a subject/object-form opposition, i.e. a structural case opposition, for case to be available as a dependency marking device in the first place. In the remainder of the paper, I would like to discuss the consequences of this point for the description of the ergative case system.

5.1 The core case

In the ergative case system, the object of a transitive clause has the same case as the subject of an intransitive clause, namely the unmarked case (nominative or absolutive). The subject of a transitive clause is marked by a special case (the ergative case). I take it to be uncontroversial that the ergative is an inherent case (see the discussion in Nash 1995, Woolford 1997, and Legate 2003). The ergative system is illustrated in (16), from Inuit:

- (16) a. Angut qungujup-p-u-q (Inuit)
 man:ABS smile-IND-INTR-3SG

 'The man smiled.'
 - b. Qimmi-p angut kii-v-a-a dog-ERG man:ABS bite-IND-TR-3SG.3SG 'The dog bit the man.'

The question that interests us here is not so much why the subject has a special case, but why, when the subject has this special case, the object is realized in the unmarked case, rather than in the accusative case. We suggest the following answer.

If the subject has an inherent case, no structural case opposition is available for marking the dependency between the subject and the predicate. It follows that case can no longer be employed to mark the predicate as a dependent of the subject. Hence, the object can only surface in the unmarked (nominative/absolutive) case.

Importantly, there is no reason to believe that the presence of ergative case on the subject affects the dependency relation found (we believe, universally) between the subject and the predicate. Hence, we do find ergative subjects triggering agreement on (a term of) the predicate, as in (17a), as well as reflexive marking of the predicate expressing subject-orientation of the event, as in (17b):

(17) a. ngajulu-rlu ka-**rna**-ngku nyuntu I-ERG AUX:PRES-1SG.SU-2SG.OB you:ABS

mya-myi (Warlpiri) see-NONPAST

'I see you.' (Hale 1983:18)

b. ngarrka-ngku ka-**nyanu** nya-nyi (Warlpiri)
man-ERG PRES-REFL see-NONPAST
'The man sees himself.' (Hale 1983:43)

These facts suggest that what is lacking in the ergative system is not the general subject-predicate dependency, but structural case as a means to express the dependency

morphologically.

5.2 Tripartite case systems

The description of ergativity in section 5.1 requires modification in view of the existence of so-called tripartite case systems, where the subject of a transitive clause has a different case from the subject of an intransitive clause (indicating ergativity), and the object of a transitive clause has a third case, arguably accusative:

- (18) a. taykka yat^ytuwan (Dhangu) woman:NOM screamed 'The woman screamed.' (Schebeck 1976:524)
 - b. yūlŋu-tu taykka-na pūyan man-ERG woman-ACC hit 'The man hit the woman.'(Schebeck 1976:524)

The coexistence of ergative and accusative case in a single clause is unexpected from the perspective adopted here.

A key to the nature of tripartite case systems may be provided by an explanatory note in Schebeck's paper on the Dhangu facts (Schebeck 1976:544 note 5), which links the accusative case to animacy. As Schebeck states, the object has a non-zero case suffix when the noun phrase is [+human] (or, according to some informants' data, [+animate], or perhaps even [-abstract]). We take this to indicate that Dhangu features so-called NP-split ergativity, where ergativity is attested only with a subset of the noun phrases, and only with those that are relatively low on an animacy scale (Silverstein 1976).

NP-split ergativity may be illustrated with the following data from Dyirbal (which we present in the format of Dixon 1994, with noun markers omitted):

- (19) a. ŋuma banaga-n^yu (Dyirbal) father:ABS return-NONFUT 'Father returned.' (Dixon 1994:10)
 - b. ŋuma yabu-ŋgu bura-n father:ABS mother-ERG see-NONFUT 'Mother saw father.' (Dixon 1994:10)
- (20) a. ŋana banaga-n^yu (Dyirbal) we all:NOM return-NONFUT 'We returned.' (Dixon 1994:14)
 - b. n^yurra ŋana-na bura-n you all:NOM we all:ACC see-NONFUT 'You all saw us.' (Dixon 1994:14)

We see an ergative system in (19), where the noun phrases are nonpronominal, and an accusative system in (20), where the noun phrases are pronouns. Phenomena sensitive to animacy are generally taken to employ the scale in (21), showing that pronouns are higher

on the animacy scale than full noun phrases:

(21) Animacy scale
1st person > 2nd person > 3rd person/demonstrative > proper N > common N

I have not found reference to tripartite case systems in languages without NP-split ergativity. The case of Dhangu, thus, appears typical, in that mixing of ergativity and accusativity is conditioned by the animacy of the noun phrases involved.

