

Norwegian Object Shift as IP-internal topicalization

Merete Anderssen and Kristine Bentzen

*Department of Language and Linguistics/Center for Advanced Study in
Theoretical Linguistics (CASTL), University of Tromsø*

Abstract

In this paper we discuss the phenomenon of Object Shift in Norwegian, and we show that this operation is more complex and discourse related than what has traditionally been assumed. We argue that Object Shift cannot be accounted for in a purely prosodic approach. Rather, we demonstrate that a common denominator for all objects undergoing Object Shift is that they are topics. We thus propose that Object Shift should be analysed as (IP-internal) topicalization. Furthermore, we discuss in detail the peculiar behaviour of the topical pronominal object *det* 'it' in cases where its referent is not an individuated, gender-agreeing noun, but rather a non-individuated referent, like a full clause, a VP or a type DP. In such cases, this pronoun typically refrains from Object Shift. We discuss the contrast between these types of objects and shifting objects in light of the topic hierarchy presented in Frascarelli & Hinterhölzl (2007) and show that pronominal objects that undergo Object Shift have the characteristics of *familiar* topics, while *det* 'it' in the non-shifting contexts have the characteristics of *aboutness* topics. Consequently, we propose that Object Shift only applies to pronominal objects that constitute familiar topics.

1. Introduction

Scandinavian Object Shift is a phenomenon that has intrigued linguists since it was first discussed in Holmberg (1986), more than twenty years ago. This is also the case with Norwegian Object Shift (OS), which is the topic of the present paper. OS, which moves pronominal objects across negation and other adverbs, is illustrated with a Norwegian example in (1):

- (1) Jon så **den** ikke.
Jon saw it not
'Jon didn't see it.'

Despite a great deal of interest in and focus on these structures, there exists as of yet no generally agreed upon analysis of the phenomenon with regard to several aspects of the construction. This includes questions such as (i) what types of objects move, (ii) why these objects move, and (iii) why they only do so in conjunction with verb movement. In the present paper, we will address the first two of these questions.

Traditionally, Norwegian OS has been regarded as an operation that applies to prosodically weak objects (see section 3.1), and in light of this, it might seem surprising that the question of which objects move and why should still be a topic of research. One might expect the answer to these questions to be that weak pronominal objects move and they do so because

© 2012 Merete Anderssen and Kristine Bentzen. *Nordlyd* 39.1: 1-23, special issue on 'The Grammar of Objects,' ed. by Kristine Bentzen and Antonio Fábregas. University of Tromsø. <http://www.ub.uit.no/baser/nordlyd/>

they are prosodically light.¹ However, the situation is considerably more complex than this. We will show that there is a great deal more variation with regard to which pronouns shift than is generally assumed in the literature and we will further illustrate that this variation is not contingent on prosody. Instead, we will argue that OS should be regarded as an operation in which pronominal objects are topicalized to an IP-internal topic position. Furthermore, as we will see, the nature of the element the topical pronominal object refers to plays a crucial role. While pronouns with an *individuated* referent typically undergo OS, pronouns with a *non-individuated* referent tend to remain in an unshifted position. We link this contrast to what type of topic the pronominal object constitutes.

The paper is organised as follows. Section two provides a brief introduction to OS, while section three discusses previous theoretical approaches to the phenomenon. In section four, we present some new data that challenge the traditional view of these structures. Section five introduces the topic-based analysis of OS, while six deals with different types of topichood. Finally, section seven shows how the different types of topical pronouns display complimentary distribution with respect to various positions in the clause. Section eight provides some concluding remarks.

2. Norwegian Object Shift

As is well known, Norwegian OS only applies to pronominal objects. This means that if the object in a sentence such as (1) above had been a full DP, it would have to appear to the right rather than to the left of the negation. This difference is illustrated in (2) below:

- (2) a. Jon så **den** ikke.
 b. Jon så ikke **bilen**.
 Jon saw it not car.the
 ‘Jon didn’t see it/the car.’

However, OS is not only restricted to pronominal objects, it is also a fairly restrictive operation in other ways. For example, it only applies when the lexical verb moves out of the VP, an observation that is known as Holmberg’s Generalization (HG, Holmberg 1986). As a result, OS does not apply in clauses with periphrastic tense (3a) or in embedded clauses without verb movement (3b). This close correlation with verb movement is further confirmed by the fact that in embedded clauses displaying verb movement, pronominal objects have to shift (3c).

¹ Note that this characterization of OS is not compatible with Icelandic OS, as both pronominal and DP objects may shift in this language.

- (3) a. Jon har {*den} ikke lest {den}.
Jon has it not read it
 ‘Jon hasn’t read it.’
- b. Jon sa [at han {*den} ikke likte {den}].
Jon said that he it not liked it
 ‘Jon said that he didn’t like it.’
- c. Jon sa [at han likte {den} ikke {*den}].
Jon said that he liked it not it
 ‘Jon said that he didn’t like it.’

As mentioned above, one of the goals of the present study is to illustrate that OS does not apply across the board. However, it is a well-known fact that OS does not apply to all pronouns, specifically not to contrastively focused pronouns. This is illustrated in (4):

- (4) John leste {*DEN} sannsynligvis aldri {DEN}.
Jon read IT probably never IT
 ‘Jon probably never read that one.’

This observation is clearly compatible with the abovementioned prosodic approach to OS in the sense that in (4) the pronominal object is not prosodically light, in contrast with the unstressed pronominal objects in (1) and (2a). As we can see, the two also behave differently with regard to OS, the unstressed element shifts (cf. (1) and (2a)), while stressed pronouns do not, (4). However, in the remainder of this paper, we will show that this dichotomy is not representative of the behaviour of pronominal objects in general. Many pronominal objects do not shift, some of which are stressed and some of which are unstressed.

At this point, it might be useful to briefly comment on how Norwegian OS compares with scrambling in languages such as Dutch and German. Although the two processes have some properties in common, there is good reason to assume that OS is indeed different from scrambling. It is different with respect to HG, in the sense that scrambling is not limited to contexts in which the lexical verb leaves the VP (cf. (5b)). Furthermore, the two are also different with regard to landing sites. OS always goes to the immediate left of the negation or adverbial(s)², while scrambling can go in several positions, including in between adverbials (cf. Thráinsson 2001; Vikner 2006).

² Modulo so-called *Long Object Shift* in Swedish, where the shifted object ends up in a position preceding the subject (but following the finite verb). See Josefsson 1992, 2003. We will not discuss this phenomenon further here.

