

The Interpretation of Object Shift and Optimality Theory

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Diesing (1996, 1997) observes that the interpretations of object-shifted objects and non-object-shifted objects in Icelandic object shift constructions differ along lines very similar to the interpretation differences between scrambled and non-scrambled objects in, e.g., German. The present paper argues that Optimality Theory has certain advantages over, e.g., Minimalism in accounting for such data. This is because the interpretational differences only hold of object shift constructions: In a construction in which object shift is possible, a non-object-shifted object only has one interpretation (parallel to a German non-scrambled object), but in a construction in which object shift is not possible, a non-object-shifted object is ambiguous (interpretable either like a German scrambled object or like a German non-scrambled object). In other words, what matters is not just whether the object has moved, but also whether it “could have moved” (i.e., it depends on how well those competing candidates are doing which contain object-shifted objects). In Optimality Theory, such a situation can be accounted for in terms of violable constraints, and the difference between object shift and scrambling can be derived from different rankings of the same constraints.

1 Introduction

Object shift is a process found in the Scandinavian languages (Holmberg 1986, 1991, 1997, 1999, Vikner 1989, 1994 and the other papers in Corver & van Riemsdijk 1994, Josefsson 1992, 1993, Holmberg & Platzack 1995, and references in all of these) which moves the object out of its base position inside the VP to a position to the left of an element (e.g., negation or adverbial) which is not part of the VP:

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- (1) *Danish*
- a. *Hvorfor læste Peter aldrig *den* ?
 - b. Hvorfor læste Peter *den* aldrig *t* ?
why read Peter (it) never (it)
- (2) *Icelandic*
- a. *Af hverju las Pètur aldrei *hana* ?
 - b. Af hverju las Pètur *hana* aldrei *t* ?
why read Pètur (it) never (it)

In Icelandic, all DPs undergo object shift, whereas in the other Scandinavian languages, only pronouns do:

- (3) *Danish*
- a. Hvorfor læste Peter aldrig *den her bog* ?
 - b. *Hvorfor læste Peter *den her bog* aldrig *t* ?
why read Peter (this book) never (this book)
- (4) *Icelandic*
- a. Af hverju las Pètur aldrei *þessa bók* ?
 - b. Af hverju las Pètur *þessa bók* aldrei *t* ?
why read Pètur (this book) never (this book)

The contrast between (1)/(2) and (3)/(4) shows that object shift of pronouns is obligatory in both Danish and Icelandic, whereas object shift of full DPs is only optional in Icelandic and downright impossible in Danish. Object shift is only possible if the verb leaves VP, which a finite main verb does in main clauses (which are V2, see (1)-(4)), but which a non-finite main verb never does:

- (5) *Danish*
- a. Hvorfor har Peter aldrig læst *den* ?
 - b. *Hvorfor har Peter *den* aldrig læst *t* ?
why has Peter (it) never read (it)
- (6) *Icelandic*
- a. Af hverju hefur Pètur aldrei lesið *þessa bók* ?
 - b. *Af hverju hefur Pètur *þessa bók* aldrei lesið *t* ?
why has Pètur (this book) never read (this book)

Scrambling, an object movement very similar to object shift found in the continental West Germanic languages (cf. the papers in Grewendorf & Sternefeld 1990, Webelhuth 1992, Haider 1993, the papers in Corver & van Riemsdijk

1994, Müller 1995, Haider & Rosengren 1998, and references in all of these), is not dependent on the position of the verb in this way:

- (7) *German*
 a. ... ob Peter nie dieses Buch liest ?
 b. ... ob Peter dieses Buch nie t liest ?
 if Peter (this book) never (this book) reads
- (8) *German*
 a. Warum liest Peter nie dieses Buch ?
 b. Warum liest Peter dieses Buch nie t ?
 why reads Peter (this book) never (this book)
- (9) *German*
 a. Warum hat Peter nie dieses Buch gelesen ?
 b. Warum hat Peter dieses Buch nie t gelesen ?
 why has Peter (this book) never (this book) read

Scrambling, too, becomes obligatory rather than optional when pronouns are considered:

- (10) *German*
 a. *... ob Peter nie es liest ?
 b. ... ob Peter es nie t liest ?
 if Peter (it) never (it) reads
- (11) *German*
 a. *Warum liest Peter nie es ?
 b. Warum liest Peter es nie t ?
 why reads Peter (it) never (it)
- (12) *German*
 a. *Warum hat Peter nie es gelesen ?
 b. Warum hat Peter es nie t gelesen ?
 why has Peter (it) never (it) read

When pronouns are modified (e.g., *we two*, *you and I*, *he with the red hair*), they behave like full DPs (cf. (3)-(4), (6), and (7)-(9)), and not like unmodified pronouns (cf. (1)-(2), (5), and (10)-(12)), i.e. they do not undergo object shift/scrambling in Danish and only optionally in Icelandic and German.

2 The Interpretation of Object Shift (and Scrambling)

From the above, it might appear that (Icelandic) object shift and (German) scrambling are completely optional, at least as far as non-pronouns are concerned. This is not the case, however. As observed in Diesing & Jelinek (1995:150) (from now on: D&J) and in Diesing (1996:79, 1997:418), the interpretation of object-shifted objects in Icelandic differs from that of non-object-shifted objects, and this difference is parallel to the difference in interpretation between scrambled and non-scrambled objects in, e.g., German and Yiddish (cf. Diesing 1992:129).

- (13) *German*
 ... weil ich ...
 ... because I ...
- a. ... selten *die kleinste Katze* streichle
 b. ... *die kleinste Katze* selten streichle
 (the smallest cat) seldom (the smallest cat) pet
 (D&J: 130 (9-a), Diesing 1996:73 (17), 1997:379, (14-a))

D&J/Diesing observe that the interpretation of (13-a) is that whichever group of cats I meet, I rarely pet the one which is the smallest in that particular group. The interpretation of (13-b) is that there is a cat which is smaller than all others, and that cat, I rarely pet. In other words, the relative scope of *seldom* and *the smallest cat* correspond to their surface order; the one furthest left has wider scope.

- (14) *Icelandic*
 a. Hann les sjaldan *lengstu bókina*
 b. Hann les *lengstu bókina* sjaldan
 He reads (longest book-the) seldom (longest book-the)
 (Diesing 1996:79 (32), 1997:418 (82))

According to Diesing (1996, 1997), the interpretation of (14-a) is that whichever group of books he is put in front of, he rarely reads the one which is the longest in that particular group. The interpretation of (14-b) is that there is a book which is longer than all others, and that book, he rarely reads. Thus also here, the relative scope of *seldom* and *the longest book* correspond to their surface order; the one furthest left has wider scope. Diesing's claim is that these interpretation differences can be derived from her Mapping Hypothesis (1992:10, 1997:373, see also D&J: 124), i.e., that the differences

follow from whether the object is inside the VP and thereby part of the “nuclear scope (the domain of existential closure)” or outside VP but inside IP and thereby part of the “restriction (of an operator)”. Diesing’s observations are supported by the following more extensive set of data:¹

(15) *German*

- a. In den Prüfungen beantwortet er *selten die schwierigste Frage*
 in the exams answers he rarely the most-difficult question
- b. In den Prüfungen beantwortet er *die schwierigste Frage selten*
 in the exams answers he the most-difficult question rarely

(16) *German*

- a. In den Prüfungen hat er *selten die schwierigste Frage*
 in the exams has he rarely the most-difficult question
 beantwortet
 answered
- b. In den Prüfungen hat er *die schwierigste Frage selten*
 in the exams has he the most-difficult question rarely
 beantwortet
 answered

The interpretation of the German (15-a)/(16-a) is that regardless of which exam he is taking, he rarely answers whichever question happens to be the most difficult one in that particular exam. The interpretation of the German (15-b)/(16-b), on the other hand, is that there is one particular question which is more difficult than all others (e.g., “list all the irregular verbs in Icelandic”) and which appears in most or all exams, and when he encounters this question, he rarely answers it. The exact same differences in interpretation hold of the Icelandic (17-a,b):

