

On 'Holmberg's Generalization'

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1. Introduction¹

'Holmberg's Generalization' describes a relation between verb movement and object shift. 'Object shift' in this connection is understood as A-movement of the direct or indirect object of a verb, or of the subject of a Small Clause complement of a verb, from its theta-position to its Case position (see Holmberg 1986, Vanden Wyngaerd 1989, many others). The theta-position is assumed to be a position internal to the verb phrase (in the lexical domain of the verb), the Case position is assumed to be a specifier position external to the verb phrase (in the functional domain associated with the verb). The functional projection hosting this specifier position (i.e., the Case-position of the object noun phrase) is called object agreement phrase or AgrOP (Vanden Wyngaerd 1989, Chomsky 1991).²

'Holmberg's Generalization' comes in two versions, which I will call the original version and the strict version, respectively. The original version is due to Holmberg (1986:176). It can be formulated as follows:

- (1) Holmberg's Generalization (original version)
Object shift of an element α from the complement domain of a verb β occurs only if β has moved out of VP

This generalization is derived from standard assumptions of the Government and Binding approach (Chomsky 1981), combined with the additional assumption that a trace (in this case, of a verb) may remain invisible. In the Government and Binding approach, the verb assigns Case to its complement inside the VP. If the object moves out of the VP,

¹ This paper was prompted by the question "What do you do with 'Holmberg's Generalization'?", put to me in January 1994 in Cambridge by Anders Holmberg. I'd like to thank Anders, Chris Collins, Eric Hoekstra, Dianne Jonas, Höskuldur Þráinsson, Akira Watanabe, and an anonymous reviewer for this yearbook for comments and discussion.

² In Zwart (1993), I used the term 'scrambling' for the noun phrase movement referred to here. 'Object shift' is introduced by Holmberg (1986) as referring to movement of both pronouns and full noun phrases. I believe that these two movements should be kept apart (cf. Zwart 1992a), and will use the terms 'pronoun shift' and 'clitic placement' here to refer to movement of weak pronouns. 'Focus scrambling' (Neeleman 1994) is arguably the A'-movement counterpart of object shift as it is understood here. A characteristic of Object Shift is that the canonical order of the arguments (subject, direct object, indirect object) is maintained (Den Dikken and Mulder 1991), which is not necessarily the case in Focus Scrambling. Other differences involve the strict locality of Object Shift, absent in Focus Scrambling, and the marked intonational pattern of Focus Scrambling, absent in Object Shift. I will ignore A'-movement in this paper. On the question of Object Shift creating a configuration in which parasitic gaps are licensed (Bennis and Hoekstra 1984), see Zwart (1993, p. 309f).

and the verb remains inside the VP, the verb assigns Case to the trace of the object, which then counts as a variable. However, since the object movement is A-movement, this variable is not A'-bound (as is required), and the derivation yields an ungrammatical result. Verb movement salvages the derivation, on the assumption that the trace of the verb may remain invisible (i.e., syntactically inactive), hence does not assign Case to the trace of the shifted object.

However, many of the assumptions deriving the original version of Holmberg's Generalization are no longer generally held. In particular, the idea that Case is assigned external to the VP, and that Object Shift is movement to a Case licensing position, makes it impossible to reduce Holmberg's Generalization to the requirement that a variable must be A'-bound. Nevertheless, Holmberg's Generalization is still generally considered to be valid (Chomsky 1993, Deprez 1994, Ferguson and Groat 1994, Vikner 1994).

Chomsky (1993:18) proposes a stricter formulation of Holmberg's Generalization, which can be derived from locality conditions on movement:

- (1') Holmberg's Generalization (strict version)
 Object shift of an element α from the complement position of a verb β to the specifier position of γ , the AgrOP associated with β , is possible only if β moves to the head of γ

On this formulation, Holmberg's Generalization can be derived from the requirement that steps in a derivation be as short as possible (minimality), one of the requirements of economy of derivation in Chomsky (1993). The shortest step for an object on its way out of the VP would be to move to the specifier position of VP. But this is impossible, since the specifier position of VP is assumed to be the theta-position of the subject. Therefore, movement of the object to its Case-position, the specifier of AgrOP, would never be possible, unless, somehow, the specifier position of VP and the specifier position of AgrOP were to become equidistant from the base position of the object. Chomsky proposes that verb movement to AgrO has this effect of making the two specifier positions involved equidistant from the base position of the object. As a result, movement of the object across the specifier position of VP to the specifier position of AgrOP counts as the shortest possible step, and is allowed by economy of derivation.

