STRUCTURAL CASE, SPECIFIER-HEAD RELATIONS, AND THE CASE OF PREDICATE NPS

ABSTRACT. We argue that in Germanic languages, predicate NPs always receive case construently. In some languages (English, Russian, Dutch, German), the case on the NP is itself an accusative case assigner; in other languages (Danish, Swedish and Norwegian), the case on the NP is interpreted in terms of agreement with the subject. In either case, the subject NP has to be the subject of a verb or the object of a word. The constraint on case assignment for predicate NPs is that they must agree in case with the subject NP. This constraint is due to the fact that both NPs need to be in a fixed set of cases, through the agreement constraint on the verb. The hypothesis that predicate NPs and the subject NP have to agree in case is shown to provide a simple account of some complex case alternations in Germanic.

1. INTRODUCTION

The question of how predicate NPs get case has received surprisingly little attention in the generative literature, although it has been widely discussed in the student literature. We hope to show in this paper that they deserve better attention. Not surprisingly, perhaps, the lack of consensus is a function of the difficulty of the questions. Consider a simple example, such as (1):

(1) [Property: [I] be a doctor]

A survey of the literature reveals a wide range of possible analyses as to the source of the morphological case on the predicate NP:

(2) 1. Possible sources of case on Predicate NPs:
   b. Default case (Babby 1980: 117 ff., Freidin and Babby 1984: 91, fn. 3)

According to the Caseless Hypothesis (1), predicate NPs like a doctor in (1) are exempt from the Case Filter. According to the Default Case Hypothesis (2c), they receive case through the Agreement Hypothesis. According to the Structural Case Hypothesis (2d), they receive case via coinclination with the subject NP.
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In (4a) both the subject and the predicate NP must be marked nominative. Following Koopman and Sporschke (1991), we assume that the nominative on the subject NP is licensed by virtue of the Spec-IP Head-agreement. Hence the subject in (4a) is nominative. The subject and object cases differ in Icelandic in the same way as in English. In (4b) we have marked the noun phrase without the subject case.

In (3b,c,e-g) the copula assigns accusative case to the predicate NP, just as the transitive verb assigns accusative case to its complement in (3a,2).

In (4d) the subject and the object cases differ in Icelandic in the same way as in English. In (4e) the subject case in (4c) is nominative, and the object case is accusative. In (4f) the subject case in (4c) is nominative, and the object case is accusative.

The CP boundary is presumably an absolute barrier to government by case assignment from the matrix IP. Here we depart from an assumption of much current work within the principles and parameters framework and follow Sigurðsson (1989: 183-191) in assuming that PROs in Icelandic - and perhaps universally - are governed case in the same way as the lexical subject of a finite clause. In an example such as (5), the lower (non-finite) serves as a nominative case assigner for PRO via Spec-Head agreement. Likewise, the same (non-finite) serves as a source of nominative case for the predicate NP kenmari via government, in a fashion completely analogous to the finite example (4).

Let us now turn to a slightly more complicated example, one in which the clause contains a correlational construction embedded under an Exceptional Case Marking (ECM) verb like telja "believe". Consider example (6):
The question now is why the predicate NP in (6) occurs in the accusative rather than the nominative, as in (5), given the set of assumptions made about. In other words, how does the accusative case assigned by the matrix verb ścięga penetrate into the embedded VP? Our answer is the following: we propose that ścięga assigns accusative case to the Spec-IP under government (by virtue of governing IP; ścięga also governs Spec-IP). A Spec-Head relationship holds between the NP 'kamię' and the lower I, and thus the two share syntactic features. We suggest that morphological cases are syntactically non-atomic complexes of case features, in the spirit of Jakobson (1956). A number of such analyses have been proposed in the literature; we assume the feature decomposition of case from Zaenen and Malag (1984/1989: 149) shown in (7):

(7) Case Features: -OBJ = OBL NOM
+OBJ = OBL ACC
+OBJ = OBL DAT
-OBJ = OBL GEN

For the present purposes, the only crucial aspect is that the case features for NOM both take [+] values. We suggest then that the [+OBJ] feature assigned by the matrix ECM verb gains entry to the embedded I via the Spec-Head relations between the latter and the embedded subject. In an intuitive sense, the positive [+OBJ] feature is then able to override the negative [-OBJ] feature value inherent in the embedded I, and from there to spread along the same case path.

