Complementizers – semantic and grammatical issues

Kasper Boye
University of Copenhagen
boye@hum.ku.dk
Overview

1. The standard view
2. Complementizer semantics
3. Germanic complementizer semantics
4. Complementizer deletion
5. Problems and questions
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The standard view

A standard definition of complementizers

"a word, particle, clitic or affix, one of whose functions it is to identify [a complement] as a complement" (Noonan 2007: 55).
The standard view

Canonical complementizers
Features
- words
- grammatical (as opposed to lexical)
- found in finite complements
- distinguish finite complements from independent finite clauses and from other dependent finite clauses.

(1) a. I think [that] he is in his office.
   b. He is in his office.
   c. I like it [when] he is in his office.
The standard view

Complementizer functions
The literature tends to focus on the complementizing function of complementizers

However, complementizers may have other functions than identifying complements

Pragmatic functions
"Social meaning": marker of genre, style, etc.
"Filler function": optional complementizers may be inserted to "alleviate production difficulties" (Kaltenböck 2009: 56).

Semantic functions
Overview

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Complementizer semantics

Examples of semantic complementizer functions

Tense complementizers (Awa Pit; Curnow 1997):

NON-FUTURE
(1) Na=na  min-tu-s  [us=na  kwa-t  ka].
   1SG=TOP  think-IPFV-LOCUT  3SG=TOP  eat.PFV.PTCP  COMP
   ‘I am wondering if he has eaten’.

FUTURE
(2) Na=na  Marcos=ta=na  mima-ta-w
   1SG=TOP  Marcos=ACC=TOP  ask-PST-LOCUT:SBJ
   [mizhaka=ma a-mtu  sa].
   when=INTER  come-IPFV.PTCP  COMP
   ‘I asked Marcos when he would come’.
Complementizer semantics

Complementizers that distinguish non-truth-valued (state-of-affairs designating) and truth-valued (propositional) complements (Tukang Besi; Donohue 1999):

STATE-OF-AFFAIRS DESIGNATING
(1) No-’ita-’e [Ø no -kanalako te osimpu].
   3R-see-3OBJ 3R -steal CORE young.coconut
   ‘She saw him stealing the coconut’.

PROPOSITIONAL
(2) No-’ita-’e [kua no -kanalako te osimpu].
   3R-see-3OBJ COMP 3R -steal CORE young.coconut
   ‘She saw that he had stolen the coconut’.
Complementizer semantics

(Epistemic) modal complementizers (Lango; Noonan 1992)

(1)  Dákô párô àpárâ
     woman 3SG.consider.HAB consider.GER
     [ká nákô òrègô kál].
     COMP girl 3SG.grind.PFV millet
     ‘The woman doubts whether the girl ground the millet’.

(2)  nákô òkòbbì dákô
     girl 3SG.say.BEN.PFV woman
     [nî dyël òcàmò].
     COMP goat 3SG.eat.PFV
     ‘The girl told the woman that the goat ate it.’
Complementizer semantics

Epistemic modal complementizers are frequently found (van Lier & Boye 2010).

<table>
<thead>
<tr>
<th>System</th>
<th>No. of languages in sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epistemic COMP(s)</td>
<td>13</td>
</tr>
<tr>
<td>Non-epistemic COMP</td>
<td>15</td>
</tr>
<tr>
<td>No COMP</td>
<td>14</td>
</tr>
<tr>
<td>No info</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>
Complementizer semantics

In fact, Frajzyngier (1995) claims that all complementizers are primarily modal.

However, van Lier & Boye (2010) suggest that complementizers need not have semantic functions at all.
Complementizer semantics

Example of language with semantically neutral complementizer:

Bororo (Macro-Gê) has one complementizer which is obligatory in all finite and nonfinite complements (except complements with only a subject and an intransitive verb):

There is no (semantic) complement(izer) contrast!

Bororo (Crowell 1979: 105)

(1) \(E\)-\textit{ridiwa-re} \[u\text{-}\textit{nire} \ ipo \ kadê\text{-}\textit{di-ji}]. \ (finite)
   \begin{align*}
   &3\text{PL-know-neutral} \quad &3\text{sg-STATATIVE} \quad &\text{pole} \quad &\text{cut-COMP-referent} \\
   &'\text{They know he was cutting the pole}'.
   \end{align*}

(2) \(E\)-\textit{ridiwa-re} \[u\text{-}i \ ipo \ kadê\text{-}\textit{di-ji}]. \ (nonfinite)
   \begin{align*}
   &3\text{PL-know-neutral} \quad &3\text{SG-NMLZ} \quad &\text{pole} \quad &\text{cut-COMP-referent} \\
   &'\text{They know about his cutting the pole}'.
   \end{align*}
Overview

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Germanic complementizer semantics

Germanic complementizers – an introduction

Most, if not all, Germanic languages display a complementizer contrast similar to that in English between *that* (type 1) on the one hand, and *if* or *whether* (type 2) on the other.

