Object shift and optionality. An intricate interplay between syntax, prosody and information structure^{*}

Gunlög Josefsson, Lund University

Abstract. The topic of my article is Object Shift and optionality, mainly from a Swedish viewpoint. I present the result of a survey, which shows that informant's intuitions concerning the wellformedness of shifted and non-shifted sentences vary to a large degree. For sentences with monotransitive verbs and monosyllabic object pronouns, such as *den* (it.common) 'it', the shifted alternative is preferred, whereas there is a tie for sentences with disyllabic object pronouns, such as *honom* 'him' and *henne* 'her'. The picture is similar for ditransitive constructions. Sentences with the order direct object > indirect object are generally rejected by the informants, even though such sentences are considered less ungrammatical if both objects have undergone Object Shift.

I also outline an analysis, according to which Object Shift is triggered by information structure, more specifically by a general propensity for old/thematic elements to appear in the middle field. However, Object Shift is blocked if ungrammatical structures arise, such as OV constituent order. The bias for monomorphemic pronouns to shift and a stronger tendency for bimorphemic pronouns to remain *in situ* is explained by the phonological properties of the lexical items involved. Thus, in order to understand OS we need to take different factors into account: information structure, syntax and prosody.

0.Introduction

Objects are canonically located to the right of the negation and other sentence adverbials in Swedish and the rest of the Scandinavian languages. However, objects may under certain circumstances appear to the left of sentence adverbials – such objects are assumed to have undergone Object Shift. In Swedish and the other Mainland Scandinavian languages, Object Shift (henceforth abbreviated

^{*} Parts of the results of the investigation presented in this paper are published in Josefsson (2003) and (2010). The results have been presented at different occasions: at the workshop "Object positions – formal and functional approaches", Aarhus University, January 18–19, 2007, at the Grammar seminar, Lund University, spring 2007, and at "The 1st Tampa workshop on Syntax, Semantics, and Phonology", at "The 19th Southeast conference on Foreign Languages, Literature, and Film", University of South Florida at Tampa, February 2010. I thank the participants at those occations for valuable comments. All errors are my own. A special thanks goes to Christer Platzack for valuable comments.

OS) is possible if the object is a weak, i.e. unstressed, object pronoun; OS of full DP objects is not grammatical. The properties of OS are illustrated in (1):

- (1) a Varför köper Johan inte bilen? why buys Johan not car.the 'Why doesn't Johan buy the car?'
 - b *Varför köper Johan bilen inte?
 - c Varför köper Johan den inte? why buys Johan it not 'Why doesn't Johan buy it?'

In this paper I address the question of the optionality of OS. Basing my argumentation on a survey I argue that OS is optional in Swedish, and that this optionality – as well as certain tendencies that will be discussed below – is related to prosodic properties of the lexical items involved in the construction. Although important, prosody does not trigger OS; what causes the pronoun to appear in the middle field is a general propensity for element representing old and/or thematic information to move leftwards in the sentence.

My paper is organized as follows: In section 1 I introduce some key features of OS. In section 2 I present the result of the survey on the grammaticality of shifted and "unshifted" sentences in Swedish. In section 3 I sketch the outlines of an analysis of OS based on prosodic properties and information structure. Section 4 contains a short summary.

1. Some key features of Object Shift

Object shift has been the subject of a vivid discussion in the literature, and its main properties are presumably well known. In this section I introduce some key features that are important for the points I make in this paper.

Object shift – the displacement of a weak object to the left of its canonical position – applies in all the Scandinavian languages. OS is restricted by what is usually referred to as Holmberg's generalization, which means that OS takes place only when all verbs have evacuated the VP (cf. Chomsky 1995: 352; for a definition of Holmberg's generalization, and Holmberg 1999). Consequently, in Swedish (and in the rest of the Mainland Scandinavian languages), OS is

restricted to simple tense main clauses (with one exception, see below). Furthermore, OS does not affect complements of prepositions or objects of verb particles:¹

		-				cf. Anders spelade inte med
A	Anders	played hir	т	not	with	honom.
		sparkade <i>kicked</i>				cf. Anders sparkade inte ut den.

OS of pronouns is possible in all the Scandinavian languages. In addition, OS of full DP objects is possible in Icelandic. In the rest of this paper I will concentrate on Swedish; hence the term Object Shift will refer exclusively to pronominal OS (unless otherwise is stated). All examples will be from Swedish.

Object Shift comes in two versions. The type just described is sometimes called Short Object Shift. In Long Object Shift a weak object pronoun appears between the verb in C° and a subject in Spec TP; see (3) for an example:²

(3) Det här lärde mig Maria igår. this here taught me Maria yesterday Maria taught me this yesterday.'

Both Short and Long OS will be discussed below.

2. Is OS obligatory or optional?

Even though OS has been discussed vividly the last 25 years, the optionality of OS has not been scrutinized in a serious way. In some cases researchers seem to resort more to stipulations than to empirical investigations when this question is discussed – maybe because optionality has been notoriously difficult to accommodate in a generative framework. For instance, in Chomsky (1993) it is assumed that OS applies generally to all objects, overtly or covertly. Holmberg (1991: 156) claims that OS is more or less obligatory in Swedish. Josefsson

¹ In Danish OS applies also in verb – particle constructions; importantly the order between verb particle and verb is the opposite in Danish, as compared to Swedish; hence the verb particle follows the object in Danish.

 $^{^{2}}$ For a more thorough discussion on Long Object Shift, see Holmberg (1986) and Josefsson (1992, 1993).

(1992) makes the same assumption. The underlying problem of optionality is of course how to define weak pronouns – such pronouns are more easily discerned in languages where strong and weak pronouns/clinics have distinct forms – this is not the case in the Scandinavian languages. In order to get an operative definition of weak pronouns Josefsson (1992) simply stipulates that weak object pronouns are object pronouns that have undergone OS. Consequently, OS is obligatory for weak pronouns. Such definitions are of course circular and devoid of all value.