(17) *Icelandic*

- a. Í prófunum svarar hann *sjaldan erfiðustu spurningunni*
 in exams-the answers he rarely most-difficult question-the
- b. Í prófunum svarar hann *erfiðustu spurningunni sjaldan*
 in exams-the answers he most-difficult question-the rarely

There is one case which is not discussed by Diesing, namely, the context in which object shift is not possible in Icelandic. In this context, only one word order is possible, (18-a), and this word order has not just one of the two interpretations discussed above, it actually has both interpretations:

(18) *Icelandic*

- a. Í prófunum hefur hann *sjaldan* svarað *erfiðustu*
 in exams-the has he rarely answered most-difficult
spurningunni
 question-the
- b. *Í prófunum hefur hann *sjaldan* *erfiðustu* *spurningunni*
 in exams-the has he rarely most-difficult question-the
 svarað
 answered
- c. *Í prófunum hefur hann *erfiðustu* *spurningunni* *sjaldan*
 in exams-the has he most-difficult question-the rarely
 svarað
 answered

3 Optimality Theory and the Interpretation of Object Shift (and Scrambling)

3.1 Optimality Theory

In optimality theory (cf., e.g., Prince & Smolensky 1993, Grimshaw 1993, 1997, Burzio 1995, Müller 1997, Archangeli & Langendoen 1997, Barbosa et al. 1998), constraints are taken to be relative (“soft”) rather than absolute (“hard”):

- (19) a. *Absolute*: If a sentence violates constraint C, it is ungrammatical.
 b. *Relative*: That a sentence violates constraint C may be bad, but not as bad as if it had violated constraint B, which again is less bad than if it would violate constraint A.

In other words: Although there is a price to be paid every time a constraint is violated, the price is not always the grammaticality of the sentence in question. The following four ideas are central to optimality theory (Grimshaw 1997:373):

- (20) a. Constraints may be violated.
 b. Constraints are ordered in a hierarchy (a grammar is a particular ordering of constraints).
 c. Constraints are universal, i.e., in all languages, the same constraints

- apply, except that they are ordered differently from language to language (language variation is variation in the constraint hierarchy).
- d. Only the optimal version of a sentence is grammatical; all non-optimal versions are ungrammatical (the optimal version/candidate of two is the one with the least violation of the highest constraint on which the two versions/candidates differ).

Let us now return to the data discussed in sections 1 and 2. These data showed that the interpretation of an object in Icelandic depends on whether or not it has undergone object shift, in a completely parallel way to how the interpretation of an object in German depends on whether or not it has undergone scrambling. It is crucial, however, that whereas scrambling is never impossible in German, there are many contexts in Icelandic which do not allow object shift. In those Icelandic sentences in which object shift is excluded, the non-object-shifted object has *two* interpretations: It may be interpreted either as if it preceded the adverbial or as if it followed it, and not just the latter.

This ambiguity is the reason why an Optimality Theory analysis is particularly suitable here:

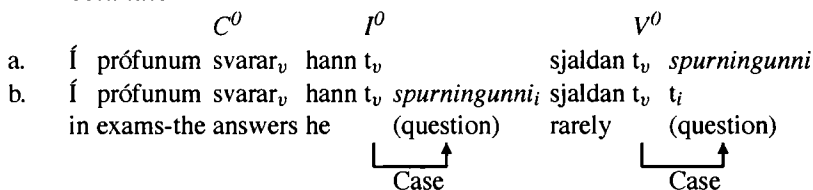
On the one hand, the generalisation seems to hold of most of the data that the scope of objects and adverbials is read off their surface position (Diesing's "Scoping Condition", 1996:70, 1997:375-76, see also D&J: 127), hence the differences seen in, e.g., (17), between the non-object-shifted object in (17-a), "he rarely answers whichever is the most difficult question in any given exam", and the object-shifted object in (17-b), "there is a question more difficult than all others, and when he encounters this question, he rarely answers it".

