# Preposed object pronouns in mainland Scandinavian<sup>\*</sup>

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#### **Abstract**

We report on a study of preposed object pronouns using the *Scandinavian Dialect Corpus*. In other Germanic languages, e.g. Dutch and German, preposing of unstressed object pronouns is restricted, compared with subject pronouns. In Danish, Norwegian and Swedish, we find several examples of preposed pronouns, ranging from completely unstressed to emphatically stressed pronouns. We have investigated the type of relation between the anaphoric pronoun and its antecedent and found that the most common pattern is *rheme-topic chaining* followed by *topic-topic chaining* and *left dislocation with preposing*. The phonetic realization of the pronouns, however, is not correlated with the type of anaphoric chain; rather it reflects the type of the antecedent (VP, clause or entity) and whether or not the speaker has a contrast in mind.

Previous studies have found a subject-object asymmetry with respect to clitic pronouns. Since we were not able to search for Swedish clitic pronouns in the corpus, we gathered some data on Swedish clitics and *r*-pronouns using a questionnaire. The results from the questionnaire confirm that object clitics resist preposing, whereas *r*-pronouns can be preposed. Given the results from the corpus study, we conclude that we need to distinguish clitics, unstressed pronouns, pronouns with word stress and emphatically stressed pronouns in order to account for the full range of variation.

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#### 1 Introduction

Preposing of object pronouns is quite common in Danish, Norwegian and Swedish, for instance in question/answer exchanges, as illustrated in (1)–(2).

- (1) A: Var är cykeln?

  where is bike.DEF

  'Where is the bike?'

  B: Den ställde jag i garaget.

  it put I in garage.DEF

  'I put it in the garage.'
- (2) A: Har dialekten här ändrat sig?

  has dialect.DEF here changed REFL

  'Has the dialect here changed?'

  B: Nej, det tycker jag inte.

  no it think I not

  'No, I don't think so.'

A's question introduces a referent (the bike in (1)) or an issue (whether the dialect has changed in (2)) and B starts the reply by referring back to this referent or issue, using an anaphoric pronoun. For perspicuity we use underlining for the antecedent and italics for the preposed anaphoric pronoun. Throughout the article we follow Ward (1985) in using the term *preposed* for constituents that appear in Spec,CP, i.e. that precede the finite verb in main clauses.<sup>1</sup>

In English, this type of preposing is hardly used. The unmarked answer to the English equivalent of question (1) above would be as in (3a) with the anaphoric object pronoun in situ; preposing leads to ungrammaticality (3b). Preposing of a demonstrative pronoun is possible (3c), but not appropriate in this context as this would invoke a contrast, not present in the Swedish original.

- (3) Where is the bike?
  - a. I put *it* in the garage.
  - b. \* *It* I put in the garage.
  - c. # That I put in the garage.

Similarly, whereas it is possible to resume the issue introduced by the question in (4) with an anaphoric *so* in situ in English, preposing *so* sounds very strange.

<sup>1</sup> In the Scandinavian grammar tradition, this position is often referred to as *fundament* ('foundation'). We avoid the term *topicalized* since this suggests that the preposed constituent has a particular discourse function.

- (4) Has the dialect around here changed?
  - a. No, I don't think so.
  - b. \* No, so I don't think.

By looking at a number of spontaneously produced Danish, Norwegian and Swedish examples with preposed pronouns like in (1) and (2), we are able to reevaluate some claims in the literature which are based on constructed examples. We start by describing our data collection. In section 3, we analyse in what contexts preposing is used, looking in particular at the relation between the antecedent and the pronoun, and in section 4, we look closer at the variation in phonetic realization of the pronouns. We also investigate a claim in the literature that there is a systematic difference between Norwegian and Swedish. Previous studies have shown that there is a subject-object asymmetry with respect to preposing of pronouns in Dutch and German. This is discussed in section 5 where we look at clitics and so called *r*-pronouns in Swedish. While this article concentrates on the mainland Scandinavian languages, some relevant data from Icelandic are presented in section 6.

## 2 Preposed object pronouns in the Nordic Dialect Corpus

Preposing of object pronouns has been occasionally mentioned in the literature (e.g. Holmberg 1986:123f.; Vallduví & Engdahl 1996:500f.; Engdahl 1997:58ff.; Platzack 1998:97ff.; Erteschik-Shir 2007:7f.) but with the advent of the *Nordic Dialect Corpus* (NDC) (Johannessen et al. 2009a) it has become possible to investigate more systematically to what extent such preposing is used in ordinary conversations, what discourse functions it serves and how the pronouns are realized phonetically.

The NDC consists of recordings and transcripts of some 800 speakers from Denmark, the Faroe Islands, Iceland, Norway and Sweden. For the present study, we investigated the Danish, Norwegian and Swedish sub-corpora. The recordings contain both interviews with speakers in various regions and conversations between two speakers from the same region. The transcripts are annotated with morpho-syntactic information like part of speech, tense, case and number, but are not parsed. Consequently we were not able to extract examples with preposed object pronouns automatically. After some pilot investigations, we identified the following eight frequent verbs in Swedish, and their Danish and Norwegian counterparts, which often occurred with preposed objects: fa ('get'), gara ('do'), ha ('have'), se ('see'), saga ('say'), tro ('believe'), tycka ('think'), vilja

('want', 'will'). We used search strings as shown in the screen shot below with an initial pronoun (*den* ('it' non neuter), *det* ('it' neuter) or *dem* ('them'), followed by a verb lemma<sup>2</sup>, followed by a noun or pronoun.

æøå»	æøå»	æøå»	
det	interval: synes	interval:	+
criteria»	min max criteria» lemma	min max criteria» noun pron	_

An overview of the results of the search is given in Table 1.

Table 1: Preposed pronouns with eight transitive verbs in the NDC

	Danish	Norwegian	Swedish	Total
No. of words	211 266	2 169 693	293 569	2 674 528
No. of prep. pron.	781	3 692	814	5 287
/1000 words	3,7	1,7	2,8	2,0

Preposing the neuter pronoun det was by far the most common and accounted for 95% of the 5 287 hits, across all verbs. This was expected, given that det is used both as an entity level anaphor, as a propositional anaphor (see example (2)) and as a VP anaphor (see section 4).<sup>3</sup> The slightly higher frequency in Danish may reflect the strong tendency in this language to front VP anaphors ( $\emptyset$ r-snes 2013, Mikkelsen to appear). The highest proportion of den and dem was found with fa (13%) and ha (10%). For further details, see the appendix.

Table 1 by itself does not show whether preposing of object pronouns is common or not. In order to get an idea how common preposing is, we can look at a different study, carried out by Andréasson, Lindahl & Engdahl (2013), also using the NDC. In this study we extracted all occurrences of the verbs *förstå* ('understand'), *se* ('see') and *tro* ('believe') that were followed by a negation within ten words.<sup>4</sup> We then went through the hits and identified examples that

<sup>&</sup>lt;sup>2</sup> At present the Swedish sub-corpus is not fully lemmatized which meant that we had to search for all tensed forms of the verbs. We also searched for the object forms *henne* ('her'), *honom* ('him'), *dig* ('you.ACC'), *mig* ('me'), *oss* ('us') and *er* ('you.PL.ACC') but found no or very few examples, presumably because the corpus is fairly small.