In order to determine if OS is optional or obligatory in Swedish, 26 native speakers of Swedish were asked to assess the grammaticality of a set of 20 sentences containing shifted as well as non-shifted alternatives of the same sentences (see the Appendix).³ All informants were native speakers of Swedish coming from different parts of Sweden and Finland. All were familiar to grammaticality judgment procedures; the majority of the informants were also trained linguists. In order to ensure that the informant's intuitions were not affected by any ongoing discussions about OS, linguists, who were known by the investigator to have worked previously on OS or who had been involved in the discussion around OS, were excluded from the investigation.⁴

The questionnaire contained two (in some cases three) examples of each sentence type, the only difference being that the weak object pronoun was *in situ* in one of the examples, but not in the other(s). In order to ensure that the pronouns in the test sentences were construed as weak by the informants, i.e. representing old and/or thematic information, the test examples contained at least two sentences, the test sentence plus one or two sentences providing context. Consider the Appendix for more details.

The informants were given the following instruction (my translation): "The best way is probably to read the sentences aloud, so that you can adapt your stress pattern. However, the parts in italics should consistently be unstressed".

³ Due to a technical error nine of the informants were never asked to assess sentences with a topicalized verb. See more below.

⁴ In Josefsson (2003) the problems of linguists loosing their native language intuition when working a particular construction are discussed, a phenomenon that Josefsson (2003) termed "the ballerina syndrome".

Consider (4) for an example of a test sentence:⁵

(4) Jag tror faktiskt inte att hon är där. Man ser ju I believe in-fact not that she is there. One sees JU *henne* inte. her not.
'I don't actually believe that she is there. One can't see her!'

The informants were asked to assess the wellformedness of the test sentences by using one of the five grades *, *?, ??, ? or OK. The grades were explained in the following way:

(5)	Grammaticality grading	
	* helt ogrammatiskt	'completely ungrammatical'
	?* icke välformat, men något bättre än *	'not well-formed, but slightly better than *'
	?? mycket tveksamt	'very odd'
	? något tveksamt	'slightly odd'
	OK helt OK	'completely OK'

In order to work statistically with the data I applied the following principles of conversion:

(6) Principles of conversion

* = 0 p *? = 1 p ?? = 2 p ? = 3 p OK = 4 p

Let us now take a closer look at the results.

2.1 Shifted and unshifted monotransitive constructions

Our first example is OS in monotransitive sentences. In (7a and c) the pronoun is the monosyllabic *den* (it.common) 'it' and in (7b and d) the disyllabic *honom* 'him'. (7a), where OS has applied, should be compared to its unshifted

⁵ Since there is no direct English counterpart to the particle ju it is simply glossed as JU. By using ju in a declarative sentence the speaker conveys an expectation that the listener already has knowledge about the facts that are presented, and also agrees with the speaker's point of view. The closest English translation would probably be 'as we know'.

counterpart in (7c), and the shifted example in (7b) should be compared to the unshifted example in (7d):

- (7) Shifted and unshifted monotransitive sentences with one sentence adverbial
 - a Det låg en orm på stigen. Mannen såg den inte. Och därför *it lied a snake on path.the. man.the saw it not. and therefore*blev han biten. (Ex. 2)⁶ *was he bitten*'There was a snake on the path. The man didn't see it. And for this reason he was
 - b Han är en riktig diva. Jag gillar honom inte. (Ex. 16)
 he is a real diva. I like him not
 'He is a virtual diva. I don't like him.'

bitten.'

- c Det låg enorm påstigen. Mannen såg inte den. Och därför blev *it lied a snake on path.the. man.the saw not it. and therefore was* han biten. (Ex. 7) *he bitten*'There was a snake on the path. The man didn't see it. And for this reason he was bitten.'
- d Han är en riktig diva. Jag gillar inte honom. (Ex. 12) he is a real diva. I like not him.
 'He is a virtual diva. I don't like him.'

The informants' grammaticality judgments are shown in Table 1 below. (The informants are numbered from A to Z.)

Ex.	Sequence	А	В	С	D	Е	F	G	Н	-	J	к	L	М	Ν	0	Ρ	Q	R	S	Т	U	v	w	х	Y	z	М	m
(7a)	den inte	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	4	4	3	3	4	4	4	4	4	4	4	3,8
(7b)	honom inte	3	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	3	4	2	4	4	4	4	4	4	3,8

(7c)	inte den	4	4	4	0	3	3	4	0	4	3	3	3	4	3	4	2	4	2	2	1	4	2	4	1	4	4	3	2,9
(7d)	inte honom	4	4	4	0	4	4	4	2	З	4	З	4	4	4	4	4	4	2	4	3	4	4	4	1	4	4	4	3,5

Table 1. Grammaticality of shifted and unshifted monotransitive sentences with one sentence adverbial. M = median, m = arithmetic mean value.

⁶ The example number given after the examples refeRS to the numbering in the questionnaire.

Even though the shifted examples (7a) and (7b) received a higher arithmetic mean value, 3,8 for both, it is worth pointing out that nine of the 26 informants considered all four sentences above completely grammatical (shaded cells). Only 4 informants (cells marked by horizontal lines) differentiated between the two variants in a clear way, i.e. gave 0 or 1 (corresponding to * or ?*) to one of the alternatives while grading the other as 3 or 4 (corresponding to ? or OK). 7 informants preferred the shifted order *honom inte* (him not) over *inte honom*, while 4 informants preferred *inte honom* over *honom inte*. For *inte den/den inte* the picture is clearer; 13 informants preferred the shifted *den inte* (it.common not) over the unshifted alternative *inte den*, although one informant, informant A, made the opposite judgment.

Assuming a level of significance at $p \le 0.05$, only the difference between *den inte* and *inte den* is significant (p=0.0016).⁷ For *honom inte* vs. *inte honom* (ex. 17) no significant difference was found (p=0.175). If shifted vs. non-shifted monotransitive sentences i.e. (7a) + (7b) vs. (7c) + (7d) are compared, the difference is significant (p=0.0011). Speaking in more informal terms we may assume that there is a tendency: shifted sentences are preferred, but a difference is statistically significant only for sentences with the weak object pronoun *den* (it.common) 'it'.