It is this stricter version of Holmberg's Generalization that I will address in this paper. I will question both the empirical basis and the conceptual basis of Holmberg's Generalization as formulated in (1'). In the empirical part (section 2), I will consider a group of closely related languages, the North Germanic (Icelandic, Faroese, Norwegian, Danish, Swedish) and Continental West Germanic (Dutch, Frisian, German) languages. I will argue that the Continental West Germanic languages contradict Holmberg's Generalization, and that of the North Germanic languages only Icelandic is relevant. I will then proceed to argue that even in the case of Icelandic, there is room to doubt the validity of Holmberg's Generalization. In the conceptual part (section 3), I will discuss the attractiveness of the shortest steps requirement of economy of derivation, and I will consider the question of whether Holmberg's Generalization maintains its intuitive plausibility, once the copy theory of movement of Chomsky (1993, section 5) is adopted (cf. Solà 1994 and Groat and O'Neil 1994).

This article must remain inconclusive, since it is impossible to disprove Holmberg's Generalization entirely. Its purpose is to reassess the empirical and conceptual motivation of Holmberg's Generalization, and to remove the impression that it is an undisputed fact of language.

2. Empirical Questions

2.1 Object Shift

In this section, Object Shift phenomena will be illustrated in three groups of Germanic languages:

1. Continental West Germanic (Dutch, Frisian, German): henceforth CWG
2. Mainland Scandinavian (Danish, Norwegian, Swedish): henceforth MSC
3. Insular Scandinavian (Faroese, Icelandic): henceforth ISC

In embedded clauses, the CWG languages show an SOV pattern, and the MSC and ISC languages show an SVO pattern. In main clauses, the finite verb is in the second constituent position in the languages of all three groups. The languages in the ISC group show the 'verb second' pattern in embedded clauses also. In the CWG and MSC languages, the finite verb occupies a more rightward position in embedded clauses than in main clauses.

Nonadjacency of the verb and the direct object is widely attested in all three groups of languages:

(2) CWG: Dutch

- a. Jan wast vandaag zijn auto niet
 John washes today his car not
- b. ..dat Jan vandaag zijn auto niet wast
 that John today his car not washes

(3) MSC: Swedish

- a. Johan köpte inte boken
 John bought not the book
- b. ..att Johan inte köpte boken
 that John not bought the book

(4) ISC: Icelandic³

- a. Jón keypti ekki bókina
 John bought not the book
- b. ..að Jón keypti ekki bókina
 that John bought not the book

³The ISC caption in the text is misleading, since Faroese patterns with the MSC languages with respect to object shift (Vikner 1994).

But since the verb is in a derived position in verb second constructions (Koster 1975, Den Besten 1977), the non-adjacency of the direct object and the verb in the a-sentences in (2)-(4) is irrelevant for detecting Object Shift. The same goes for the b-sentence in (4), assuming embedded verb second to be maximally similar to main clause verb second.

Of the b-sentences in (2)-(4), only the CWG case in (2b) presents an undisputed case of Object Shift. Assuming the verb in (2b) to be in its base position (Koster 1975, Den Besten 1977), we must conclude that the direct object *zijn auto*, originally a sister of the verb, has shifted to the left. The adjacency of the verb and the direct object in (3b) suggests that this object shift is absent in embedded clauses in the MSC languages.

If we assume that the position of direct objects does not vary between main clauses and embedded clauses, we must conclude that also in (2a), but not in (3a), the direct object has shifted to the left.