On the other hand, this generalisation clearly does not hold in constructions which disallow object shift, like (18). The Scoping Condition would predict that also in (18), a non-object-shifted object would only have one interpretation, i.e., that (18-a) could only be interpreted like (17-a) and not like (17-b) (and also that the interpretation of (17-b) would only be available in sentences where object shift was possible). This is not correct; (18-a) is ambiguous between the two interpretations. In other words, what matters is not just whether the object has undergone object shift or not, but also whether it "could have moved if it had wanted to." This can be accounted for in Optimality Theory terms by saying that in Icelandic, the LICENSING constraint is ranked higher than the SCOPING constraint. The idea is that the object in an object shift construction is licensed both in its base position and in the object-shifted position, whereas in a non-object-shift construction, the object is only licensed in its base position.

Diesing (1997:414) suggests that this licensing could be constrained by the Shortest Move constraint under the assumption of Equidistance of Chomsky (1993:17-19 = 1995:184-186) (see also Bobaljik & Jonas 1996 and Collins & Práinsson 1996).

Object licensing could however also be a question of Case assignment along the lines of Holmberg (1986:177) and Vikner (1994:493) (though see Holmberg 1997:215, 1999:25-27, where it is a question of licensing the feature [-focus] by the closest c-commanding X^0), i.e., Case may be assigned either by a verb or a verb trace in V^0 or by a verb or a verb trace in I^0 , where the former is relevant for objects in situ inside VP and the latter for objects that have undergone object shift. (17-a,b) would thus be analysed as follows:

(21) Icelandic



Constructions which disallow object shift would do so because I^0 neither contains the Case assigning verb (i.e., the main verb) nor a trace of it. In the following subsections, the optimality theory analysis of Icelandic will contain the following three constraints, given in the order of the ranking for Icelandic:

(22) a. LICENSING:

An object must be licensed by being c-commanded by its selecting verb or the trace of this verb (this subsumes Shortest Move/Equidistance/Case assignment because c-command is the lowest common denominator of the various licensing mechanisms discussed).

b. SCOPING:

An element has the (surface) position in the clause that corresponds to its relative scope (based on Diesing 1992:10-12, 1996:70, 1997:375, D&J: 126; cf. the discussion above, and see also Bobaljik 1995:362).

c. STAY:

Movement should be avoided. This corresponds to Procrastinate (movement should not take place before LF) and/or Economy of Derivation (movement should not take place at all).

German differs from Icelandic in that SCOPING is ranked above LICENSING, not below it.

I have included the constraint STAY, which constrains all movements, in all the tableaux. Just like LICENSING more or less corresponds to Shortest Move in Minimalist terms, STAY more or less corresponds to Procrastinate (see also the discussion in the conclusion in section 4).

If STAY were to receive the highest ranking, no movement would ever take place. If STAY did not exist, we would expect not to find any “Movement as a last resort” type phenomena (cf., e.g., Chomsky 1991) at all.

3.2 Icelandic Objects with Narrow Scope

Consider the analysis of input in which the object has narrow scope relative to the adverbial (i.e., “he rarely answers whichever is the most difficult question in any given exam”). First the case in which object shift is possible:

(23)

Input: narrow scope object	LICENSING	SCOPING	STAY	
a. \mathbb{E} ... svarar hann sjaldan <i>OBJ</i>				= (17-a)
b. * ... svarar hann <i>OBJ</i> sjaldan		*!	*	= (17-b)

The computation of the optimal candidate proceeds as follows: (23-a) is better than (23-b), because (23-a) does better than (23-b) on the highest constraint on which the two differ, SCOPING, where (23-a) has no violations and (23-b) one. In other words, (23-b) loses out because of its violation of SCOPING, hence the “!” next to this violation (“!” marks the fatal violation).