Another set of sentences that involves monotransitive sentences is shown in (8). In (8a) the object pronoun precedes two sentence adverbials, in (8b) the pronoun appears between the two sentence adverbials, and in (8c) it remains *in situ*, i.e. in a non-shifted position:

- (8) Shifted, halfway shifted and (fully) shifted monotransitive sentences with two sentence adverbials.
 - a Jag tror faktisktinte att hon är där. Man ser henne I believe in-fact not that she is there. One sees her ju inte. (Ex. 9)
 JU not
 'I don't believe, in fact, that she is there. One can't see her.'
 - b Jag tror faktiskt inte att hon är där. Man ser ju henne inte. (Ex. 1)

⁷ The test used to calculate significance is "t-Test: Paired Two Sample for Means".

c Jag tror faktiskt inte att hon är där. Man ser ju inte henne. (Ex. 6)

The grammaticality judgments are shown in Table 2 below:

Ex.	Sequence	А	в	с	D	Е	F	G	н	I	J	к	L	М	Ν	0	Ρ	Q	R	s	т	U	v	W	х	Y	z	м	m
(8a)	henne ju inte	4	4	4	4	4	1	4	4	4	4	4	3	4	4	3	3	2	3	2	1	0	0	4	4	3	4	4	3,12
(8b)	ju henne inte	3	4	4	3	4	4	4	4	4	4	1	3	3	4	4	4	1	4	3	4	2	4	4	4	4	4	4	3,5
(8c)	ju inte henne	1	2	4	1	3	3	4	3	4	3	3	4	4	4	4	4	4	2	2	1	4	2	3	2	4	4	3	3,04

Table 2. Grammaticality of shifted and unshifted monotransitive sentences with two sentence adverbials. M = median, m = arithmetic mean value.

Even though (8b) received a higher arithmetic mean value than the others, the difference between the informants' assessments is not significant. For (8a) vs. (8b) p=0.187; for (8b) vs. (8c) p=0.117; for (8c) vs. (8a) p=0.808.

2.2 Clauses with bitransitive verbs

The canonical order between direct and indirect objects in Swedish is indirect object > direct object. Three of the test sentences were of this type:

(9) Shifted and unshifted sentences with ditransitive verbs.

- I sin bokhylla hittade mannen den poesibok som han hade köpt a. in reflbookshelf found man.the the *poetry-book* that he had bought till flickvännen. Men han gav henne den inte. (i bet. 'Han girl-friend.the but he gave her it not. (mean(ing) 'he to gav inte boken till sin flickvän.') Han hade nämligen ångrat book.the to refl girlfriend') he gave not had namely regretted sig. (Ex. 5 refl 'In his bookshelf the man found the poetry book that he had bought for his girlfriend, but he didn't give it to her; he had changed his mind.'
- b. men han gav henne inte den. (Ex. 18)
- c. men han gav inte henne den. (Ex. 19)

							-	-	-		-			-	-	-	-	-		-	_	-	-		-				
Ex.	Sequence	А	В	С	D	Е	F	G	н	T	J	к	L	м	Ν	0	Р	Q	R	S	т	U	v	w	х	Y	z	М	m
(9a)	henne den inte	4	4	4	1	4	1	4	4	4	4	4	0	2	4	1	2	3	3	3	1	0	2	4	4	3	4	3,5	2,85
(9b)	henne inte den	2	4	4	0	4	4	4	4	4	2	3	4	3	4	3	4	4	4	3	1	3	1	4	0	4	4	4	3,12
(9c)	inte henne den	4	0	4	0	4	4	4	3	3	2	3	4	4	4	4	3	3	3	1	3	4	2	3	0	4	4	3	2,96

Table 3 shows the results of the grammaticality judgments of (9a)–(9c):

Table 3. Grammaticality of shifted and unshifted ditransitive sentences with one sentence adverbial. M = median, m = arithmetic mean value.

As Table 3 shows, both the median and the arithmetic mean value point out the order indirect object > sentence adverbial > direct object as the preferred one. The second best choice appears to be when both objects remain *in situ*, and the least liked one is when both objects shift. Neither mean values are significant though; for (9a) vs. (9b) p=0.423; for (9b) vs. (9c) p=0.527; for (9a) vs. (9c) p=0.776. Hence, we conclude that OS is optional for bitransitive verbs.

It has been suggested in the literature that the reversed order of objects, direct object > indirect objects, is grammatical in Swedish (cf. Holmberg 1986: 207, Josefsson 1992: 73, Hellan & Platzack 1999: 131-132). This order of arguments seems to be rejected by the informants in the present study. Consider the examples:

- (10) Shifted and unshifted sentences with ditransitive verbs, direct object > indirect object
 - a. I sin bokhylla hittade mannen den poesibok som han hade in refl bookshelf found man.the the poetry-book that he had flickvännen. Men han gav den henne inte. (i bet. 'Han köpt till girl-friend.the but he not. (mean. 'he bought to gave it her gav inte boken till sin flickvän.') Han hade nämligen gave not book.the to refl girlfriend') had namely he ångrat sig. (Ex. 13) regretted refl

'In his bookshelf the man found the poetry book that he had bought for his girlfriend, but he didn't give it to her; he had changed his mind.'

b. men han gav den inte henne. (Ex. 15)

c. Men han gav inte den henne. (Ex. 11)

Table 4 shows the informants' assessments of (10a–b):

Ex	Sequence	А	в	с	D	Е	F	G	н	-	J	к	L	М	Ν	0	Ρ	Q	R	S	т	U	v	w	х	Y	z	М	m
(10a)	den henne inte	1	1	0	0	2	0	4	0	2	0	2	0	0	0	0	1	1	З	3	0	0	0	0	0	1	0	0	0,81
(10b)	den inte henne	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0,31
(10c)	inte den henne	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0,12

Table 4. Grammaticality judgments of shifted and unshifted ditransitive sentences with one adverbial. M = median, m = arithmetic mean value.

What Table 4 shows is that the order direct > indirect object cannot be considered grammatical in Swedish. However, it was accepted by a few informants, at least to some degree; only one informant considered one of the alternatives to be OK (= 4 p) (informant G, for the order in (10a)). We may also conclude that there seems to be different degrees of ungrammaticality; full shift of both objects in (10a), i.e. when both objects appear to the left of the sentence adverbial, was considered the least ungrammatical option of the three, and the alternative where both objects remain *in situ* is the worst case. If we compare the judgments shown in Table 4, we find that the difference between (10a) and (10b) is not significant (p=0.114), for (10b) vs. (10c) p=0.3634. However, the difference between (10a) and (10c) is significant, p= 0.0169.

2.3 Long Object Shift

There were two examples of Long Object Shift in the material, i.e. sentences where the weak object pronoun appears between the verb in C° and a subject in a non-initial position.

