# **Double complementizers**

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#### 1 Introduction

Unlike English, the Mainland Scandinavian languages have a complementizer som in embedded questions with a subject gap; see the Swedish example in (1a) (and cf. Teleman et al. 1999/4: 555 ff.). This is sometimes referred to as "doubly filled comp", following Chomsky & Lasnik (1977). The complementizer is also sometimes marginally possible in wh-clauses without a subject gap; see (1b) and (1c). Teleman et al. (1999/4: 509, 511) refers to the possibility of som 'that' after relative  $n\ddot{a}r$  'when' or  $d\ddot{a}r$  'there' as regional in Swedish. Also in Faroese, the relative complementizer  $i\eth$  can sometimes occur after a wh-word, but it is never obligatory (Thráinsson et al. 2004: 303f.).

- (1) a) Hon vet inte vem \*(som) kommer i dag. (Swe.) she knows not who that comes today

  'She doesn't know who will come today.'
  - b) Hon vet inte när (?som) han kommer. (Swe.) she knows not when that he comes 'She doesn't know when he comes.'
  - c) Hon vet inte vem av dem (som) han har bjudit. (Swe.) she knows not who of them that he has invited 'She doesn't know which of them she has invited.' (Stroh-Wollin 2002: 17)

In Icelandic sem 'that' is not allowed in examples corresponding to (1) (Thráinsson 2007: 448 ff.). However, the complementizer  $a\delta$  'that' often co-occurs with other complementizers in spoken Icelandic (Thráinsson 2007:449 f.), and this is sometimes the case with at/att 'that' also in Mainland Scandinavian. In Icelandic,  $a\delta$  can follow the relative complementizer sem, as in (2).

(2) Þetta er bókin sem (að) ég keypti. (Ice.) this is book.def that I bought 'This is the book that I bought.' (Thráinsson 2007: 450)

The ScanDiaSyn survey included the following sentences to test the possibility of  $at/a\delta/att$  following another complementizer or wh-word:

- (3) a) Hvis at du kommer på besøg, blir vi meget glade. (#367) (Da.) if that you com on visit become we very happy
  'If you come to visit, we'd be very happy'
  - b) Når at du kommer, skal du tage aviser med. (#370) (Da.) when that you come must.pres you take newspapers with 'When you come, you must bring newspapers.'
  - c) Jon spekulerede på om at han kunne komme på besøg. (#368) (Da.) Jon wondered on wheter he could come on visit 'Jon was wondering whether he could come visit.'

Sentences (#367) and (#370) was tested in Denmark and on Iceland, sentence (#368) only in Denmark. The results from the Nordic Syntax Database (Lindstad et al. 2009) and the Nordic Dialect Corpus (Johannessen et al. 2009) are presented below.

#### 2 Results

## 2.1 Nordic Syntax Database

In Denmark, sentence (#367), with a conditional clause with the complementizer hvis/ef 'if' +  $at/a\delta$  'that', is accepted only on Eastern Jutland; see Map 1. It receives a medium score in Århus (also Eastern Jutland). On Iceland, on the other hand, the sentence is accepted in most locations; see Map 2. It receives a medium score in a few locations in the north and in the southwest.



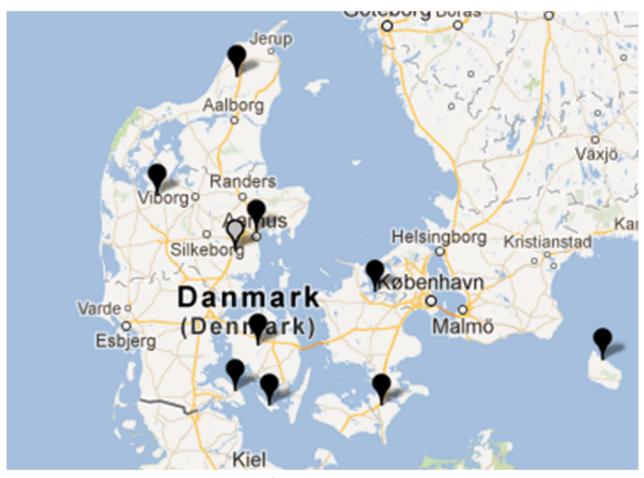
Map 1. Double complementizer in Danish: hvis 'if' + at 'that' in conditional clause (#367: Hvis at du kommer på besøg, blir vi meget glade. 'If you come to visit, we'd be very happy.')

