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NP-MOVEMENT

with special reference to Icelandic[1]

0.  Introduction

In Knowledge of Language, Chomsky (1986a) suggests that movement is a "last
resort".[2] The standard GB explanation of NP-movement is a "last resort
explanation" of the ideal type: NP-movement applies to an NP iff the NP fails
to get Case in situ (provided that movement does not violate any independent
principles).    Call  this  "the defective Case-marking explanation of NP-move-
ment".  Defective Case-marking is usually taken to relate to "defective theta-
marking", in a sense.  What I have in mind is the so-called "Burzio's generali-
zation".   It has been stated in various ways in the generative literature (see,
for instance, Chomsky 1981: 125; Burzio 1986: 185).   For our purposes, the
simple formulation in (1) will do:


    (1)  If there is no VP-role in [NP, IP],
         then there is no V-Case in [NP, VP]


From (1), it follows that NP-movement is both allowed and enforced by interact-
ing principles of Theta Theory and Case Theory. If there is no theta role in
the subject position, an NP *may* move there without violating the Theta-Criteri-
on.   In addition, it *must* move, in order to get (nominative) Case, if it is
generated in a non-Case position.

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The defective Case-marking explanation of NF-movement, then, makes the crucial prediction that there should be only one possible way in which NF-movement and Case-marling can interact:

(2)    [-C(ase)] in [NF, VP]:    Movement enforced

Three other inherently logical possibilities are usually taken to be ruled out, either by the Case Filter ((3) below) or by Burzio's generalization ((4) and (5)):

(3)    [-C] in [NF, VF]:    Movement not enforced

(4)    [+C] in [NF, VP]:    Movement enforced

(5)    [+C] in [NF, VP]:    Movement not enforced

(3) always results in a non-Case-marled NF, and is therefore ruled out in a principled manner by the Case Filter. On the other hand, both (4) and (5) seem to be realized in Germanic languages. German and Dutch probably have no NF-movement, i.e. they seem to exemplify (5), cf. the discussion in, e.g. Reuland (1985), Koster (1986), Haider and Rindler-Schjerve (1988), and Sigurðsson (1988). Conversely, Icelandic and Faroese realize (4).[3]

If (4) and (5) are possible options in UG, both the defective Case-marling explanation of NF-movement and Burzio's generalization must have gone off the right tracl somewhere. By using data from Icelandic, an NF-movement language with a richer Case system than most other Western European languages, I shall illustrate that this is indeed the case:[4] First, NF-movement has nothing to do with Case assignment; second, [NP, VP] is always a position of some Case, irrespective of the theta-properties of the [NF, IF] position (sections 1-2). This calls for an alternative approach to NP-movement (sections 3-4), as well

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as to the well-established fact that [NP, VP] is never a position of <u>structural</u> <u>accusative</u> Case unless the VP assigns an external theta-role (section 5). A coherent analysis of these phenomena, in turn, suggests some important revisions of Case Theory (section 6).


## 1. NP-movement and Case: Icelandic vs. English and German

English has some NP-movement constructions that have no direct counterpart in Icelandic and vice versa. Basically, however, NP-movement applies under the same conditions in Icelandic as in other Western European languages (that have NP-movement), such as English, Romance, and the mainland Scandinavian languages: it is clause-bounded or CP-bounded, and it is obligatory (under certain circumstances, see sections 3-4) whenever there is no theta-role in [NP, IP].[*] Thus, Icelandic has the following well-known instances of NP-movement, among others:

1. Subject-to-Subject Raising
2. Ergative NP-movement
3. Passive NP-movement

This is illustrated below:

(6)  <u>Ólafur</u> virðist [[t] vera    gáfaður].
     Olaf    seems         (to) be intelligent


(7)  <u>Báturinn</u> sökk [t] i   striðinu.
     the boat sank      in the war


(8)  <u>María</u> var kosin   [t].
     Mary  was elected

However, the interaction of NP-movement and Case-marking is partly different in Icelandic and English. In English and other languages that have only structural Case or S-structure Case, NP-moved subjects always turn up in the nominative

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[*] On the CP-boundedness of NP-movement, see Sigurðsson (1988). As argued there, raising infinitivals are either bare IPs or small clauses.

in finite clauses.    In these languages, therefore, Acc-Nom alternation is typical of active/passive and transitive/ergative pairs like the following:

(9)  a.  They elected _him_.

     b.  _He_ was elected (by them).     (Nom-_Acc_ : _Nom_)


(10) a.  They drowned _him_.

     b.  _He_ drowned.                   (Nom-_Acc_ : _Nom_)


For structural nominatives and accusatives, Icelandic displays this same alternation, cf. (11)-(12):

(11) a.  Þeir kusu    _hana_.
         they elected her

     b.  _Hún_ var kosin.               (Nom-_Acc_ : _Nom_)
         she was elected


(12) a.  Þeir stækkuðu _hana_.
         they enlarged her/it

     b.  _Hún_    stækkaði.             (Nom-_Acc_ : _Nom_)
         she/it enlarged/grew


However, Icelandic also has many instances of "inherent" or lexical Case. Thus, all datives and genitives in the language, as well as some accusatives, are lexical in the sense that they are not only dependent upon syntactic structure but also upon lexical properties of the Case assigning head (either regular theta-properties or an arbitrary lexical marking for some particular Case).

Being assigned prior to NP-movement, i.e. at D-structure (cf. Chomsky 1986a: 193), lexical Case is generally preserved under NP-movement in Icelandic. Consider the following pairs:[*]

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[*] As discussed in Bernódusson (1982) and Sigurðsson (1988), this is reminiscent of the preservation of absolutives in so-called "truly ergative languages", such as Greenlandic (cf., e.g., Marantz 1984). - As is well known, German also preserves lexical Case in the passive, but it does not apply any NP-movement (in passives or elsewhere), it seems. See further below.

(13) a.    Hún hvolfdi  **bátnum**.

she capsized the boat(D)

b.    **Bátnum**       hvolfdi.          (Nom-**Dat** : **Dat**)

the boat(D) capsized


(14) a.    Hann saknaði **þín**.

he    missed  you(G)

b.    **Þín**    var saknað.          (Nom-**Gen** : **Gen**)

you(G) was missed

"You were missed."


This is seen for  many other  constructions in  the language,  for instance the peculiar Present  Participle Construction,  discussed in Friðjónsson (1982) and Sigurðsson (1988).  The present participles  in  question  have  much  the same theta-properties as  the English  -**able**-adjectives discussed by Williams (1981) (and the corresponding -**bar**-adjectives in German and the  mainland Scandinavian languages).[7]  Consider the following pairs:


(15) a.    Við drukkum ekki **mjólkina**.

we  drank   not  the milk(A)

b.    **Mjólkin**      er ekki drekkandi.    (Nom-**Acc** : **Nom**)

the milk(N) is not  'drinking'

"The milk is not drinkable."