To summarize so far, we propose that predicate NPs always receive case structurally: either the copula verb is itself an accusative case assigner,

or case features (typically, nominative from I, but in certain instances, accusative from a higher I) are able to penetrate into the VP containing the predicate NP. Under this view, any apparent case agreement between subject and predicate NP is epiphenomenal, due not to a rule of agreement under concatenation, but due to the fact that both NPs are 'dependent' on I - albeit through quite distinct mechanisms - for case.

Let us turn now to a brief consideration of the other three hypotheses outlined in (2a-c).

2. ALTERNATIVES TO THE STRUCTURAL CASE HYPOTHESIS

2.1. Caselessness

The Caselessness hypothesis would seem implausible on the face of it, since predicate NPs clearly bear m-case in languages which exhibit m-case on argument NPs. Moreover, contrary to Author's (1991) claim, adjacency effects similar to those generally assumed to hold for ungrammatical instances of structural case marking are observed in the relation between the English copula and predicate NP:

    b. John was [yesterday] a fool.
    c. John was surely a fool.
    d. John has surely been a fool.

e. John has been surely a fool.

Just as adverbs cannot generally occur between a verb and its object(s), as shown in (8a), most adverbs cannot occur in the position between the copula and the predicate NP, as shown in (8b), and for adverbs that can, like surely, as illustrated in (8c), the apparent non-adjectivity can be attributed to the raising of the finite verb to I - a movement that only auxiliaries and be undergo in English. This is further confirmed by the contrast between (8a) and (8e). When the adverb surely occurs unambiguously between the copula and the predicate NP (as in 8e, in contrast with 8a and 8b), the structure is ill-formed. Thus, predicate nominals in English exhibit the same adjacency effects as NP-complements to transitive verbs; hence there is nothing to be gained by assuming they are Caselessness. (See Lasnik 1992, for further discussion.)

2.2. Default Case

The Default Case Hypothesis is in essence represented by Eidmann and Babb (1984: 96, fn. 4). Noting that left-dislocated NPs and predicate NPs in Russian receive nominative case, just as subjects do, they suggest this is so because all three are in the same relevant structural configuration. While
this suggestion is not compatible with more current views of phrase structure, it could easily be reinterpreted as the hypothesis that left-dislocated NPs and predicate receive case through a default mechanism. Within Germanic, however, there are counterexamples to the assumed correlation between the case of left-dislocated NPs and the case of predicate NPs in (unattested) copular constructions. Consider, for example, the following data from Frisian (Jiitvan Hoekstra, p.c.):

(9) a. Ik praat net bole goed Frysk
b. At ik dy wil, see ik
If you-ACC were, would I...

As (9a) shows, the nominative is the case of left dislocation, while the accusative is the case of predicate NPs in the relevant constructions (9b). Moreover, a Default Case Hypothesis cannot account for the case alternations in a language like Icelandic, in which predicate NPs occur in the nominative in some syntactic contexts, e.g. (4)-(5), but in the accusative in others, e.g. (6).

2.3. Case Agreement

This leaves us with the choice between the two hypotheses stated in (10): structural case or an independent mechanism of case agreement under predication.

(10) a. Case Agreement Hypothesis: a predicate NP agrees in m-case with the NP it is predicated of.
b. Structural Case Hypothesis: a predicate NP gets m-case either from V or, in languages where copular verbs are not accusative case-assigned, case from I.

