

Subject and object extraction from embedded clauses

Kristine Bentzen

UiT The Arctic University of Norway

1. Introduction

Many languages display a restriction on extraction of subjects from embedded clauses, in particular when the embedded clause is introduced by an overt complementizer. This phenomenon is called the “*that*-trace effect,” and it is illustrated with a Swedish example in (1a). However, the literature reports on variation among the Scandinavian languages on this point (cf. among many others Platzack 1986, Holmberg 1986, Hellan and Christensen 1986, and Westergaard et al. 2012 for a recent overview). According to the Swedish Reference Grammar (SAG, Teleman et al. 1999, cf. also Platzack 1986, Holmberg 1986), Swedish indeed displays a *that*-trace effect, in that the subject cannot be extracted when the embedded clause contains an overt complementizer as in (1a), while such extraction is possible when the complementizer is deleted, as in (1b) (Teleman et al. 1999 vol 4:426). The same pattern holds true for Danish (cf. Vikner 1995) and Faroese (cf. Thráinsson et al. 2004):

(1) a. * Kalle har dom sagt att inte kommer. (Swedish)

Kalle have they said that not comes

b. Kalle har dom sagt inte kommer.

Kalle have they said not comes

‘They have said that Kalle isn’t coming.’

In Fenno-Swedish, on the other hand, the *that*-trace effect is claimed to be absent, and constructions like (2a) are acceptable (Teleman et al. 1999 vol 4: 426). Moreover, for Norwegian, Faarlund et al. (1999:986) claim that, although it is preferred to delete the complementizer when a subject is extracted, leaving it expressed overtly is also an option, as in (2b) (cf. also Hellan and Christensen 1986, Taraldsen 1978, Fiva 1985, 1991, and Westergaard et al. 2012 for a recent overview):

(2) a. Den matchen vet jag säkert att spelas i morgon. (FinSw)

that match.the know I surely that play.PASS tomorrow

‘This match I know for sure will be played tomorrow.’

b. Denne boka veit eg (at) vil interessere deg. (Nynorsk)

this book.the know I that will interest you

‘This book I know will interest you.’

In Icelandic, the complementizer cannot be deleted (from Maling and Zaenen 1978: 478-479):

- (3) Hver sagðir þú *(að) væri kominn til Reykjavíkur? (Icelandic)
who said you that was come to Reykjavik
 ‘Who did you say had come to Reykjavik?’

An alternative strategy to leaving out the complementizer in order to avoid the *that*-trace effect is to insert a resumptive pronoun in the position following the complementizer. This strategy has been claimed to be used to varying degrees in the Scandinavian languages (cf. Engdahl 1982:166, 1985 for Swedish, Fiva 1991 for Norwegian):

- (4) Vilken elev trodde ingen att han skulle fuska? (Swedish)
which pupil thought noone that he should cheat
 ‘Of which pupil did no one think that he would cheat?’

Moreover, in certain varieties of Norwegian, the relative pronoun *som* ‘that’ occurs with extraction of a *wh*-subject (cf. Westergaard et al. 2012):

- (5) Hvem sa du som kom til Tromsø? (Norwegian)
who said you that came to Tromsø
 ‘Who did you say came to Tromsø?’

We know that there is quite a lot of variation across the Scandinavian languages with respect to issues related to subject extraction, and therefore these constructions were tested for in the Nordic Syntax Database.

Extraction of objects from embedded clauses is not known to be restricted by the presence or absence of the complementizer to the same extent, but for completeness, constructions parallel to those with subject extraction were included in the questionnaires.