(16) a.    Við bjóðum ekki **Pétri**.

we  invite not  Peter(D)

b.    **Pétri**     er ekki bjóðandi.        (Nom-**Dat** : **Dat**)

Peter(D) is not  'inviting'

"Peter is not invitable."


Naturally, the  language also  has numerous ergatives that do not relate to any transitive verb.  Even these may  either  take  a  structural  nominative  or a lexical accusative, dative, or (rarely) genitive, as illustrated below:

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[7] In other constructions, present participles in Icelandic usually translate as present participles in English. As discussed in Sigurðsson (1988), the Present Participle Construction is  a middle construction of a sort.

(17) <u>Pétur</u> dó [t] í stríðinu.
Peter(N) died in the war

(18) <u>Olkur</u> hungraði [t].
us(A) hungered
"We were hungry."

(19) <u>Pétri</u> leið [t] vel.
Peter(D) felt well

As first pointed out by Andrews (1976), there can be no doubt whatsoever that obliques like the accusative in (18) and the dative in (19) are S-structure subjects (often called "quirky"). See also, for instance, Thráinsson (1979), Bernódusson (1982), Zaenen et al. (1985), Yip et al. (1987), Platzack (1987), and the references cited in these works. Moreover, there is extensive evidence that they are D-structure objects, i.e. derived by NP-movement from [NP, VP] to [NP, IP], just like the obliques in (13b), (14b), (16b), and the nominative in (17) (cf. Bernódusson 1982, Sigurðsson 1988).

In sum, then, NP-movement and Case assignment usually interact in the following manner in Icelandic:[*]

(20) Structural Case: (<u>Acc</u> ->) <u>Nom</u>

(21) Lexical Case: a. <u>Acc</u> -> <u>Acc</u>
b. <u>Dat</u> -> <u>Dat</u>
c. <u>Gen</u> -> <u>Gen</u>

This suggests two rather interesting conclusions:

(22) If VP assigns no external theta-role, then V must not assign <u>structural accusative Case</u> to [NP, VP]

(23) NP-movement is independent of Case assignment to [NP, VP]

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[*] I say "usually" because there are certain exceptions to this main rule. These exceptions do not matter in the present context, so I shall not go into them here (but for a discussion, see Zaenen and Maling 1984, and Sigurðsson 1988).

(22) makes an important distinction between structural accusative Case, on the one hand, and lexical Case and structural nominative Case, on the other hand (see further section 5 below). In languages like English, of course, this distinction is invisible.[*] In Lexical Case languages, on the other hand, there is rather straightforward evidence that (22) is empirically true - for instance in Finnish (cf. Belletti 1988), Russian, Latin, Ancient Greek, German, Faroese, and, for that matter, all the Old Germanic languages, including Old English (cf. Bernódusson 1982; Allen 1984). German, for example, has both oblique-taking passives and ergatives, albeit not as extensively as Icelandic.[10] Consider the following examples:

(24) a.  Mir   ist kalt / ubel.      (German)
     b.  Mér   er  kalt / illt.      (Icelandic)
         me(D) is  cold / nauseated
         "I am freezing / nauseated."


(25) a.  Mir wurde geholfen.         (German)
     b.  Mér var  hjálpað.           (Icelandic)
         me  was  helped
         "I was helped."


In German, then, as in Icelandic, verbal (and adjectival) heads of VPs that do not assign an external theta role are free to assign lexical Case, as opposed to structural accusative Case. Thus, data from both languages indicate that (22) is empirically true; see also sections 4-6 below. On the other hand, German has no bearing on (23), whereas Icelandic has. As argued by Zaenen et al. (1985), the obliques in examples like (24)-(25) are topicalized objects in German, and not (S-structure) subjects, as in Icelandic (on German, see also, e.g., Cole et al. (1980)). In a transformational framework, this means that the obliques are derived by NP-movement in Icelandic, as opposed to German (see

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[*] Due to lack of lexical Case and to the Definiteness Effect. See section 4 below.

[10] So-called thematic lexical Case (i.e. semantically predictable Case) is still frequent in German. Thus, goals and experiencers are very often dative in German, as in Icelandic. On the other hand, arbitrary lexical Case or "truly quirky Case" (cf. Yip et al. 1987) is quite rare in German as compared to Icelandic.
- Note that I do not use the the term "morphological case" in this connection. In my opinion, that term should be reserved for morphophonological (PF-) realization of (lexical as well as purely structural) Case. German has basically the same Case system as Icelandic, with the major exception that it has no Subject-Predicate Agreement (see section 6). On the other hand, it has only a very meager morphological case system, whereas the morphological case system is highly complex in Icelandic.

(4) vs. (5) above). As mentioned in the introduction, there is clear evidence that Faroese has oblique NP-movement, like Icelandic (cf. Plazack 1987), whereas Dutch seems to be like German in having no NP-movement.[11] As far as I know, the matter has not been settled for the other lexical Case languages mentioned above.[12]


## 2. Oblique vs. nominative NP-movement

Oblique NP-movement is, of course, rather troublesome for the defective Case marking explanation of NP-movement. According to this standard explanation, NP-movement is enforced only if the moved NP fails to get Case in situ: the NP moves "in order to escape" violation of the Case Filter. However, oblique NP-movement is just as obligatory as nominative NP-movement in Icelandic. This is illustrated for ergatives in (26)-(28):[13]

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[11] If this is correct, word order variation in the so-called "middle field" of the sentence in Dutch (cf. Koster 1986) and German (cf. Abraham 1986a) is not due to application vs. nonapplication of NP-movement. Consider Haider and Rindler-Schjerve (1988) and Sigurðsson (1988, section 6.5.3).

[12] Much important analytical descriptive work remains to be done in this field. Allen (1984) argues that Old English was of the "Icelandic type", i.e., had oblique subjects. However, her arguments for taking this position are very slender in comparison with the extensive evidence for oblique or "qurky" subjects in Modern Icelandic (summarized in Zaenen et al. 1985, and Sigurðsson 1988). Even for Old Icelandic, it is rather hard to settle the question (cf. Sigurðsson 1983: 148 f.).

[13] Icelandic is a V2 language. Hence, the sentence initial position in normal declaratives is a topic position, [Spec, CP], whereas the position following the finite verb is the underlying subject-position, [NP, IP] (cf., e.g., Holmberg 1986). Thus, a normal subject-initial declarative involves Topicalization of the subject. This is shown in (1) (where I do not show any Verb-Fronting):

(i) Jón hafði [t] kysst Mariu.
    John had     kissed Mary

In order to avoid this masking effect of Topicalization, I shall often use questions (having no topic position) for demonstration. Like other Germanic V2 languages, Icelandic also has general Verb-Fronting (cf., e.g., Thráinsson 1986, Holmberg 1986, Sigurðsson 1988), i.e. the finite verb moves in front of the subject position in normal main clauses (questions as well as declaratives). This is illustrated in a simplified manner in (ii):

(ii) a. Hafði Jón [[v] [kysst Mariu]]?
     b. Kysti Jón   [[v] Mariu]?

When I wish to show an intact VP, I therefore use sentences with an auxiliary.