How can we choose between these two hypotheses? Agreement is surely the universal tradition; traditional grammars all contain statements like the following:

'Words used as modifiers, predicatives or appositive of other nouns must agree in case, and often agree in number and sometimes in gender with the nouns they modify or describe. (Hutton 1845: 135)'

This view is also found in the generative literature (Andrews 1982, Anderson 1980, Yi et al. 1987). Rothstein (1992: 138, fn. 10) suggests that "the morphological properties of NPs are largely determined in many languages by an agreement mechanism, to be distinguished from the structural Case relation..." The Agreement Hypothesis appears to account straightforwardly for all the Icelandic data discussed thus far. One might ask, therefore, whether there are any empirical or conceptual reasons for preferring the Structural Case Hypothesis over Case Agreement. Conclusively, the Structural Case Hypothesis is more compatible with much current work in syntax. Well-studied instances of both overt and abstract agreement have been shown to involve a Spec-head relationship. For example, Roberts (1993: 19) defines agreement as just such a structural relationship if the Agreement Hypothesis were correct, it would have to be based on a semantic relationship between two pronominal projections, not a syntactic relationship between a Specifier and its Head. Given the existence of languages like Danish and English, it seems to us more natural to attribute the observed paradigmatic variation to a difference in the case-assigned properties of copular verbs than to claim that entirely different case-assigned mechanisms are operative.

Moreover, there is a very simple and compelling empirical reason to pursue the Structural Case hypothesis: sometimes the m-case on predicate NPs differs from the m-case on predicate APs in the same structural configuration. Hence, different mechanisms must underlie the case-marking of the same syntactic context in Icelandic, while predicate NPs are susceptible to the kind of "superficial" agreement that the Agreement Hypothesis might lead us to expect. predicate NPs are restricted by a well-established restriction on structural case assignment. Consider constructions involving controlled PRO in Icelandic. As illustrated in (11), it is possible for both predicate APs and predicate NPs to occur in either nominative or accusative when PRO is controlled by a matrix controller bearing structural case.

(11) a. Jón hóð mig, leði til PRO, vera
b. Jón asked me-ACC to be

quick-NOMquick ACC

Pred AP

dykrófr(þýriðsvæska)

Pred NP

Let us consider this to be an instance of the phenomena traditionally known as Case Attraction. Under our assumptions it is not obvious why this alternation is possible. However, let us assume that the case of the controller may optionally be copied onto PRO (as PRO is not assigned lexical case by the embedded predicate). Then the paradigm in (11) above and in (12)-(13) below will follow straightforwardly. In (11), PRO may either receive structural nominative from I or may receive structural accusative via Case Attraction. In either case, I will serve as the source for case features for the predicate NP through the mechanisms already familiar from the discussion above of (5) for the nominative and (6) for the accusative.
At this point, it might appear that predicate APs receive case features in the same way. A different picture emerges, however, when we consider controllers bearing lexically assigned inherent case, as illustrated in (12).

Consider first predicate APs.

(12) a. Jón skipsði Hálendi, leðað PRO, vera
Jón ordered Harold-DAT to be
fjúfur/fífallið/um) quick-NOM/DAT
Fred AP
b. Hana, langar leðað PRO, vera stjórn/Bistiðila
Fred AP
she-ACC looks to be
elm-NOM/ACC

The percent sign indicates that only some speakers allow attraction into the dative case of the controller; for other speakers, only nominative is possible. What is significant is that predicate NPs do not exhibit the same behavior, as first noted by Östman (1990). Observe the contrasts between (12) and (13); unlike predicate APs, a predicate NP cannot 'inherit' the case of its controller if that case is lexically assigned.

(13) a. Jón skipsði Hálendi, leðað PRO, vera
Jón ordered Harold-DAT to be
dyváruður/dyvárvarði
Fred NP
dørkrók-NOM/DAT
b. Hana, langar leðað PRO, vera(vero)
Fred NP
she-ACC-long to become

dyváruður/dyvárvarði

dørkrók-NOM/ACC

In (13a) a lexically case-marked dative object controls PRD; in (13b) a lexically case-marked accusative subject does. In both instances the predicate NP must occur in the nominative. It is worth emphasizing that the judgments for the examples in (12)–(13) are robust, and even speakers who do not themselves like dative on predicate APs (under case attraction) get the contrast. Andrews (1990: 231, fn. 25), citing Friggstad (1997), notes that examples like (13) are 'quite rare in normal usage,' and that it is unclear how these complications could be treated. This would certainly be even more true of (12). In any case, the child is raising little evidence in the primary linguistic data for the complete syntactic paradigm. Poverty of the stimulus evidence further suggests that Universal Grammar must dictate that predicate NPs differ from predicate APs in how they are assigned case. These contrasts between predicate APs and predicate NPs undermine the view that predicate NPs 'inherit' the case of

the NP with which they are lexically co-indexed. On the other hand, the fact that inherent case on a controller cannot be transmitted to predicate NPs indicates that the shared case marking in examples (4)–(6) is epiphenomenal. The fact that only nominative is possible on the predicate NPs in (13) is exactly what is expected if predicate NPs are structurally marked. It is well known that syntactic features can never be transmitted from a lexically case-marked subject to I, as illustrated in (14) (adapted from Sigurdsson 1991b: 32).