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



Map 2. Double complementizer in Icelandic: hvis 'if'' + að 'that' in conditional clause (#367: Hvis at du kommer på besøg, blir vi meget glade. 'If you come to visit, we'd be very happy.') (White = high score, grey = medium score, black = low score)

Also sentence (#370), with n ar 'when' + at 'that', is rejected in all locations in Denmark, except on Eastern Jutland where it receives a medium score; see Map 3. On Iceland, on the other hand, sentence (#370), is accepted in all locations, except in one location in the southwest, where it receives a medium score; see Map 4.



Map 3. Double complementizer in Danish: når 'when' + at 'that' in a temporal when-clause (#370: Når du kommer, skal du tage aviser med. 'When you come, you must bring newspapers.') (White = high score, grey = medium score, black = low score



Map 4. Double complementizer in Icelandic:  $pegar'when' + a\delta'that'$  in a temporal when-clause (#370: Når du kommer, skal du tage aviser med. 'When you come, you must bring newspapers.') (White = high score, grey = medium score, black = low score)

Sentence (#369), with an embedded question with om 'whether' + at 'that', is rejected in all locations in Denmark; see Map 5.



Map 5. Double complementizer in Danish: om 'whether' + at 'that' in an embedded question (#368: Jon spekulerede på om at han kunne komme på besøg. 'Jon was wondering whether he could come visit.')

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

## 2.2 Nordic Dialect Corpus

Examples with at following a complementizer or wh-word can be attested in the NDC; a couple of examples are given in (4).

- (4) a) og det var jo sjovt for at når vi var i Salbrovad (Da.) and that was PRT fun because when that we were in Salbrovad 'and that was fun, because when we were in Salbrovad' (fyn3)
  - b) så flytter de over når at de har taget gymnasietiden (Da.) so move they over when that they have taken high.school.time.def
    'so they move over when they have finished high school' (bornholm3)

Examples with n ar 'when' + at 'that' can be attested in a few places in Denmark (Als, Bornholm, Eastern Jutland, and Fyn) and in many parts of Norway; see Map 6. There are no corresponding examples (with att 'that') from Swedish in the corpus.

Examples with hvis 'if' + at 'that' can only be attested in one location in Denmark (Western Jutland) but are widespread in Norwegian; see Map 7 (and cf. Faarlund et a. 1997:1944). Again, there are no clear examples from Swedish (with the complementizer om).



Map 6. Når 'when' + at 'that' in the Nordic Dialect Corpus.



Map 7. Hvis 'if' + at 'that' in the Nordic Dialect Corpus.

### 3 Discussion

### 3.1 Other data sources

In larger, written corpora, examples of att 'that' following a complementizer can be attested also in Swedish. An example with eftersom 'since' + att is given in (5a); examples like this are common in the spoken language. Also examples with  $n\ddot{a}r$  'when' + att occur; see (5b), but they are rare.

- (5) a) Sen börjar jag ny klass nästa år eftersom att då läser jag bara hotell. (Swe.) then begin I new class next year since that then read I only hotel 'Then I will begin a new class next year, because then I only study hotel.'
  - b) på lunchen när att hon vaknat on lunch. DEF when that she wake. SUP

(Swe.)

'At lunch, when she has woken up' (Bloggmix)

In a few rare cases, *när* 'when' is instead followed by the relative complementizer *som*, as in (6) (cf. also (1b) above).

(6) Jag vill alltid ha dig nära när som åren läggs till år. (Swe.)

I want always have you close when that year. DF. PL add. PRES. PASS to year. PL

'I always want to have you close when the years are added to years.'

(Bloggmix)

In a corpus study of written Swedish, Kalm (2011: 25) notes that *att* sometimes occurs after e.g. *fast* 'although', *ifall* 'if', *innan* 'before', *medan* 'while' and *som om* 'as if'. According to Kalm, examples seem to have become slightly more common in the end of the 20th century, but they are still quite infrequent in the written language, and many examples are from reported speech or dialogue.