This leads us to conclude to the following universal Germanic structure:⁴

(5)	AgrSP	AgrSP	AgrOP	AgrOP	?	VP	VP	XP	
	spec	AgrS	spec	AgrO		spec	V		
	subject					adverb			<u>invariant</u>
									<u>embedded:</u>
			object _i			verb	t _i		CWG
						verb	object		MSC
		verb					object		ISC
									<u>main:</u>
		verb	object _i				t _i		CWG
		verb					object		MSC
		verb					object		ISC

The picture in (5) may have to be modified in two respects (at least).

First, in MSC languages the pronominal objects do shift to the left:

(6) MSC: Swedish

- | | | | | | |
|----|-------|--------|------|--------|------------|
| a. | Johan | köpte | den | inte | |
| | John | bought | it | not | (cf. (3a)) |
| b. | ..att | Johan | inte | köpte | den |
| | that | John | not | bought | it |

⁴The charts in the text assume a universal structure for all Germanic languages, in which specifiers are to the left of heads, and heads to the left of complements (cf. Kayne 1993, Zwart 1992). Remaining functional projections have been left out for reasons of space. The analysis also does not do justice to much recent research involving the role of TP (e.g. Jonas 1992).

The difference between (3a) and (6a) can be explained away if *den* is a clitic, enclitic to the verb (Holmberg 1986:234). Indeed, if *den* is stressed, it appears in the same position as the full noun phrase *boken*:

(7) MSC: Swedish

Johan	köpte	inte	DEN
John	bought	not	that one

Holmberg (1986) refers to the process of pronoun movement in (6) as 'Object Shift'. I will use pronoun shift as a neutral term for this phenomenon, and clitic placement as the more technical term.

Second, in Icelandic the direct object may also appear in shifted position:⁵

(8) Icelandic

a.	Jón	keypti	bókina	ekki	(cf. (4a))	
	John	bought	the book	not		
b.	..að	Jón	keypti	bókina	ekki	(cf. (4b))
	that	John	bought	the book	not	

The existence of both (4) and (8) can be accounted for in two ways. First, we may assume that Object Shift in Icelandic is optional. That is, the direct object may be spelled out either in the complement position (the theta-position) or in the Spec,AgrOP (the Case position). Secondly, we may assume that the position of *ekki* (and other adverbs) is not fixed.

There are two arguments to assume that the latter account is correct. First, the position of adverbs in the CWG languages is not fixed either:

(9) CWG: Dutch

a.	Jan	wast	zijn auto	vandaag	niet	(cf. (2a))	
	John	washes	his car	today	not		
b.	..dat	Jan	zijn auto	vandaag	niet	wast	(cf. (2b))
	that	John	his car	today	not	washes	

As (2) and (9) show, the adverb *vandaag* 'today' may appear both to the left and to the right of the direct object. Since the direct object appears to the left of *niet* in both cases, object shift must take place in both (2) and (9). Therefore, the pattern in (2)/(9) cannot be described as optional object shift, but must be described in terms of variable adverb positioning.

Secondly, as the question mark in (5) betrays, not much is known about the canonical position of adverbs. In Chomsky (1965), Williams (1974), and Jackendoff (1977), generalizations are made about the positions of various types of adverbs. On the basis of those generalizations, it is generally assumed that sentence adverbs mark the

⁵Apparently this is not possible in Faroese (Vikner 1994:502, based on observations by Michael Barnes).

VP-boundary. However, this assumption dates from before the split-INFL hypothesis underlying the chart in (5) (cf. Pollock 1989, Chomsky 1991). Assuming that sentence adverbs may be adjoined to both VP and AgrOP in (5) does not contradict the earlier generalizations about the position of sentence adverbs.

I will therefore assume that ekki in Icelandic may be adjoined to VP or AgrOP. This makes it possible to modify (5) as follows:⁶

(5')	AgrSP	AgrSP	?	AgrOP	AgrOP	?	VP	VP	XP	
	spec	AgrS		spec	AgrO		spec	V		
	subject		(adverb)				(adverb)			<u>invariant</u>
										<u>embedded:</u>
				object _{t_i}			verb	t _i		CWG
							verb	object		MSC
	verb			object _{t_i}				t _i		Icel.
										<u>main:</u>
		verb		object _{t_i}				t _i		CWG
		verb						object		MSC
		verb		object _{t_i}				t _i		Icel.