2. Results

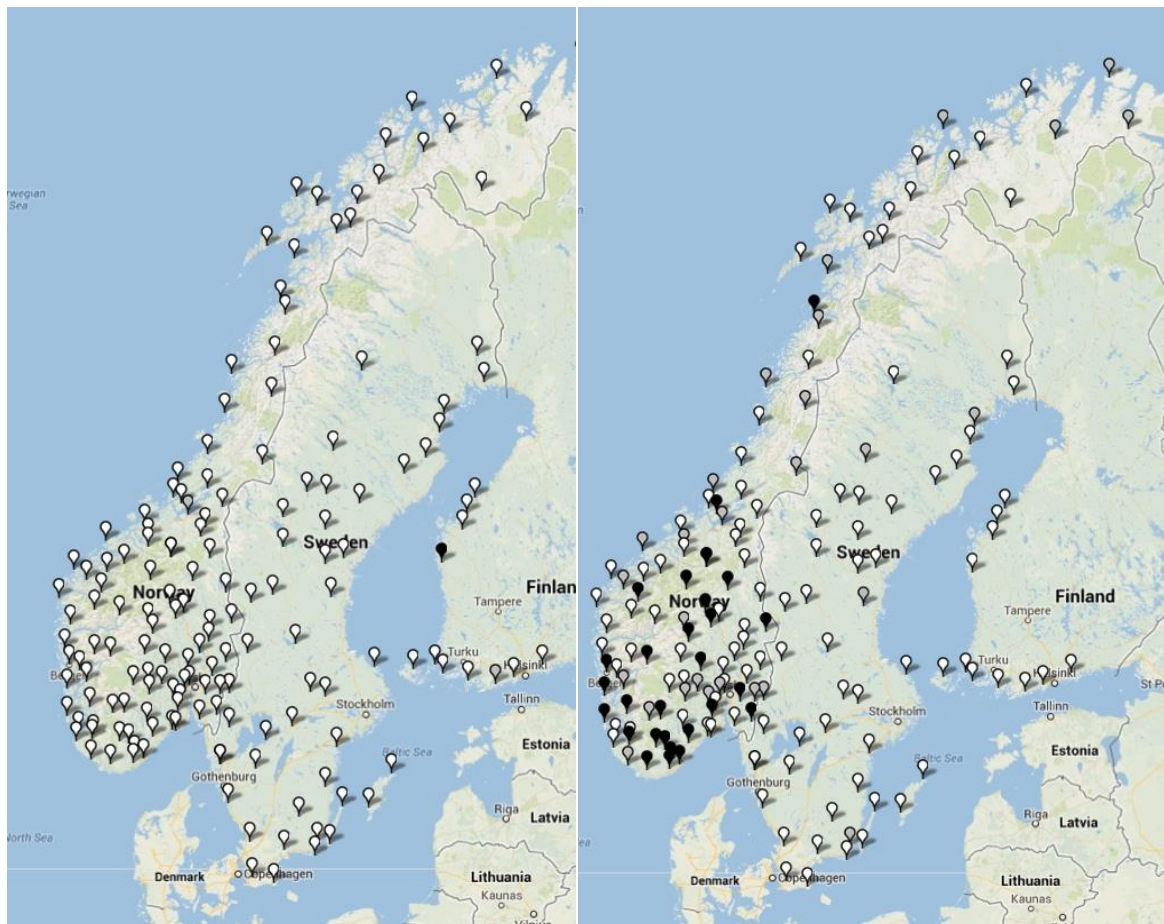
2.1 Nordic Syntax Database (NSD)

The following constructions with object extraction were tested in Norway, Sweden, and Finland: (6a) extraction from a *that*-complement without an overt complementizer; (6b) extraction from a *that*-complement with an overt complementizer; (6c) extraction from a *that*-complement with the complementizer *som*. This is illustrated here with Norwegian examples:

- (6) a. Hvem tror du jeg skal treffe imorgen? #325 (Norwegian)
who think you I shall meet tomorrow

- b. Hvem tror du at jeg skal treffe imorgen? #329 (Norwegian)
who think you that I shall meet tomorrow
- c. Hvem tror du som jeg skal treffe imorgen? #333 (Norwegian)
who think you that I shall meet tomorrow
 ‘Who do you think I am going to meet tomorrow?’

(6a) receives high scores everywhere (except in Närpes in Finland), and appears to be the typically accepted variant of the sentences in (6), see map 1. (6b) is also quite generally accepted. In Finland and Sweden, this example receives a high score everywhere. In Norway, however, there are several medium scores throughout the country, and there is also a cluster of low scores in the southern part of the country, see map 2. This is somewhat unexpected and calls for further investigation.



Map 1: *wh-object extraction from that-clause without a complementizer.*

(#325: *Hvem tror du jeg skal treffe imorgen*

(‘Who do you think I am going to meet tomorrow?’)