- (5) a. Ich habe nicht **für das Buch** bezahlt. (German)
I have not for the book paid
- b. Ich habe **für das Buch** nicht bezahlt.
I have for the book not paid
 ‘I have not paid for the book.’

Scrambling is also different from OS with respect to the types of elements that move. For example, as illustrated in (5), PPs can undergo scrambling but cannot do OS. It is a well-known fact that only pronominal objects can undergo OS in the Mainland Scandinavian languages, including Norwegian, while pronominal objects, PPs and DPs can scramble. Note, however, that in Icelandic, DPs, but not PPs, can also undergo OS, making OS in Icelandic more like scrambling than OS in the Mainland Scandinavian languages.

3. Previous research: Why prosodic approaches do not work

As already mentioned, a number of different approaches have been proposed to account for OS. For example, several early studies relate it to case assignment (Holmberg 1986, Vikner 1994, Holmberg & Platzack 1995). Fox & Pesetsky (2005), on the other hand, propose an approach based on phases and order preservation, where the order of the verb and the object within the vP phase has to be preserved. Nilsen (2003) takes *Holmberg’s Generalization* to follow from phrasal verb movement of the VP, where the object is pied-piped along inside the VP. There are numerous accounts of various aspects of OS, and the works mentioned here are just a few examples of the many different kinds of proposals available in the literature. As one of our main goals here is to show that not all pronominal objects behave the same with respect to OS, the details of these approaches will not be discussed further. What is important in the current context, however, is to show that the prosodic account of OS, which at first sight seems quite promising, does not work, given the data that will be presented here. Furthermore, the second aim of the present study is to propose an account of Norwegian OS that regards it as topicalization to a clause-medial (IP-internal) position, and consequently, any approaches which take OS to be related to information structure are of particular relevance as well. Thus, the present section will consider prosodic and information structure based approaches to OS and argue that these need to be revised to account for the data presented here.

3.1 Prosodic accounts

The general observation that all pronominal objects have to undergo OS, except stressed contrastive ones, has made prosody an attractive starting-

point for various accounts of the phenomenon. For example, Erteschik-Shir (2005) argues that OS is a purely phonological operation. According to her proposal, weak object pronouns do not constitute prosodic words and cannot be pronounced on their own. Consequently, they have to cliticize onto another element in an operation she refers to as Prosodic Incorporation. This operation causes pronominal objects to incorporate into the verb. Importantly, these elements cannot cliticize onto the negation or other adverbials, thus making it impossible for pronominal objects to follow negation.

Another account of OS that relies heavily on prosodic factors is found in Vogel (2006). Vogel argues that Scandinavian OS is a reflection of a restriction that applies quite generally in the Germanic languages, namely that weak function words tend to be avoided on the edges of larger prosodic domains. In Vogel's account (following Selkirk 1996), weak function words are defined as words lacking word stress. Based on this observation, he provides an optimality theoretical account of OS according to which weak function words are invisible, in the sense that they do not count as part of the phonological-correspondent of the verb phrase (they do not project prosodic structure). As a result, shifted pronouns do not violate syntactic constraints on the linearization of VP in languages with OS. (See also Josefsson 2003, 2010, for other approaches that take prosody into account in order to explain OS).

In the remainder of this section, we will show that OS versus no OS is dependent on the *type* of pronominal object rather than its prosodic status. In order to do this, we will show that the distinction between mono- and disyllabic object pronouns is irrelevant. Rather, certain types of pronouns have to undergo OS, while others cannot do so. If we start by considering personal pronouns, these pronouns have to shift across negation irrespective of whether they have one or two syllables. This is illustrated in (6), where the pronoun in (6a) is monosyllabic, while the one in (6b) is disyllabic. As can be seen from the examples, in both cases the pronominal object has to shift.

- (6) a. Han så {**meg**} ikke {***meg**}.
he saw me not me
 'He didn't see me.'
- b. Han så {**dere**} ikke {***dere**}.
he saw you.PL not you.PL
 'He didn't see you.'

Moving on to possessive pronouns, these elements cannot undergo OS, irrespective of whether they are monosyllabic (7a) or disyllabic (7b).³

- (7) a. Han fant **{*min}** ikke **{min}**.
he found mine not mine
 ‘He didn’t find mine.’
- b. Han fant **{*deres}** ikke **{deres}**.
he found yours.PL not yours.PL
 ‘He didn’t find yours.’

The same is true for indefinite pronouns (cf. Diesing 1996, Vikner 1997); they do not shift regardless of how many syllables they consist of. This is illustrated for a monosyllabic pronoun in (8a) and a disyllabic one in (8b).

- (8) a. Jeg ville låne en sykkel, men han hadde **{*en}** ikke **{en}**.
I wanted borrow a bicycle but he had one not one
 ‘I wanted to borrow a bicycle but he didn’t have one.’
- b. De kjente **{*noen}** ikke **{noen}**.
they knew someone not someone
 ‘They didn’t know anyone.’

Finally, Mikkelsen (2011) has shown that pronominal objects that are focused cannot shift, even if they are unstressed (Mikkelsen 2011: 240). Thus the monosyllabic personal pronoun (*him*) in (9) cannot shift, even though it is (i) a personal pronoun, and we saw in (6) that personal pronouns always shift, and (ii) monosyllabic, and we have seen that prosodic accounts rely on the idea that OS is related to prosody.

- (9) Den hurtigste spiller på holdet er uden tvivl Morten og ...
the fastest player on team.the is without doubt Morten and
 den højeste er **{*ham}** faktisk også **{ham}**.
the tallest is him actually also him
 ‘The fastest player on the team is without a doubt Morten and the tallest one/player is actually also him.’ (Danish)

Thus, we have shown that there are a number of examples of prosodically weak object pronouns that do not undergo OS, while strong pronouns (which receive word stress) may or may not shift depending on what type of pronouns they are. Consequently, we can conclude that the prosodic account does not hold. However, if we consider the example in (9), this example also reveals that the classification into types of pronouns used

³ As one of the reviewers point out, lack of OS with possessive pronouns might be due to ellipsis in the sense that such objects implicitly include an elided noun.

above does not hold. As (9) shows, the personal pronoun *him*, which we would expect to obligatorily appear to the left of the negation, has to remain in the unshifted position because it is focused. This suggests that it is not enough to classify different types of pronouns as shifting or non-shifting, it is also necessary to consider what impact information structure has in each individual case.