The MSC languages are the only languages under consideration here that do not show any variation in the adverb-object order:

- (10) MSC: Swedish
- a. *Johan köpte boken inte (cf. (3a))
 John bought the book not
- b. *..att Johan köpte boken inte (cf. (3b))
 that John bought the book not

This follows from the lay out in (5'): the adverbs are always to the left of the direct object, regardless which of the two positions indicated the adverbs occupy. This explanation requires that we assume that adverbs cannot adjoin to the right of AgrOP and VP. This suggests either that adjunction is always to the left, as Kayne (1993) proposes, or that adverbs occupy a specifier positions of some sort (cf. Rijkhoek 1994).

Ignoring the effects of definiteness and intonation (for which see Zwart 1994b), this suffices to illustrate the Object Shift phenomena in the languages under consideration here. Let us now turn to the empirical evidence for Holmberg's Generalization that these languages present.

⁶ Recall that Faroese patterns with the MSC languages with respect to Object Shift.

2.2 Continental West Germanic

If the analysis in (5') is correct, the Continental West Germanic languages show Object Shift in both main and embedded clauses, but verb movement in main clauses only. This contradicts both the original and the strict formulation of Holmberg's Generalization.

The original formulation can be maintained if we assume that even in embedded clauses, the verb undergoes a short verb movement to the left, out of the VP. The strict formulation, however, is incompatible with the non-adjacency of the verb and the direct object in (2b). Assuming the direct object to have shifted to the specifier position of AgrOP, the placement of the adverb *niet* leads us to conclude that the verb has not moved to AgrO.

There are two ways to reconcile the Object Shift facts of CWG with the strict formulation of Holmberg's Generalization. One way would be to assume that the verb in (2b) does in fact occupy the AgrO-position, and that the direct object has moved out of AgrOP by an additional movement operation. This additional movement, however, would have to be argued for independently. Alternatively, one could assume that the functional heads, among which AgrO, are situated to the right of their complement in the CWG languages. This assumption, however, is not supported by any empirical evidence, as demonstrated in Zwart (1993).

We are led to conclude, then, that Holmberg's Generalization (1') does not cover Object Shift in the CWG languages.

2.3 Mainland Scandinavian

In the Mainland Scandinavian languages, full noun phrase objects never shift (see (5')). The pattern in (3), therefore, does not provide empirical evidence for or against Holmberg's Generalization.

As (6) and (7) show, weak object pronouns do show obligatory Object Shift. The sentences in (11) serve to demonstrate that this pronoun shift (indicated by the position of the pronoun with respect to the adverb *inte*) is not allowed if the verb does not move:

- (11) MSC: Swedish
- a. *..att Johan den inte köpte (cf. (6b))
 that John it not bought
- b. *Johan har den inte köpt
 John has it not bought
 "John has not bought it."
- c. Johan har inte köpt den
 John has not bought it

In (11a), the verb does not move, a standard property of MSC embedded clauses (cf. (5')). In (11b), an auxiliary-participle construction, the participle is assumed to occupy a VP-internal position. In both cases, the pronoun is not allowed to undergo movement out of the VP. These observations seem to support Holmberg's Generalization.

It is highly questionable, however, whether pronoun shift and object shift constitute a single phenomenon. Holmberg (1986:232) argues that the weak pronouns in MSC that do undergo movement are heads rather than phrases. Given our current understanding of the phenomena, the distribution of heads and phrases are regulated in entirely different ways (see a.o. Kayne 1975, Baltin 1982). Full noun phrases move to the specifier position of an agreement phrase at some point of the derivation, a movement that is driven by feature checking requirements (cf. Chomsky 1993). Heads adjoin to other heads, in a way that is not at all well understood.