- (11) Long object shift with the verb *möta* 'meet' (11a) vs. the nonshifted alternative (11b)
 - I hallen mötte *honom* en a. hemsk syn. Den stora kistan var in hall him horrifying sight. the met а big chest was borta! (Ex. 3) gone 'A horrifying sight met him in the hallway. The big chest was gone.'
 - b. I hallen mötte en hemsk syn honom. (Ex. 8)

(12) Long object shift with the verb *slå* 'strike'+ the non-shifted alternative

a. I det ögonblicket slog henne en skrämmande tanke. Hon hade in that moment stroke her a frightening thought. she had

nog glömt dra ur sladden till strykjärnet. (Ex. 10) probably forgotten pull out cord.the to iron 'In that moment she was struck by a frightening thought. She had probably forgotten to pull out the chord to the iron.'

b. I det ögonblicket slog en skrämmande tanke henne. (Ex. 14)

Consider Table 5, which shows the grammaticality judgments of LOS with the verb *möta* 'meet'.

Ex	Sequence	А	В	с	D	Ε	F	G	н	I	J	к	L	М	Ν	0	Ρ	Q	R	S	т	U	v	w	х	Y	z	м	m
(11a)	mötte honom SU	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	4	4	4	3	2	4	4	4	4	4	4	3,81
(11b)	mötte SU honom	3	2	3	0	2	1	3	1	3	3	3	4	4	2	3	4	3	3	2	3	4	2	4	2	4	3	3	2,73

Table 5. Grammaticality judgements of Long Object Shift with the verb $m\ddot{o}ta$ 'meet'. M = median, m = arithmetic mean value.

The informants considered (11a), i.e. the shifted alternative, to be significantly better than the unshifted alternative (p=0.00034).

Now consider LOS with the verb *slå* 'strike':

Ex.	Sequence	А	В	С	D	Е	F	G	н	I	J	к	L	М	Ν	0	Ρ	Q	R	S	т	U	v	w	х	Y	z	М	m
(12a) slog henne SU	3	4	4	4	2	1	4	4	4	4	3	2	4	4	3	2	2	4	3	1	2	2	3	4	1	4	3	3
(12b	slog SU henne	4	2	3	0	3	1	4	4	4	3	4	4	4	4	4	4	4	4	1	3	4	4	4	2	4	4	4	3,31

Table 6. Grammaticality judgments of Long Object Shift with the verb sla^{a} 'strike'. M = median, m = arithmetic mean value.

The difference between the mean value of the shifted and the non-shifted alternatives for the verb *slå* 'strike' in (12) is smaller than the corresponding figures for the verb *möta* 'meet' in (11); the difference is not significant (p=0.342). A tentative conclusion is that Long OS is optional for those verbs that allow it. Whether the shifted or unshifted variant is preferred seems to be at least to a certain extent a lexical question, i.e. dependent on the verb.

2.4 Object shift in verb fronting construction

The analysis proposed in Holmberg (1999) relies on the grammaticality of OS in main clauses with auxiliaries – provided the main verb moves to a sentence initial position. There is one example of this type in the questionnaire.

(13) Object shift with topicalized verb:

- a. Kysst har han henne inte. Bara hållit försiktigt i handen. (Ex. 19) kissed has he her not. just held lightly in hand.the 'He hasn't kissed her. Just held her hand lightly.'
- b. Kysst har han inte *henne*. (Ex. 20)

The informant's intuitions about the grammaticality of examples such as (13a) and (13b) went in different directions: Nine informants accepted (13a), i.e. graded the sentence as OK or ?, whereas five informants graded it as * or ?* (i.e. considered it very odd or completely ungrammatical). Seven informants (out of 17) gave the two alternatives the same grade, whereas nine considered (13b) less grammatical than (13a); only one informant did the opposite, and graded (13b) as better than (13a).

Ex	Sequence	А	В	с	D	Е	F	G	Н	Ι	J	К	U	v	W	х	Y	z	М	m
(13a)	kysst henne inte	0	4	2	0	3	4	4	З	4	2	4	0	2	1	4	4	1	3	2
(13b)	kysst inte henne	0	0	3	0	3	4	4	2	2	0	3	0	0	1	1	2	0	1	1

Table 7. Grammaticality judgments of Object Shift in verb fronting constructions. M = median, m = arithmetic mean value.

The arithmetic mean value for (13a) is 2, whereas it is only 1 for (13b). The difference between (13a) and (13b) is significant (p=0.0066). It is difficult to draw any definite conclusions as to the grammaticality of verb fronting in general – the picture is extremely scattered – but it seems as though simultaneous OS "helps up" the grammaticality of the construction. In a sense this reverses on of the ideas in Holmberg (1999): it is not verb fronting that makes OS possible in sentences with an auxiliary, it is OS that licenses verb fronting.

3. The role of case, information structure, and phonology

Object shift is defined as an operation that allows a weak object pronoun to appear in the middle field, i.e. to the left of one or more sentence adverbials. Why does this happen? And why can only weak object pronouns undergo OS in the Mainland Scandinavian languages? In this section I will attempt to give some new perspectives on the phenomenon.

First of all: Why are pronouns special – why do not full DP objects move? First of all, it is generally accepted that pronouns are the only nominals in Mainland Scandinavian that have morphological case, which allows them to appear in positions where other nominals are banned. This explanation, launched already in Holmberg (1986), provides an answer as to why only pronouns shift in Mainland Scandinavian, while also full DPs may undergo OS in Icelandic; in Icelandic also full DPs have morphological case.⁸

Another question is why a pronoun such as *den* (it.common) 'it' is more apt to appear to the left of sentence adverbials, as compared to *honom* 'him' (see section 2.1 above). This difference is unexpected if morphological case was the only clue to the story of OS.⁹ In my view, this observation shows that we need to direct our attention to the phonological properties of pronouns, in particular to prosody – not because prosody triggers movement, but because prosody propagates or restricts movement.¹⁰ One important feature of all weak,

- (i) Därför bor Sten där inte längre. *therefore lives Sten there no longer* 'Therefore Sten doesn't live there any more.'
 (ii) *Därför bor Sten i Lund inte längre.
- therefore lives Sten in Lund not longer

¹⁰ See also e.g. Erteshik-Shir (2005, 2010) for analyses of OS in phonological terms.