3.2 *Focus-based accounts*

There are several accounts of OS that have taken it to be related to information structure. Common to most of these is that they relate it to focus, or rather defocussing.⁴ For example, Holmberg (1999) argues that pronominal objects have to shift out of the VP to avoid being left within the default focus domain (the VP). According to Holmberg, weak pronominals (such as in the example in (2a) above) are inherently non-focused and have to move out of the VP, while strong pronouns and DPs have to be focused and consequently remain in situ (illustrated in (4) and (2b), respectively). The problem has in many cases been to distinguish this focus-based approach from a purely prosodic account, as the two make the same predictions with respect to (2a), (2b) and (4). The defocussed element in (2a) is also prosodically light, while the focussed elements in (2b) and (4) are prosodically strong.

As already indicated by example (9) above, Mikkelsen (2011) found a way to tease focus and prosodic prominence apart. In her study of OS largely based on Danish, Mikkelsen shows that while pronouns in predicational copular clauses must shift, this is not the case in specificational clauses. According to Mikkelsen, the explanation for this is related to information structure: Predicational copular clauses have a free focus structure, and focus may hence be on either the pre- or the post-verbal argument. Specificational copular clauses, on the other hand, exhibit fixed focus on the post-copular element (cf. Mikkelsen 2011: 235-236). Consequently, in such contexts, the post-copular element cannot shift across the negation, and this is what we saw illustrated in (9) above. However, Mikkelsen further tested a number of informants regarding whether stress played a role in these structures. The results of her survey revealed that in clauses of the type in (9), the pronoun was only acceptable in the unshifted position, but in this position it could be either stressed or unstressed. Based on this, Mikkelsen argues that a purely phonological

⁴ Focus-based accounts are also found in Diesing and Jelinek (1995), Platzack (1998) and Josefsson (1999). Furthermore, Josefsson (2003, 2010) also argues that OS is (at least partly) the result of a general propensity within languages to move backgrounded or given elements to the middle field.

account of OS is untenable; the reason why pronominal objects shift is not that they lack stress, but rather that they cannot be focused and consequently have to shift out of the VP.

However, there are some problematic aspects of Mikkelsen's account as well. First recall from the previous subsection that indefinite pronouns do not undergo OS in the Scandinavian languages. This was illustrated in (8) above, repeated here for convenience.

- (8) a. Jeg ville låne en sykkel, men han hadde {*en} ikke {en}.
I wanted borrow a bicycle but he had one not one
 I wanted to borrow a bicycle but he didn't have one.
- b. De kjente {*noen} ikke {noen}.
they knew someone not someone
 They didn't know anyone.

Within the defocusing approach advocated by Holmberg (1999) and Mikkelsen, we would consequently expect indefinite pronominals to be focused. However, this does not seem to be the case. None of the indefinite pronouns in the examples in (8) above are contrastively focused. Even though it is possible to imagine a situation in which these elements could be contrastively focused, the examples in (8) reveal that this is not necessary. Furthermore, as illustrated in (8a), there is no requirement for indefinite object pronouns to be informationally new either, so it is not the case that they have to be informationally focused. This is revealed both by the example in (8a) and in (10), in which the pronoun *en* 'one' refers back to *chocolate*:

- (10) Jeg skulle gjerne ha gitt deg en sjokolade,
I should gladly have given you a chocolate
 men jeg har {*en} ikke {en}.
but I have one not one
 'I would gladly have given you a chocolate but I don't have one.'

Furthermore, indefinite pronouns cannot answer *wh*-questions, which is a common test for focusability. This is illustrated by the unnaturalness of the answer in the dialogue in (11) below.

- (11) A: Hva vil du ha?
what will you have
 'What do you want?'
- B: #Jeg vil ha en / noe.
I want have one something
 'I want one/something.'

Thus, indefinite pronouns are problematic to accounts that take OS to be a defocussing operation. Such approaches are further challenged in the next section where we discuss another group of pronominal objects that are not stressed and not focused, but that nevertheless have to remain in situ in contexts in which OS generally applies.

4. Some new data: The curious case of pronoun *det* ‘it’

In this section we present some more data that are problematic both for the prosodic account of OS and for the defocussing approach. These data concern the pronoun *det* ‘it.’ This pronoun is the neuter form of the third person singular personal pronoun. In OS contexts, it typically refers to an NP referent in the neuter gender, as in (12):

- (12) A: Så du **huset**_{NEUT}? B: Ja, jeg likte **det**_{NEUT} ikke.
 saw you house.the *yes I liked it not*
 A: ‘Did you see the house?’ B: ‘Yes, I didn’t like it.’

However, as has been shown by several people (cf. among others Houser et al. 2008 for Danish, and Borthen 2003 and Lødrup 2012 for Norwegian), the pronoun *det* can also refer to non-nominal entities like clauses and VPs, as well as to type DPs. In the latter case, there is often a gender-mismatch between the pronoun *det* and the type DP it refers to, indicating that the referential relationship here is different from that seen in (12). The examples in (13)-(15) illustrate these other referring options for *det*.

- (13) Jeg hørte **at han var blitt syk**. **Det** var synd. (clausal referent)
 I heard that he was become ill it was sad
 ‘I heard that he had fallen ill. That was sad.’
- (14) Jeg hadde **vært på festen**. **Det** hadde John også. (VP referent)
 I had been at party.the it had John too
 ‘I had been to the party. So had John.’
- (15) Jeg liker **fisk**_{MASC}. **Det** er sunt. (Type DP referent)
 I like fish it is healthy
 ‘I like fish. It’s healthy.’

Interestingly, pronominal *det* with referents like those in (13)-(15) tends to resist OS. Andréasson (2008, 2009, 2010) has shown this for Danish and Swedish with respect to *det* referring to a clause or a VP, and Anderssen et al. (2012) have demonstrated this for Norwegian *det* referring to a clause, a VP, or a type DP. Norwegian examples are provided in (16)-(18):

- (16) A: Spiste du noe frukt?
 ate you any fruit.MASC
 ‘Did you eat any fruit?’

B: Nei, jeg gjorde {***det**_{VP}} ikke {**det**_{VP}}.
no I did it_{.NEUT} not it_{.NEUT}
 ‘No, I didn’t.’ (det = ‘eat any fruit’)

(17) A: Har hun gått hjem?
has she gone home
 ‘Has she gone home?’

B: Jeg tror {***det**_{CLAUSE}} ikke {**det**_{CLAUSE}}.
I think it_{.NEUT} not it_{.NEUT}
 ‘I don’t think so.’ (det = ‘that she has gone home’)

(18) A: Hva med fisk til middag?
what with fish_{.MASC} to dinner
 ‘How about fish for dinner?’