<sup>&</sup>lt;sup>3</sup> See Engdahl (2012) for an overview of different uses of *det*.

<sup>&</sup>lt;sup>4</sup> Using the following type of search string:

contained a pronominal object. The reason for including negation was that we wanted to look at all positions where pronominal objects could be realized, i.e. preposed, preceding the negation (=shifted) and in situ, (cf. Andréasson 2010). The positions are shown in bold in (5), using examples from the NDC.

(5) a. PREPOSED: det tror jeg ikke (Da. bornholm 6) think I not 'I don't think so.' b. SHIFTED: jag såg den inte (Sw. indal ow2) saw it not 'I didn't see it.' (No. stordal\_ma\_01) vi forsto c. IN SITU: ikke **det** heller we understood not it either 'We didn't understand it either.' d. ELLIPTICAL: jeg skjønte ikke heilt (No. kvæfjord 02uk) understood not quite 'I didn't quite understand.'

The distribution of pronominal objects in a sample of 189 utterances is shown in Table 2.

Table 2: Distribution of pronominal objects with förstå, se and tro in Danish, Norwegian and Swedish

Preposed	shifted	in situ	ellipsis	Total
92	46	40	11	189

In about half of the utterances, the object pronoun was preposed. The rest were fairly evenly divided between shifted and in situ.<sup>5</sup> We conclude that preposing is a common realization strategy, at least with the investigated verbs, but that this needs to be studied further.

<sup>([((</sup>lemma="se" %c))] []{0,10} [((lemma="ikke" %c))])

<sup>&</sup>lt;sup>5</sup> Further analysis revealed different preferences for shifting and in situ depending on the verb, on the referent type of the object and to some extent on the language (see Andréasson 2013 and Engdahl & Lindahl in prep.).

### 3 Antecedent-anaphor relations

As a first step in our analysis of how the preposed object pronouns are used, we looked at the relation between the pronoun and its antecedent. We took a sample of 50 examples from each language.<sup>6</sup> The sampling procedure was biased in favour of preposed *den* and *dem* examples, since there were so few of them, but was the same for the three languages. We distinguished three common patterns:

- (i) *Rheme-topic chain*: the antecedent is introduced in the preceding utterance. This type is also called *focus chaining* (Erteschik-Shir 2007) and *switch* or *shift topic* (van Kampen 2008). We have already seen two examples of this type in examples (1)–(2) above. In (6) below (taken from the NDC), a Swedish speaker from Villberga describes when he bought his first car.<sup>7</sup>
- (6) villberga\_om1: de ville ha reda på när man hade gjort <u>sin första</u> they wanted find out when one had made REFL first

<u>bilaffär</u> *car-purchase* 

och *den* gjorde jag 1950 strax före julen (Sw.) and it made I 1950 right before christmas.DEF 'and I made mine in 1950, right before Christmas'

(ii) *Topic-topic chain*: the antecedent is already established as a topic, or discourse *theme*, in the preceding turn. This type is also called *continuous topic* (Daneš 1974) or *topic chaining* (Erteschik-Shir 2007). We illustrate this type with a Danish example in (7) and a Swedish example in (8).

(i) sjaelland4: den - den synes jeg er så flot it - it think I is so nice 'I think it is so nice.'

<sup>&</sup>lt;sup>6</sup> The sample includes eight examples where the preposed pronoun is the subject of an embedded clause, as shown in (i). A Danish woman is commenting on a coffee thermos.

<sup>&</sup>lt;sup>7</sup> See Johannessen et al. (2009b) for details about the transcription format in the NDC. # indicates a short pause, ## a longer pause. Interruptions are marked with a hyphen (*viss*-) and overlapping speech is marked with \*, but the exact stretch of the overlap is not shown. A final ? indicates that the transcriber understands the utterance to be a question. The examples are prefixed with the location. *villberga\_om1* thus identifies an old male informant from Villberga. When you search the NDC, the location is shown on a map if you click on the information symbol, displayed to the left of the hit.

(7) aarhus1: og den udstilling hed "cable\_and\_pipe" # (Da.)

and that exhibition was called

og <u>den</u> fandt sted I herning øh hverandet år and it took place in Herning every second year

og øh# den fik vi lavet på fællesskandinaviske vilkår and oh# it got we made on inter-Scandinavian terms 'and we arranged it on inter-Scandinavian terms'

(8) int-Skinn: har du någon kontakt med dem som gjorde lumpen (Sw.) have you any contact with them that did military-service.DEF

samtidigt som du? at-same-time as you

Skinn-ym1: ja #det var <u>två stycken andra plutonsjukvårdare</u> *yes there were two other paramedics* 

<u>de</u> var från Fagersta så *dem* har jag ganska bra kontakt med *theywere from Fagersta so them have I pretty good contact with* 'they were from Fagersta so I have pretty good contacts with them'

- (iii) *Left dislocation with preposed pronoun*: the antecedent is introduced in a dislocated position and immediately resumed by an anaphoric pronoun in Spec,CP. Andersson (1982) refers to this type as *topic movement*.<sup>8</sup> In the Danish example in (9), the informant talks about how they used horses to pull the farm equipment, and then introduces the new machine, the tractor, in dislocated position.
- (9) fyn5: ja men øh f i starten da k eller s i mine drengeår # (Da.) yes but in beginning. DEF then or in my boyhood

da kørte vi jo med heste for # plov og harve og #
then drove we with horses for plough and harrow and

såmaskinen og alt sådan\_noget sow-machine.DEF and all such stuff

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<sup>&</sup>lt;sup>8</sup> Zaenen (1984) calls a similar construction in Icelandic *contrastive dislocation* and this term is also used by Holmberg (1986:113f.). Eide (2011) uses the term *copy left dislocation* and makes a further distinction depending on whether there is a pause before the preposed pronoun or not. See also SAG 4:438–449, Vangsnes (2008) and Josefsson (2012).

og # traktor det fik vi jo først her i hvad har det været i 1957 and # tractor it got we PRT first here in what has it been in 1957 'and as for a tractor, we didn't get one until – what was it – 1957.'

Note that the bare noun *traktor* (non-neuter gender) is resumed by the neuter pronoun *det*, which is quite common (cf. Borthen 2004, Platzack 2012, Josefsson 2010). The dislocated constituent is often an instance of a set that is mentioned in the context or inferable from it (cf. Daneš' (1974) notion *hypertheme*). In the Norwegian example in (10), the informant is talking about TV programs. This then provides the background set and the left dislocated *skisytinga* ('the biathlon') is one type of sports program in this set. Here the preposed pronoun *den* agrees with the dislocated *skisytinga*.

This kind of doubling by an initial pronoun is also very common with subjects, but these were not included in our study.<sup>9</sup>

Table 3 shows the distribution of the three types of antecedent-anaphor relations in the sample.

	Da	n(50)	No	o(50)	Sw	(50)	Total	(150)
Rheme-topic	30	60%	31	62%	31	62%	92	61%
Topic-topic	12	24%	6	12%	6	12%	24	16%
Left disl. w prepos.	4	8%	9	18%	7	14%	20	13%
Cataphoric/deict.	4	8%	4	8%	6	12%	14	9%
Change of speaker	12	24%	10	20%	15	30%	37	25%
Not clause bound	3	6%	7	14%	7	14%	17	11%

<sup>&</sup>lt;sup>9</sup> See Johannessen (2013) who investigates subject left dislocations in the NDC.