(14) a. Strákinn langathuð/hugðuðu helm
the-boys-ACC wanted-3sg-3sg himself
‘the boys wanted to go home’

b. Strákinnun var/vore
the-boys-DAT be-PST-3PL-3PL
kallað/kallað
cold-NOM/ACC-named-DAT

kallað/kallað

the boys were cold

In (14a–b) the verb cannot agree with a lexically case-marked subject, and in (14b) number, gender, and case features cannot be transmitted to the 'predicate AP.' In Sigurdsson's terms, lexical case features cannot travel along a structural case path. Thus, even if lexically assigned case features are attracted to PRO in (13), they cannot gain access to any NPs with I, since they cannot be transmitted to I via the Spec-Head relation.

Why, then, is it possible for the predicate APs in (12) to agree with lexically case marked controllers of PRO, and why, on the other hand, is agreement between lexically case marked subject and 'predicate AP' not possible in (14b)? The examples in (12) and (14b) differ with respect to gender and number agreement, which is obligatory in (12), but impossible in (14b). In other words, in the examples in (11b) and (12), even when there is no case attraction, there must still be number and gender agreement. This suggests that in general APs, perhaps due to their inherent underspecification for 0-features, must have access to syntactic features of the NPs of which they are predicated. Examples in which 'improper' predicates appear, such as (14b), may be thought of as examples of 'inlined' predication. The oblique case subject is in some sense not modified directly by the AP, but rather is the experiencer of a state of the world denoted perhaps by the entire VP. Perhaps in just such instances, the small clause analysis of the copular sentence is not appropriate. In any case, it is apparent that the syntactic behavior of predicate NPs is readily understood as a special case of the syntactic behavior of arguments NPs in these constructions, while the syntactic behavior of predicate APs reflects the expected 'ignoring'
behavior of modifiers. We suggest that this is because NPs are prototypically arguments, while APs are prototypically modifiers.

3. IMPLICATIONS FOR GB CASE THEORY

We have assumed that copular predicates in Danish, Norwegian and English assign structural accusative Case. If this analysis is correct, then it underlines two theoretical constructs often associated with GB: Burzio's (1986: 176–179) Generalization, which states that if a verb fails to assign a theta role to its external argument, then it fails to assign accusative Case, and Chomsky's (1986: 155) Chain Condition, which requires that a CHAIN contain 'exactly one Case-marked position' if it is to be Case-marked, and thus 'visible' for the Theta Criterion. Assuming the Small Clause analysis of copular constructions, the structure of a simple 'matrix clause with a copular verb' will thus be as in (15):

(15) [NP [t (VP t [t, NP])] ]]

A representation like (15) in Danish-type languages will violate Burzio's Generalization, because the verb fails to assign a theta role to an external argument, since it does not have one; nevertheless, it assigns accusative Case to NP. Furthermore, the CHAIN (NP, t) violates the Chain Condition because both positions are Case marked, given that the structural Case Path which carries accusative to NP will also include t.

In this connection, it is perhaps interesting to note that there are two distinct types of violations of the proposed Chain condition. In the type illustrated in (15), it is the position of NP at S-structure that determines the actual morphological Case of the NP. The structural accusative assigned to t is simply ignored. Under the assumption that oblique subjects in Icelandic are VP-internal at S-structure, the opposite is true of the CHAINS of which they are members: it is the case lexically associated with the argument that determines the actual morphological Case of the NP, not the structural case that would normally be assigned to an NP in subject position at S-structure (usually nominative, but accessible in ECM constructions). In both types of violations it is a structural case which is ignored by morphology. It is not even the case that a chain can have two Case-marked positions as long as one of them is structural and one of them is inherent Case (as Bettens 1983 speculates); in structures like (15), both of the Case-marked positions would be receiving structural Case.