B: Nei, Per spiser {#**det**} ikke {**det**}.
no Per eats it_{.NEUT} not it_{.NEUT}
 ‘No, Per doesn’t eat that.’ (det = fish as a type of food)

These data further challenge the prosodic account of OS, as these unshifted instances of *det* typically are unstressed. Furthermore, these types of pronouns can hardly be claimed to be focus elements (thereby resisting OS), as they clearly refer to given information, and do not express any kind of contrastivity.

Thus, OS needs an alternative account. In the remaining sections, we will pursue an approach in which OS is seen as a topicalization operation.

5. OS as IP-internal topicalization

In her discussion of OS in Swedish and Danish, Andréasson (2008, 2009, 2010) alludes to the notion of *accessibility* and cognitive status in the sense of the Givenness Hierarchy of Gundel et al. (1993). This hierarchy is shown in Figure 1:

in focus	activated	familiar	identifiable	referential	type identifiable
<i>it</i>	<i>this/that/ this N</i>	<i>that N</i>	<i>the N</i>	<i>indefinite this N</i>	<i>a N</i>

Figure 1: Givenness Hierarchy (Gundel et al. 1993)

According to the Givenness Hierarchy, personal and demonstrative pronouns have the highest cognitive status, *in focus* and *activated*, respectively. Borthen et al. (1997) and Gundel et al. (1999) discuss the use of *it* and *that* in English in comparison with (what they claim are) the

Norwegian counterparts, unaccented and accented *det*.⁵ They show that whereas *it* (and unaccented *det*) typically refers to a nominal expression, *that* (and accented *det*) typically refers to a clausal entity, as shown in (19)-(20), where *it* in (19) refers to the snake, and *that* in (20) refers to the whole preceding clause ‘there was a snake on my desk’ (modified from Borthen et al. 1997: 89):

(19) There was a snake on my desk. It scared me.

(20) There was a snake on my desk. That scared me.

In terms of the Givenness hierarchy, *it* in (19) has a higher cognitive status than *that* in (20), and in parallel, *det* referring to a nominal expression has a higher cognitive status than *det* referring to a clause.

Andréasson (2008, 2009, 2010) makes use of this distinction in her account of shifted and non-shifted pronominal objects in Danish and Swedish. She argues that pronouns with a DP referent are in general cognitively easier to process than pronouns with a clausal or VP referent. In English, this is reflected in the use of *it* vs. *that*. For Danish and Swedish, Andréasson argues that the difference in cognitive status affects the availability of OS. More specifically, she proposes that the OS position is only available to pronominal objects that are *in focus*. This accounts for the standard cases of OS, as Andréasson argues that pronominal objects referring to DPs are *in focus*. *Det* referring to a clause or a VP, on the other hand, is only *activated* (and not *in focus*), and it typically does not undergo OS.

Although neither Gundel et al. (1993) nor Andréasson (2008, 2009, 2010) say this explicitly, it seems clear that the term *in focus* essentially means *topic*. As a definition of what it means to be *in focus*, Gundel et al. (1993: 279) say it is ‘the current center of attention’ and Gundel (2010: 154) says that ‘the addressee is intently looking at it’ and that ‘it was introduced in a syntactically prominent position in the immediately preceding sentence’. These are properties that are associated with topichood, e.g. what the sentence is about (Reinhart 1981). Along the lines of Andréasson, Anderssen et al. (2012) therefore argue that the common denominator for pronominal objects that undergo OS is that they are topical elements. Thus they propose that OS is an operation of topicalization, where the target position for the topicalized object is an IP-internal TopP (cf. Jayaseelan 2001, 2008, Mohr 2005).

However, there are strong indications that the unshifted pronominal *det* in (16)-(18) also qualifies as a topic. For one thing, it is typically

⁵ This parenthesis is added because as shown in Bentzen and Anderssen (2011), unaccented *det* may also be used in contexts where English uses *that*.

unaccented, which suggests that it corresponds to English *it*, and thus is an *in focus* element, i.e. a topic. Furthermore, based on results from a corpus survey of written Danish and Swedish texts⁶, Andréasson (2010) reports that the preferred position of *det* referring to a clause or a VP in Danish and Swedish is in fact the clause-initial position. As far as we know, the pronoun tends to be unstressed here as well (the same holds for Norwegian). This is another good indication that such pronouns are indeed topics.

Due to this, Anderssen et al. (2012) argue that topicality alone cannot be what determines whether or not a pronominal object shifts. They point out that a crucial distinction between shifting and non-shifting *det* concerns the nature of the entity it refers to in terms of *individuation*. Pronominal objects that typically undergo OS are not only topics, but they also clearly have an individuated referent, i.e. they refer to a specific, identifiable entity <e> (cf. Andréasson 2008) already mentioned in the discourse. We saw this in example (12), where *det* in speaker B's response refers to the specific house mentioned by speaker A in the previous utterance. In contrast, both clausal- and VP-referring *det* and *det* referring to a type DP have non-individuated referents. In examples (16) and (17), *det* does not refer to a specific or identifiable entity in the discourse, but rather to whole propositions; the VP 'eat any fruit' in (16) and the whole clause 'she has gone home' in (17). Likewise, in example (18), *det* does not refer to any specific fish. If it did, it would have agreed in gender with the masculine noun 'fish' and appeared in its masculine form *den*. Rather, *det* here refers to fish as a type of food, and thus has a non-individuated referent. Consequently, *det* does not undergo OS in (16)-(18).

These different referential properties of personal pronouns can be further illustrated with spoken data from the Nordic Dialect Corpus⁷ (Johannessen, Priestley, Hagen, Åfarli & Vangsnes 2009). Consider first example (21). In this dialogue, the lake *Djelgiaore* is the topic of the discourse. Once the lake has been introduced into the discourse, speaker *lakselv_03gm* refers to it using the agreeing personal pronoun *det* (in the neuter gender, since *vann* 'lake' is neuter) when he explains to speaker *lakselv_04gk* that the lake is called *Djelgiaore*, and that it runs into another lake called *Nattvann*. And crucially, in speaker *lakselv_03gm*'s final utterance, the pronoun, again referring to the same specific lake *Djelgiaore*, shifts across negation:

⁶ Korpus Dk (<<http://ordnet.dk/korpusdk>>) and PAROLE (<<http://spraakbanken.gu.se/parole/>>).

⁷ http://www.tekstlab.uio.no/nota/scandiasyn/Search_Facilities.html

- (21) Dialogue between an old man (*lakselv_03gm*) and an old woman (*lakselv_04gk*) from Lakselv in Northern Norway.