The facts from MSC support this distinction between object shift and clitic placement. If anything, then, the sentences in (11) lead us to conclude that clitic placement in CWG is subject to something like Holmberg's Generalization. They do not, however, have any bearing on the issue that interests us here: the relation between object shift and verb movement.

Hence we are led to conclude that the MSC languages provide no evidence in support of Holmberg's Generalization (1').

2.3 Icelandic

Since Faroese patterns with the MSC languages regarding object shift (Vikner 1994), the only language in which evidence in support of Holmberg's Generalization can be found must be Icelandic.

Notice that if the facts from Icelandic could be found to support the correlation of verb movement and Object Shift, it would be premature to call this correlation a generalization. After all, a correlation that is found in only one language might well be accidental.

I believe, however, that the facts from Icelandic do not provide unequivocal support for even a hypothetical correlation between verb movement and Object Shift. The relevant facts are comparable to (11b-c), except that the Icelandic examples feature full noun phrases rather than clitics:

- (12) Icelandic
- | | | | | | | |
|----|--------|------|-------|----------|--------|----------|
| a. | ..að | Jón | hefur | ekki | keypt | bókina |
| | that | John | has | not | bought | the book |
| b. | * ..að | Jón | hefur | bókina | ekki | keypt |
| | that | John | has | the book | not | bought |

The sentences in (12) differ from the sentences in (8) in that the former contain two verbs.⁷ The functional projection in which the object is licensed (AgrOP) is associated with a verb, in the sense that it is a projection of features of the verb. Since the embedded verb *keypt* has an object (*bókina*), there must be an AgrOP associated with *keypt*. The

⁷It is assumed here that the auxiliary verb is a lexical verb, i.e. not a functional element generated in a head position in the functional domain.

argument that gives rise to Holmberg's Generalization assumes that this AgrOP is part of the functional domain of the matrix clause. This can be concluded from the fact that in the crucial sentence, (12b), *bókina* appears to the left of the adverb *ekki*, which modifies the matrix verb *hefur*. (12b) being ungrammatical, it is concluded that movement of the object of a verb (keypt) to AgrOP is not permitted if the verb does not also move.

It is, however, quite possible that the AgrOP associated with the embedded verb is part of the embedded clause structure, and hence appears to the right of the adverb *ekki*. This presupposes a structure as in (13):

(13) Biclausal structure for past participle constructions

[_{AgrSP} subject [_{TP} *ekki* [_{VP} verb¹ [_{XP} [_{AgrOP} object [_{VP} verb²]]]]]]]

In (13), the noun phrases are in their licensing positions, and the verbs are in their base positions, with verb¹ referring to the auxiliary and verb² referring to the past participle. XP is the unknown category label of the embedded clause. Assuming (13), we do not expect (12b) to occur, independently of the relation between Object Shift and verb movement.

A structure like the one in (13) may also have to be assumed for Verb Projection Raising constructions in some CWG languages and dialects (Kaan 1992, Zwart 1993, Den Dikken 1994). In these constructions, two verbs appear to form a sentence-final cluster, with the embedding verb preceding the embedded verb. However, various constituents may intervene between the two verbs, among which are fully inflected object noun phrases:

(14) CWG: West Flemish

- | | | | | | |
|----|-------------|-------------|-------------------|-------------------|-------------|
| a. | <i>..da</i> | <i>Jan</i> | <i>geen vlees</i> | <i>wilt</i> | <i>eten</i> |
| | <i>that</i> | <i>John</i> | <i>no meat</i> | <i>wants</i> | <i>eat</i> |
| b. | <i>..da</i> | <i>Jan</i> | <i>wilt</i> | <i>geen vlees</i> | <i>eten</i> |
| | <i>that</i> | <i>John</i> | <i>wants</i> | <i>no meat</i> | <i>eat</i> |
- "..that John doesn't want to eat meat."

The 'Verb Projection Raising' illustrated in (14b) is a common feature of Flemish and Swiss German dialects. Since these dialects show the CWG object shift phenomenon (cf. (5)), the optimal assumption is that the direct object is in the specifier position of AgrOP in all cases. (14b) then shows that the AgrOP associated with the embedded verb can be situated between the matrix VP and the embedded VP.