Similar conclusions about the Chain Condition must be reached on entirely independent grounds. There are languages where passive verbs, which by hypothesis do not assign a subject theta-role, nonetheless assign accusative case to their retained objects. One such language is classical Greek.

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(16) a. ἐφίλοντας ills πρόδρομον πολέμος
    since indeed the ACC poetess-poem-ACC Muse-NOM
    'since indeed the Muse has taught them poems' (Homer, Od. 8.480)

b. διδόσκοιμα εἰσῆλθεν
    reach-top-pass-fut. speech-ACC
    'I shall be taught speech' (Euripides, Andromache 739)

There is no evidence in favor of treating the accusative in (16) as inherent Case associated with a particular thematic role; note that in particular in monosyllabic ones, the accusative theme parvuliare, becoming nominative. Muse is Classical Greek in any way atypical in this respect; the same pattern holds in English and Liambanga Qebocha, as shown in (17):

(17) a. I was given them*they for Christmas
    b. can-ga cuanta-te (nawa) villa-aicio cars-ngul
       your-TOP story-ACC (child) tell-pass be-gi-2sg
       'Were you told the story by the child?' (Jake 1985: 66, 17b)

In both of the examples in (17) the retained object is assigned accusative case. (For further discussion and evidence from ECM constructions cross-linguistically, see Yoon and Yoon 1990, and Yoon 1991.)

4. SIGURDSSON'S PUZZLE

In this section we extend the mechanisms that we have used to account for the case of predicate NPs in Icelandic to a larger range of predicates in that language, viz., those that take nominative objects. Our analysis provides a solution to the puzzle noted by Sigurdsson (1989: 206), namely that the nominative objects of dative-nominative verbs obligatorily retain their nominative when embedded under an ECM verb, whereas pred-tpate nominatives obligatorily switch to accusative. The contrast is illustrated in (18)–(19):

(18) a. Hon er konnlukena
    she-NOM is teacher-NOM*ACC
    b. Heimi lésstur Haraldur/Harald
    her-DAT is-told-by Haraldur/NOM*ACC
    'she is told by Harald'
Postverbal nominatives are possible in control infinitives whenever PRO corresponds to an oblique subject. The availability of nominative case is illustrated by the grammaticality of the following sentences, in which the infinitive clause contains a dative-nominative verb.

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its propositional complement and assigns Specifier directly to IP, there is no reason why that could not be an inherent one.

We suggest that the observed contrast is due not to the difference between predicative and argument NPs, but rather to the presence or absence of lexical case marking on the subject. We hypothesize that case assignment is actually indirect, via Specifier position. Then the key to Sigurdson's puzzle lies in the different conditions under which nominative objects arise. For most verbs, nominative complements arise only in the presence of oblique subjects, which block subject-verb agreement; predicative NPs, on the other hand, occur with nominative subjects, which do not block subject-verb agreement. Lexical case does not travel along a Structural Case Path. Consequently, the presence of a lexical case-marked NP in Spec-IP blocks both agreement and the formation of a Case Path. Although the finite verb cannot agree with the lexical case-marked NP in Spec-IP, it can indeed must agree in mood with the postverbal nominative NP, and the participle agrees in gender as well. Consider the following examples (discussed by Andrews 1990).

(23a) a. Eg told. hafa verði I believed the horses ACC to have been gefna Jóni, given-ACC-p:masc. John-DAT
   'I believed the horses to have been given to John'
   b. Eg told. hafa verði gefnir I believed John-DAT to have been given
   hestan*gefna hestra. horses-NOM/ACC
   'I believed John to have been given horses'.

In (23a) the post participle in the ECM complement agrees in case, number, and gender with the accusative NP in the embedded Spec-IP. In (23b), however, there is no agreement between the dative case NP in the embedded Spec-IP but there is agreement in case and in the relevant 8 features between the participate and the post-verbal nominative NP.