Discourse topic: Lake Djelgiaore, where the man is going fishing this weekend:

- lakselv_03gm: jeg skal forresten opp og fiske sik til helga.
 ‘By the way, I’m going to go fish for powan this weekend.’
- lakselv_04gk: ja. Hvor du gjør det?
 ‘Yeah. Where do you do that?’
- lakselv_03gm: vi har et vann_{NEUT} som ligger e [eh] helt oppved Nattvann. **Det**_{NEUT} renner ned i Nattvann. **Det**_{NEUT} heter Djelgiaore. Man ser **det**_{NEUT} ikke ve- fra veien. [*det* = Djelgiaore]
 ‘There is this lake right up by *Nattvann*. **It** runs into *Nattvann*. **It**’s called *Djelgiaore*. You can’t see **it** from the road.’

This example clearly shows that what the pronoun *det* here refers to is indeed the topic of the conversation. Speaker *lakselv_04gk* asks where speaker *lakselv_03gm* goes fishing and by introducing the lake *Djelgiaore*, he turns this into the discourse topic. Moreover, *det* refers to a specific, identifiable entity in the discourse, namely lake *Djelgiaore*, and hence has an individuated referent. As expected under the proposal by Anderssen et al. (2012) the pronoun *det* thus undergoes OS.

In the next dialogue, the musical “Jesus Christ Superstar” is the topic of the discourse. Speaker *kirkenes_01um* first asks speaker *kirkenes_02uk* whether she has seen this musical, and then whether she thought it was good. Speaker *kirkenes_01um* uses the pronoun *det* in her response to this. *Det* here clearly refers the whole proposition ‘it was good.’ By the time of speaker *kirkenes02uk*’s response, this proposition is already present in the discourse, and thus given. We therefore assume the proposition to have the status of being topical at the point of speaker *kirkenes02uk*’s response. However, this proposition obviously cannot be considered to be a specific entity. Consequently, the pronoun *det* in speaker *kirkenes02uk*’s response refers to a non-individuated element, and hence remains in an unshifted position.

- (22) Dialogue between a young man (*kirkenes_01um*) and a young woman (*kirkenes_02uk*) from Kirkenes in Northern Norway.

Discourse topic: Musicals, and “Jesus Christ Superstar” in particular:

- kirkenes_01um: har du sett “Jesus Christ Superstar”?
 ‘Have you seen “Jesus Christ Superstar”?’

- kirkenes_02uk: Ja. Har du?
 ‘Yes. Have you?’
 kirkenes_01um: Var den bra?
 ‘Was it good?’
 kirkenes_02uk: Nei, jeg synes ikke **det**. [*det* = that JCS was good]
 ‘No, I don’t think so.’

Finally, let's look at a naturally occurrence of example of *det* referring to a type DP, a bathing beauty⁸ (also from the Nordic Dialect Corpus). Here, speaker *brunlanes_01um* is not asking speaker *brunlanes_02uk* whether she *is* some particular bathing beauty but rather whether she has characteristics in common with those associated with a bathing beauty in general. Thus, when speaker *brunlanes_02uk* responds using *det* to refer to this, she too does not have any particular bathing beauty in mind, but rather bathing beauty as a type. Another indication that we are dealing with reference to a type DP here is that there is lack of gender agreement between bathing beauty, which is masculine, and the pronoun *det*, which as we know is neuter. As one would expect, this pronoun thus does not undergo OS:

- (23) Dialogue between a young man (*brunlanes_01um*) and a young woman (*brunlanes_02uk*) from Brunlanes in Eastern Norway.
Discourse topic: Swimming in the sea and finding good places to lie down on the beach:

- brunlanes_01um: nei så du er ikke noen badenymfe_{MASC} nei.
 ‘No, so you’re not much of a bathing beauty.’
 brunlanes_02uk: nei jeg er **ikke det** # jeg jobber heller om sommeren jeg.
 ‘No, I’m not # I’d rather work during the summer.’
 [*det* = bathing beauty]

These spoken corpus examples therefore support the generalization proposed in Anderssen et al. (2012), namely that topical pronominal objects with an individuated referent undergo OS, while topical pronominal objects with a non-individuated referent do not.⁹

⁸ Literally a ‘bathing nymph’.

⁹ Note, however, that although this generalization correctly describes the typical scenario, even this approach cannot account for the complete picture. As shown in Bentzen & Anderssen (2011), there are contexts in which even a pronoun *det* referring to e.g. a clause can undergo OS (from Bentzen & Anderssen 2011):

- (i) At John er så naiv, plager meg virkelig, men hun merker {**det**} ikke {**det**}.
that John is so naïve bothers me really but she notice it not it
 ‘That John is so naïve really bothers me, but she doesn’t notice it/that.’

In the next section, we link the different behaviour of various topical personal pronouns with respect to OS to the nature of different kinds of topics.

6. The relevance of the type of topichood

Frascarelli (2007), Frascarelli & Hinterhölzl (2007, and references therein) discuss different types of topics. They distinguish between *aboutness* topics, *contrastive* topics, and *familiar* topics. Aboutness topics are “what the sentence is about.” Contrastive topics on the other hand “create[s] oppositional pairs with respect to other topics”. Finally, a familiar topic is “[A] given or accessible constituent, which is typically distressed.” We adopt this division of various topics, and as we will see shortly, the type of topic a pronominal object is will influence whether it is available to OS.

In Norwegian, all shifting pronominal objects are distressed. They are also informationally given, and D-linked in the sense that they have an accessible referent in the discourse. Thus, shifting pronominal objects have the typical characteristics of what Frascarelli & Hinterhölzl label familiar topics. Recall that in the previous section we demonstrated that personal pronouns that undergo OS are topics, as illustrated in the dialogue in (21). In this dialogue, it is clear that *det* in the final utterance is not just a topic, but more specifically what Frascarelli & Hinterhölzl refer to as a familiar topic. Indeed they claim that familiar topics usually are realized as pronouns, exactly the types of elements that undergo OS. Based on this, we propose that OS applies to (all and only) *familiar* pronominal objects in Norwegian.

While objects that are familiar topics obligatorily shift, objects that are *not* familiar topics cannot shift. In the previous section, we saw that the pronominal object *det* ‘it’ with a clause, a VP, or a type DP as its referent does not shift. This is at first sight surprising, as these objects probably also constitute topics. Recall the dialogue in (22), in which the topic under discussion is the musical “Jesus Christ Superstar”, repeated here as (24). The speaker *kirkenes_01um* asks his interlocutor whether she thought it was good, and she (*kirkenes_02uk*) answers using a structure that does not involve OS. We argued in the previous section that by the time (24) is uttered, the proposition “it was good” is already present and given in the

(non-shifted *det* = ‘that it worries me that...’)
(shifted *det* = ‘that John is so naïve’)

Moreover, Andréasson 2008 claims that *det* referring to a clause occurs in a shifted position much more frequently in factive than in non-factive clauses. We leave the challenge these observations pose for future research (but point the interested readers to Bentzen & Anderssen 2011 for a preliminary account for this).

discourse and hence a topic, but nevertheless does not undergo OS. The fact that the object pronoun in (24) can be topicalized to the clause-initial position, as illustrated in (25), confirms that the relevant object is indeed a topic.