It can easily be seen how a combination of [high animate] and [low animate] participants may yield a hybrid system (from here on, we abstract away from what counts as high or low animate in a particular language system). In Kham (Watters 2002:67), for instance, 1st and 2nd person pronouns are [high animate] and all other noun phrases [low animate]. Like in Dyirbal, the former show nominative/accusative case, and the latter ergative/absolutive case:

- (22) a. ge:-∅ em-tǝ mi:-rǝ-∅ ge-ma-ra-dǝi-ye (Kham) we-NOM road-ON person-PL-ABS 1PL-NEG-3PL-find-IMPF 'We met no people on the way.'
 - b. ge:h-ye ŋa-lai duhp-na-ke-o ox-ERG I-ACC butt-1SG-PERF-3SG 'The ox butted me.'

Apparently, where animacy is involved, the simple case marking mechanism sketched in section 5.1 may be overruled.

The following generalizations can be made:

- (23) System of object marking in split-NP languages
- a. A [high animate] noun phrase marks dependency regardless of the status of the subject
- b. A [low animate] noun phrase does not mark dependency regardless of the status of the subject

Clause (23a) is in contradiction with the system of ergativity described in section 5.1. According to that system, the accusative marker should appear only if the subject is nominative. How can we understand clause (23a) in terms of the general subject-predicate dependency underlying case-marking in the neo-Jakobsonian approach taken here?

As we have seen, choice of the ergative system does not affect the general organization of the clause, in which the predicate is a dependent of the subject. In split-NP languages, certain noun phrases come with an animacy marker. We now have to say that the morphological realization of the animacy marker is a function of the position of the noun phrase in the clause: subject vs. term-of-the-predicate. Clause (23a) then states that the animacy marker takes a dependent form (the accusative) if the noun phrase is contained within a dependent category. It is thus a feature of the predicate which is morphologically realized on one of its terms.

Clause (23b) follows from the circumstance that [low animate] noun phrases lack a morphological realization of the animacy marker, and hence also lack a dependent variant of the animacy marker (i.e. the accusative suffix). This accounts for the fact that a

nominative (high animate) subject still does not trigger accusative case on a low animate object. That a low animate (ergative) subject does not trigger accusative case on the object was of course already explained on the system described in section 5.1.

All this is separate from the issue of what explains the ergative case on the subject, which falls outside the scope of this article. It should be noted here, however, that the factor ensuring ergative case on the subject may obscure the fact that the tripartite system is rooted in animacy, in the sense that even [high animate] subjects may be realized with ergative case because of it. This yields the pattern of Waga-Waga, where the [high animate] category includes pronouns, proper names, human beings, as well as some other living beings (Wurm 1976:106):

- (24) a. bugin^y-du (ŋ)i-na iya:-u (Waga-Waga) dog-ERG thou-ACC bite-FUT 'The dog will bite you.' (Wurm 1976:107)
 - b. ŋa-d^yu ŋunam-ma n^ya-ŋi guyum-ba I-ERG children-ACC see-PAST camp-LOC 'I saw the children in the camp.' (Wurm 1976:107)

In Waga-Waga, the subject invariably receives ergative case, regardless of animacy. The marking of the object, however, is sensitive to animacy as described in (23).

As Dixon (1994:109) observes, the converse of the Waga-Waga case, NP-split ergativity where objects of all kinds surface with accusative marking, does not appear to occur. This suggests that the feature responsible for the morphology of the object in hybrid systems is animacy, rather than case.

Summarizing, tripartite case-marking systems arise where languages distinguish noun phrases along an animacy scale, and feel the need to mark a [high animate] object contained within a dependent predicate. It is possible that the morphology employed here has the function of signaling the marked situation of a [high animate] entity in a dependent role. [High animate] elements are more common in the nondependent position of subjects (cf. Comrie 1978:386), and languages tend to mark situations where the hierarchy of grammatical functions and the animacy hierarchy are not aligned (e.g. by inverse marking in the Algonkin languages).

6. Conclusion

In this paper I have argued that structural cases are not distributed via local relations between noun phrases and lexical or functional heads. Instead, the accusative case marking of direct objects is the morphological realization of a higher order dependency between the subject and its sister, the predicate, containing the direct object. This accounts for situations where an accusative case-marked object is arguably not in a configuration where it could be assigned case by any known case assignment mechanism. The proposal was shown to provide a simple account of Burzio's Generalization, to the extent that it is empirically correct, as well as of a structural exception to Burzio's Generalization. In addition, it provides a simple account of the ergative case marking pattern, where the structural case opposition between nominative and accusative cannot be employed to mark the subject-predicate dependency relation, because the subject carries an inherent case. Tripartite case systems were argued to involve an additional factor of animacy, requiring overt marking of

a [high animate] entity contained within a dependent category.

The proposal has some similarities to that of Yip, Maling and Jackendoff (1987), except that no recourse is taken to an independently established case hierarchy, and that no case linking mechanism presupposing a 'case tier' needs to be invoked. Like the Yip, Maling and Jackendoff proposal, however, it draws a parallel between the ergative case marking system and the case marking pattern in quirky subject languages such as Icelandic (see also Pannemann 2002).

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