Our hypothesis is that the presence of a lexically case-marked NP in Spec-IP blocks Spec-head agreement, thereby blocking transmission of external case along the Structural Case Path. In a simplex clause, this will have the effect of blocking Spec-head agreement, and hence there will be no agreement with an oblique subject. Oblique subjects do not agree in any 8-features with the finite verb, nor with a predicate adjective or passive participle; these appear in default 3rd sg.nominative NOM/ACC instead. The local Structural Case Path will extend downwards into the VP, however, allowing for agreement with any (nominative) NP. When such clauses are embedded under ECM verbs, the presence of a lexically case-marked NP in Spec-IP will block the assignment of the matrix Structural Case to Spec-IP, and thus block transmission of matrix ACC further into the embedded infinitival. If Spec-IP does not contain a lexically case-marked NP, however, as in (23a), then Spec-head agreements will apply. The matrix ECM verb assigns accusative to the embedded subject, which is then transmitted to the embedded Structural Case path via Spec-head agreement."

5. CONCLUSIONS

In this paper we have argued that predicate NPs - although predicative semantically - are treated like VP internal arguments by Case Theory. In languages in which copular verbs are not Case assigners, such as Icelandic, German, and Swedish, predicate NPs will have to be assigned structural Case from I through some mechanism such as the Structural Case Path (Sigurdson 1989). We have argued that inherent nominative case is never an option. While we have only begun to investigate the hypothesis that predicate NPs are universally assigned structural case, we believe that this hypothesis is on the right track, and, furthermore, that the study of the mechanisms responsible for the case of predicate NPs is a potentially revealing window on the mechanisms underlying case assignment in Universal Grammar, given that the child's triggering experience for determining which case is to be assigned to predicated NPs in infinitival constructions is extremely limited.

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In addition there appear to be cases of a special Predicative Case (Husab&;B&;tein 1981; K&;st 1982). One might wish to view this case as the lexical case arising from the structural case hypothesis that we will be defending in this paper. Since predicative case is not found in any of the Germanic languages, we will not pursue this matter further here.

1. This is a consequence of B&;ro&;w&;r's (1961, 1962) suggestion that the Case Filter is not an independent principle of grammar, but rather the Visibility Condition from the Theta Theory. Thus, on the assumption that they are not their-market, predicative NPs are excluded from the domain of the Case Filter.

2. The predicative rule in English requiring nominative case on predicate NPs (henceforth 'NP') is in contrast to the 'classical' (i.e. standard) treatment for virtually all speakers as soon as one extends the data beyond this monolingual example, as illustrated in (4). No such predicative rule exists for Danish and Norwegian.

3. On the other hand, the assumption that a agreement in a diagnostic for nominative case, the agreement of the reflexive verb with the pronominal NP in existential sentences poses a potential problem for our hypothesis: it can be treated as if it were in its Dat (Subj-Decl) form. While we have no definitive analysis of this to offer, note that in the natural speech of many speakers including our own, the reflexive verb is always 3rd sg. There's only one possibility. To the extent that personal pronouns can occur in all existential sentences in English, they are marked accusative, as illustrated in the following data.

(1) Who could teach this course? There's always wrong.
*There was always right.
*They were always right.

4. Introducing configuration for the hypothesis that the copula does function as an accessible case feature we would find in the Germanic family. In Standard Literary English, main clauses have the following form:

(1) a. Zeydun Zeydun, nom noma, NON-MOD ACC
Zeydun is a variant
Here there is no lexical verb, and the predicative NP appears in the nominative case. Such sentences have a present tense interpretation. In the past tense, the lexical verb is required:

(2) a. Zeydun Zeydun, nom noma, NON-MOD ACC
Zeydun is a variant.

Thus, when the copular verb is present, the predicative NP must appear in the accusative rather than the remaining nominative. The same alternation holds of predicative APs.

5. Through this paper we will generally provide 'simplified' two-structure analysis of the sort given in (4). These two structures should not be taken away from the very bold assumptions: first, that subjects of clauses originate in a VP-internal position (F. D. Kiparsky and Speckard 1964 and references cited therein) and move to Spec, V (cf. Kiparsky 1981). Second, this copular verb takes small clause complements (c.g. Zeydun 1984: 60ff, Kiparsky 1984). Thus, the structure of the VP in (4) might be more carefully represented as:

\[
\begin{array}{c}
\text{SPEC-HEAD RELATIONS AND PREDICATE VPS} \\
\end{array}
\]

\[
\begin{array}{c}
\text{V} \\
\text{NP} \\
\text{SPEC} \\
\text{MOD} \\
\text{DOM} \\
\end{array}
\]

6. In (4), it is the nature of the copular verb, and the role of noun is, in general, these considerations will not be relevant to our discussion.