(24) Nei, jeg synes ikke **det**.
no I think not that
 ‘No, I don’t think so.’

(25) Nei, **det** synes jeg ikke.
no that think I not
 ‘No, I don’t think so.’

So a pressing question is why these elements tend to refrain from undergoing object shift. We link this to the nature of the constituent the pronoun is referring to. Both clausal and VP-referring *det* ‘it’ and *det* ‘it’ referring to a type DP have a *non-individuated* referent. They do not refer to any specific or identifiable (D-linked) entity in the discourse, and hence cannot be familiar topics. We argue that such objects are *aboutness* topics, or “what the sentence is about” in the framework of Frascarelli & Hinterhölzl (2007). Note that Frascarelli & Hinterhölzl (2007:105) claim that facts and events cannot be aboutness topics. This assumption is based on the fact that German *das* (it), when referring back to entire facts or events, is never marked with the Low + High* tone that is generally used for aboutness topics. We would like to challenge this assumption, at least for Norwegian, and claim that the Norwegian equivalent, *det*, can be an aboutness topic. Pragmatically this makes sense in the context discussed in (22), as the sentence (in 24) is about the fact that the musical was not good (according to the speaker). Furthermore the constituent has been “newly introduced” (Frascarelli & Hinterhölzl 2007:88, from Givón 1983) and “is a matter of standing and current interest or concern” (Frascarelli & Hinterhölzl 2007:88, from Strawson 1963), and hence fits Frascarelli & Hinterhölzl’s definition of aboutness topic perfectly.

Let us consider another example of an aboutness topic, this time from one of the adult speakers in a child language corpus (Anderssen 2006). In this dialogue, the investigator and Ann are looking in a book where there are pictures of different kinds of food, and among these there is a picture of macaroni. The investigator tells Ann that the thing she can see in the picture is called macaroni.

(26) INV: Har du spist makaroni?
have you eaten macaroni
 ‘Have you ever eaten macaroni?’

ANN: Nei.

no

INV: Har du **ikke det**?

have you not that

‘Haven’t you (done that)?’

In this dialogue the topic is whether Ann has ever tasted macaroni. It starts with the investigator asking whether she has, and Ann answers that she has not. Then the investigator utters the sentence containing the potential OS context, and this is a question that literally means *have you not done that*. In the relevant utterance, the pronominal object *det* refers to the VP, *eaten macaroni*, and does not shift. The clause takes the form of an interrogative, but it is more of a ‘conversational’ interrogative than an actual one; the investigator could have replied with a declarative clause with the same order of the negation and the pronominal object. If that had been the case, both the in situ version in (27) and the topicalized version in (28) would be acceptable. This again reveals that these elements are topics, even though they are not familiar topics.

(27) Du har ikke **det**.
you have not that
 ‘You haven’t done that.’

(28) **Det** har du ikke.
that have you not
 ‘You haven’t done that.’

In this section, we have argued that VP- and CP- and type DP-referring examples of unshifted *det* should be regarded as topics, but as aboutness topics rather than familiar topics. Another interesting fact about these examples is that the natural translation of *det* in these contexts is in fact *that* (cf. (27)-(28)). Recall from Figure 1 in section 5 that Andréasson (2008, 2009, 2010) refers to the Givenness Hierarchy of various nominal elements (Gundel et al. 1993) in her treatment of OS in Danish and Swedish. According to this hierarchy, personal and demonstrative pronouns have the highest cognitive status, that is, they are *in focus* and *activated*, respectively. Andréasson argues that only pronominal objects that are *in focus*, that is personal pronouns, may undergo OS. In section 5, we suggested that *in focus* seems to be equivalent to topic. In this section we have seen that the pronominal objects in (22)-(28) also behave like topics, even though these pronominal elements are defined as *activated* rather than *in focus* according to the Givenness Hierarchy. There thus seems to be a parallel between what Gundel et al. (1993) refer to as *in focus* pronominal objects and familiar topics, on the one hand, and what they refer to as

activated pronominal objects and aboutness topics, on the other. The common denominator here is topichood and a high cognitive accessibility. However, as we have seen already, the two types of topics are not associated with the same syntactic position.

7. The positions of pronominal objects: An overview

In this section we correlate the types of topics discussed in Frascarelli & Hinterhölzl (2007) to the various positions in which pronominal objects can occur in Norwegian. Based on data from Italian and German, Frascarelli & Hinterhölzl argue that there is a hierarchy among various topics with respect to their relative order and position in the clause. We here propose an adaptation of this hierarchy to account for the possible positions of pronominal objects in Norwegian.¹⁰ The various positions and functions of the different types of topical objects in Norwegian can thus be roughly schematized as follows:

Clause-initially		OS position	In situ	
<i>About topic</i> <i>det</i> _{NON-INDIV}	<i>Contr topic</i> contrastive obj	<i>Fam topic</i> obj _{INDIV}	<i>About topic</i> <i>det</i> _{NON-INDIV}	<i>Contr focus</i> focussed obj

Figure 2: Topic hierarchy in Frascarelli & Hinterhölzl (2007) adapted to Norwegian pronominal objects

In the in-situ position, we find contrastively focused pronouns. We also typically find the pronoun *det* here when it has a non-individuated reference. In the OS position, we find pronominal objects that have undergone OS, namely objects that are familiar topics. Finally, in the clause-initial position, we again find the pronoun *det* with a non-individuated reference, in addition to contrastive topics. There is a complimentary distribution between these different types of topics: While familiar topics typically cannot occur neither in the in-situ position nor in the clause-initial position, aboutness topics and contrastive topic/focus elements cannot occur in the OS position.

The examples in (29)-(31) illustrate the complementary distribution of various types of pronominal objects. In (29) we see an example of the placement of familiar (non-contrastive) topics, and as these examples show, these pronominal objects have to undergo OS; they are generally incompatible with both the clause-initial and the in-situ position:

¹⁰ Note that while Frascarelli & Hinterhölzl (2007) discuss topical *subjects*, we do not attempt to say anything about the position of subjects in Norwegian. Our current proposal only concerns pronominal *objects*.