Let us now turn to the case in which object shift is not possible:

(24)

Input: narrow scope object	LICENSING	SCOPING	STAY	
a. \mathbb{E} ... hann sjaldan svarað <i>OBJ</i>				= (18-a)
b. * ... hann sjaldan <i>OBJ</i> svarað	*!		*	= (18-b)
c. * ... hann <i>OBJ</i> sjaldan svarað	*!	*	*	= (18-c)

(24-a) is better than (24-b), because (24-a) does better than (24-b) on the highest constraint on which the two differ, LICENSING, where (24-a) has no violations and (24-b) one. The same goes for the comparison between (24-a) and (24-c), and therefore (24-a) is better than either (24-b) or (24-c). The result is that (23-a) and (24-a) are the optimal candidates and hence the only grammatical versions of the sentences in question. However, this result could be achieved in (almost) any theoretical framework, including ones with non-violable constraints, as there is no conflict between the constraints here; the winning candidates do not violate any constraints at all. In the derivations in

the following subsection, this is not the case: All candidates violate at least one of the constraints.

3.3 Icelandic Objects with Wide Scope

If the input is such that the object has wide scope relative to the adverbial (i.e., “there is a question more difficult than all others, and when he encounters this question, he rarely answers it”), the situation changes crucially:

(25)

Input: wide scope object	LICENSING	SCOPING	STAY
a. * ... svarar hann sjaldan <i>OBJ</i>		*!	
b. $\text{\textcircled{a}}$... svarar hann <i>OBJ</i> sjaldan			*

= (17-a)
= (17-b)

(25-b) is better than (25-a), because (25-b) does better than (25-a) on the highest constraint on which the two differ, SCOPING, where (25-b) has no violations and (25-a) one. Given that (25-b) nevertheless violates a constraint, namely STAY (= Procrastinate/Economy of Derivation), it has to be the case not only that STAY is a violable constraint (as it is also in Minimalism; cf. section 4 below), but also that STAY has lower priority than SCOPING, as can be seen here, where the choice is between having to violate either SCOPING or STAY. Let us now turn to the case in which object shift is not possible:

(26)

Input: wide scope object	LICENSING	SCOPING	STAY
a. $\text{\textcircled{a}}$... hann sjaldan svarað <i>OBJ</i>		*	
b. * ... hann sjaldan <i>OBJ</i> svarað	*!	*	*
c. * ... hann <i>OBJ</i> sjaldan svarað	*!		*

= (18-a)
= (18-b)
= (18-c)

Whereas in (25), there was a constraint conflict between SCOPING and STAY, here there is a conflict between LICENSING and SCOPING. If both were non-violable constraints, (18-a) would be impossible with the wide scope interpretation (i.e., (26) should have no good output at all), which clearly is not the case. (26-a) is better than (26-b), because (26-a) does better than (26-b) on the highest constraint on which the two differ, LICENSING, where (26-a) has no violations and (26-b) has one. The same goes for the comparison between (26-a) and (26-c), and therefore (26-a) is better than either (26-b) or (26-c). Given that (26-a) nevertheless violates a constraint, namely SCOPING, it has to be the case not only that SCOPING is a violable constraint (which is *not* the case in Diesing’s minimalist analysis; cf. section 4 below), but also that SCOPING has lower priority than LICENSING, as can be seen when the choice is between having to violate either LICENSING or SCOPING. This section thus

shows that, given the three constraints, LICENSING, SCOPING, and STAY, defined as in (22), the Icelandic ranking has to be LICENSING \gg SCOPING \gg STAY, and that at least SCOPING and STAY have to be violable.

3.4 German Objects

I want to suggest that the relevant difference between Icelandic and German, i.e., the difference between object shift and scrambling, is that where Icelandic has LICENSING ranked above SCOPING, German has SCOPING ranked above LICENSING. This could reflect either that object LICENSING is less necessary in German than in Icelandic, or that c-command is not a necessary condition on object licensing in German. Consider first the narrow scope cases in which the object has narrow scope relative to the adverbial (i.e., “he rarely answers whichever is the most difficult question in any given exam”):

(27)

Input: narrow scope object	SCOPING	LICENSING	STAY	
a. \mathbb{E} ... V er selten <i>OBJ</i> ...				= (15-a)
b. * ... V er <i>OBJ</i> selten ...	*!		*	= (15-b)

(28)