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In all three languages, the rheme-topic chain is the most common type, amounting to 61%. Left dislocation with preposed pronoun is quite common in Norwegian (18%) and Swedish (14%), but noticeably less so in Danish (8%), where topic-topic chain is the second most common type (24%). Given that the sample is quite small, we cannot tell whether these differences are systematic. A larger investigation is obviously called for.

We also found some examples which did not fit the definitions of the three types. In some examples, the preposed pronoun is *cataphoric* and the antecedent appears later in the utterance. One Swedish example is shown in (11) where an older man talks about the importance of wearing safety helmets while working in the forest.

gå i skogen utan hjälm *det* gör jag inte walk in forest. DEF without helmet it do I not 'This I'll say, I don't walk in the forest without a helmet.'

Talking about safety helmets, the speaker *vaxtorp\_oml* starts with *dom är ju* ('so they are...') then interrupts himself and starts again with a preposed *det* which points forward to the following direct quote, which in turn is a left dislocation with another preposed *det*.

A few examples involve *deictic* uses, as in (12), where the preposed pronoun is clearly demonstrative.

spurt M10 hvor barskapet hans var asked M10 where bar.DEF his was

lommedalen\_02uk: mm

lommedalen\_01um: og (laughter)## lurte på om det var noe som and wondered if there was some that

skulle tømmes #
should be emptied
og da hadde M10 pekt på " ja den vil jeg ikke ha
and then had M10 pointed at "yes it want I not have

den vil jeg ikke ha den vil jeg ikke ha

it want I not have it want I not have

'Yes, that (one) I don't want (to drink), that I don't want,...'

In about a quarter of the 150 examples, the antecedent is produced by one speaker and the preposed pronoun by another speaker. In the Norwegian and Swedish samples, 14% of the pronouns are arguments of a subordinate clause. In Danish, only 6% involve a non-local dependency, but since the numbers in this study are small, we cannot jump to any conclusions about systematic differences. These examples typically involve the verbs *synes* 'think'/'find', as in the Danish example in (13), or *tru* 'believe' as in the Norwegian example in (14).

well – it think I in any case it is 'Anyway, I think it is.'

Valdres er en bra plass Valdres is a good place

vest\_slidre\_04gk: ja *det* trur jeg *det* trur jeg trygt en kan si *yes it think I it think I safely one can say* 'Yes, I think so. I think one can safely say so,'

When the interviewer in (14) suggests at Valdres er en bra plass 'that Valdres is a nice place', the older woman from Vestre Slidre responds with an affirmative ja, followed by a short det trur jeg 'it think I' with a preposed det, and then confirms her own utterance with the comment det trur jeg trygt en kan si 'it think I safely one can say', this time with a preposed det from the subordinate clause.

#### 4 Phonetic realization

#### 4.1 Variation in the NDC

We listened to the 150 examples and found that there was considerable variation in the way the preposed pronouns were realized. To some extent, this was ex-

pected given that the recordings involve a large number of speakers with different dialects. In addition to the dialectal variation, we found, not very surprisingly, that the duration, intensity and pitch contours of the pronouns varied, presumably as a function of the information structure of the utterance. To illustrate the range of this variation, consider the two following examples, both produced by an older woman from S:t Anna in south east Sweden. The reader can easily access the sound files by searching the NDC, using a few words in the examples, and clicking on the sound or video symbol to the left of the hits. We have added the following notation to the NDC transcripts: subscript odet for reduced pronunciation, i.e. without word stress, 'det when word stress is present, and capitals DET for emphatic stress.

(15) st\_anna\_ow3: vet ni vad jag gjort just nu i vinter? (Sw.) know you what I done just now in winter 'Do you know what I have done this past winter?'

jag har gått på datakurs ni tror inte att jag är klok va? *I have gone to PC-course you think not that I am clever PRT* 'I have taken a PC course. You think I'm crazy, don't you?'

odet HAR jag i alla fall it have I anyway 'That's what I did, anyway.'

In (15) the woman tells the interviewers that she has taken a PC course, elicits a reaction from the interlocutors and then asserts that she has indeed done this. The initial *det* is a VP anaphor, referring back to *gått på datakurs* 'taken a PC course' and is produced very fast. The main stress is on the finite verb *HAR* which conveys a verum focus.

(16) INT: vad har du att berätta om <u>Halland</u> då? (Sw.) what have you to tell about Halland then

st\_anna\_ow3: 'det är väl inte nej DET vill jag inte berätta något om it is PRT not no THAT want I not tell some about 'It isn't particularly, no that I don't want to talk about.'

<sup>&</sup>lt;sup>10</sup> See Bruce (2007:116f.) and Riad (2013) for details about the phonetic correlates of stress in Swedish.

Right before the excerpt in (16), the speaker  $st\_anna\_ow3$  has told the interlocutors that she has been part of a study group that has studied Halland (a county on the west coast of Sweden) probably with the aim of a joint visit there later in the spring. The interviewer invites the woman to say something about Halland. The woman starts somewhat hesitantly  $det \ddot{a}r v\ddot{a}l inte$  'it isn't particularly') interrupts herself with nej 'no' and states clearly that she does not want to talk about THAT, thereby also conveying that she can talk about other things. Here the initial DET is clearly stressed and noticeably longer.

We analysed the sound files of (15) and (16) using PRAAT (Boersma & Weenink 2014) and the results are shown in Figure 1 and 2. The black line indicates the pitch level  $(F_0)$  and intensity is shown above the pitch track.

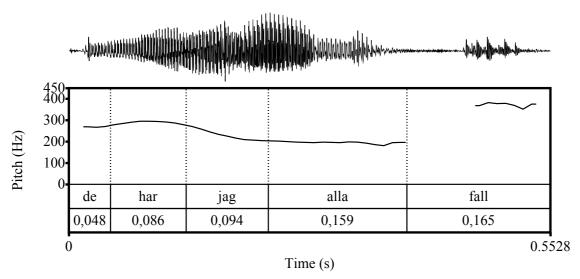


Figure 1: PRAAT analysis of example (15)

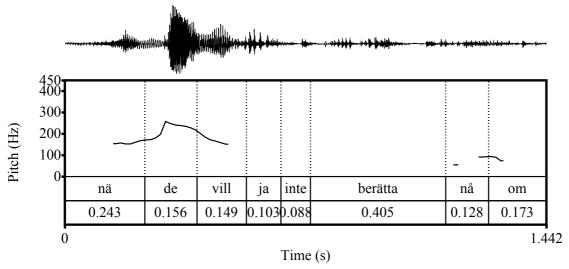


Figure 2: PRAAT analysis of example (16)

Figure 1 shows that the length of the initial *det* in (15) is only about 50 milliseconds. In Figure 2, the initial *det* is about three times as long, 156 milliseconds. In addition the word is produced with a clear prosodic gesture which contributes to the perception that it is stressed.