(White = high score; grey = medium score; black = low score)

Map 2: *wh-object extraction from that-clause with complementizer at ‘that’.*

(#329: *Hvem tror du at jeg skal treffe i morgen?*)

In contrast, (6c) was basically rejected everywhere:



Map 3: *wh*-object extraction from *that*-clause with complementizer *som* ‘*that*’.

(#333: *Hvem tror du som jeg skal treffe imorgen?* ‘*Who do you think I am going to meet tomorrow?*’)

(*White* = high score; *grey* = medium score; *black* = low score)

With respect to subject extraction from *that*-clauses, various types of constructions were tested in the NSD. First of all, the construction that has been reported as generally accepted, with complementizer deletion, was tested in Faroese (7a), Norwegian and Swedish (7b):

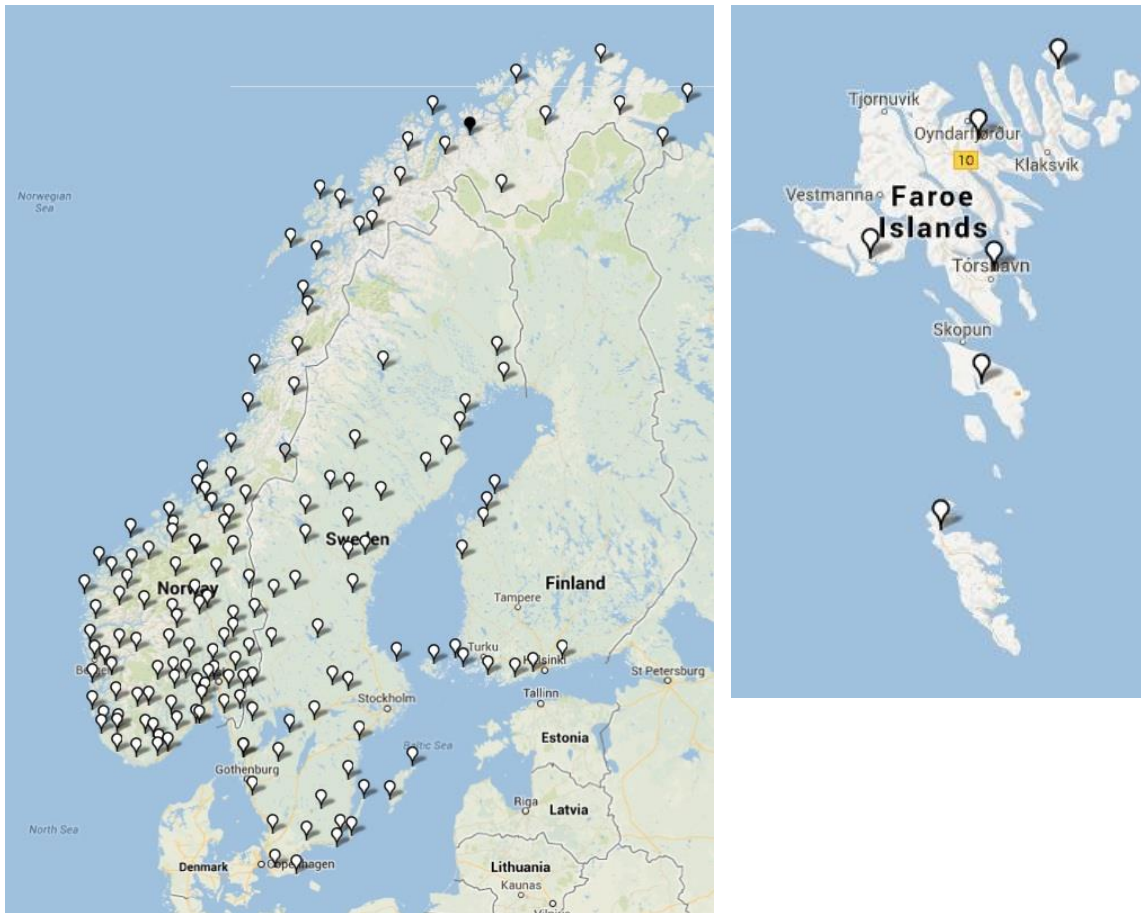
(7) a. *Hvør væntar tú fer við?* #324 (Faroese)

who expect you go with
‘Who do you think will come along?’

b. *Hvem tror du har gjort det?* #324 (Norwegian)

who think you have done it
‘Who do you think has done it?’