This shows that an analysis of (12) along the lines of (13) is possible. There is also evidence that shows that some Object Shift is in fact taking place in (12b). Recall that *ekki* is a matrix clause adverb, so that (12b) merely shows that Object Shift into the matrix clause does not take place in Icelandic. If we now supplement the example in (12b) with an adverb that may belong to the embedded clause, we can test whether there is Object Shift in the embedded part of the structure or not. Such an example is provided in (15) (from Collins and Thráinsson 1993:144):

- (15) Jón hefur lesið bækurnar oft
 John has read the books often

A possible explanation for (15) could be that the adverb *oft* is adjoined to the right of the embedded VP. However, this would predict that (15) can also have a reading in which the adverb modifies the matrix verb. But matrix adverbs are excluded in the position of *oft* in (15), as Thráinsson (1993:199) shows:

- (16)
 a. * Jón hefur lesið bækurnar sennilega
 John has read the books probably
 b. Jón hefur sennilega lesið bækurnar
 John has probably read the books

The contrast between (15) and (16a) suggests that *oft* in (15) must belong to the embedded part of the past participle construction. This can only be enforced if we adopt Kayne's (1993) conjecture that adjunction to the right is excluded.

If the adverb in (15) is not adjoined to the right somewhere, the position of the object noun phrase shows that there is Object Shift inside the embedded part of the structure in (12).

This leads to the conclusion that the past participle *keypt* in Icelandic is in a derived position: it must have moved to a functional head position to the left of the embedded AgrOP (cf. (13)).

Movement of non-finite verbs in Icelandic has been proposed earlier by Holmberg (1986:218) for infinitivals in the complement of control verbs:

- (17)
 a. Jón lofaði að lesa ekki bókina
 John promised to read not the book
 b. Jón lofaði að lesa bókina ekki
 John promised to read the book not

In (17), the variation of the position of the negative adverb *ekki* again follows on the assumption that there are (at least) two adverb positions in the Germanic languages (cf. (5')). What is relevant here is that the infinitival verb *lesa* has undergone verb movement to the left.

Accepting Holmberg's argument that control infinitivals in Icelandic undergo head movement as well, we can make the generalization that all verbs in Icelandic move to a position in the functional domain.⁸

⁸Thráinsson (1993) argues that infinitives in the complement of modal verb do not undergo verb movement, in contradistinction with infinitives in the complement of control verbs. The argument is based on the observation that no adverb may intervene between the infinitive and the object in the complement of modal verbs. The conclusion is problematic, however, since adverbs are also not allowed to precede the infinitive in the complement of modal verbs, which suggests verb movement out of the VP again (Thráinsson 1993:200). I will

Now if Icelandic has generalized verb movement, we cannot construe a minimal pair of Icelandic sentences that shows that Holmberg's Generalization is correct. Icelandic has generalized verb movement and generalized object shift, but there is no evidence that the two phenomena are related.

2.4 Conclusion

Summarizing, the empirical evidence in support of Holmberg's Generalization is not overwhelming. The MSC languages and Faroese are irrelevant, since these languages do not show (full noun phrase) Object Shift at all. Object Shift in the CWG languages is independent of verb movement to AgrO, contradicting in particular the strict formulation of Holmberg's Generalization in (1'). Finally, the evidence from Icelandic is not decisive, since a minimal pair of sentences with and without verb movement and Object Shift cannot be established beyond a reasonable doubt.

From an empirical point of view, then, Holmberg's Generalization must be considered no more than a hypothesis, and, in view of the properties of the languages discussed here, a problematic one with limited scope.

3. Conceptual Questions

Within the minimalist framework of Chomsky (1993), Holmberg's Generalization (1') appears to enjoy intuitive plausibility because of its intimate connection with locality conditions on movement, ultimately deriving from economy of derivation. I believe, however, that Holmberg's Generalization raises a number of conceptual questions, three of which I will discuss in the remainder of this paper.