Figures 1 and 2 show clear cases of an unstressed *det* and an emphatically stressed *det*. There were also a number of intermediate cases, varying in length, intensity and/or pitch level. Given the number of different speakers, we did not attempt to classify these. We did, however, look for a possible correlation between antecedent-anaphor relation and prosodic realization, but did not find any clear evidence for this in this material. It is not the case that e.g. proposed pronouns in rheme-topic chains are systematically realized in a way that is distinct from preposed pronouns in topic-topic chains or in left dislocations in our examples. Instead the prosodic realization seems to reflect whether the speaker intends to invoke a contrast or not. In (15), the preposed *det* seems to be purely anaphoric whereas in (16), the heavily stressed *DET*, together with the negated clause *vill jag inte berätta nå om* ('I don't want to tell anything about'), conveys that the speaker is unwilling to talk about this particular issue, but may very well talk about other issues.

In the left dislocation type, we also find both completely unstressed occurrences of preposed pronouns, as in (17), and heavily stressed pronouns, as in (18), both Norwegian examples.

hjartdal\_ma: å ja slikkt nokko såmm <u>natursjilldringar</u> *DÆI* likar eg 'dæi # oh yes such thing as nature-description them like I them

menn ee <u>dinnan politikken</u> *DENN* synns eg ikkje nokko omm *but eh this politic*.DEF *that think I not something about* 'Oh yes, things like nature accounts, I like them, but the politics, I don't care much about it.'

In (18) the interviewer asks whether the informant has read a lot, which then functions as a hypertheme for the answer (Daneš 1974). The speaker *hjartdal ma* picks out two different types of reading material, to which he has

very different attitudes. Both the dislocated phrase and the pronouns are clearly stressed<sup>11</sup>.

Of the 87 *det*-initial examples in the 150 sample, 64 (74%) are VP anaphors, as in (13) and (15), or have a proposition as antecedent, as in (14). There is a clear tendency for this kind of *det* to be short and unstressed, as in the Danish example in (19).

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(19) oestjylland4: og
                       det var i hvert fald utænkeligt dengang
                                                                             (Da.)
                           was in any case unthinkable then
                  and it
                    det var
                              omvendt
                  that it was reversed
                  at en pige gik over og bød en mand op eller en dreng op
                  that a girl went over and asked a
                                                      man
                  odet gjorde man bare ikke
                  it
                       did
                             one just not
                  'that a girl walked over and asked a man or a boy to dance. You just
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But there are also examples when VP and clausal anaphors are stressed, as in (20) where an older man from Våxtorp is talking about the horses they used to have.

didn't do that '

After saying that life was hard for the horses, he comments on his own utterance, starting with a *det* which is clearly longer and more prominent than *det* in the

<sup>&</sup>lt;sup>11</sup> Since the Hjartdal dialect differs quite a lot from the standard orthographic version, example (18) is given in the semi-phonetic transcription format also provided for the Norwegian sub-corpus.

preceding utterance.<sup>12</sup> This has the effect of giving more emphasis to his statement.

### 4.2 A proposed difference between Norwegian and Swedish

In a recent article, Anderssen & Bentzen (2012) propose that the various types of pronominal objects in Norwegian are in complementary distribution with respect to the three possible positions illustrated in (5) and Table 2 above, i.e. preposed, shifted and in situ. Objects referring to recently introduced entities which are non-contrastive have to occur in the shifted position, (21), whereas VP and clausal anaphors cannot be shifted but are OK in preposed position, (22) (cf. Anderssen & Bentzen 2012, ex. (29)–(30)).

- (21) Har du spist <u>bananen din</u>? (No.) have you eaten banana.DEF your 'Have you eaten your banana?'
  - a. \*Nej, den likte jeg ikke.

    no it liked I not
  - b. Nej, jeg likte *den* ikke. *no I liked it not* 'No, I didn't like it.'
  - c. \*Nej, jeg likte ikke den.
    no I liked not it
- (22) Spiste du noe frukt? ate you any fruit 'Did you eat any fruit?'
  - a. Nej, *det* gjorde jeg ikke. *no it did I not* 'No, I didn't.'
  - b. \*Nej, jeg gjorde *det* ikke.

    no I did it not
  - c. Nej, jeg gjorde ikke *det.*no I did not it
    'No, I didn't.'

<sup>12</sup> The reduced <sub>0</sub>*det* here is a matrix subject and is not included among the 150 examples. In the Swedish transcriptions, a comma is sometimes used to indicate a short pause, in addition to # (Henrik Rosenkvist, personal communication 8 April, 2014).

<sup>&</sup>lt;sup>13</sup> Type anaphors in Norwegian behave like VP anaphors, see Anderssen & Bentzen 2012, ex. (23).

According to Anderssen & Bentzen, preposing of a non-contrastive entity referring pronoun, as in (21a), is strongly degraded in Norwegian, in contrast with Swedish. They further claim that the initial position in Norwegian is only available for entity level object pronouns which are used contrastively, as shown in (23) (Anderssen & Bentzen's (31)).<sup>14</sup>

- (23) Kjøpte du <u>den siste boka til Camilla Läckberg</u> igår? (No.) bought you that last book. DEF 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. Nei, jeg kjøpte ikke *DEN* (men jeg kjøpte en annen bok). *no I bought not THAT but I bought an other book* 'No, I didn't buy THAT one (but I bought another novel).'

The question is now whether Norwegian and Swedish really differ in the way proposed by Anderssen & Bentzen. This is where the NDC becomes very useful since we can investigate both whether preposed entity pronouns are always strongly stressed and whether they always invoke a contrast with other referents. In our sample of 50 Norwegian examples, there are 24 preposed object pronouns with entity antecedents. Among them there are some which are clearly stressed and where the pronoun is contrasted with other occurrences. We have already seen one such example in (20) above, and another is given in (24). This use of left dislocation structures seems to be particularly common in Norwegian.

(24) aasnes\_ma\_02: men den ble separert altså # og mjølka kjbut it was separated PRT and milk.DEF

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<sup>&</sup>lt;sup>14</sup> Anderssen & Bentzen's c-example is a cleft construction, shown in (i).

<sup>(</sup>i) 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 the text we have replaced it with an in situ version.

ja <u>rømmen</u> *DEN* gjorde de kinna de smør av yes cream.DEF it made they churned they butter of 'yes, the cream they churned into butter'

og ## osten # DEN løypte de sund med and cheese.DEF it curdled they with

noe de kalte sundløyp something they called xx 'and the cheese they curdled using something they called sundløyp'

But there are also several examples of non-contrastive uses of preposed pronouns. In (25), an old woman from Kvinnherad has just mentioned that she has bought a laptop and adds a comment about how she uses it.<sup>15</sup>

(25) kvinnherad\_04gk: ja # inn å sjå ka e får i <u>lønn</u> vet du (No.) yes in to see what I get in salary know you

'Yes, I can just go in and check my salary, you know.'

kvinnherad\_03gm: ja 'denn får dåkke vel sennt via der dåkke åg yes it get you PRT sent via there you too 'Yes, you probably get it sent to the computer, you too,'

After the speaker *kvinnherad\_04gk* has said that she uses the computer to check what her salary will be, the speaker *kvinnherad\_03gm* comments that *it*, i.e. the salary, also gets sent via the computer. *kvinn-herad\_03gm* realizes the preposed *denn* with normal word stress, indicated as '*denn*, but there is no emphasis or lengthening. There is only one referent, the salary, and no contrast is invoked. This kind of example is thus unexpected in Norwegian on Anderssen & Bentzen's account.