(26) a. Hafði **báturinn**   [sokkið [t]]⁻

    had   the boat(N)  sunk

  b. *Hafði [e] [sokkið báturinn(N)]⁻


(27) a. Hafði **bátinn**   [rekið [t]]⁻

    had   the boat(A)  drifted

  b. *Hafði [e] [rekið bátinn(A)]⁻


(28) a. Hafði **bátnum**   [hvolft [t]]⁻

    had   the boat(D)  capsized

  b. *Hafði [e] [hvolft bátnum(D)]⁻


- and for passives in (29)-(31):


(29) a. Var **báturinn**   [keyptur [t]]⁻

    was the boat(N)  bought

  b. *Var [e] [keyptur báturinn(N)]⁻


(30) a. Var **bátnum**   [stolið [t]]⁻

    was the boat(D)  stolen

  b. *Var [e] [stolið bátnum(D)]⁻


(31) a. Var **bátsins**   [saknað [t]]⁻

    was the boat(G)  missed

  b. *Var [e] [saknað bátsins(G)]⁻


That is, NPs that are clearly assigned Case at D-structure, when still in the [NP, VP] position, must move to [NP, IP] in case [NP, IP] is nonargumental.

Icelandic facts of this sort have remained a puzzle in transformational syntax. Elaborating upon Rizzi's null-subject theory (1982), Platzack (1987) suggested that nominative Case is "absorbed by" or assigned to a pronominal element (AGR or [+pronoun]) in Infl in clauses that have an oblique subject. This would explain why NP-movement *may* take place in such clauses without leading to a Case conflict between the structural nominative and the retained lexical Case (Case conflict being banned, cf. Chomsky 1981, 334). Obviously, however, this does not explain why oblique NP-movement *must* take place (under the same conditions as nominative NP-movement). I shall return to this in sections 5 and 6.

At first sight, it might seem possible to resolve this problem by assuming that inherent or lexical Case is not syntactic or structural in any sense. If this were correct, we could say that NPs marked for lexical Case must move to [NP, IP] in order to get (invisible) structural Case, thus maintaining the defective Case-marking explanation of NP-movement with respect to structural Case (cf. Belletti 1988: 25 f.). This would suggest that the Case Filter is met if and only if an NP or a chain bears structural Case (or else oblique NP-movement would not be enforced). That, in turn, would entail that it is not possible to save an NP from violating the Case Filter by 'merely' marking it for lexical Case.

Under this simple approach, then, oblique subjects bear a lexical (oblique) Case plus an invisible structural (nominative) Case. Call this the Double-Case Approach. Appealing as it may seem, it is probably quite mistaken. This is indicated by several facts, of which I shall mention only four here: First, there is only one set of inflectional rules for Case. Thus, lexical accusatives are always homophonous with purely structural accusatives. This would seem to be rather peculiar if lexical Case is something quite different from structural Case. Second, as demonstrated in Sigurðsson (1988), lexical Case is structural or syntactic in the sense that it is assigned in the syntax under the same structural conditions as purely structural Case. see further section 6 below. Third, the finite verb invariably shows up in the default 3rd person singular in clauses that do not contain any nominative argument; that is, obliques never enter into Spec-head agreement with Infl, whereas nominatives do. cf. (32) vs. (33):

(32)  Þig/Okkur/Þá          langaði í    bókina.
      you/us/them (etc.) longed  for the book
      Asg/A/A               3sg
      "You/We/They wanted (to get) the book."

(33) a.  Þú           vildir       bókina.
         you(Nsg) wanted(2sg) the book

     b.  Við    vildum       bókina.
         we(N) wanted(1pl) the book

     c.  Þeir    vildu       bókina.
         they(N) wanted(3pl) the book

We have an account for this if the finite verb only agrees with arguments that are assigned structural Infl-Case (see also Rognvaldsson (1982), and, more generally, Borer (1986)).[14] In the Double-Case Approach, on the other hand, it is not clear how this should be explained (all subjects bearing Infl-Case (visible or invisible) in this approach).

Finally, consider again pairs like (13) and (14):

(13) a. Hún hvolfdi **bátnum**.

she capsized the boat(D)

b. **Bátnum** hvolfdi.

the boat(D) capsized

(14) a. Hann saknaði **þín**.

he missed you(G)

b. **Þín** var saknað.

you(G) was missed

"You were missed."

In the Double-Case Approach, the oblique subjects in (13b) and (14b) must move to [NP, IP] in order to get (invisible structural "nominative") Case. This would imply that the ergative in (13b) and the passive in (14b) are nonassigners of (invisible structural "accusative") Case. However, for this to work, we would have to assume that the transitives in (13a) and (14a) are assigners of (invisible structural "accusative") Case, as well as of lexical

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[14] As argued by Rognvaldsson (1982), the reason for the non-agreement in cases like (32) is _clearly_ not a "morphological gap". Rognvaldsson's arguments are sound, but here is yet another one, not mentioned by him: Some ergative verbs and predicates either take a theme-subject in the nominative or an experiencer subject in the dative. In the former case, the finite verb always agrees with the subject, whereas it never does in the latter case:

(i) a. Ofnarnir _hitnuðu._
the radiators(N) became-warmer(3pl))
b. Ofnarnir _höfðu_ hitnað.
the radiators(N) had(3pl) become-warmer

(ii) a. Þeim _hitnaði._
them(D) became-warmer(3sg)
'They became warmer.'
b. Þeim _hafði_ hitnað.
them(D) had(3sg) become-warmer

I shall discuss another "minimal pair" of this sort in section 6.

Case - or else their objects would be ruled out by the (structural) Case Filter. In the same manner, this approach would entail that prepositions always assign an invisible structural Case plus a visible lexical Case (all prepositional Cases in Icelandic are clearly lexical). For further problems with the Double-Case Approach, see section 5 below.

In short, it seems rather clear that the defective Case-marking explanation of NP-movement cannot account satisfactorily for the obligatoriness of oblique NP-movement in Icelandic. The straightforward interpretation of the facts in languages of the "Icelandic type", as well as of facts in languages of the "German type", is, simply, that NP-movement has nothing to do with Case assignment.


## 3. The Subject Command Condition.


The defective Case-marking explanation of NP-movement is not only incorrect. It is also conceptually suspect, as pointed out by Abraham (1986b: 5): two modules of grammar, Theta Theory and Case Theory, cooperate in a mysterious manner so as to predestine NP-movement, as it were.

Alternative approaches to "NP-movement structures" have been pursued in nontransformational frameworks, e.g. Relational Grammar and Lexical Functional Grammar. The solutions suggested in these frameworks involve a sort of a "relational condition" on argument structure, having, roughly, the effect that an object must be commanded by a subject. Consider the Final 1 Law in Relational Grammar (cf. Perlmutter and Postal 1983, 1984) and the Association Principles in the LFG-approach of Zaenen et al. (1985). I believe these ideas should be capitalized on in transformational syntax, i.e. made compatible with a movement analysis of "NP-movement structures". In fact, conceptually related ideas have been proposed in transformational syntax, albeit not to explain NP-movement. What I have in mind is Williams' C-Command Condition on Predication saying, roughly, that a subject must c-command its predicate (cf. Williams 1980: 206), and Chomsky's Extended Projection Principle (EPP), saying that any clause must contain a subject (cf. Chomsky 1982: 10; 1986b: 4).