Input: narrow scope object	SCOPING	LICENSING	STAY	
a. \mathbb{E} ... er selten <i>OBJ</i> V ...				= (16-a)
b. * ... er <i>OBJ</i> selten V ...	*!	*	*	= (16-b)

This is the unproblematic case; as in the Icelandic (23-a) and (24-a), the winning candidates here, (27-a) and (28-a), violate no constraints. Consider now the wide scope cases in which the object has wide scope relative to the adverbial (i.e., “there is a question more difficult than all others, and when he encounters this question, he rarely answers it”), where the situation changes crucially:

(29)

Input: wide scope object	SCOPING	LICENSING	STAY	
a. * ... V er selten <i>OBJ</i> ...	*!			= (15-a)
b. \mathbb{E} ... V er <i>OBJ</i> selten ...			*	= (15-b)

Even though (29-b) violates STAY, because the object has undergone movement, it is grammatical, because its competitor, (29-a), violates the higher ranked SCOPING.

(30)

Input: wide scope object	SCOPING	LICENSING	STAY	
a. * ... er selten <i>OBJ</i> V ...	*!			= (16-a)
b. \mathbb{E} ... er <i>OBJ</i> selten V ...		*	*	= (16-b)

Even though (30-b) violates LICENSING, because the object is not c-commanded by the main verb, it is still grammatical, because its competitor, (30-a), violates the higher ranked SCOPING. This section thus shows that the three constraints, LICENSING, SCOPING, and STAY, defined as in (22), have to be ranked as follows in German: SCOPING \gg LICENSING \gg STAY, and that at least LICENSING and STAY have to be violable. The result of the reranking of SCOPING and LICENSING (compared to Icelandic) is thus that in cases of scrambling in German, SCOPING determines everything regardless of whether there is licensing via c-command. In other words, there is a one-to-one correspondence between word order and interpretation in cases of scrambling in German. That this is not necessarily the case outside scrambling contexts is shown in the next subsection.

3.5 Scoping May Also Be Violated in German

Both in Icelandic and in German, topicalisation of the object in (17-a)/(15-a) results in exactly the same surface string(s) as topicalisation of the object in (17-b)/(15-b):

- | | | | | | | |
|------|------------------|-------------------------------------|---------------------|-----------------------|-------------|----------------|
| (31) | <i>Icelandic</i> | <i>Erfiðustu</i> | <i>spurningunni</i> | <i>svarar</i> | <i>hann</i> | <i>sjaldan</i> |
| (32) | <i>German</i> | <i>Die schwierigste Frage</i> | | <i>beantwortet er</i> | | <i>selten</i> |
| | | (the) most-difficult question(-the) | | answers | he | rarely |

These two sentences are both ambiguous, i.e., both have both the reading of (17-a)/(15-a), “he rarely answers whichever is the most difficult question in any given exam”, and the one of (17-b)/(15-b), “there is a question more difficult than all others, and when he encounters this question, he rarely answers it”. To account for (31) and (32), it suffices to assume (as I do in Vikner 1999) that the topic (the object) is an operator, and that operators underlie a separate constraint, OP-SPEC (Grimshaw 1997:377, Baković 1998:39), which requires them to move to a specifier position (which for various reasons will be CP-spec; see, e.g., Grimshaw 1997:377). OP-SPEC would then have to be ranked above the other three constraints discussed so far. The effect of OP-SPEC here is parallel to the effect of LICENSING in (24) and (26), i.e., regardless of whether the object has wide or narrow scope, OP-SPEC will let (phonetically) identical candidates win in the two cases. Consider first the tableaux for the Icelandic (31):

(33)

Input: object = topic, narrow scope	OP- SPEC	LICENS ING	SCOP ING	STAY
a. * ... svarar hann sjaldan <i>OBJ</i>	*!			
b. * ... svarar hann <i>OBJ</i> sjaldan	*!		*	*
c. \mathbb{E} <i>OBJ</i> svarar hann sjaldan		*	*	*

 = (31)

(34)

Input: object = topic, wide scope	OP- SPEC	LICENS ING	SCOP ING	STAY
a. * ... svarar hann sjaldan <i>OBJ</i>	*!		*	
b. * ... svarar hann <i>OBJ</i> sjaldan	*!			*
c. \mathbb{E} <i>OBJ</i> svarar hann sjaldan		*		*