After listening to all the examples, it seems to us that *det*, used as a VP or clause anaphor, is often reduced in all three languages. *Det*, with an entity antecedent, and *den* and *dem* normally retain a word stress, but there is a clear difference between the realization when the context does not invoke a contrast, as in (6)–(8) and (25) and the realization when there is a contrast set, as in (16), (18) and (24). Preposing of entity level pronouns in Norwegian and Danish is not limited to contrastive contexts but seems to be used also when there is only one relevant antecedent in the context, just as in Swedish. Whether or not pre-

<sup>&</sup>lt;sup>15</sup> Example (25) is rendered in the semi-phonetic transcription format.

posed pronouns are in general more reduced in Swedish than in Norwegian or Danish needs further investigation, as does a possible correlation with the use of so called *topic drop*.

### 5 "Weak" pronouns, clitics and r-pronouns

We saw in the previous section that the preposed pronouns vary a great deal in their phonetic realization. In this section we will address some previous proposals which bear on this. We show that we need to make more fine grained distinctions when it comes to the realization of object pronouns than previous research has done and that generalizations about clitics don't necessarily hold about other unstressed pronouns

### 5.1 Clitics in Danish and Norwegian

We start by discussing how the data from NDC bears on a claim made by Schwarz & Vikner (1996) that there is an asymmetry between weak subject and object pronouns in Danish and Norwegian: "Weak subjects pronouns *can* but weak object pronouns *cannot* occur as the initial element in a V2 clause." (1996:18). In the context of arguing that the symmetric V2 analysis is more adequate than the asymmetric analysis proposed by Travis (1984) and Zwart (1991), Schwarz & Vikner refer to Danish and Norwegian data involving clitic pronouns. The Danish clitic, written 'd (phonetically [ð]), used in Copenhagen, is a reduced form of *det* which can be used both as subject and object, provided that it is preceded by a word ending in a vowel. The Norwegian clitic a, used in the Oslo dialect, is both a subject and an object form which cliticises to a preceding word ending in a consonant (see Christensen 1984).

The relevant contrast involves examples like the following.

- (26) a. For hun/a har ikke bodd her. (Christensen 1984:(1)) (No.) for she/she.CL has not lived here
  b. Hun/\*a har ikke bodd her. she/she.CL has not lived here
- (27) a. For vi traff henne/a i går. (Christensen 1984:(26)) (No.) for we met her/her.CL yesterday
  b. For henne/\*a traff vi i går.
  for her/her.CL met we yesterday

(26a) shows that both a subject pronoun and a clitic are possible in Spec, CP when preceded by a suitable host, in this case the conjunction *for*. In the absence of a host, only the full pronoun *hun* is possible (26b). (27b) shows that an object pronoun may be preposed, but that an object clitic is infelicitous, despite the presence of a host. <sup>16</sup> The same pattern is found in Danish and, as we will see in 5.2, to some extent in Swedish.

Schwarz & Vikner's analysis builds on Rizzi (1990) and the notion of Relativized Minimality. According to them "the unstressed object pronoun (as opposed to the unstressed subject one) is impossible in CP-spec because it does not agree with C<sup>0</sup> and because it would have to move across the subject in IP-spec on its way to CP-spec." (1996:19). We will not go into the details of their analysis but note that Schwarz & Vikner do not distinguish between clitic, "weak" pronoun and "unstressed form of the pronoun". In their article, Schwarz & Vikner refer to Danish and Norwegian data with clitics, but the conclusion they draw is that unstressed object pronouns may not appear initially. The data from the NDC again provides a more nuanced picture (cf. also Mikkelsen to appear).

A search for the clitic a in the Norwegian sub-corpus returns several hundred post-verbal occurrences, as well as a few examples where the subject clitic appears following men 'but' or for 'for', as illustrated in (28) (cf. (26a)). 17

As predicted by Christensen (1984), there were no hits with utterance initial a, nor any hits with preposed object a following a conjunction. It was more difficult to limit the search in the Danish sub-corpus to find instances of the clitic 'd, discussed by Schwarz & Vikner (1996). A search for d in the Danish sub-corpus, <sup>18</sup> returned a large number of self-interruptions, hesitations and cases where det was co-articulated with a following copula, which did not involve the clitic 'd.

But in addition to clitics, there are, as we have seen in previous sections, several examples in the NDC involving preposed object *det* where the pronoun is clearly unstressed (i.e. does not have word stress). See the Danish examples in

<sup>&</sup>lt;sup>16</sup> Christensen (1984) also analyses the interaction between the clitic a and cliticisation of the negation 'kke, but this is not discussed in Schwarz & Vikner (1996).

<sup>&</sup>lt;sup>17</sup> Using the search string "([((word="for" %c))][((phon="a" %c))]);"

Using the search string "([((start="start"))][((phon="d" %c))])".

(13) and (19), where *det* is a VP anaphor, and the Danish example (9) and Norwegian example (17), where it acts as a type anaphor. There are also examples where the preposed pronoun refers back to a recently introduced entity, as in the Danish example in (7) and the Norwegian example in (25). In both cases, the preposed non-neuter pronoun *den* carries word stress, but it is not emphatically stressed. The fact that we find preposed unstressed pronouns or pronouns with only word stress in the Danish and Norwegian corpora shows that we need to distinguish full pronouns from clitics.

#### 5.2 Clitics in Swedish

Does the same subject-object asymmetry with respect to preposed clitics show up in Swedish? Many Swedish dialects have clitic forms for object pronouns which retain older accusative forms, no longer in use in the standard language (cf. the *Swedish Academy Grammar* (SAG) 2:271). The feminine object clitic is 'na, from the old accusative feminine hana. The masculine object clitic is 'en, from the old accusative masculine han. The neuter object clitic is 'et.<sup>20</sup> When the masculine and neuter pronouns cliticise onto a word ending in a vowel, they are often further reduced to 'n and 't.

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(29) a. Jag såg'na inte.

I saw 'er not

'I didn't see her.'
b. Jag såg'en inte./ Jag såg'et inte.

I saw 't not / I saw 't not

'I didn't see it.
c. Jag hörde'n inte./ Jag hörde't inte.

I heard 't not / I heard 't not

'I didn't hear it.'
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These clitic forms are only used for objects as shown by the examples in (30).

<sup>19</sup> The clitics in Schwarz & Vikner's examples all refer to entities. It is not clear whether 'd behaves differently as a VP or type anaphor.

<sup>&</sup>lt;sup>20</sup> Some speakers also use the forms 'an and 'at.

c. Per får'et.

Per gets 't

'Per gets it.'

The near minimal pair in (30b,c), from SAG (2:271), is interesting. Despite the fact that the subject and object forms of the neuter pronoun *det* are identical, the clitic form 'et can not be used as a subject clitic, (30b), but only as an object clitic, (30c).

Just as in Danish and Norwegian, we find that preposing of an object clitic is impossible. The example in (31) is modelled on the authentic example in (8); the relevant part is repeated here.

<u>de</u> var från Fagersta så *dem* har jag ganska bra kontakt med *theywere from Fagersta so them have I pretty good contact with* 'they were from Fagersta so I have pretty good contacts with them'

\*så'na har jag ganska bra kontakt med so'er have I pretty good contact with 'so I have pretty good contacts with her.'