<table>
<thead>
<tr>
<th></th>
<th>Type 1</th>
<th>Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danish</td>
<td><em>at</em></td>
<td><em>om/hvorvidt</em></td>
</tr>
<tr>
<td>Dutch</td>
<td><em>dat</em></td>
<td><em>of</em></td>
</tr>
<tr>
<td>English</td>
<td><em>that</em></td>
<td><em>if/whether</em></td>
</tr>
<tr>
<td>Faroese</td>
<td><em>at</em></td>
<td><em>um/hvørt</em></td>
</tr>
<tr>
<td>German</td>
<td><em>dass</em></td>
<td><em>ob/inwiefern</em></td>
</tr>
<tr>
<td>Icelandic</td>
<td><em>að</em></td>
<td><em>hvirt</em></td>
</tr>
<tr>
<td>Norwegian</td>
<td><em>at</em></td>
<td><em>om/hvorvidt</em></td>
</tr>
<tr>
<td>Swedish</td>
<td><em>att</em></td>
<td><em>om/huruvida</em></td>
</tr>
</tbody>
</table>
Germanic complementizer semantics

Type 1 and Type 2 make up a distributionally defined system.

- Type 1 and Type 2 can only occur initially.

  (1) *He knows [that/if she is there].

  (2) *He knows [she is there that/if].

- In some language (English, German, Swedish), though not all, Type 1 and Type 2 are mutually exclusive.

  (3) *He knows [if that she is there].

  (4) *He knows [that if she is there].
Germanic complementizer semantics

The standard semantic description of the contrast

- The complementizer contrasts reflect the contrast in independent clauses between "declarative", "basic", or "neutral" on the one hand and "interrogative on the other":

  Type 1 complementizers mark complements as "declarative" or "neutral".

  Type 2 complementizers mark complements as "interrogative".

Germanic complementizer semantics

Some problems with the standard description

1. The term "interrogative" suggests that Type 2 complements have illocutionary meaning, but dependent clauses arguably do not have illocutionary meaning (e.g. Cristofaro 2003, following Searle).

2. In some cases, Type 2 complements can be described as expressing propositions that are, or have been, questioned,

Danish
(1) Han spurgte [om hun mon var syg].
he ask.PST COMP she Q be.PST ill
'He asked if she were ill'.

but in other cases, this description is far-fetched (cf Huddleston & Pullum 2002: 983 on English; Zifonun & al. 1997 on German).

(2) Hun drukker uanset [om han (*mon) gør].
she drink.PRS irrespective COMP he Q do.PRS
'She is drinking whether or not he is'.
Germanic complementizer semantics

Claim
Semantically, the contrasts between Type 1 and Type 2 complementizers must be understood as epistemic modal contrasts:

**Type 1** (*that*, etc.): epistemically neutral

**Type 2** (*if*, *whether*, etc.): uncertainty about the proposition expressed by the complement*


* There are subtle stylistic and semantic differences between Type 2 complementizers (e.g. Nordström 2010: 217 on Swedish; Huddleston & Pullum 2002: 973 on English).
Germanic complementizer semantics

The proposed description vs. the standard description
The description of Germanic complementizers in terms of epistemic modality does not share the problems of the standard description:

1. While it would be odd to have illocutionary meaning in dependent clauses, there is nothing odd in having dependent clauses with epistemic modal meaning: Epistemic modal meaning is non-illocutionary (e.g. Hengeveld 1989).

2. The description of Type 2 complements as expressing 'uncertainty' is perfectly compatible with the description of some cases of Type 2 complements as expressing propositions that are, or have been, questioned:

   Questions imply uncertainty.

   In contrast, the description of Type 2 complements as "interrogative" is incompatible with the description of some cases of Type 2 complements as expressing uncertain propositions:

   Uncertainty does not imply question.
Germanic complementizer semantics

Various sets of facts pertaining to Germanic complementizers support the proposed description of them in terms of epistemic modality:

1. Diachrony
2. Distribution
3. Minimal pairs
4. Complementizer deletion
5. Non-complementizing uses of complementizer forms
6. Combinations with other subordinators
Germanic complementizer semantics

Diachrony

Development of Type 1 complementizers
Sources: epistemically neutral pronouns
(Eng.: that, Germ.: das, Dan./Old Norse: þat*)

Grammaticalization:

Faroese (Lockwood 1968: 223; from Diessel 1999: 124)

(1) Eg sigi tað: [hann kemur].
   I say.PRS that he come.PRS
   ‘I say that: he comes’.