(29) **Pronominal objects with an individuated referent:**

Har du spist bananen din?
have you eaten banana.the your
 ‘Have you eaten your banana?’

- a. *Nei, **den** likte jeg ikke.¹¹
no it liked I not
- b. Nei, jeg likte **den** ikke.
no I liked it not
 ‘No, I didn’t like it.’
- c. *Nei, jeg likte ikke **den**.
no I liked not it

In (30) we see the possible positions for the pronoun *det* when it refers to a non-individuated referent and functions as an aboutness topic, viz. clause-initially or in situ. The OS position is generally not available for these pronouns. This holds true regardless of whether *det* refers to a VP (as in (30)), a clause, or a type DP.

(30) **Pronominal objects with a non-individuated referent:**

Spiste du noe frukt?
ate you any fruit
 ‘Did you eat any fruit?’

- a. Nei, **det** gjorde jeg ikke.
no it did I not
 ‘No, I didn’t.’
- b. *Jeg gjorde **det** ikke.
I did it not
- c. Nei, jeg gjorde ikke **det**.
no I did not it
 ‘No, I didn’t.’

Finally, in (31) we see the possible positions for contrastive pronouns. Again, the options are the clause-initial position or the in-situ position, whereas the OS position is unavailable. Note that in the clause-initial position, this pronoun is a contrastive *topic*, while in the in situ position, it is contrastively *focused*:

¹¹ Although (29a) is strongly degraded in Norwegian, Vallduví & Engdahl (1996:34-35) show that such pronominal objects can occur in clause-initial position in Swedish.

(31) **Contrastive pronominal objects:**

- Kjøpte du den siste boka til Camilla Läckberg igår?
bought you that last book.the to Camilla Läckberg yesterday
 ‘Did you buy the most recent Camilla Läckberg novel yesterday?’
- a. Nei, **DEN** kjøpte jeg ikke (men jeg kjøpte en annen bok).
no that bought I not but I bought an other book
 ‘No, THAT I didn’t buy (but I bought some other novel).’
- b. *Nei, jeg kjøpte **DEN** ikke (men jeg kjøpte en annen bok).
no I bought that not but I bought an other book
- c. Det var ikke **DEN** jeg skulle ha (men en annen bok).
it was not that I should have but an other book
 ‘I didn’t want THAT one (but some other novel).’

In this final section we have shown that the relative position of the different types of pronominal objects can be described in terms of an adaptation of the topic hierarchy in Frascarelli & Hinterhölzl (2007). We have also illustrated the complimentary distribution of pronominal objects with respect to position in the clause. This further supports our claim that pronominal objects may constitute different kinds of topics, and that the type of topichood involved determines the availability of OS to an IP-internal TopP.

8. Summary and concluding remarks

In this paper, we have proposed an approach to OS that regards it as IP-internal topicalization. We have done this by illustrating that pronominal objects that undergo OS typically represent topics, and, following Frascarelli & Hinterhölzl’s (2007) hierarchy of topics, we have demonstrated that, more specifically, these elements fit into the category of familiar topics. Not only are they D-linked, but they also represent the most accessible type of referent in the Givenness Hierarchy, that is, they are *in focus* (Gundel et al. 1993). However, a closer investigation into the placement of different pronominal objects reveals that a great number of them do not undergo OS. This includes pronominal objects referring back to non-individuated referents, such as VPs, CPs, or type-referring DPs. In fact, these elements do not shift even in cases when they can be shown to be topics. Based on this, we suggest that object pronouns (*det*) referring back to non-individuated referents are aboutness topics, and must either be topicalized into the clause-initial position, or remain in an in situ topic position. These referents are somewhat less accessible in Gundel et al.’s (1993) Givenness Hierarchy than personal pronouns; they are *activated*. Thus there appears to be a correlation between what Frascarelli &

Hinterhölzl refer to as familiar topics and what Gundel et al. refer to as *in focus*, on the one hand, and what Frascarelli & Hinterhölzl refers to as aboutness topics and *activated* referents (Gundel et al. 1993), on the other. In this paper, we have shown that in Norwegian, the former type of topics obligatorily undergoes OS, while the latter typically does not.

References

- Anderssen, Merete, Kristine Bentzen & Yulia Rodina. 2012. 'Topicality and complexity in the acquisition of Norwegian Object Shift,' *Language Acquisition* 19(1), 39-72.
- Anderssen, Merete. 2006. *The Acquisition of Compositional Definiteness*. PhD dissertation, University of Tromsø.
- Andréasson, Maia. 2008. 'Not all objects are born alike — accessibility as a key to pronominal object shift in Swedish and Danish,' in Miriam Butt and Tracy Halloway King (eds), *Proceedings of the LFG08 Conference*, CSLI Publications, Stanford, 26-45.
- Andréasson, Maia. 2009. 'Pronominal object shift — not just a matter of shifting or not,' *Working Papers in Scandinavian Syntax* 84, 1-20.
- Andréasson, Maia. 2010. 'Object shift or object placement in general,' in Miriam Butt and Tracy Halloway King (eds), *Proceedings of the LFG10 Conference*, CSLI Publications, Stanford, 26-42.
- Bentzen, Kristine & Merete Anderssen. 2011. 'Scandinavian Object Shift revisited: The relevance of (types of) topichood,' Paper presented at the 10th International Conference on the Structure of Hungarian in the Workshop on Uralic and Scandinavian Languages, University of Lund.
- Borthen, Kaja, Torstein Fretheim & Jeanette Gundel. 1997. 'What brings a higher-order entity into focus of attention?' in Ruslan Mitkov & Branimir Boguraev (eds.) *Operational Factors in Practical, Robust Anaphora Resolution. Proceedings from a workshop sponsored by the ACL*, Universidad Nacional de Educación a Distancia, Madrid, 88-93.
- Borthen, Kaja. 2003. *Norwegian Bare Singulars*. Ph.D. thesis, Norwegian University of Science and Technology.
- Diesing, Molly & Eloise Jelinek. 1995. 'Distributing arguments,' *Natural Language Semantics* 3, 123-176.
- Diesing, Molly. 1996. 'Semantic variables and object shift,' in Höskuldur Thráinsson, Samuel David Epstein and Steve Peter (eds.), *Studies in comparative Germanic syntax II*, Kluwer Academic Publishers, Dordrecht, 66-84.
- Erteschik-Shir, Nomi. 2005. 'Sound patterns of syntax: Object shift,' *Theoretical Linguistics* 31(1-2). 47-94.
- Fox, Danny & David Pesetsky. 2005. 'Cyclic linearization of syntactic structure,' *Theoretical Linguistics* 31(1-2). 1-45.
- Frascarelli, Mara & Roland Hinterhölzl. 2007. 'Types of topics in German and Italian,' in Susanne Winkler and Kerstin Schwabe, (eds.), *On Information Structure, Meaning and Form*. John Benjamins, Amsterdam, 87-116.
- Frascarelli, Mara. 2007. 'Subjects, topics and the interpretation of referential *pro*,' *Natural Language and Linguistic Theory* 25, 691-734.