As expected, this construction is typically accepted all over Norway, Sweden, Finland, and the Faroe Islands:



Maps 4-5: *wh*-subject extraction from *that*-clause with complementizer deletion.

(#324: *Hvem tror du har gjort det?* ‘Who do you think has done it?’/*Hvør væntar tú fer við?* ‘Who do you think will come along?’)

(White = high score; grey = medium score; black = low score)

Secondly, constructions with an overt complementizer *at* ‘that’ were also tested in Faroese, Norwegian and Swedish (here illustrated with Norwegian examples):

(8) a. *Hvem tror du at har gjort det?* #328 (Norwegian)

who think you that have done it

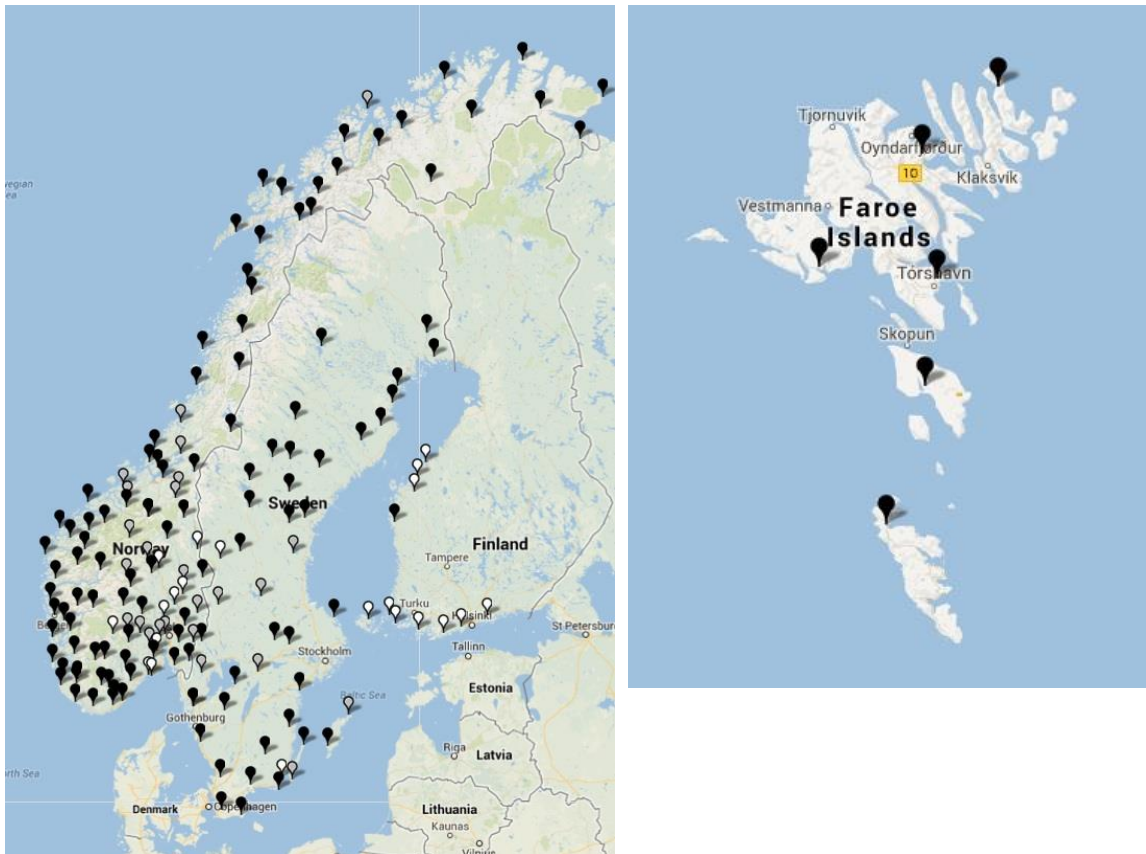
‘Who do you think have done it?’

b. *Hvem sa du at ikke hadde kommet?* #1367 (Norwegian)

who said you that not had come

‘Who did you say hadn’t come?’