As far as I can judge, none of these proposals has exactly the desirable effects. Thus, for instance, EPP only requires that a clause have a structural subject. If nothing more is said, sentences like (34a, b) should be grammatical:

(34) a. *Hafði [e] hitnað þér?

      had        gone-warmer you(D)

    b. *Var [e] saknað mín?

       was      missed me(G)

There is nothing wrong with null-subjects as such in Icelandic. Nonreferential _pro_ is in fact extremely common in the language. Most often, it is expletive, as in (35), but arbitrary _pro_, as in (36), is also possible:[13]

    (35) a. Hafði [e] rignt mikið?

       had   (it) rained much

    b. Hafði [e] slokknað á ljósinu?

       had   (it) gone-out on the light

       "Had the light gone out?"

    (36) a. Má [e] lesa bókina?

       may (one) read the book

       "May we(/you/people, etc.) read the book?"

    b. Hér ber [e] að gæta varúðar.

       here shall (one) to heed caution

       "Here, one should be cautious."

Why is _pro_ possible in (35)-(36), but impossible in (34)? For the difference between (34) and (36), the explanation is rather straightforward: _pro_ is expletive in (34) but arbitrary in (36). That is, _pro_ bears a theta-role or is an argument in (36), NP-movement into [NP, IP] thus being ruled out by the Theta-Criterion. In contrast, expletive _pro_, as in (34), is nonargumental (bears no theta role), NP-movement therefore not leading to a violation against the Theta-Criterion.[14] Compare (37) and (38):

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[13] Thus, Icelandic is like Spanish, but unlike Italian, in having some cases of arbitrary subject _pro_. On the typology of _pro_ in Modern Icelandic, see Sigurðsson (1988).

[14] In passives, the 'suppressed' external theta role is present and has an arbitrary reading. However, it is assigned to the (nominal) participle suffix (Jaeggli 1986; Sigurðsson 1988), i.e. it does not link to the subject position.

(37) a.　*Hafði [e] hitnað　　þér?　　　= (34a)

　　　　had　　　gone-warmer you(D)

　　b.　Hafði þér hitnað [t]ⁿ


(38) a.　Má　[e] lesa bókina?　　　　= (36a)

　　　　may　　read the book

　　b.　*Má bókina lesa [t]ⁿ


This explanation does not, of course, extend to the difference between (34) and (35), pro being expletive in both cases. However, there is another crucial difference between these clause types: The VPs in (34) contain a nuclear argument of V, whereas the VPs in (35) either contain no argument ((35a)) or only an argument of P ((35b)). (35a), then, may surface with expletive pro for the obvious and simple reason that the clause contains no NP to move to [NP, IP].[17] Similarly, (35b) surfaces with expletive pro because NP-movement never strands a preposition in Icelandic (cf. Maling and Zaenen 1985), Icelandic being like most other European languages in this respect (German, Russian, French, etc.).[18]

The notion 'nuclear argument', then, is important. Subjects of raising infinitivals are nuclear arguments of raising verbs like telja 'believe' and virðast 'seem', whereas ("true") prepositional objects are never nuclear arguments of any verbs. Thus, it seems to matter whether or not the argument is protected by an 'independent' head, in a sense. Deviating slightly from Chomsky's understanding of the notion 'protection' (cf. Chomsky 1986b: 42), I

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[17] However, verbs like rigna 'rain' sometimes select an (optional) internal role. When they do, the argument bearing the internal role must move to [NP, IP] (if it is definite or topical):

(i)　Hafði gullinu　　rignt [t] til jarðar?
　　　had　the gold(D) rained　to earth

For Icelandic at least, this casts serious doubts on the suggestion made by Chomsky (1981) that "weather verbs" take a 'quasi argument' in the subject position. In any event, such 'quasi arguments' would differ from arbitrary null-subjects (see (38)) in not blocking NP-movement.


[18] In other words, Icelandic (as opposed to Norwegian and Swedish) has no 'pseudopassives' of the (exceptional) English type. Following many authors (e.g. Hornstein and Weinberg 1981, Stowell 1982, Maling and Zaenen 1985), I assume that "pseudopassives" involve a reanalysis of V+P as a complex verb. If that is correct, the prepositional object is treated as a nuclear argument of the complex verb, hence raised to the subject position.

assume that a head is a protecting head iff it is a Case assigner. According-
ly, I define the notion 'nuclear argument' as follows:[19]

    (39) For a and b, a a head and b an argument,
        b is a nuclear argument of a iff:
        1. a m-commands b, and
        2. a and b are not separated by a protecting head c
           (i.e. there is no protecting head c that m-commands b but not a)

The presence vs. absence of a nuclear argument of V is essential. This is seen
by various facts, most clearly the frequent ERGATIVE/IMPERSONAL ALTERNATION in
cases like (40) vs. (41):[20]

    (40) a.   *Hafði [e] kólnað     laugin?
           had       gon-colder the pool(N)
        b.   Hafði laugin     kólnað     [t]?
           had    the pool(N) gone-colder

    (41) a.   Hafði [e] kólnað?
           hat   (it) gone-colder
        b.   Hafði [e] kólnað     i   lauginni?
           had   (it) gone-colder in the pool(D)
           "Did the pool get colder?"
        c.   *Hafði lauginni kólnað i [t]?

  - cf. also the roughly synonymous (42) and (43):

    (42) a.   *Hafði [e] hummað Fétur?
           had       hummed Peter(N)
        b.   Hafði Fétur hummað [t]?
           "Did Peter hum?"

---

[19] With respect to the Minimality Condition, I am thus replacing the notion 'barrier' with the notion 'protecting head'. See further section 6 below.

[20] The same phenomenon is seen in many other NP-movement languages, for instance the mainland Scandinavian languages (the difference being that these insert a lexical expletive into the subject postion in cases like (41), (43), and (45), cf. Afarli 1987). - Note that the subject-PP alternation involved in this is frequently seen for potential assigners of lexical Case (see (44)-(45) below).

(43) a.   Hafði [e] hummað í Pétri?

      had    (it) hummed in Peter(D)

  b.   *Hafði Pétri hummað í [t]?


This same alternation is also frequent in the passive, impersonal passives being unusually common in Icelandic (cf. Friðjónsson 1987; Sigurðsson 1988). Consider the synonymous (44) and (45):


(44) a.   *Var [e] beðið      þin?

      was    waited(-for) you(G)

  b.   Var þín beðið [t]?

     "Were you waited for?"


(45) a.   Var [e] beðið eftir þér?

      was    waited for   you(D)

     "Were you waited for?"

  b.   *Var þér beðið eftir [t]?