Hosono (2010) aims at explaining OS in purely prosodic terms. She hypothesizes that "an object pronoun moves to cause downstep" (p. 28). In my view it is unclear exactly what it

⁸ The idea that case is what blocks OS of full DPs leaves unexplained why OS of full DPs is not available in Faroese, and seems to have been absent or at least uncommon in Old Swedish. To account for this I will have to assume that morphological case in Faroese and Old Swedish is different from case in Icelandic, and not being able to exhaustively licence DPs.

⁹ Another argument against case being the trigger for object shift is the fact that also weak selected adverbials such as *där* 'there' in the context of the verb *bo* 'live' may move (cf. Josefsson 1992):

unstressed personal pronouns is that they have – or may have – the same prosodic properties as inflection. In order to understand the importance of this we shall first take a look at the word accent system of Swedish.

Swedish has two word accents patterns, accent 1 and accent 2. The two accent patterns have a phonemic status, and the accent pattern may distinguish two meanings, for instance the accent 1 word *'anden'* 'the duck' from the accent 2 word *'anden'* 'the ghost'. Accent 2 is generally the accent used for bi- and multisyllabic words, whereas accent 1 is typically used for monosyllabic words. In general, affixation to a monomorphemic word will cause a change of accent pattern, and give the new, more complex word, an accent 2 contour. Inflectional suffixes such as the plural suffix have this effect, as well as the past tense suffix and the majority of the derivational suffixes:

means to assume that an (often) optional element of a clause needs to move in order to give rise to a particular prosodic countour. Another problem of Hosono's approach is that it takes only subject-initial sentences into account; hence OS is explained as a verb – object relation. OS applies equally well to sentences where a subject intervenes between the finite verb and pronoun. The subject may even itself contain a prosodic phrase, for instance an attributive PP, cf. (i). Adverbials too may intervene between the verb and the weak pronoun, cf. (ii):

(i) välbevakad. Staden var Därför brandskattade Valdemar Atterdag från city.the was well.guarded. therefore plundered Valdemar Atterdag from den inte. Danmark Denmark it not 'The city was well guarded. Therefore V.A. from Denmark did not plunder it. (ii) Staden var välbevarad, och därför brandskattade den danske kung and therfore plundered city-the was well.kept, the Danish king

Valdemar Atterdag troligen den inte.
Valdemar Atterdag probably it not.
'The city was well preserved, and therefore the Danish king V.A. probaby did not plunder it.'

One of the main points of my article is that even though a verb *in situ* blocks OS, a weak object pronoun does not lean prosodically on the verb, but on its closest host to the left.

Another argument against Hosomi's approach is that it does not take the optionality of OS into consideration; as shown above OS is optional in Swedish.

The idea to investigate the prosodic properties of OS is most probably on the right track, though, and also to consider dialectal and other prosodic variations. However, it remains to be shown exactly in what way and to which extent such variation and OS relate.

(14)a	dam 'lady' (accent 1)	damer 'ladies' (accent 2)
b	sy 'sew' (accent 1)	sydde 'sewed' (accent 2)
c	saft 'juice' (accent 1)	saftig 'juicy' (accent 2)

There are some exceptions to the generalizations illustrated in (14). Certain types of inflection do not cause a shift of accent on monosyllabic words: the definite suffix in the singular on monosyllabic nouns and the present tense suffix on second conjugation verbs are two examples. The same holds for the diminutive suffix *-is*: ¹¹

(15) a	dam 'lady' (accent 1)	damen 'the lady' (accent 1)
b	stek 'fry' (accent 1)	steker 'fries' (accent 1)
с	dag 'day' (accent 1)	dagis 'daycare center' (accent 1)
d		<i>dagiset</i> 'the daycare center (accent 1)

We may conclude that affixation does not always give rise to shift from accent 1 to accent 2. What is particular about weak object pronouns is that they in certain respects behave like a non-accent shifting affix. The cluster consisting of a monosyllabic verb and a weak object pronoun makes up a prosodic word; the first syllable (the verb) receives stress and the second syllable (the object pronoun) is unstressed; the constituent as a whole has accent 1. This is illustrated in (16):

(16) a	Damen såg de		den inte.			<i>såg den</i> : [´soːgdən]
	lady.the	saw	it.common.sg	not		Accent 1
	'The lady d	lidn't	see it.'			
b	Därför	såg	damen den		inte.	damen den: ['baːŋətdən]
b		U	damen den lady.the it.com			<i>damen den</i> : ['baːŋətdən] Accent 1

The "cluster" *såg den* in (16a) has the same prosodic contour as *damen* (lady.the) 'the lady' in (15a). Also *damen den* (child.the it.common) 'the lady it' in (16b) has accent 1, which means that the prosodic contour of *damen den* in (16b) is the same as that of *dagiset* (day.IS.the) 'the daycare center', in (15d), which has accent 1, consisting of a stressed syllable followed by two unstressed

¹¹ Another derivational suffix that does not give rise to an accent shift is the diminutive -o, as in *fett-o* (fat-O) 'fatso'.

syllables. The similarity between host + weak object pronoun and accent one words can be discerned only if the host for the object pronoun – the verb or the subject – has accent 1. If the host has accent 2 no accent shift will take place.

The idea is that a weak object pronoun is inflectional, from a prosodic point of view. The host for the object pronoun can be a verb, but also the last word of a DP subject, or an adverbial. If the subject is in a sentence initial position, as in (16a), the finite verb is normally the host, and if another constituent occupies Spec CP, the subject will serve as host for the object pronoun. If the subject in Spec IP is followed by an adverbial, this adverbial will be the host of the weak object pronoun.

The proposed analysis has much in common with the cliticization analyses of object shift, such as the ones proposed in Dimitrova-Vulchanova & Hellan (1991), Holmberg (1991), and Josefsson (1992, 1993), but the crucial difference is that the object is never assumed to cliticize onto the verb specifically or the verb chain.¹²,¹³ Instead the object pronoun cliticizes to any type of host that it finds to its left.¹⁴ The assumption that OS could be explained in terms of the object pronoun cliticizing onto the verb or being dependent on the verb chain, which has been suggested in the literature, is probably a misinterpretation due to the observation that a weak object pronoun cannot appear to the left of a verb.¹⁵

¹²Josefsson (1992) suggests, for instance, that a weak object pronoun may piggy-back on the verb and excorporate when the verb lands in I° . From a theoretical point of view excorporation should not be ruled out, but OS is not an instance of excorporation. The mistake in Josefsson (1992) was to assimilate object shift with cliticization of the Romance type; it is probably much better to compare OS to scrambling in German.