The results show that a *that*-trace effect is missing in Finland, as well as in various places in Eastern Norway; speakers in these areas accept examples like those in (8). Moreover, in Trøndelag and a few places in central Sweden, these examples receive a medium score. However, in other locations in Norway and Sweden, as well as on the Faroe Islands, the examples in (8) are rejected:



Maps 6-7: *wh*-subject extraction from *that*-clause with overt complementizer at ‘that’.

(#328: *Hvem tror du at har gjort det?* ‘Who do you think have done it?’)

(White = high score; grey = medium score; black = low score)

Third, it has been noted (Nordgård 1985, 1988, Westergaard et al. 2012) that several Norwegian dialects use the relative pronoun *som* rather than the complementizer *at* ‘that’ in constructions when a *wh*-subject has been extracted. Thus, the example in (9) was included in the questionnaire, and tested in Norwegian and Swedish:

(9) *Hvem tror du som har gjort det?* #332 (Norwegian)

who think you SOM has done it

‘Who do you think has done it?’

This sentence received a high score in Northern Norway, Trøndelag, and the North West coast of Norway (Sogn og Fjordane, Møre og Romsdal). However, it was rejected in South and East Norway, in Sweden and in Finland:



Map 8: *wh*-subject extraction from *that*-clause with overt relative pronoun *som* ‘that’.

(#332: *Hvem tror du som har gjort det?* ‘Who do you think has done it?’)

(White = high score; grey = medium score; black = low score)

Finally, constructions with a resumptive pronoun in the embedded clause were tested in Norwegian and Swedish; with an overt complementizer, (10a-b), and with complementizer deletion, (10c):

- (10) a. *Hvem tror du at han har gjort det.* #336 (Norwegian)
who think you that he has done it
 ‘Who do you think has done it?’
- b. *Vilka killar tror du att de har rånat banken?* #1397 (Swedish)
which boys.the think you that they have robbed bank.the
 ‘Which boys do you think have robbed the bank?’
- c. *Hvem tror du han har gjort det?* #1204 (Norwegian)
who think you he had done that
 ‘Who do you think has done it?’

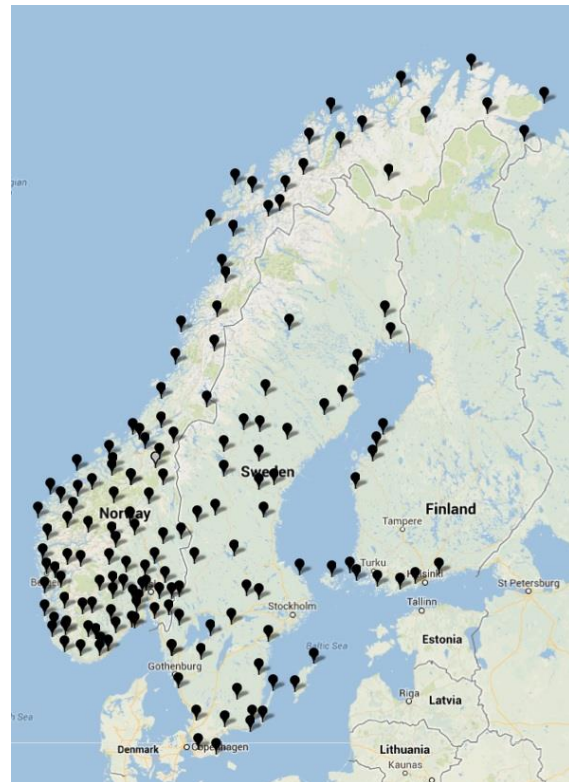
All of the sentences in (10) were generally rejected everywhere in Norway, Sweden and Finland:



Map 9: *wh*-subject extraction from *that*-clause with a resumptive pronoun with an overt complementizer at ‘that’.

(#336: *Hvem tror du at han har gjort det?* ‘Who do you think has done it?’)

(White = high score; grey = medium score; black = low score)



Map 10: *wh*-subject extraction from *that*-clause with a resumptive pronoun without an overt complementizer at ‘that’.

(#1204: *Hvem trur du han har gjort det?* ‘Who do you think has done it?’)