What we need, then, is some condition on the relation between argument positions. For reasons I cannot go into here, it must be stated for nuclear arguments of predicative adjectives as well as for nuclear arguments of verbs.[21] It has the effect that (definite or topical) S-structure objects must

---

[21] In other words, predicative adjectives are ergative, sentences like He is big. being derived by NP-movement from D-structures like [[e] is [big he]. Icelandic offers extensive evidence in favor of this analysis (cf. Sigurðsson 1988). For example, predicative adjectives often display the Ergative/Impersonal Alternation discussed above for verbs. Compare (i)-(ii) to (40)-(41) above:

(i)a. *Er [e] köld laugin.
    is    cold the pool
 b. Er laugin köld [t]?
    is the pool cold

(ii)a. Er [e] kalt?
    is (it) cold
 b. Er [e] kalt í lauginni?
    is (it) cold in the pool
 c. *Er lauginni kalt í [t]?

The difference between the (agreeing) feminine singular nominative köld and the default neuter singular nominative/accusative kalt does not matter here, but I shall discuss it in section 6 below. As we shall see, it constitutes another argument for an ergative analysis of predicative adjectives.

be commanded by an argumental subject. Let us therefore call it the SUBJECT
COMMAND CONDITION (SCC):


(46)   The Subject Command Condition:
       *IP if [NP, IP] is nonargumental and [VP/AP, IP] includes a nuclear
       argument of V/A


- where 'includes' is the opposite of Chomsky's 'excludes' (cf. Chomsky 1986b,
9):


(47) a.   Exclusion:   a excludes b if no segment of a dominates b
     b.   Inclusion:   a includes b if a dominates all segments of b


It follows that VP/AP does not include [NP, VP/AP] if the latter is coindexed
with a position external to VP/AP. As we shall see in the next section, this
explains the Definiteness Effect.

Perhaps, SCC should be subsumed under a revised version of the Extended
Projection Principle (an idea suggested to me by Christer Platzack). If this
is a correct step to take, EPP should be reformulated, roughly, as follows:


(48) a.   IP contains a structural subject, [NP, IP], external to VP
     b.   [NP, IP] is nonargumental iff [VP/AP, IP] does not include any
          nuclear argument of V/A


However, I shall take it that SCC is an independent condition, EPP thus only
involving (48a).

In a series of works, Hubert Haider claims that German is exempted from EPP,
i.e. has no specific external argument position, [NP, IP] (see Haider 1986,
1987, Haider and Rindler-Schjerve 1988).[22] If that is correct, SCC applies
"vacuously" to German, the language therefore having no NP-movement.[23]

_____

[22] Nominatives in German, then, are either VP adjuncts (e.g. "subjects" of transitives) or V/A-complements
(e.g. passive "subjects"). However, there is no reason to believe that Infl is VP-internal in German (as
suggested by Webelhuth 1986). Rather, nominative Case is assigned into VP in much the same way in German as in
other languages, e.g. English and Icelandic. See section 6 below and Sigurðsson (1988).


[23] I am indebted to Christer Platzack for drawing my attention to Haider's hypothesis.

## 4. The Definiteness Effect

In the present analysis, all NP-movement is forced by SCC, i.e. NP-movement has nothing to do with Case assignment, neither in languages like English nor in the "Icelandic type" of languages. As yet, however, we have not developed any explanation of the Definiteness Effect upon NP-movement (cf. Safir 1985): generally, indefinite NPs are exempted from obligatory NP-movement, as is well known. This applies to lexically Case-marked NPs in much the same way as to purely structurally Case-marked NPs. This is illustrated below for ergatives.[24]

Nominatives:

(49) a.  *Höfðu [e] sökkið bátarnir?

      had        sunk    the boats(N)

   b.  Höfðu bátarnir sökkið [t]?

      "Did the boats sink?"

(50) a.  Höfðu [e] sökkið einhverjir bátar?

      had        sunk    some        boats(N)

      "Did there sink any/some boats?"

   b.  Höfðu einhverjir bátar sökkið [t]?

Accusatives:

(51) a.  *Hafði [e] rekið    bátana?

      had        drifted the boats(A)

   b.  Hafði bátana rekið [t]?

(52) a.  Hafði [e] rekið    einhverja báta?

      had        drifted some        boats(A)

   b.  hafði einhverja báta rekið [t]?

---

[24] As we would expect, predicative adjectives often behave similarly as ergative verbs with respect to the Definiteness Effect (cf. Sigurðsson 1988). However, there are some "extra" complications involved in the Definiteness Effect upon NP-movement of A-objects, so I shall not pursue this here. - Actually, Icelandic has two (very similar) Definiteness Effects: upon NP-movement and upon það- 'there, it' insertion into [Spec, CP]. Since the latter does not matter for the point I am making, I shall not go into it here (but for a discussion, see Sigurðsson (1990, chapter 6.3) and the references cited there).

Datives:

(53) a.  *Hafði [e] hvolft    bátunum¬

         had         capsized the boats(D)

     b.  Hafði bátunum hvolft?


(54) a.  Hafði [e] hvolft   einhverjum bátum?

         had        capsized some         boats(D)

     b.  Hafði einhverjum bátum hvolft [t]?


As we would expect, passives also behave this way.   This is illustrated below.

Nominatives:

(55) a.  *Voru [e] málaðir bátarnir¬

         were      painted the boats(N)

     b.  Voru bátarnir málaðir [t]?


(56) a.  Voru [e] málaðir einhverjir bátar?

         were     painted some          boats(N)

     b.  Voru einhverjir bátar málaðir [t]¬


Datives:

(57) a.  *Var [e] stolið bátunum¬

         was      stolen the boats(D)

     b.  Var bátunum stolið [t]?


(58) a.  Var [e] stolið einhverjum bátum?

         was     stolen some          boats(D)

     b.  Var einhverjum bátum stolið [t]?


Genitives:

(59) a.  *Var [e] saknað bátanna?

         was     missed the boats(G)

     b.  Var bátanna saknað [t]¬

(60) a.  Var [e] saknað einhverra báta?

was        missed some        bots(G)

b.    Var _einhverra báta_ saknað [t]?


Similar facts are, of course, found for the  prototypical Existential Construc-
tion:

(61) a.    *Hafði [e] verið bókin        á borðinu?

had          been  the book(N) on the table

b.    Hafði _bókin_ verið [t] á borðinu?


(62) a.    Hafði [e] verið einhver bók      á borðinu?

had          been  some    book(N) on the table

b.    Hafði _einhver bók_ verið [t] á borðinu?


In sum, then, NP-movement is obligatory for definite or topical NPs, but
optional for indefinite or nontopical NPs, irrespective of Case-marking:[25] The
former can only satisfy (or escape violating) SCC by means of movement, whereas
the latter seem to have alternative means to do so. Following Safir (1985: see
also Reuland 1985), I assume that nonmoved logical subjects form a chain or
enter into a chain-like relation with the [NP, IP] position.  If that is
correct, they are not  included by VP (since VP does not dominate all segments
of the subject-chain, cf. (47b)). It follows that they do not have to move to
[NP, IP] in order to satisfy SCC.