#### 3.2 Theoretical issues relating to double complementizers

Double complementizers have been attested in several other European dialects (see e.g. Poletto 2000 for Italian, Alber 2007 for Tyrolean and Barbiers et al. 2005, Boef 2012 for Dutch dialects), and they have been used to argue for an analysis of the left-periphery with several positions (see e.g. Rizzi 1997, Stroh-Wollin 2002 and many others). The fact that double complementizers are sometimes, but not always, possible e.g. in Danish dialects can then point to differences between different clause-types. It has been suggested that for Dutch, factivity (assertion) plays a role for the possibility of complementizer doubling (see Barbiers 2002 and van Gelderen 2005). The results from the ScanDiaSyn survey do not point to any such restrictions, at least not in Icelandic. We can also note that the Swedish example with eftersom 'since' + att 'that' in (5a) has subject-verb inversion in the embedded clause; embedded V2 has often been argued to be restricted to asserted complements. In Swedish (unlike some Danish varieties), the complementizer need not be omitted in embedded V2-clauses (see Heycock 2006), and, apparently, it can sometimes even be doubled. (See Bentzen 2014a for the distribution of embedded V2 in the Scandinavian dialects.)

The difference between Icelandic and Danish observed in the survey might then relate to variation in the structure of the left-periphery of the clause, and possibly to other differences related to embedded word order (e.g. embedded V2 and stylistic fronting). It obviously also relates to differences in the properties of the complementizers. While the complementizer  $a\check{o}$  is often possible after another complementizer (including sem), Icelandic does not allow the relative complementizer sem to follow a wh-word. In Danish, at can follow som only when it is in turn followed by the relative complementizer/expletive der 'there'; see (7).

(7) \*(der) (Da.) den fyr som at traf henne the that that there met her 'I always want to have you close when the years are added to years.' (Stroh-Wollin 2002: 196)

The analysis of *sem/som* is much debated. Traditionally, it has been viewed as a relative pronoun, but now it is often viewed as a complementizer (see e.g. Taraldsen 1986 and Stroh-

Wollin 2002 for discussion and arguments against treating som as a relative pronoun). Holmberg (2000) accounts for the requirement of som in subject relatives in Mainland Scandinavian by assuming that it is a non-nominal expletive; his account does not immediately extend to other optional uses of som, e.g. following  $n\ddot{a}r$  'when'. Cf. also Platzack (2000) who suggests that som contains different features in its relative and interrogative uses.

With respect to <code>að/at/att</code>, we can note that Swedish dialects do not generally allow extraction of a subject from a <code>that-clause</code> with an overt <code>att</code> (the so-called <code>that-trace</code> phenomenon; see <code>Bentzen 2014b</code> and references cited there), whereas this is possible in many Norwegian dialects and in Icelandic (and e.g. Dutch). We can also note that Swedish sometimes has <code>som</code> where Norwegian and Danish can or must use <code>at</code>; see (8). Possible variation within the languages has not been investigated systematically, but Bergman (1942) gives examples with <code>att</code> from Southern Sweden, where Standard Swedish requires <code>som</code>.

- (8) a) Det är i Stockholm som/\*att vi brukar träffas. (Swe.)

  it is in Stockholm that we use.pres meet

  'It is in Stockholm we usually meet.'
  - b) Det var i Oslo at/\*som hun studerte jus. (No.) it was in Oslo that she studied law 'It was in Oslo she studied law.'
  - c) Det er i København at/\*som mødet ska finne sted.

    it is in Copenhagen that meeting. DEF shall find place

    'It is in Copenhagen the meeting will take place.'

    (cf. Stroh-Wollin 2002: 67)