¹³ See also Cardinaletti & Starke (1999) for a discussion on the distinction between strong pronouns, weak pronouns and clitic pronouns.

¹⁴ There is another type of clitic in Modern Swedish that is also free to cliticize on any other type of host, namely the genitive marker *-s*. There seems to be consensus in the literature that this element is not a case marker but a syntactically free, but phonologially bound element, which cliticizes to the last word of a noun phrase.

¹⁵ Within generative theory this restriction, called Holmberg's generalization (Holmberg 1986, 1999), is usually described in terms of movement: a weak object cannot bypass a verb. In my view it is not obvious that Holmberg's generalization is best formulated in terms of the verb blocking the weak object pronoun. As will be proposed below, it is probably better to describe the restriction as due to the result being an ungrammatical OV-configuration. It is not only weak object pronouns that are banned from movement to the middle field when a verb is left in the VP – all types of movement that result in an OV-configuration are ungrammatical in Swedish. See Josefsson (2010) for more discussion.

However, the fact that OS is not possible if the verb remains in the VP (Holmberg's generalization) is better explained by other, independent principles to which we shall return below.

The constituent *såg den* in (16a) consists of two syllables, one stressed and one unstressed. The corresponding constituent in (16b), *damen den*, has three syllables. One stressed syllable followed by two unstressed ones works fine in Swedish, but if too many unstressed syllable are stacked after each other, the derivation deteriorates – for simple phonological reasons. This might happen if the verb is disyllabic or more and/or the object pronoun is disyllabic. This, I claim, is why disyllabic pronouns, such as *henne* 'her' and *honom* 'him' are more "apt" to remain *in situ* (or at least what appears to be *in situ*), whereas monosyllabic object pronouns, such as *den* (it.common) 'it' are more inclined to appear in a shifted position (see 2.1 and 2.2 above). Speaking less technically, a monosyllabic pronoun is prosodically lighter, and is therefore more readily realized as inflection. There is no example of shifted and unshifted examples with *det* (it.neuter) 'it' or *dem* 'they' in the questionnaire, but we expect that these pronouns will behave as *den*.

The reason why informants disagree when assessing the test sentences could perhaps have to do with how natural the sentences sound, i.e. how likely we are to hear them in actual speech. Sentences such as those in (16) seem to be fairly natural; however, also a sentence such as (17) must be considered grammatical in my view, even though the stressed syllable *-mod-* in *förmodligen* is followed by no less than four unstressed syllables:

(17) Därför såg damen förmodligen honom inte.
 therefore saw lady.the probably him not
 'Therefore the lady probably didn't see him.

Note that the whole sequence $(f\ddot{o}r)modligen \ honom$ is one prosodic word, [før'mu:dl:gənhənəm] pronounced with accent 1 (*förmodligen* is an accent 1 word, due to the prefix $f\ddot{o}r$ -.)¹⁶

The issue is further complicated by the fact that some sentence adverbials, for instance *inte* 'not', seems to be able to acquire the same prosodic properties as

¹⁶ The sequence *förmodligen honom inte* gave only three hits on Google, and *förmodligen henne inte* four hits.

described above for object pronouns. Hence, in a non-shifted example, such as (18) below, the sequences sag + inte, and Bo + inte, both have accent 1, which indicate that they are words, from a prosodic point of view:¹⁷

(18) a	Bo såg Bo saw 'Bo didn't	it	not		såg inte	[´soːgɪntə] Accent 1
b	Därför therefore 'Therefore	saw	Bo	it	Bo inte [' A	buːintə] Accent 1

There is another property of the negation that has to be taken into consideration (which also might suggest a slightly different analysis). The Swedish negation *inte* 'not' is often reduced to a monosyllabic [ntə], which probably makes it even more inclined to cliticize prosodically onto its host to the left.¹⁸ (To what extent this holds for other sentence adverbials remains to be investigated.) If this is correct either an object pronoun or a sentence adverbial, in particular the negation *inte*, could cliticize to its closest host to the left. However, both negation/sentence adverbial and object pronoun cannot cliticize simultaneously – they have to be assigned a linear order. Since disyllabic pronouns are heavier than monosyllabic ones, i.e. contain more syllables, they are more apt to stay in what appears to be *in situ*.¹⁹,²⁰

¹⁷ It might even be the case that the whole sequence såg inte den is a prosodic word. The intuition that *den* receives a slight amount of stress in this configuration could probably be explained as due to the tendency of rythmic alternation, see fn 20.

¹⁸ It is often claimed that OS of pronouns is obligatory, or at least more obligatory, in Danish, as compared to Swedish. It could perhaps be fruitful to investigate whether these tendencies/restrictions are related to the pronounciation of the negation *ikke*, which clearly have different prosodic properties as well as rules for reduction, as compared to the Swedish negation *inte*. If the possibility of having weak object pronouns *in situ* in Swedish is related to the possibility of allowing the negation to be reduced to prosodic inflection, then it might be expected that OS is obligatory in language varieties where the negation cannot be reduced or realized as prosodic inflection. Also the prosodic profiles of object pronouns, which differ among the Scandinavian languages, have to be taken into consideration, as well as the general prosodic contour of sentences.

¹⁹ "True" clitics, such as '*n* för *honom* 'him' and '*na* for *henne* 'her' provide even more arguments for the clitic status of object pronouns. These clitics may integrate prosodically on their closest host to the left.

Before closing this subsection a few words about the trigger for OS needs to be said. The proposed analysis explains why only weak object pronouns can undergo OS in the Mainland Scandinavian languages, not full DP objects: only pronominal objects have morphological case; hence they can survive without structural case. But why do objects move optionally? From the discussion in this paper it is evident that weak pronouns can indeed stay *in situ*, i.e. take any type of element to the left as their host.²¹ The trigger of OS is probably a fundamental property of the language, a property that Swedish shares with the other Germanic languages and also the Romance languages. We know from work on information structure that there is a general propensity for backgrounded or given elements to move to the middle field; I claim that OS is due to this propensity, and so is scrambling of arguments and adverbials in German. The propensity in question correlates to Gundel's (1988:229) "given before new" principle, as well as Newmeyer's (1998:122) "thematic first explanation" (see also see Herring 1990:164, Molnár 2003, and Hinterhölzl and Petrova 2010 for

- Boris såg'na'nte nåt mer.
 Boris saw'her'not any more
 'Boris didn't see her any more.'
- (ii) Sen såg Boris'na'nte nåt mer.
 then saw Boris'her'not any more
 'After that Boris did'nt see her any more.'