 = (31)

Both (33-c) and (34-c) correspond to (31) in Icelandic. Consider now the tableaux for the German (32), which show that the ranking difference between Icelandic and German discussed in the previous section has no effect in the case at hand:

(35)

Input: object = topic, narrow scope	OP- SPEC	SCOP ING	LICENS ING	STAY
a. * ... beantwortet er selten <i>OBJ</i>	*!			
b. * ... beantwortet er <i>OBJ</i> selten	*!	*		*
c. \mathbb{E} <i>OBJ</i> beantwortet er selten		*	*	*

 = (32)

(36)

Input: object = topic, wide scope	OP- SPEC	SCOP ING	LICENS ING	STAY
a. * ... beantwortet er selten <i>OBJ</i>	*!	*		
b. * ... beantwortet er <i>OBJ</i> selten	*!			*
c. \mathbb{E} <i>OBJ</i> beantwortet er selten			*	*

 = (32)

Both (35-c) and (36-c) correspond to (32) in German and show that even in German, SCOPING is outranked by another constraint, and therefore even in German, SCOPING has to be violable.

4 Conclusion

Within Optimality theory, it is not only possible but actually expected that a constraint may override a second constraint and at the same time be overridden itself by a third constraint. This paper has tried to show that such situations are found both in Icelandic and in German, where on the one hand, SCOPING overrides Procrastinate/STAY, cf. the Icelandic (25) and the German (29), and on the other hand, SCOPING is at the same time overridden itself by Shortest Move/LICENSING in Icelandic, cf. (26), and by OP-SPEC in German, cf. (35-c)/(36-c).

In other frameworks, e.g., the Minimalist Program, this is not straightforwardly possible, because there are only two levels, “Conditions on Convergence” and “Economy Considerations”, where the former are inherently ranked above the latter.

According to Diesing (1997:422), a minimalist analysis (Chomsky 1993, 1995, Bobaljik & Jonas 1996 and Collins & Þráinsson 1996) regulates the availability of object shift by means of Shortest Move, a rule which determines whether object shift is a possible movement. This is only the case if the verb itself has moved, due to Equidistance (see, e.g., Chomsky 1993:17-19 = 1995:184-186 and Bobaljik & Jonas 1996).

Shortest Move is a “Condition on Convergence” (Chomsky 1995:219-220), i.e., if it is violated, the derivation will crash rather than converge. Procrastinate, on the other hand, which is a generalisation that says that overt movement (before Spell-Out, i.e., in the syntax) is more costly than covert movement (after Spell-Out, i.e., at LF), is an “Economy Consideration”, which means that it can only select between different converging derivations, but not cause a derivation to crash. This difference is important: If Procrastinate were a condition on convergence, “there would never be any cases of overt movement” (Diesing 1997:422). In terms of the present analysis, this would correspond to STAY being inviolable, which is untenable, as discussed in connection with (25) above. Given that clear cases of object shift do exist, Diesing (1997:422) concludes that it must be the case that “the Scoping Condition is a condition on Convergence, which leads to the overriding of Procrastinate”. In terms of the present Optimality Theory analysis, this simply corresponds to SCOPING being higher ranked than STAY.

The difference between the Minimalist Program and Optimality Theory is that if, in minimalist terms, the Scoping Condition is a condition on convergence, the Scoping Condition itself may *not* be violated, as this would make the derivation crash. However, as the discussion of the Icelandic (26) above

showed (see also the discussion of the German (35)), the Scoping Condition must be a violable constraint,² otherwise a wide scope interpretation of the object would only be possible in object shift constructions, which clearly is not the case.