   Let us look a bit more closely into this. As argued by Rögnvaldsson (1984),
the Definiteness Effect is in fact a "topicality effect". That is, topicality
rather than formal definiteness controls whether or not  NP-movement is obliga-
tory (but obviously, there is an extensive overlap of topicality and definite-
ness). I shall not review Rögnvaldsson's arguments here, but as far as I can
see, they are sound (see also Sigurðsson 1988). Given that nonmoved logical
subjects must form a chain with [NP, IP] in order to satisfy SCC, this indi-
cates that topicality somehow renders the subject-chain ill-formed. The reason
for this, I believe, is as follows (for closely related ideas see Safir 1985
and Reuland 1985).

_____          ___

[25] Like all other generalizations over the Definiteness Effect I know of, this one is a simplification:
some definite NPs do not always have to move, whereas some indefinite NPs have to. Many problems of this kind
are resolved if the relevant factor is taken to be topicality rather than definiteness (see below).

Topical Ns and NPs have a type of reference which is different from that of nontopical NPs. This is rather obvious from simple cases like the following:

(63) a.   There was an old man crossing the street.
b.   The old man crossed the street.

The nontopical logical subject in (63a) is only referential in the sense that it picks out some particular 'object' in some particular 'situation' (to use the terminology of situation semantics). Topical N(P)s, on the other hand, are coreferential with some other argument that has either been mentioned in previous discourse or is given in the pragmatic context of the utterance. No doubt, there are various ways to formalize this difference. One way to do so would be to say that topical Ns and NPs bear a special type of referential index, say a coreferential index. I shall take the stronger and more interesting viewpoint here that they are the only NPs that are referential in syntax or syntactico-semantics. That is:

(64)   All and only topical NPs bear a referential index

If this is correct, we have to distinguish between _referential_ indices and mere _identity_ indices: even nontopical NPs leave behind an identity index when moved (the identity of the antecedent and its trace being "read off" from their indices). Presumably, identity indices are assigned in a basically free manner (cf. Chomsky 1981), whereas referential indices are not. I shall designate all and only referential indices by a star (such as in "$NP_{i*}$").

Now, recall that nonmoved logical subjects satisfy (or escape violating) SCC by means of coindexation with [NP, IP]. In NP-movement languages, all sentences with a nonmoved logical subject have an expletive element in this external argument position, either an overt "pronominal" like English _there_ or an expletive _pro_ (as in Iclandic). Being expletive, these elements cannot, of course, bear a referential index, whereas they are free to bear a mere identity index. What we are dealing with, then, is the following four relations between the external and the internal argument positions. "ex" stands for "an (external) expletive", whether or not lexicalized:

(65) a.  *[ex$_i$, NP$_{i*}$]:  a nonmoved topical NP

    b.  [NP$_{i*}$, t$_{i*}$]:  a moved topical NP

    c.  [ex$_i$, NP$_i$];  a nonmoved nontopical NP

    d.  [NP$_i$, t$_i$]:  a moved nontopical NP

The relations in (65b-d) are well-formed chains. In (65a), on the other hand, the "potential members" of the chain (the expletive and the NP) bear incompatible indices, hence cannot form a chain. It follows that the only available means to save the structure from violating SCC is to move the NP to the external argument position (this giving the well-formed (65b) instead of (65a)).

This is exactly the desirable result. At first sight, though, (65c) might seem to be a violation against Principle C of the Binding Theory (cf. Chomsky 1981, 188):

(66)  A R(eferential) expression is free

·However, it seems natural to assume that only referentially indexed or topical NPs are R-expressions in syntax. Given this, Principle C can be reformulated as follows:

(67)  NP$_{i*}$ is free

It follows that (65c) is not a Principle C violation (whereas (65a) would be if it were a well-formed chain). For essentially the same approach, see Safir (1985).

## 5. The accusative gap

Obviously, our account for the Definiteness Effect or the "topicality effect" owes very much to the ideas of Safir (1985). There is, however, one crucial difference between his and our approach: Deviating only minimally from Chomsky (1981) (by subsuming cosuperscripting under coindexing), Safir takes it that nonmoved logical subjects must form a chain with the structural subject in order for them to be able to inherit the structural nominative assigned to the latter (the assumption being that coindexing of thematically nondistinct NPs

transmits Case). In our approach, on the other hand, the chain-formation is forced by SCC.

There must be something basically wrong with the assumption that Case can be inherited through cosuperscripting (Chomsky 1981) or coindexing (Safir 1985; Borer 1986). This is indicated by a wide variety of facts in morphological case languages like Icelandic (cf. Sigurðsson 1988). We already saw one of these facts in the last section: obliques display much the same Definiteness Effect as nominatives. Consider two further typical pairs:

(68) a. *Var [e] málaður báturinn⁻

      was      painted the boat(N)

   b. Var [e] málaður einhver bátur⁻

      was      painted some    boat(N)


(69) a. *Var [e] stolið bátnum⁻

      was      stolen the boat(D)

   b. Var [e] stolið einhverjum bát⁻

      was      stolen some        boat(D)


Obviously, it is not a very appealing solution to assume that the dative in (69b) must be coindexed with [NP, IP] in order to be able to inherit the structural nominative of the latter. Not only would we have to assume the troublesome Double-Case Approach of Belletti (1988), discussed in section 3; here, we would also be forced to assume that the Case of Infl is capable of penetrating the domain of a lexical governor that is a Case assigner (see the next section).

Leaving it aside, for the moment, how the logical subject in (68a) gets its structural nominative, we note that Icelandic (like German, Faroese, etc.) shows that the [NP, VP] position is always a position of some Case. Even in VPs that do not assign an external role (VPs headed by passives, ergatives, etc.), the object position is only incompatible with one particular Case, viz. structural accusative Case, see also Belletti (1988).[24] In other words,

_____    _____

[24] However, on the basis of language specific properties of Finnish, Belletti (1988) makes the unfortunate universal claim that ergatives always assign a lexical partitive Case (having no specific form in languages like English), and suggests that the partitive is only compatible with indefinite NPs for semantic reasons. - The crucial property of ergatives or unaccusatives, as can be observed in Finnish as well as in Icelandic (and German, Faroese, etc.), is that they never assign structural accusative.