But since 'na, 'en and 'en cannot be used as subject clitics, we cannot test whether there is a subject-object asymmetry. There is, however, another set of clitic pronouns in Swedish, which we turn to in the next section.

#### 5.3 r-pronuns in Swedish

A characteristic feature of the Stockholm dialect is that the initial d in certain unstressed monosyllabic pronouns and adverbs is replaced with an r after a vowel or r, as recently described by Teleman (2013) and Riad (2014:99–102, 225f.). The relevant forms are shown in Table 4.

<sup>&</sup>lt;sup>21</sup> In addition to looking at phonetic and syntactic factors, Teleman discusses the possible origin and the historical development of these forms. Riad chooses the term d-continuization since it undoes the closure of the stop d (Riad 2014:99).

Table 4: Overview of r-pronouns in Swedish

Spoken standard	<i>r</i> -form	Translation
den	ren	it, non-neuter, nom/acc
det	re	it, neuter, nom/acc
dom	rom	they/them, nom/acc
du	ru	you, sing nom
dej	re(j)	you, sing acc
då	rå	then

We see that three of the forms, ren, re and rom, are used both as subjects and objects and consequently are relevant with respect to the subject-object asymmetry discussed above. Unfortunately there is hardly any data from Stockholm speakers in the NDC. The use of r-pronouns is however spread across the Mälardalen region, so we might expect to find examples from measuring points in that region. But since the Swedish sub-corpus is only transcribed using standard orthography, we cannot find these r-pronouns by searching the database.  $^{22}$ 

Instead we carried out a small questionnaire. Six informants, all born in Stockholm between 1945 and 1960, were asked to judge a set of 18 sentences containing r-pronouns and object clitics, using a scale from 1 (=impossible) to 5 (=perfectly natural).<sup>23</sup> The stimuli always included a host for the r-pronoun but the type and position of the host was systematically varied.<sup>24</sup> The average judgment is reported within brackets.

The results show that the most common form, 're, is accepted both as subject and object. In (32), the post-verbal subject 're is cliticised to the finite verb and in (33) an object 're is cliticised to the verb.<sup>25</sup>

<sup>&</sup>lt;sup>22</sup> The Norwegian sub-corpus is transcribed both orthographically and in a phonetically adapted format. This is a big advantage as shown in Johannessen (2012) who carried out a search for r-pronouns in Norwegian dialects using the NDC.

<sup>&</sup>lt;sup>23</sup> This scale was chosen as it is the same scale used in the Nordic Syntax Database (Lindstad et al. 2009b). Just as in this database, average judgments are reported, although this may be inappropriate given that it is an ordinal scale and not an interval scale. However, for small sets, as in this questionnaire, the average is more informative than the mean.

<sup>&</sup>lt;sup>24</sup> Some of the test examples were adapted from Teleman (2013).

<sup>&</sup>lt;sup>25</sup> Ahlberg (2014) provides a phonetic analysis of such r-pronouns, produced by a speaker from Uppland, north of Stockholm.

<sup>(</sup>i) villberga\_om1: då va're riktigt varmt väder then was 't really warm weather 'Then it was really warm.'

(32) Nu snöar're. (subj) [5]

now snows 't

'Now it's snowing.'

(33) Ja tar're. (obj) [5]

I take 't

'I'll take it.'

We were particularly interested in looking at whether r-pronouns can be preposed. In (34a), a subject 're is adjacent to the interjection-like imperative titta ('look') and in (34b) to the subjunction  $s\mathring{a}$  ('so that') which introduces a subordinate clause. In (34c) 're is used as a VP anaphor and follows the conjunction  $s\mathring{a}$  ('so') which introduces a main clause.

(34) a. Titta're snöar! (subj) [5] look 't snows 'Look, it is snowing.'

- b. Dom tog i så're bara small. (subj) [5] 
  they took in so 't just went-bang

  'We put so much effort into it that it just went bang.'
- c. Mamma sa att vi fick äta upp matsäcken, så're gjorde vi. (obj) [5] *mummy said that we got eat up picknick*.DEF *so 't did we* 'Mummy said we could eat our picknick, so that's what we did.'

All the examples in (34) were judged as natural. We thus do not find any difference in acceptance of 're depending on whether it is a subject or object, but the type of host has an effect. An example where 're follows a vocative du (35a) was found slightly less natural and an example with left dislocation (35b) was unacceptable to most of the informants. This probably reflects a difference in prosodic structure, since the initial constituents in (35) are more likely to be followed by a pause than the ones in (34). This would presumably make cliticisation less felicitous.

(35) a. Du're där funkar inte. (subj) [4,7] 
you 't there works not 
'Hey you, that doesn't work.'

b. Hugga ve're orkar ja inte längre. (obj) [2,2] chop wood 't have strength I no more

'Chop wood, I don't have the strength do do it anymore.'

For two of the informants, the judgments on the plural pronoun 'rom differ from 're.

- b. Kom killarna? Nä'rom kom inte. (subj) [4,5] came boys. DEF no 'ey came not
- c. Ja tittar på nyheterna varje kväll, så'rom har jag koll på. (obj) [4] *I watch on news*.DEF *every evening so 'em have I control on* 'I watch the news every evening so I keep up with them.'

Whereas all the informants accept subject 'rom following a verb, as in (36a), two of them were not entirely happy when subject 'rom followed the response particle  $n\ddot{a}$  ('no') in (36b). The same two informants were even less happy when an object 'rom followed the conjunction  $s\mathring{a}$  in (36c). Only one example with 'ren was tested, (37), and showed overall low acceptance among the informants.

Since we do not know how the speakers would have judged subject uses of 'ren, we cannot say anything definitive about a subject-object asymmetry. Given that most of the informants judged (36c) to be grammatical, we believe that such an asymmetry would not be as clear cut for Swedish r-pronouns as it seems to be for the other Scandinavian clitics we have discussed. A larger study is clearly called for which should look at all the uses of the various r-forms and in addition investigate possible effects of the host. One idea might be to record informants who are asked to read a set of short dialogues aloud before giving their judgments. Such recordings would give us more information about how prosodically integrated the different types of hosts are (cf. (35a,b)) and how this affects the acceptability judgments.

We also included some examples with ordinary object clitics and the informants confirmed that these cannot be preposed or used as subjects (cf. (31), (30)).

Given the differential behaviour of the examples discussed in sections 4 and 5, we conclude that in order to account for the full range of preposed object pronouns, we need to distinguish between clitics, unstressed pronouns, pronouns with word stress and emphatically stressed pronouns, as they are used in different contexts. Clitics are, not surprisingly, sensitive to the nature of the host, whereas the choice between, on the one hand, an unstressed pronoun or a pronoun with word stress and, on the other hand, a pronoun with emphatic stress reflects whether the speaker has a contrast in mind. As for the choice between an unstressed pronoun and a pronoun with word stress, this seems to vary with the type of antecedent (VP anaphors are more likely to be reduced) and possibly with the language. Swedish appears to use unstressed forms to a greater extent than Danish and Norwegian.

### 6 Beyond the mainland

This study has been limited to the mainland Scandinavian languages, but it would definitely be interesting to extend it to the insular Scandinavian languages Icelandic and Faroese. According to Halldór Sigurðsson<sup>26</sup>, a direct translation of (1) into Icelandic is pragmatically marked, see (39). Leaving the pronoun in situ, (B'), would be more natural, like in the English version in (3).