The proper name *Boris* has accent 1. As expected the sequences såg'na'nte in (i) and *Boris'na'nte* in (ii) are prosodic words with one stressed syllable, såg and *Bo-*, and accent 1 contour.

²⁰ A weak object pronoun *in situ*, for instance in a sequence such as *inte den* 'not it', receives what might be conceived of as a slight amount of stress. However, it is not necessarily the case that this is focus stress; a sequence of unstressed syllables is subject to rhytmic alternation, normally expressed as differences in duration of the vowel (Engstrand 2004, 208f). It is important to keep this in mind, in order not to take rhytmic alternation to be focus induced stress, and consequently not draw the erroneous conclusion that weak pronouns left *in situ* always carry some kind of focus/stress.

²¹ From a theoretical point of view, we cannot rule out the possibility that the sentence adverbial and the weak object pronoun both raise to the middle field, and that object pronoun that appears to be left *in situ*, for example in (17b), is in fact string adjacent to the sentence adverbial in the middle field.

more discussion). Weak object pronouns typically represent thematic or old information; leftwards movement of such elements to the middle field is expected.

If we assume that the trigger for OS is some version of Gundel's "given before new"-principle, why does a verb left in the VP block leftwards movement of the weak object pronoun? My answer is not an answer to this particular question; instead I resort to a much more pervasive principle of the language, which, however, is not yet fully understood: the directionality parameter. The verb doesn't block only weak pronouns, no object of any type, neither pronominal objects nor full DP objects, may "bypass" the verb ("Holmberg's generalization"), prepositions, or verb particles, since that would give rise to an OV constituent order (unless the object lands in a sentence-initial position). Swedish, being a VO-language does not allow OV. Furthermore, Swedish has prepositions not postpositions and the verb particle precedes the object.²² The OV vs. VO parameter is a huge question complex, which cannot be investigated in this paper. However, if an adequate explanation to the OV vs. VO directionality parameter is given, then the question inherent in Holmberg's generalization dissolves.

In short: objects (and other elements) that represent old information objects have a tendency to move to the middle field, due to a general propensity for weak, but not strong, objects may undergo OS in the Scandinavian languages, since only elements that convey thematic/old information move to the middle field. Only pronominal objects may undergo object shift, since they are the only nominals endowed with morphological case.

4.Conclusions

The main conclusions from the discussion above are that OS is optional in Swedish, and that there is a great deal of variation between informants. Thus, it follows from the first conclusion that it is incorrect to claim that OS is

²² The directionality parameter seems to hold in the IP-VP domain. Hence, if a verb particle is moved to Spec CP object shift may take place, as expected. In a similar way, OS is fine in Swedish with verb particle constructions if the verb particle belongs to the very small group of particles that take their complements to the left (as in Danish). See Josefsson (2010) for further discussion.

obligatory in Swedish. However, we might conjecture that OS could be obligatory for some speakers of Swedish. Such a conclusion does not follow directly from the data presented in this study – thorough investigations have to be pursued in order to confirm or reject such a supposition – but results from the survey indicate that this could well be the case. Some informants seem to consistently prefer shifted alternatives, whereas others prefer the non-shifted ones. From a theoretical point of view, this questions the possibility of getting answers to broad and general questions such as "Is OS obligatory in Swedish?". The results of this study bring focus on the question of optionality.

Grammaticality judgements vary among informants. It might be that finer instruments for evaluating grammaticality judgments can be worked out, but a reasonable assumption is that there will always be areas where speaker's intuitions vary – even between extreme values such as "completely acceptable" and "completely ungrammatical". Since intuitions concerning OS vary to such a large extent it is imperative that researchers on OS define very carefully the object for their study: If the purpose is to understand OS within the internal grammar of one certain individual, for instance in order to find out how grammaticality judgements on this construction interplay with grammaticality judgements of other constructions, it is fine to use data from only one single speaker. However, if a researcher wants to investigate the status of OS in Swedish, it is not enough to appeal to grammaticality judgments from one single speaker, not even data from a handful of speakers will suffice – more thorough investigations are needed, where a broader range of data is taken into consideration.

References

Cardinaletti, Anna & Starke, Michal, 1999. The Typology of structural deficency. A case study of the three classes of pronouns. In: van Riemsdijk, Henk (ed.) *Clitics in the languages of Europe. Empirical approaches to language typology*, vol. 5. Mouton de Gruyter: Berlin & New York, 145–223.

Chomsky, Noam, 1995. The Minimalist program. Cambridge: The MIT Press.

Dimitrova-Vulchanova, Mila & Hellan, Lars, 1991. Clitics and the Completedness Parameter. In: van Riemsdijk, Henk & Rizzi, Luigi (eds) *Clitics and Their Hosts*. Eurotyp Working Papers 1. Grammatical Models Section, Tilburg, 1–63.

Engstrand, Olle. 2004. Fonetikens grunder. Studentlitteratur: Lund.

Erteshik-Shir, Nomi, 2005. The sound patterns of syntax: the case of Object Shift. *Theoretical Linguistics*, 31, 47–94