Burzio's generalization should be reformulated as in (22) above, repeated here for convenience:

(22)    If VP assings no external theta-role, then V must not assign
        <u>structural accusative Case</u> to [NP, VP]

At least in lexical Case languages like Icelandic and German, it seems to be possible to generalize this, so as to account for the Case-marking properties of adjectives and prepositions, as shown in (22)':

(22)'       If XP assigns no external theta-role, then X must not assign
            <u>structural accusative Case</u> to [NP, XP]

Obviously, it would be a substantial improvement if we could explain this peculiar gap in some principled manner. In a very different framework, Yip et al. (1987) observe that it seems to be impossible to assign structural accusative unless structural nominative is also assigned within the minimal IP of the accusative. Call this the ACCUSATIVE FILTER. We can formulate it, roughly, as shown in (70), where "-\" means "realized as":

(70)   *[+$C_j$] -> structural ACCUSATIVE, unless [+$C_i$] -\ NOMINATIVE

This seems to be empirically true, at least canonically. However, something more is needed to account for the accusative gap. Consider cases like (71) (analyzed in rather different manners in Andrews (1982), Yip et al. (1987), and Sigurðsson (1988)):

(71) a.    Ég taldi    [Maríu vera    gáfaða/*gáfuð].
                        A            A/*N
           I believed Mary (to) be intelligent
     b.    <u>María</u> var talin    [[$\underline{t}$] vera    gáfuð/*gáfaða].
           N        N                        N    /*A
           Mary was believed    (to) be intelligent

This is the regular behavior of all Exceptional Case Marking (ECM) inifitivals in Icelandic: the ECM-verb assigns both the structural accusatives in (71a), but when passivized, as in (71b), it somehow looses its structural Case-marking "power" (the matrix Infl-Case therefore being able to penetrate both the matrix

VP and the infinitival; cf. the next section). If there were nothing more to this than the Accusative Filter, we would expect either the predicative adjective of the infinitival or the matrix participle to turn up in the accusative in (71b) (nominative Case being assigned within their minimal IP, i.e. to the matrix subject).

I shall not go any further into this here (but see Sigurðsson 1988). What matters in the present context is that Burzio's generalization is only true for structural accusative Case. Hence, the object position of ergatives, predicative adjectives, passives, etc. may either be assigned structural nominative or some lexical Case.


## 6. Case assignment

Icelandic data illustrate very clearly that some assumptions of GB Case Theory must be revised or rejected. In the following, I shall only comment briefly upon two notorious problems in Case Theory: What becomes of nominative Case in sentences with oblique subjects, and how (and when) is it possible to assign nominative Case into VP?

Consider Case assignment in sentences with oblique subjects, whether moved to [NP, IP] or only coindexed with it:                    ·

<blockquote>

(72)  a.  Var      <u>föllunum</u>      útdeilt  [t]?
          was(3sg) the Cases(D) assigned
          "Were the Cases assigned?"

      b.  Var      [e]ᵢ     útdeilt  [einhverjum föllum]ᵢ?
          was(3sg) (there) assigned  any(D)       Cases(D)

</blockquote>

As argued by Holmberg (1985) and Platzack (1987), the subject position in movement examples like (72a) must not be assigned structural nominative, its assignment leading to a Case conflict with the raised dative. Since Case assignment is often taken to be obligatory, this might seem to be a serious problem, but it is not. What is obligatory is "Case receiving", not Case assignment (see also Yip et. al 1987). That is, the assignment of some particular Case is only obligatory if there is an NP (or, rather, a [+N] category) that "needs" the Case in order to satisfy the Case Filter. Otherwise, the Case in question simply remains unassigned, i.e. the principle in (73) holds:

(73)   A potential Case assigner assigns its Case

iff the Case is required by the Case Filter


Like other processes in the "Principles and Parameters" approach of GB, then, Case assignment is not "inherently obligatory". Accordingly, the "fate" of the (potential) structural nominative in sentences like (72a) is not a problem. Moreover, this is both a simple and a natural approach to the Case-marking properties of optionally transitive verbs and prepositions (compare also Burzio (1986, 185), Chomsky (1986b, 24), and Sigurðsson (1988)).

If sentences like (72a) do not involve any assignment of Infl-Case, we have an account for a fact mentioned in section 2, namely that Infl or the finite verb never agrees with oblique subjects.   Notice the default 3rd person singular in (72a).   Interestingly, (72b) is just like (72a) in this respect (and this is a general phenomenon). Plausibly, the reason is that the subject position and the nonmoved dative form a chain:   First, being lexical, the dative must be retained (or else, we end up with a violation against the Projection Principle, cf. Sigurðsson 1988); second, chains must bear one and only one Case (cf. Chomsky 1981, 334). It follows that Infl-Case must not be assigned to the subject-chain, the finite verb therefore showing no agreement.[27]

There is extensive evidence for this approach, for instance the behavior of Dat-Nom ergatives and passives (in German as well as in Icelandic (and Faroese), cf. Sigurðsson 1988). Consider (74)-(76):


(74) a.    Okkur leiddist.

us(D) bored(3sg)

"We were bored."

b.    Okkur leiddust    þessir strákar/*þessa stráka.

us(D) bored(3pl) these   guys(N)/*(A)

"We were bored by these guys."


(75)   Pétur lánaði mér   þessa hatta.

Peter lent    me(D) these hats(A)

---

(76) a.   Mér   voru        lánaðir þessir hattar.
          me(D) were(3pl) lent     these  hats(N)
          "I was lent thess hats."

    b.   *Mér   voru        lánaðir(/var        lánað) þessa hatta.
          me(D) were(3pl) lent    (/was(3sg) lent)   these hats(A)

    c.   Þessir hattar voru        lánaðir.
          these  hats(N) were(3pl lent

Facts of this sort have been thoroughly discussed by many authors, for example
Thráinsson (1979), Bernódusson (1982), Zaenen et al. (1985), and Yip et al.
(1987). They illustrate two things rather clearly: First, if Case is not
required by the Case Filter, it is not assigned. Second, even VP-internally,
the "first" structural Case assigned in the clause is always nominative.

    This, of course, raises the question how and when structural nominative can
be assigned into VP. Leaving the problematic Double Object Construction aside
(but for a discussion, see Sigurðsson 1988), I shall only address this question
for relatively simple cases like the following:

(77)  Voru [e]$_i$    ekki [kosnir [neinir forsetar]$_i$]$^$
      3pl              m.pl.N  m.pl.N  m.pl.N
      were (there) not chosen any       presidents


(78)  Höfðu konurnar   ekki [verið [gáfaðar     [t]]]$^$
      3pl    f.pl.N                  f.pl.N
      had    the women not  been    intelligent

As indicated in (78), I take it that all predicates headed by predicative
adjectives are ergative (as mentioned in section 3 and fn. 21 above).