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<sup>&</sup>lt;sup>26</sup> Personal communication at Grammar in focus, March 2014.

We carried out a small search in the Icelandic part of the NDC, which now amounts to 56000 words. We found several examples with fronted  $pa\delta$  ('it') used as a propositional anaphor, as shown in (40) and (41).

- (40) iceland\_b1: reyndar býr Clinton í Harlem hverfinu vissir þú það indeed lives Clinton in Harlem block knew you it 'Clinton actually lives in Harlem. Did you know that?'
  - iceland\_a1: það vissi ég ekki it knew I not 'I didn't know that.'
- (41) reykja\_14gk: já # ég held þú fáir allavega ekki svona snið þar sko núna # yes I think you get at-least not such model there PRT now 'Yes, I think at least you won't get such a model there now'

ekki enn þá not yet

reykja\_13gm: jú það held ég yes it think I 'But I think you can,'

There were also examples when the neuter singular *það* was used to refer to an entity or a type, as in (42) where a couple from Reykjavík are talking about buying clothes for the summer.

- (42) reykja\_13gm: kannski jakka með bótum maybe jacket with patches
  - reykja\_14gk: já # já það væri smart og jafnvel kannski svolítið sumarlegar yes yes it would-be smart and even maybe a little summery [...]

reykja\_13gm: já ákkúrat yes exactly

reykja\_14gk: *það* sá ég hjá Guðmundi Jör *it saw I at Gudmund Jör* 'I saw that at Gudmund Jör (name of shop).' The speaker *reykjavik\_14gk* here uses *það* to refer back to the kind of summer clothes she talked about earlier.

We did not find any examples with preposed *það* used as a VP anaphor or other preposed object pronouns, but this may be due to the corpus being rather small. Halldór Sigurðsson provided the example in (43).

B: Nei, hann hef ég ekki séð í allan dag no him have I not seen in all day

en ég sá konuna hans núna rétt áðan but I saw wife his now right before

svo að hann hlýtur að vera hérna einhvers staðar. so that he must to be here somewhere 'No, I haven't seen him all day, but I saw his wife just now so he must be somewhere around here.'

The referent is newly introduced in A's question, so this is a case of focus chaining. But note that B carries on contrasting *hann* ('him') with *konuna hans* ('his wife') which may indicate that preposing of an object personal pronouns carries with it a certain amount of contrast in Icelandic, like in English. More research on Icelandic, as well as on Faroese, is clearly needed.

### 7 Concluding remarks

Our study of pronoun initial utterances in the Nordic Dialect Corpus has revealed that preposed object pronouns have several different information structural functions. A preposed pronoun is often used as a way of connecting an utterance to a recently introduced referent or issue (*rheme-topic chaining*). It may also be used as a way of maintaining the same topic over a stretch of discourse (*topic-topic chaining*). Another context is in left dislocation or hanging topic constructions where the dislocated constituent is immediately followed by a co-referential pronoun. Judging from a study of 150 utterances, Danish, Norwegian and Swedish are quite similar with respect to how pronoun preposing is used, with some indications that the left dislocation strategy is more common in Norwegian.

The phonetic realization of the preposed pronouns varies to a great extent, from highly reduced to emphatically stressed. There does not seem to be any straightforward correlation between type of antecedent-pronoun relation and the phonetic realization. Rather, the degree of stress on the pronoun seems to reflect whether or not the speaker has a contrast set in mind. In addition, the type of referent matters; the VP anaphor *det* is highly likely to be unstressed (i.e. produced without a word stress), in all three languages. Preposed entity referring pronouns like *den* and *dem* tend to retain a word stress, but need not be emphatically stressed. Given that the NDC provides access both to the recording and the context of the utterance, we are able to show that a previous claim by Anderssen & Bentzen (2012) for Norwegian, based on constructed data, is too restrictive.

Schwarz & Vikner (1996) argue that there is a subject-object asymmetry with respect to preposing of what they refer to as "weak" pronouns. However, the data they use involve preposing of clitic pronouns. In our study, we find that unstressed object pronouns are preposed in all the three languages whereas real clitic pronouns, such as *a* in Norwegian and 'en and 'na in Swedish, cannot be preposed. The behaviour of so called *r*-pronouns is intriguing and requires further study.

Our main study has been limited to the mainland Scandinavian languages, but clearly needs to be extended to the insular languages Faroese and Icelandic. A search in the Icelandic sub-corpus in the NDC suggests that preposing of object *það* ('it.NEUT') is quite common, especially when it refers to an issue under discussion, but that other preposing may be less common than in the mainland languages.

In this study, we have focussed on the role of the context of the utterance. We are currently looking closer at the information structure of Swedish utterances which start off with preposed object pronouns in comparison with utterances where the pronoun is in situ or shifted (Engdahl & Lindahl in prep.). We have for instance seen that when there is a focus sensitive adverb such as negation in the utterance, the preposed pronoun is more likely to receive a contrastive interpretation and be realized in a more prominent way.

#### References

Ahlberg, Malin. 2014. Enclitic pronouns in Swedish. Term paper, Department of Swedish, University of Gothenburg.

Anderssen, Merete & Kristine Bentzen (2012) Norwegian Object Shift as IP-internal Topicalization. *Nordlyd* 39(1):1–23.

- Andersson, Lars-Gunnar. 1982. What is Swedish and Exception to? Extractions and Island Constraints. In Engdahl, Elisabet & Eva Ejerhed (eds.) *Readings on Unbounded Dependencies in Scandinavian Languages*, 33–45. Umeå / Stockholm: Almqvist & Wiksell International.
- Andréasson, Maia. 2010. Object Shift or Object Placement in General? *Proceedings of the LFG10 Conference*, p. 26–42. Stanford, CA: CSLI Publications.
- Andréasson, Maia. 2013. Object shift in the Scandinavian languages: The impact of contrasted elements. *Nordic Journal of Linguistics* 36:187–217.
- Andréasson, Maia, Elisabet Engdahl & Filippa Lindahl. 2013. Objektsrealisering och informationsstruktur i NDC. Vart tar de pronominella objekten vägen? [The realisation of objects and information structure. Where do pronominal objects end up?] Talk at the Dialect Seminar, University of Oslo, January 10–11, 2013.
- Boersma, Paul & David Weenink. 2014. Praat: doing phonetics by computer [Computer program]. Version 5.3.16, retrieved March 2014 from http://www.praat.org/
- Borthen, Kaja. 2004. The Norwegian type-anaphor *det*. In A. Branco, T. McEnery and R. Mitokov (eds.), *Proceedings of the 5th Discourse Anaphora and Anaphor Resolution Colloquium*. 9–14. Lisboa: Edições Colibri.
- Brandtler, Johan, David Håkansson, Stefan Huber & Eva Klingvall (eds.). 2012. Discourse & Grammar. A Festschrift in Honor of Valéria Molnár. Lund: Centre for Languages and Literature, Lund University.
- Bruce, Gösta. 2007. Components of a prosodic typology of Swedish intonation. In: Riad, Tomas & Carlos Gussenhoven (eds.) *Tones and Tunes. Typological Studies in Word and Sentence Prosody*, 113–146. Berlin: de Gruyter.
- Christensen, Kirsti Koch. 1984. Subject Clitics and A'-Bound Traces. *Working Papers in Scandinavian Syntax* 15:1–31.
- Daneš, František. 1974. Functional sentence perspective and the organization of the text. In F. Daneš (ed.), *Papers on functional sentence perspective*, 106–128. Prague: Academia, The Hague & Paris: Mouton.
- Eide, Kristin Melum. 2011. Norwegian (non-V2) declaratives, resumptive elements, and the Wackernagel position. *Nordic Journal of Linguistics* 34:179–213.
- Engdahl, Elisabet. 1997. Relative clause extractions in context. *Working Papers in Scandinavian Syntax* 60:51–79.
- Engdahl, Elisabet. 2012. Optional Expletive Subjects in Swedish. *Nordic Journal of Linguistics*