- Erteshik-Shir, Nomi, 2010. The phonology of adverb placement, OS and V-2: The case of Danish 'MON'. In: Erteschik-Shir, Nomi and Rochman, Lisa (eds), *The Sound Patterns of Syntax*, Oxford University Press, Oxford.
- Gundel, Jeanette. 1988. Universals of topic-comment. In: Hammond, Michael, Moravcsik, Edith A., and Wirth, Jessica R., (eds). *Studies in Syntactic Typology*. Amsterdam: John Benjamins, 243–284.
- Hellan, Lars & Platzack, Christer. 1999. Pronouns in Scandinavian languages: An overview. In: van Riemsdijk, Henk (ed.), *Clitics in the Languages of Europe*. Berlin: Mouton de Gruyter, 123–142.
- Herring, Susan C. 1990. Information structure as a consequence of word order type. *Proceedings of the 16th Annual Berkeley Linguistics Society*, 163–174.
- Hinterhölzl, Roland & Petrova, Svetlana, 2010. From V1 to V2 in West Germanic. *Lingua* 120/2: 315–328.
- Holmberg, Anders, 1986. *Word order and syntactic features in the Scandinavian Languages and English.* Ph.D. diss. Dept of General Linguistics, Stockholm University.
- Holmberg, Anders, 1991. The distribution of Scandinavian weak pronouns. In: van Riemsdijk, Henk & Rizzi, Luigi, *Clitics and their hosts*. Eurotyp Working Papers, vol. 2:55–174. Geneva/Tilburg.
- Holmberg, Anders, 1999. Remarks on Holmberg's generalization. *Studia Linguistica* 53: 1–39.
- Holmberg, Anders. 1986. *Word order and syntactic features in the Scandinavian languages and English*. Ph.D. dissertation, University of Stockholm.
- Holmberg, Anders. 1999. Remarks on Holmberg's generalization. Studia Linguistica 53:1-39.
- Hosono, Mayumi, 2010. Scandinavian Object Shift as the Cause of Downstep. *Working Papers in Scandinavian Syntax* 85. Centre for Languages and Literature, Lund University, 1–36.
- Josefsson, Gunlög, 1992. Object Shift and Weak Pronominals in Swedish. *Working Papers in Scandinavian Syntax* 49: 59–92. Department of Scandinavian languages, Lund University.
- Josefsson, Gunlög, 1993. Object Shift and Weak Pronouns in Swedish. In: Hellan, Lars (ed.) *Clitics in Germanic and Slavic*, Eurotyp Working Papers 4: 51–82.
- Josefsson, Gunlög. 2001. The true nature of Holmberg's Generalization revisited once again. *Working Papers in Scandinavian Syntax* 67: 85–102.
- Josefsson, Gunlög, 2003. Four myths of Object shift ... and the Truth. In: Delsing, Lars-Olof, Falk, Cecilia, Josefsson, Gunlög, & Sigurðsson, Halldór (eds), *Grammar i Focus, vol II. Festschrift for Christer Platzack, November 18, 2003.* Department of Scandinavian Languages, Lund University, 199–207.
- Josefsson, Gunlög, 2010. There is no OBJECT SHIFT, just a GENERAL SHIFT, and independent constraining principles. *Tampa Papers in Linguistics*, vol 1: 13-29. Dept of World Languages, University of South Florida. http://www.tampalinguistics.org/
- Molnár, Valeria. 2003. "C". In: Delsing, Lars-Olof, Falk, Cecilia, Josefsson, Gunlög, and Sigurðsson, Halldór (eds), *Grammar in focus, vol II. Festschrift for Christer Platzack, November 18, 2003.* Department of Scandinavian languages, Lund University, 235–248.
- Newmeyer, Frederick J. 1998. Language form and language function. Cambridge: MIT Press.

Appendix: The questionnaire

Bästa informant!

Jag vore mycket tacksam för hjälp med bedömning av några meningar, d.v.s. om de är välformade eller inte. De aktuella meningarna är svärtade. Resten är bara kontext, som ska göra meningarna lättare att tolka. Markera med någon av följande symboler före varje mening.

* helt ogrammatiskt
?* icke välformat, men något bättre än *
?? mycket tveksamt
? något tveksamt
OK helt OK

Det bästa sättet är nog att läsa upp meningarna högt, så att man kan anpassa sin betoning. Kursiverade led ska dock genomgående vara obetonade. Naturligtvis garanteras du anonymitet.

1 Jag tror faktiskt inte att hon är där. Man ser ju henne inte.

2 Det låg en orm på stigen. Mannen såg *den* inte. Och därför blev han biten.

3 I hallen mötte honom en hemsk syn. Den stora kistan var borta!

4 Inte gillade hon honom. Men nog kunde hon fördra hans närvaro under en kortare tid.

5 I sin bokhylla hittade mannen den poesibok som han hade köpt till flickvännen. Men **han gav** *henne den* inte. (i bet. 'Han gav inte boken till sin flickvän.') Han hade nämligen ångrat sig.

6 Jag tror faktiskt inte att hon är där. Man ser ju inte henne.

7 Det låg en orm på stigen. Mannen såg inte *den*. Och därför blev han biten.

8 I hallen mötte en hemsk syn honom. Den stora kistan var borta!

9 Jag tror faktiskt inte att hon är där. Man ser henne ju inte.

10 **I det ögonblicket slog** *henne* **en skrämmande tanke.** Hon hade nog glömt dra ur sladden till strykjärnet.

11 I sin bokhylla hittade mannen den poesibok som han hade köpt till flickvännen. Men **han gav inte** *den henne*. (d.v.s. 'Han gav inte boken till sin flickvän.')) Han hade nämligen ångrat sig.

12 Han är en riktig diva. Jag gillar inte honom.

13 I sin bokhylla hittade mannen den poesibok som han hade köpt till flickvännen, men **han gav** *den henne* inte. (d.v.s. 'Han gav inte boken till sin flickvän.') Han hade nämligen ångrat sig.

14 **I det ögonblicket slog en skrämmande tanke** *henne***.** Hon hade nog glömt dra ur sladden till strykjärnet.

15 I sin bokhylla hittade mannen den poesibok som han hade köpt till flickvännen, men **han gav** *den* **inte** *henne*. (i bet. 'Han gav inte boken till sin flickvän.') Han hade nämligen ångrat sig.

16 Han är en riktig diva. Jag gillar honom inte.

17 I sin bokhylla hittade mannen den poesibok som han hade köpt till flickvännen, men **han gav inte** *henne den*. (i bet. 'Han gav inte boken till sin flickvän.') Han hade nämligen ångrat sig.

18 I sin bokhylla hittade mannen den poesibok som han hade köpt till flickvännen, men **han gav** *henne* inte *den*. (i bet. 'Han gav inte boken till sin flickvän.') Han hade nämligen ångrat sig.

19 Kysst har han *henne* inte. Bara hållit försiktigt i handen.20 Kysst har han inte *henne*. Bara hållit försiktigt i handen.

Tack för din medverkan!

Gunlög Josefsson

Gunlög Josefsson Institutionen för nordiska språk, Lunds universitet Helgonabacken 14 223 62 Lund

e-post: gunlog.josefsson@nordlund.lu.se