I thus hope to have shown that Optimality Theory allows a comprehensive account of the interpretation of object shift (and of scrambling), which includes aspects that would seem to be more difficult to account for within other frameworks, e.g., the Minimalist Program.³

Notes

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1. A few remarks on the data and on the native speaker informants are in order. According to Molly Diesing (p.c.), the informants for the data and the interpretations given in (14) above were Johannes Gísli Jónsson, Sigríður Sigurjónsdóttir, Halldór Ármann Sigurðsson, and Höskuldur Práinsson. In an earlier version of this paper, Vikner (1997), I focussed on the interpretation of indefinite objects, but as was pointed out by Johannes Gísli Jónsson, examples with an object in situ in the context where object shift is possible, like (21-a) in Vikner (1997), are not completely unambiguous, as opposed to what I claimed there (a generic reading of (21-a) in Vikner 1997 is not impossible, just dispreferred). In this paper I therefore focus on definite superlative objects like the ones discussed in Diesing (1996, 1997). These works only discussed Icelandic data like (14) above,

where object shift is possible. The possible interpretations of data like (18) below, in which object shift is not possible, were not mentioned. The informants for the data discussed here include Kristján Árnason, Gunnar Hrafn Hrafnbjargarson, Johannes Gísli Jónsson, and Halldór Ármann Sigurðsson. Whereas the interpretation both of the object in the perfect case (where object shift is impossible), (18-a) below, and of the object in the object-shifted case, (17-b) below, is completely uncontroversial, the interpretation of the object in situ in the context where object shift is possible remains controversial, in so far as (17-a) below is found to be ambiguous by one of my four informants, Johannes Gísli Jónsson. In the text, I shall nevertheless assume that (17-a) is unambiguous, following the other three informants and following Diesing (1996, 1997).

2. Notice that this argument is still valid even if what were considered above to be cases of non-shifted objects should turn out to be objects which only undergo object shift after Spell-Out (at LF). Object shift would then always take place, and the only variation would be whether it takes place before or after Spell-Out. The Scoping Condition (“the scope of objects is read off their surface position,” (22) above) might then have to be made more explicit, e.g., “the scope of objects is read off their position at Spell-Out,” but it would still have to be violable; cf. the discussion of (18-a)/(26) above. If the Scoping Condition is *not* taken to apply to surface positions/positions at Spell-Out, but instead to positions at LF, and if object shift is assumed to vary only with respect to when it applies and not with respect to whether it applies or not, the prediction would be that all objects would receive (only) wide scope interpretations, a prediction which is clearly undesirable.

Hornstein’s (1995) analysis of scope ambiguities offers a way of accounting for the ambiguity of (18-a)/(26) while maintaining that object shift always applies (at the latest at LF), but this not only requires sacrificing the Scoping Condition, but also makes incorrect predictions for the non-ambiguous cases. Hornstein (1995: 154) assumes that scope ambiguities arise as follows: What determines scope is the relative position of the scope taking elements at LF, but the position of an element which counts for scope may be any of the positions in the chain of that element. The ambiguity of (18-a), a non-shifted object in a construction in which object shift cannot apply, could thus be accounted for if object shift is assumed to apply at LF iff it does not apply before Spell-Out: The reading of (18-a) in which the object has narrow scope arises by having the pre-object shift position of the object count for scope, and the reading in which the object has wide scope arises by having the post-object shift position count. The problem is that this account would incorrectly make exactly the parallel predictions for object-shifted objects, as in (17-b). This should be ambiguous as well: Object shift has applied, and scope may now be determined by either the non-shifted or the shifted position. But (17-b) is not ambiguous; the object can only have wide scope, not narrow scope. Also non-shifted objects in constructions in

which object shift could have applied, e.g. (17-a), would incorrectly be predicted to be ambiguous in a parallel way, although here the object can only have narrow scope, not wide scope (though see the remarks in note 1).

3. Admittedly, there are also at least two versions of minimalism that would seem to have more in common with Optimality Theory than “standard” minimalism does, in that they allow ranked and violable constraints: Bobaljik (1995:351), which like this article is an attempt to formulate Diesing’s Scoping Condition as a violable constraint, and Holmberg (1997:214). However, ranked and violable constraints are left out in a more recent version of the latter work, Holmberg (1999). As for other OT analyses of object shift, see also Müller (1998), which focusses on multiple object shift in double object constructions.

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