#### References

- Alber, Birgit. 2007. "Tyrolean A-Bar Movement: Doubling and Resumptive Pronoun Structures." In Sjef Barbiers, Olaf Koeneman, Marika Lekakou & Margreet van der Ham (eds.), *Microvariation in Syntactic Doubling*, Syntax and Semantics Volume 36: 141–170.
- Barbiers, S., H. Bennis, G. De Vogelaer, M. Devos & M. van der Ham. 2005. *Syntactic Atlas of the Dutch Dialects, volume 1.* Amsterdam University Press, Amsterdam.
- Barbiers, Sjef. 2002. "Remnant stranding and the theory of movement." In Artemis Alexiadou, Elena Anagnostopoulou & Hans-Martin Gärtner (eds.), *Dimensions of Movement*. From features to remnants, John Benjamins, Philadelphia: 44–67.
- Bentzen, Kristine. 2014a. "Embedded Verb Second." *Nordic Atlas of Language Structures* (NALS). <a href="http://tekstlab.uio.no/nals#/chapter/10">http://tekstlab.uio.no/nals#/chapter/10</a>
- Bentzen, Kristine. 2014b. "Subject and object extraction from embedded clauses." *Nordic Atlas of Language Structures* (NALS). <a href="http://tekstlab.uio.no/nals#/chapter/52">http://tekstlab.uio.no/nals#/chapter/52</a>
- Bergman, Gösta. 1942. "Sydliga provinsialismer I det bildade svenska talspråket." *Arkiv för nordisk filologi* 66: 152–250.
- Boef, Eefje. 2012. "Doubling in Dutch restrictive relative clauses: rethinking the Head External Analysis." *Proceedings of ConSole XIX*: 125–149.
- Chomsky, Noam & Howard Lasnik. 1977. "Filters and Control." Linguistic Inquiry 8: 425-504.
- Faarlund, Jan Terje, Svein Lie and Kjell Ivar Vannebo. 1997. *Norsk referansegrammatikk.* Universitetsforlaget, Oslo

- Gelderen, Elly van. 2005. "The CP and split CP cross-linguistically." WORD 55.3: 369-403.
- Hansen, Erik & Lars Heltoft. 2011. *Grammatik over det Danske Sprog.* Det Danske Sprog- och Litteraturselskab.
- Heycock, Caroline. 2006. "Embedded root phenomena." In Martin Everaert and Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax, vol. II.* Blackwell, Oxford: 174–209.
- Holmberg, Anders. 2000. "Scandinavian Stylistic Fronting: How Any Category Can Become an Expletive." *Linguistic Inquiry* 31: 445–483.
- Johannessen, Janne Bondi, Joel Priestley, Kristin Hagen, Tor A. Åfarli & Øystein A. Vangsnes. 2009. "The Nordic Dialect Corpus an Advanced Research Tool." In Kristiina Jokinen and Eckhard Bick (eds.), *Proceedings of the 17th Nordic Conference of Computational Linguistics NODALIDA 2009*, NEALT Proceedings Series Volume 4.
- Kalm, Mikael. 2011. Underordning med och utan att. MA thesis, Uppsala Universitet.
- Lindstad, Arne M., Anders Nøklestad, Janne Bondi Johannessen & Øystein A. Vangsnes. 2009. "The Nordic Dialect Database: Mapping Microsyntactic Variation in the Scandinavian Languages." In Kristiina Jokinen and Eckhard Bick (eds.), *Proceedings of the 17th Nordic Conference of Computational Linguistics NODALIDA 2009*. NEALT Proceedings Series Volume 4.
- Platzack, Christer. 2000. "A Complement-of-N<sup>0</sup> Account of Restrictive and Non-Restrictive Relatives. The case of Swedish." In Artemis Alexiadou, Paul Law, André Meinunger & Chris Wilder (eds.), *The Syntax of Relative Clauses*, John Benjamins, Amsterdam & Philadelphia: 265–308.
- Poletto, Cecilia. 2000. *The higher functional field: evidence from northern Italian dialects.*Oxford University Press, Oxford & New York.
- Rizzi, Luigi. 1997. "The Fine Structure of the Left Periphery." In Liliane Haegeman (ed.), Elements of Grammar, Kluwer, Dordrecht: 281–337.
- Stroh-Wollin, Ulla. 2002. Som-satser med och utan som. PhD thesis, Uppsala Universitet.
- Taraldsen, Knut Tarald. 1986. "Som and the Binding Theory." In Lars Hellan & Kirsti Koch Christensen (eds.), Topics in Scandinavian Syntax, Reidel, Dordrecht: 149–184.
- Teleman, Ulf, Staffan Hellberg & Erik Andersson. 1999. *Svenska Akademiens grammatik 1–4.*Norstedts Ordbok, Stockholm.
- Thráinsson, Höskuldur, Hjalmar P. Petersersen, Jógvan í Lon Jacobsen & Zakaris Svabo Hansen. 2004. Faroese. *An Overview and Reference Grammar.* Føroya Fróðskaparfelag, Tórshavn.
- Thráinsson, Höskuldur. 2007. The Syntax of Icelandic. Cambridge University Press, Cambridge.

#### Web sites:

Bloggmix: <a href="http://spraakbanken.qu.se/korp">http://spraakbanken.qu.se/korp</a>

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

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