The availability of a resumptive pronoun was also tested in one type of complement clause with object extraction in Finland and Sweden, (11a), and with subject extraction Norway, Finland and Sweden, (11b-c):

- (11) a. Den boken kommer jeg inte ihåg om jag läste **den**. #1399 (Swedish)
that book.the come I not in.mind whether I read it
 ‘That book I can’t remember whether I read.’
- b. Ole Gunnar veit jeg ikke om **han** kommer. #997 (Norwegian)
O.G. knows I not about he comes
 ‘I don’t know whether Ole Gunnar will come.’

c. Per Erik vet jag inte om kommer. #1398 (Swedish)

P.E. know I not whether comes

‘I don’t know whether Per Erik is coming.’

Sentence (11a) with a resumptive pronoun with object extraction was in general not accepted in Finland and Sweden:



Map 11: *wh-object extraction from complement if-clauses with a resumptive pronoun.*

(#1399: *Den boken kommer jag inte ihåg om jag läste den.* ‘That book I can’t remember whether I read’).

(White = high score; grey = medium score; black = low score)

As Map 12 shows, sentence (11b) with a resumptive pronoun with subject extraction was rejected in Southern Norway, a few places in Trøndelag (Selbu, Namdalen, Lierne) and in Finnmark (Kvænangen, Hammerfest, Lakselv, and Vardø), in Leksand and Sproge in Sweden, and in Brändö in Finland. However, it was accepted in Northwestern Norway (between Bergen and Trondheim) as well as in a few places in Nordland county (Northern Norway). It was also accepted in various places in Sweden, especially in the South as well as in Munsala and Närpes, Dragsfjärd, and Borgå in Finland. It received medium scores in the Troms, Nordland and Trøndelag counties, and also here and there in Sweden and Finland.

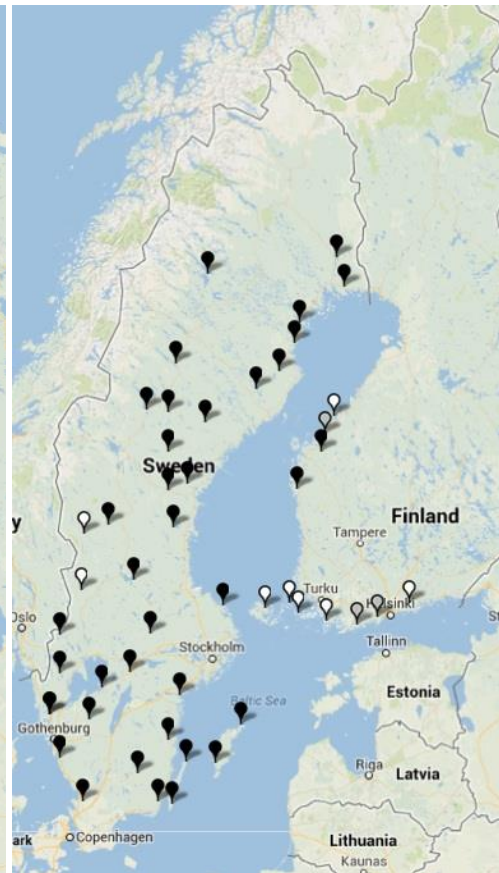
Sentence (11c) without a resumptive pronoun with subject extraction was tested in Sweden and Finland, and as illustrated in Map 13, it was rejected in most places in Sweden except for Särna and Dalby, two locations close to the Norwegian border. In Finland, however, this sentence was typically accepted in the southern part of Finland, as well as in Larsmo, with Munsala, Snappertuna, and Kyrkslätt giving medium scores. This type is interesting since the complementizer *om* ('if') cannot be deleted. Additional investigation is required on this construction in Norway.



Map 12: *wh*-subject extraction from complement if-clauses with a resumptive pronoun.

(#997: *Ole Gunnar veit jeg ikke om han kommer.* 'I don't know whether Ole Gunnar will come.')

(White = high score; grey = medium score; black = low score)



Map 13: *wh*-subject extraction from complement if-clauses without a resumptive pronoun.

(#1398: *Per Erik vet jag inte om kommer.* 'I don't know whether Per Erik is coming.')

3. Discussion

Object extraction appears to be possible from *that*-clauses both with and without an overt complementizer *at* ‘that’. However, certain places, particularly in the south of Norway, display some restrictions on extraction from clauses with the overt complementizer. Moreover, use of the complementizer *som* ‘that’ is completely out in these constructions.