- Engdahl, Elisabet & Filippa Lindahl. in prep. The many functions of preposed object pronouns in Swedish.
- Erteschik-Shir, Nomi. 2007. *Information Structure: The Syntax-Discourse Interface*. Oxford: Oxford University Press.
- Holmberg, Anders. 1986. Word order and syntactic features in the Scandinavian languages and English. Stockholm: Department of General Linguistics, University of Stockholm.
- Johannessen, Janne Bondi. 2012. Ha *ru* bursdag? Da ska *re* fejres. Om isoglossene for *r*-initielle funksjonsord. In Røyneland, Unn & Hans-Olav Enger (eds.) *Fra holtijaR til holting. Språkhistoriske og språksosiologiske artikler til Arne Torp på 70-årsdagen*, p. 183–194. Oslo: Novus.
- Johannessen, Janne Bondi. 2013. Left dislocation in main and subordinate clauses. In Johannessen, Janne Bondi & Øystein Alexander Vangsnes (eds.) *The Nordic Atlas of Language Structures Online* (NALS). http://www.tekstlab.uio.no/nals.
  - Johannessen, Janne Bondi, Joel Priestley, Kristin Hagen, Tor Anders Åfarli & Øystein Alexander Vangsnes. 2009a. The Nordic Dialect Corpus an Advanced Research Tool. In Jokinen, Kristiina & Eckhard Bick (eds.) *Proceedings of the 17th Nordic Conference of Computational Linguistics NODALIDA* 2009. NEALT Proceedings Series Volume 4.
- Johannessen, Janne Bondi, Kristin Hagen, Live Håberg, Signe Laake, Åshild Søfteland & Øystein Vangsnes. 2009b. Transkripsjonsrettleiing for ScanDiaSyn.
  - http://www.tekstlab.uio.no/nota/scandiasyn/Transkripsjonsrettleiing%20for% 20ScanDiaSyn.pdf
- Josefsson, Gunlög. 2010. "Disagreeing" pronominal reference in Swedish and the interplay between formal and semantic gender. *Lingua* 120:2095–2120.
- Josefsson, Gunlög. 2012. What's first? On the left periphery in Swedish declaratives. In Brandtler et al. (eds.), 359–372.
- Kampen, Jacqueline van. 2008. Anaphoric pronouns for topic devices: theoretical claims and acquisitional evidence. Theodoros Marinis, Angeliki Papangeli & Vesna Stojanovik (eds.) *Proceedings of the 2007 Child Language Seminar*, p. 64–72. University of Reading.
  - http://www.reading.ac.uk/web/FILES/cls/CLS\_Proceedings2.pdf
- Lindstad, Arne Martinus, Anders Nøklestad, Janne Bondi Johannessen & Øystein Alexander Vangsnes. 2009. The Nordic Dialect Database: Mapping Microsyntactic Variation in the Scandinavian Languages. In Jokinen, Kristiina & Eckhard Bick (eds.) *Proceedings of the 17th Nordic Conference of*

- Computational Linguistics NODALIDA 2009. NEALT Proceedings Series Volume 4.
- Mikkelsen, Line. to appear. VP anaphora and verb-second order in Danish. *Journal of Linguistics*.
- Platzack, Christer. 1998. *Svenskans inre grammatik det minimalistiska programmet* [The internal grammar of Swedish the Minimalist Program]. Lund: Studentlitteratur.
- Platzack, Christer. 2012. Split Topicalization in Swedish and doubling with *det* 'it.neuter'. In Brandtler et al. (eds.), 411–431.
- Riad, Tomas. 2014. *The Phonology of Swedish*. Oxford: Oxford University Press.
- Rizzi, Luigi. 1990. Relativized Minimality. Cambridge, MA.: MIT Press.
- SAG = Teleman, Ulf, Staffan Hellberg & Erik Andersson. 1999. Svenska Akademiens Grammatik [The Swedish Academy Grammar]. Stockholm; Norstedts.
- Schwarz, Bonnie & Sten Vikner. 1996. The Verb Always Leaves IP in V2 Clauses. In Belletti, Adriana & Luigi Rizzi (eds.) *Parameters and Functional Heads*, 11–62. New York: Oxford University Press.
- Teleman, Ulf. 2013. Va e re me re? Om Stockholmspronomen på *r*. I: Lindblom, Björn (red.) *Text, tal och tecken. Några perspektiv inom språkforskningen,* 17–30. (Konferenser 83.) Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- Travis, Lisa. 1984. Parameters and effects of word order variation. Ph.D. dissertation, MIT. <dspace.mit.edu/handle/1721.1/15211>
- Vallduví, Enric & Elisabet Engdahl. 1996. The linguistic realization of information packaging. *Linguistics* 34:459–519.
- Vangsnes, Øystein Alexander. 2008. On peripheral doubling in Scandinavian. In Barbiers, Sjef, Marika Lekakou, Margret van der Ham & Olaf Koeneman (eds.), *Microvariations in Syntactic Doubling*, 419–441. Bingley: Emerald.
- Ward, Gregory. 1985. *The Semantics and Pragmatics of Preposing (Topicalization)*. University of Pennsylvania.
  - <a href="http://repository.upenn.edu/dissertations/AAI8523465">http://repository.upenn.edu/dissertations/AAI8523465</a>
- Zwart, Jan-Wouter. 1991. Clitics in Dutch: Evidence for the position of Infl. *Groninger Arbeiten zur Germanistischen Linguistik* 33:71–92.

NorDiaCorp <a href="http://www.tekstlab.uio.no/nota/scandiasyn/index.html">http://www.praat.org/>

**Appendix**Occurrences of fronted (non-subject) det, den, dem with eight verbs in the NDC

Danish		Swedish	
verb	Number	verb	Number
	(den/dem)		(den/dem)
gøre	209(0)	göra	228(2)
se	7(1)	se	15(1)
sige	26(0)	säga	23(0)
tro	88(0)	tro	58(1)
synes	36(0)	tycka	61(1)
ville	55(2)	vilja	19(2)
have	324(37)	ha	330(22)
få	36(9)	få	80(3)

Norwegian	1	Total	
verb	Number	verb	Number
	(den/dem)		(den/dem)
gjøre	856(1)	do	1293(3)
se	143(3)	see	165(5)
si	132(2)	say	181(2)
tru	607(12)	believe	798(13)
tro	45(0)	think	348(6)
synes	251(5)	want/will	260(14)
ville	186(10)	have	1979(194)
ha	1325(135)	get	263(33)
få	147(21)		