7. Korean and Japanese would seem to be exceptions, that predicate NPs do not bear case markers; but see Lee (1980) for arguments that they nonetheless receive structural case.

8. Note that the Agreement Hypothesis cannot account for the form of languages like Danish and English, since even in finite clauses the subject and the predicate NP do not agree in case. A theory embodying the Agreement Hypothesis for Syntactic Case would still have to maintain the Syntactic Case Hypothesis for the lexicon.

9. See Andrews (1983a,b) for discussion. The fact that for at least some speakers there can be written sentences in which the independent subject NP is in its (5) Dat position, and the independent subject NP is in its (6) Acc position, suggests that this is an empirical question as to whether the subject of a clause is necessarily the subject of the clause. However, see Andrews (1983b) for an adequate analysis of these data.

10. In the same way, the subject NP in (7) is always 3rd sg. in the reflexive form of the reflexive verb. This is a consequence of the reflexive verb taking a reflexive noun phrase.

11. In the same way, the subject NP in (7) is always 3rd sg. in the reflexive form of the reflexive verb. This is a consequence of the reflexive verb taking a reflexive noun phrase.

12. In (15), the subject NP in (7) is always 3rd sg. in the reflexive form of the reflexive verb. This is a consequence of the reflexive verb taking a reflexive noun phrase.
CROSSOVER, CHAIN FORMATION, AND UNAMBIGUOUS BINDING

ABSTRACT. This paper addresses the question of what drives (strong) crossover effects. Investigating the behavior of different movement types with respect to crossover (as far as this data mainly from German, but also from Italian and English), I conclude that crossover effects are driven by the movement of the SPECifier of an ACCusative. Thus, I propose a unified account of strong crossover effects, which is based on the interplay of SPECifier-ADVancement (as in passive and raising constructions) and native movement. Thus, the correct descriptive generalization seems to be that Case-driven movement does not induce crossover effects, whereas other movement types do. Given this state of affairs, I turn now to the question whether Rizzi’s (1986) analysis of crossover effects, which involves a local binding constraint on chain formation, is empirically too strong—it does not allow Case-driven movement across a co-indexed item. Moreover, the distribution of crossover effects and of improper movement is strikingly similar: improper movement, too, only occurs with movement types which are not Case-driven. This calls for a unified approach. The chain formation approach, however, cannot be generalized to all non-case-driven movement processes. Hence, I argue that the Principle of Unambiguous Binding (PUB) developed by Miler and Sternefeld (1993) as a constraint against improper movement, accounts for the distribution of crossover effects straightforwardly. It is Universee of a strictly representation-based account.

6. INTRODUCTION

In this paper, I will pursue two goals. First, I will argue that Rizzi’s (1986) account of crossover effects in terms of a local binding constraint on chain formation is empirically too strong. On the basis of data mainly from German (but also from Italian and English), I contend that crossover effects occur in constructions involving with movement, topicalization, scrambling, and head movement, but, contrary to Rizzi’s assumptions, do not show up with Case-driven movement, i.e., A-movement in passive and raising constructions, and native movement in double object constructions.

My second and more specific goal, then, is to develop a different approach to crossover effects. It turns out that Case-driven movement does not only fail to induce crossover effects; what is more, it does not prohibit subsequent movement to another type of position either, it does not give rise to improper movement. In contrast, other movement types, which are not Case-driven, do both. This suggests that a unified approach should be developed which subsumes improper movement and crossover. In Miller and Sternefeld (1993), it is argued that various kinds of improper movement can be excluded by a condition which requires variables to be bound in an unambiguous way, viz., the Principle of Unambiguous Binding (PUB). This principle was originally developed in order to account for asymmetries between various kinds of A-bar movement by postulating a lack of inter-