   > Eg sigi [at hann kemur].
   I say.PRS that he come.PRS
   ‘I say that he comes’.
Germanic complementizer semantics

Development of Type 2 complementizers

Probable development of English if, Dutch of, German ob, and of Norwegian, Swedish, and Danish om, and Faroese um (cf. Nordström 2010: 203-205).

Dative form of a noun meaning ‘doubt’ (cf. Icelandic ef and Old swedish iäf ‘doubt’)

Proto-Germanic subjunction eƀa, ef

if, of, ob, om, um
Germanic complementizer semantics

Development of Type 2 complementizers (continued)

Nordström (2010: 203) proposes that the proto-Germanic dubitative noun was originally a dubitative predicate selecting a complement clause, and then grammaticalized into a dubitative complementizer.

According to Hopper & Traugott (2003:187), complementizers often develop from verbs of mental states.
Germanic complementizer semantics

Relating diachronic facts to the proposed description

The fact that major Type 2 complementizers develop from a dubitative element supports the description of them as expressions of 'uncertainty'.

* However,

   English *whether* and Icelandic *hvort* derive from interrogative pronouns: Old English *hwæber, hweber*, Old Norse *hvaðarr* 'which of two, whether'.

And

   Swedish *huruvida* and Norwegian and Danish *hvorvidt* either derive from Old Norse interrogative pronoun *hwær* 'which (of two)' or from *hwær* 'which (of many)' + *viðer* 'far'.
Germanic complementizer semantics

Distribution

Types of complement-taking elements

Nominals
(1) The problem is [that I don't like him].

Predicates
(2) She knows [that he has gone].
(3) It seems [that he has gone].
(4) It is possible [that he has gone].

Prepositions
(5) I’m fine, given (the fact) that I have been awake for 48 hours.
Germanic complementizer semantics

Three distributional classes of complement-taking elements

1. Elements which allow only Type 1 complements:
e.g. predicates of belief, possibility, hope, fear, and pretense.

Dutch (Eva van Lier, p. c.)

(1) *Ik veinsde [dat/*of ik haar nooit eerder had gezien].
   I pretend.PST COMP I her never previously have.PST see.PTCP
   'I pretended that I had never seen her before'.

Icelandic (Jóhanna Barðdal, p. c.)

(2) *Það gerðist [að/*hvort sólin braust fram].
   it happen.PST that sun.DEF break.PST forward
   'It happened that the sun broke its way through the clouds'.

Germanic complementizer semantics

Three distributional classes of complement-taking elements (continued)

2. Elements which allow only of Type 2 complements:
   predicates of asking, investigating, considering, debating, uncertainty, depending, caring, curiosity.

(1) *It depends on whether/*that you interest her. (British National Corpus)

Icelandic (Jóhanna Barðdal, p. c.)
(1) Ég prófaði [hvort/*að tölvan virkar].
   'I tested whether the computer works'.

Swedish
(2) Det är ovisst om/*att [hon kommer].
   'It’s unclear if she comes'
Germanic complementizer semantics

Three distributional classes of complement-taking elements (continued)

3. Elements which allow both Type 1 and Type 2 complements:
   e.g. predicates of knowing, learning, observing, forgetting, demonstrating, saying, guessing, deciding, and doubt.

   Faroese (Bergur Rønne Moberg, p. c.)
   (1) *Eg sá ikki [at/um hon för].*
   I see.PST NEG COMP she go.PST
   'I didn't see that/if she went away'

   (2) *Hon fortelur [at/um hann fer at koma í dag].*
   she tell.PRS COMP he will to come in day
   'She will tell that/if he will arrive today'.
Germanic complementizer semantics

Characterization of distributional classes of complement-taking elements

Class 1:
Elements which allow only Type 1 complements, do not imply uncertainty about their complement proposition.

*(Think* and *possible* present the complement *positively* as something more or less likely, rather than *negatively* as something uncertain).*

Class 2:
Elements which allow only Type 2 complements, imply uncertainty about their complement proposition.

Class 3:
Elements which allow both Type 1 and 2 complements, are compatible both with propositions that are uncertain, and propositions that are not *uncertain.*
Germanic complementizer semantics

Relating *distributional* facts to the proposed description

The distribution of Type 1 and Type 2 complementizers across three classes of complement-taking elements support the description of the two types as being epistemically neutral and expressing uncertainty about the complement proposition, respectively.