- Givón, Thomas 1983. 'Topic continuity in discourse: An introduction,' in Thomas Givón (ed.) *Topic Continuity in Discourse: A quantitative cross-language study*. John benjamins, Amsterdam/Philadelphia, 5-41.
- Gundel, Jeanette, Kaja Borthen & Thorstein Fretheim. 1999. 'The role of context in pronominal reference to higher order entities in English and Norwegian,' in Paolo Bouquet, Luciano Serafini, Patrick Brézillon, Massimo Benerecetti & Francesco Castellani (eds.) *Modeling and Using Context. Proceedings from the Second International and Interdisciplinary Conference, CONTEXT '99*. Lecture Notes in Artificial Intelligence 1688. Springer, Berlin/Heidelberg, 475-478.
- Gundel, Jeanette, Nancy Hedberg & Ron Zacharski. 1993. 'Cognitive status and the form of referring expressions in discourse,' *Language* 69, 274-307.
- Gundel, Jeanette. 2010. 'Reference and accessibility from a Givenness Hierarchy perspective,' *International Review of Pragmatics* 2, 148-168.
- Holmberg, Anders & Christer Platzack. 1995. *The Role of Inflection in Scandinavian Syntax*, Oxford Studies in Comparative Syntax, Oxford University Press, New York.
- Holmberg, Anders. 1986. *Word order and syntactic features in the Scandinavian languages and English*. Doctoral dissertation, University of Stockholm.
- Holmberg, Anders. 1999. Remarks on Holmberg's Generalization,' *Studia Linguistica* 53(1). 1-39.
- Houser, Michael J, Line Mikkelsen & Maziar Toosarvandani. 2008. 'Verb phrase pronominalization in Danish: Deep or surface anaphora?' in Erin Brainbridge & Brian Agbayani (eds.) *Proceedings of the Thirty-Fourth Western Conference on Linguistics*. Department of Linguistics, California State University, Fresno, CA, 183-195.
- Jayaseelan, Karattuparambil. 2001. 'IP-internal topic and focus phrases,' *Studia Linguistica* 55(1). 39-75.
- Jayaseelan, Karattuparambil. 2008. 'Topic, focus and adverb positions in clause structure,' *Nanzan Linguistics* 4, 43-68.
- Johannessen, Janne Bondi, Joel Priestley, Kristin Hagen, Tor Anders Åfarli & Øystein Alexander Vangsnes. 2009. 'The Nordic Dialect Corpus - an Advanced Research Tool,' in Kristiina Jokinen & Eckhard Bick (eds.): *Proceedings of the 17th Nordic Conference of Computational Linguistics NODALIDA 2009*. NEALT Proceedings Series Volume 4.
- Josefsson, G. 1992. 'Object Shift and weak pronominals in Swedish,' *Working Papers in Scandinavian Syntax* 52, 1-39.
- Josefsson, G. 1999. 'On the semantics and syntax of Scandinavian pronouns and object shift,' in *Clitics in the languages of Europe*, Henk van Riemsdijk (ed.), Mouton de Gruyter, Berlin, 731-757.
- Josefsson, Gunlög. 2003. 'Four myths of object shift... and the truth,' in Lars-Olof Delsing, Cecilia Falk, Gunlög Josefsson & Halldór Sigurdsson (eds.) *Grammar I Fokus: Vol. II. Festschrift for Christer Platzack, November 18, 2003*. Department of Scandinavian Languages, Lund University, 199-207.
- Josefsson, Gunlög. 2010. 'Object Shift and optionality: An intricate interplay between syntax, prosody and information structure,' *Working Papers in Scandinavian Syntax* 86, 1-24.

- Lødrup, Helge. 2012. 'Some Norwegian 'type anaphora' are surface anaphora,' *Journal of Germanic Linguistics* 24.1, 23-52.
- Mikkelsen, Line. 2011. 'On prosody and focus in Object Shift,' *Syntax* 14.3, 230-264.
- Mohr, Sabine. 2005. *Clausal architecture and subject positions: Impersonal constructions in the Germanic languages*, Linguistik Aktuell, John Benjamins, Amsterdam/Philadelphia.
- Nilsen, Øystein. 2003. *Eliminating positions*. Doctoral dissertation, Utrecht University.
- Platzack, Christer. 1998. *Svenskans inre grammatik—det Minimalistiska Programmet [The internal grammar of Swedish—the Minimalist Program]*. Studentlitteratur, Lund, Sweden.
- Reinhart, Tania. 1981. 'Pragmatics and linguistics: An analysis of sentence topics,' *Philosophica* 27.1, 53-94.
- Selkirk, Elisabeth. 1996. 'The prosodic structure of function words,' in James Morgan & Katherine Demuth (eds.) *Signal to Syntax: Boot-strapping from speech to grammar in early acquisition*. Lawrence Erlbaum, Mahwah New Jersey, 187-213.
- Strawson, Peter. 1963. 'Identifying reference and truth values,' *Theoria* 30, 96-118.
- Thráinsson, Höskuldur. 2001. 'Object Shift and scrambling,' in Mark Baltin and Chris Collins (eds.), *The Handbook of Contemporary Syntactic Theory*, Blackwell, Oxford, 148-202.
- Vallduví, Enric & Elisabet Engdahl. 1996. 'The linguistic realisation of information packaging,' *Linguistics* 34, 459-519.
- Vikner, Sten. 1994. 'Scandinavian object shift and West Germanic scrambling,' in Norbert Corver and Henk van Riemsdijk (eds.), *Studies on scrambling*, Mouton de Gruyter, Berlin, 487-517.
- Vikner, Sten. 1997. 'The interpretation of object shift, optimality theory and minimalism,' *Working Papers in Scandinavian Syntax* 60. 1-24.
- Vikner, Sten. 2006. 'Object Shift,' in Martin Everaert and Henk van Riemsdijk (eds.), *The Blackwell companion to syntax, Vol III*, Blackwell, Oxford, 392-436.
- Vogel, Ralf. 2006. 'Weak function word shift,' *Linguistics* 44.5, 1059-1097.