    The long distance agreement, illustrated in (77) and (78), is a general
phenomenon in morphological case languages like Icelandic (cf. Andrews 1982,
Sigurðsson 1988): In all sentences that involve assignment of only nominative
Case, all past participles and predicative adjectives agree with the subject in
gender, number, and Case, no matter whether the subject is only coindexed with

[NP, IP] or moved there.[20] Compare (77)-(78) to (79)-(80), where the partici-
ple and the adjective assign dative and show up in the (non-agreeing) default
neuter singular Nom/Acc:


(79)  Var [e]ᵢ    ekki [boðið    [neinum forsetum]ᵢ]?
      3sg              n.sg.N/A  m.pl.D m.pl.D
      was (there) not  invited   any    presidents


(80)  Hafði  konunum  ekki [verið [kalt       [t]]]?
      3sg    f.pl.D                n.sg.N/A
      had    the women not  been  cold (= 'freezing')


The difference is particularly clear for ergative verbs and adjectives that
take either a nominative subject (theme) or a dative subject (experiencer),
hence constitute "minimal pairs" of agreement vs. nonagreement (see also fn. 14
above). Compare (80) to (81):[21]


(81)  Höfðu konurnar  ekki [verið [kaldar    [t]]]?
      3pl   f.pl.N                f.pl.N
      had   the women not  been  cold (= 'cool/tough')


Now, "ergative lexical items", such as participles and adjectives, that take
a nominative subject are, of course, non-assigners of Case, whereas participles
and adjectives that take an oblique subject are assigners of lexical Case

---

[20] This makes it rather unappealing to assume that participles "absorb" accusative Case; rather, they
loose the power to assign structural Case (or have no structural Case feature to assign). Note that loosing the
power to assign structural Case (as opposed to lexical Case) does not lead to a violation of the Projection
Principle (since structural Case assignment does not relate to theta selection, cf. Chomsky 1986a: 193).
- With the exception of Icelandic and Faroese, Indo-European languages in Western Europe have joined in a
strange "conspiracy" not to show predicative Case. Romance languages do have Subject-Predicate Agreement for
number and gender, but having morphological case for only pronuns, they render the predicative (nominative) Case
invisible (and roughly the same is true of the mainland Scandinavian languages). Conversely, German has
morphological case for nouns and adjectives, but is "abnormal" in having no Subject-Predicate Agreement. Most
other Indo-European morphological case languages, like Russian, Latin, Ancient Greek, etc. seem to be basically
like Icelandic with respect to long distance phi-feature agreement. Here, I only account for long distance Case
agreement, but for an analysis of long distance gender/number agreement (inherently related to long distance
Case agreement), see Sigurðsson (1988).


[21] In finite clauses, then, predicative agreement is only found in (a subset of) sentences with an
agreeing finite verb. However, the same phenomenon is generally found in control infinitivals, indicating that
the non-finite Infl is a potential assigner of nominative Case in Icelandic (cf. Sigurðsson 1988).

(showing up on the subject). Therefore, the relevant generalization is roughly as follows (for specifics, see further below):

(82) Infl-Case is assigned to [X(P), VP/AP], X(P) is [+N], iff V/A is not a Case assigner

What is crucial is Case-marking of the V/A-head, not that it is a lexical governor. As long as the head is a non-assigner of Case, Infl-Case can be assigned into VP over arbitrarily many lexical governors. Consider (83) vs. (84). In both cases, Infl and the adjective are separated by three (non-Case-marking) lexical governors (the auxiliaries and the copula), but, all the same, Infl-Case is capable of "reaching" the non-Case-marking adjective in (83), as opposed to the dative-marking adjective in (84):

(83) Konurnar  hljóta [t] að hafa verið mjog kaldar [t].
     f.pl.N    3pl                            f.pl.N
     the women must        to have been  very cold/cool
     "The women must have been very cool."

(84) Konunum   hlýtur [t] að hafa verið mjog kalt     [t].
     f.pl.D    3sg                             n.sg.N/A
     the women must        to have been  very cold/freezing

Precisely the same contrast is regularly found for passive non-assigners vs. assigners of Case, cf. (85) vs. (86):

(85) Konurnar  hljóta [t] að hafa verið kosnar [t].
     f.pl.N    3pl                       f.pl.N
     the women must        to have been  elected

(86) Konunum   hlýtur [t] að hafa verið bjargað [t].
     f.pl.D    3sg                       n.sg.N/A
     the women must        to have been  saved

Now, recall (from section 3) that I take it that only Case assigners are protecting heads (or barriers) with respect to the Minimality Condition. Assuming that the Minimality Condition holds for maximal categories (thus deviating slightly from Chomsky (1986b, 42)), I state it as follows:

(87)  X'' is <u>protected</u> iff its head X is a Case assigner


That is, the Minimality Condition is relaxed for maximal categories whenever their heads are nonassigners of Case.  Hence, Infl-Case is assigned into exactly those VPs/APs that are not protected by another Case assigning head (in English and German as well as in Icelandic).[30]

One of the many constructions in Icelandic that indicate that this is correct is the ECM-construction.  Consider (71), repeated as (88) below:


(88)  a.  Eg taldi    [Mariu    vera gáfaða/*gáfuð    [t]].

                       A(f.sg)        A(f.sg)/*N(f.sg)

          I  believed  Mary    be    intelligent

      b.  Maria    var talin    [[t]  vera gáfuð/*gáfaða    [t]].

          N(f.sg)      N(f.sg)              N(f.sg)/*A(f.sg)

          Mary    was believed    be    intelligent


In both cases, the infinitival VP ('be intelligent') is unprotected from external Case (neither the adjective nor the copula being a Case-assigner).  In (88a), the adjective bears the structural accusative assigned by the ECM-verb ('believe'), the ECM-verb being the most local Case assigner.  In (88b), on the other hand, it bears the matrix Infl-Case, because the ECM-participle ('believed') is a non-assigner of Case, hence a non-protecing head.[31]

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[30] A compatible idea (with respect to ECP and the <u>that</u>-trace effect) is actually suggested by Chomsky (1986b: 47): "..., a minimal governor must be a category with features to serve as a barrier to government". Speaking in terms of protecting heads, rather than in terms of absolute barriers, it seems natural to relativize this idea such that a head is only a protecting head with respect to a particular feature F in so far as the head itself assigns or projects (some value of) F. See the feature percolation theory developed in Holmberg (1986) and Sigurðsson (1988). However, since I am only dealing with Case here, I only develop this idea with respect to Case assignment.

[31] Obviously, there is much more to be said about Case assignment. Most important, there is clear evidence, for example in the ECM-construction, that Case, like other non-inherent phi-features of nominals, is assigned by feature percolation. Therefore, the "Revised Minimality Condition" in (87) is actually a condition on phi-feature percolation rather than on government (Case assigners being protecting heads with respect to all percolating phi-features, and not only with respect to Case). It would take us much too far to go into this here, but for an extensive discussion see Sigurðsson (1988).

## 7. Conclusion

In this article, I have argued that the standard defective Case-marking explanation of NP-movement cannot be maintained: NP-movement as such has nothing to do with Case assignment. Instead of being triggered by defective Case-marking, it is forced by the Subject Command Condition (SCC), ruling out all clauses with a nonargumental subject and a nuclear argument of V/A that is not (legitimately) coindexed with the subject position. It follows that NP-movement applies in much the same manner in languages that have lexical or "inherent" Case as in languages that have only structural Case, e.g. in Icelandic and English.

Like the standard theory, the present analysis construes NP-movement as a "last resort": NP-movement is forced iff an IP with an external argument positon fails to meet SCC. The reason why German has no NP-movement, then, is that it is exempted from the Extended Projection Principle, i.e. it has no external argument position, SCC therefore having no domain of application in German.

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