Turning to extraction of a *wh*-subject, we have seen that such extraction is generally accepted from *that*-clauses without an overt complementizer. In this respect, subject and object *wh*-extraction pattern alike. Moreover, while in Finland and Sweden, *wh*-subject extraction out of a clause with an overt complementizer is rejected, we find a complementary distribution with respect to such extraction in Norway. In the Eastern part, such extraction is allowed out of complements with the overt complementizer *at* ‘that’ but disallowed out of a complement with the overt complementizer *som* ‘that’, while in the rest of Norway, we see the opposite pattern. These results have been reported on by Westergaard et al. (2012) based on the data from the Nordic Syntax Database, and readers are referred to this paper for further reading.

Finally, notice that although resumptive pronouns in constructions with extraction of a *wh*-subject from a *that*-clause were generally rejected, resumptive pronouns were accepted with extraction of a non-*wh*-subject from an *if*-clause in Finland, Sweden, and large parts of Norway.

References

- Engdahl, Elisabet. 1982. Restrictions on unbounded dependencies in Swedish. In Elisabet Engdahl and E. Ejerhed (eds.) *Readings on Unbounded Dependencies in Scandinavian Languages*, 151–174. Almqvist & Wiksell, Umeå.
- Engdahl, Elisabet. 1985. Parasitic gaps, resumptive pronouns and subject extractions. *Linguistics* 23: 3–44.
- Fiva, Toril. 1985. Resumptive pronomen i nordnorske dialekter. In Tove Bull and Anton Fjeldstad *Heidersskrift til Kåre Elstad*, 48–68. Tromsø: Institutt for språk og litteratur. [Reprinted in *Tromsø Linguistics in the Eighties*, 134–160. Oslo: Novus.]
- Fiva, Toril. 1991. Resumptive pronouns and binding theory. In *Papers from the 12th Scandinavian Conference of Linguistics*, ed. Halldór Á. Sigurðsson, 66–77. Linguistic Institute, University of Iceland.
- Hellan, Lars and Kirsti Koch Christensen. 1986. Introduction. In Lars Hellan and Kirsti Koch Christensen (eds.) *Topics in Scandinavian Syntax*, 1–29. Reidel, Dordrecht.

- Holmberg, Anders. 1986. *Word Order and Syntactic Features in the Scandinavian Languages and English*. University of Stockholm, Stockholm.
- Maling, Joan and Annie Zaenen. 1978. The nonuniversality of a surface filter. *Linguistic Inquiry* 9: 475–497.
- Nordgård, Torbjørn. 1985. *Word Order, Binding and the Empty Category Principle*. Cand. Philol thesis, University of Trondheim.
- Nordgård, 1988. Omkring ordstilling i *hv*-spørsmål i norske dialekter. *Skriftserie fra Institutt for fonetikk og lingvistikk, University of Bergen* 33, 26–37.
- Platzack, Christer. 1986. COMP, INFL, and Germanic word order. In L. Hellan and K. K. Christensen, eds. *Topics in Scandinavian Syntax*, 185-234. *Studies in Natural Language and Linguistic Theory*. Dordrecht: Reidel.
- Taraldsen, Knut Tarald. 1978. On the scope of wh-movement in Norwegian. *Linguistic Inquiry* 9, 623–640.
- Teleman, Ulf, Staffan Hellberg and Erik Andersson. 1999. *Svenska Akademiens Grammatik*. Svenska Akademien, Stockholm.
- Thráinsson, Höskuldur, Hjalmar Petersen, Jógvan í Lon Jacobsen and Zakaris Svabo Hansen. 2004. *Faroese. An Overview and Reference Grammar*. Føroya Fróðskaparfelag, Tórshavn.
- Vikner, Sten. 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford University Press, New York.
- Westergaard, Marit, Øystein Vangsnes and Terje Lohndal. 2012. 'Norwegian *som*: The complementizer that climbed to the matrix Left Periphery and caused Verb Second violations,' *CISCL Working Papers*.

Web sites:

Nordic Atlas of Language Structures (NALS) Journal: <http://www.tekstlab.uio.no/nals>

Nordic Dialect Corpus: <http://www.tekstlab.uio.no/nota/scandiasyn/index.html>

Nordic Syntax Database: <http://www.tekstlab.uio.no/nota/scandiasyn/index.html>