3.1 Locality

In the minimalist version (1'), Holmberg's Generalization reduces to economy of derivation, in particular the requirement that steps be as short as possible. An object noun phrase, moving to the specifier position of AgrOP, is not allowed to skip the specifier position of VP, an intervening potential landing site. Verb movement to AgrO has the effect that Spec,AgrOP and Spec,VP become equidistant from the complement position of VP, thus removing the minimality problem.⁹

I have argued elsewhere that the requirement that steps be as short as possible is a redundant feature of the minimalist approach (Zwart 1994a). Standard minimality

leave the distribution of adverbs in infinitival complements in Icelandic as a subject for further study.

⁹ Technically, V-to-AgrO movement yields a chain (V,t). The minimal domain of this chain is defined in such a way that it contains both Spec,AgrOP and Spec,VP. Movement of the object across Spec,VP is now allowed on the assumption that two positions in the same minimal domain are equidistant from a third position (Chomsky 1993:17).

effects (head movement, superraising, wh-island phenomena) can all be explained independently of economy of derivation. In addition, the shortest steps requirement is suspicious in that it refers to the process by which an output is generated, rather than to the result of the derivation itself. Ideally, derivations are only subject to ‘bare output conditions’ (cf. Chomsky 1994).¹⁰

3.2 Convergence

The only way to prove that Holmberg’s Generalization is correct would be to find a language in which (overt) verb movement does not always occur, and in which (overt) Object Shift correlates with verb movement. The Germanic languages present a number of cases of languages in which overt verb movement does not always occur. However, it is not clear whether any languages exist in which Object Shift is not generalized.

In the minimalist approach of Chomsky (1993), Object Shift is triggered by the need to check a strong N-feature of AgrO. Failure to check a strong N-feature in overt syntax always leads to a derivation that does not converge. Conversely, Object Shift in the absence of a strong N-feature of AgrO is not allowed (by the principle ‘Procrastinate’, Chomsky 1993:30).

A language which instantiates Holmberg’s Generalization, then, must have a strong N-feature of AgrO, otherwise Object Shift would not be possible at all. However, the dependence of Object Shift on verb movement suggests that this strong N-feature may remain unchecked in those cases in which the verb does not move. This, however, would lead to a non-convergent derivation. Therefore, the relevant language must always show verb movement. But if so, we cannot prove that the correlation of verb movement and Object Shift is not accidental.

3.3 The Copy Theory of Movement

Chomsky (1993, section 5) argues that movement does not leave a trace, but a copy of the moved element. Groat and O’Neil (1994) and Solà (1994) employ the copy device in arguing for an approach to crosslinguistic variation in which not the timing of the movements, but the choice of which copy to spell out yields the various word orders. This leads to a view of the grammar in which movements take place before Spell Out in all languages in identical ways, with parameters located in the functional domain determining whether a copy in the functional domain will be spelled out or not.

Adopting this approach, Object Shift languages just have the property of spelling out the copy in the Case-position (Spec,AgrOP), whereas languages like the MSC languages lack this property, and therefore spell out the copy in the theta-position. Assuming this,

¹⁰In addition, the equidistance principle meets with a number of technical problems. For example, it is unable to remove the minimality problem in double object constructions, since only two positions can be equidistant at the time (Gereon Müller and Liliane Haegeman, p.c., cf. Collins and Thráinsson 1993).

Holmberg's Generalization states that spelling out the higher copy is only allowed if the verb moves to AgrO. More precisely, it states that the N-feature of AgrO is strong if and only if the V-feature of AgrO is strong. While this may be an interesting result if it were to be found true in certain languages, Holmberg's Generalization says that this is a necessary property of universal grammar. This, however, lacks all intuitive plausibility, as something similar is apparently not true of the features of AgrS.

4. Conclusion

There is at present no empirical evidence, or conceptual support, in favor of Holmberg's Generalization (1'). At best, then, it must be regarded as a description of the potentially accidental interaction of verb movement and Object Shift in a single language, Icelandic.

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Groningen, November 3, 1994