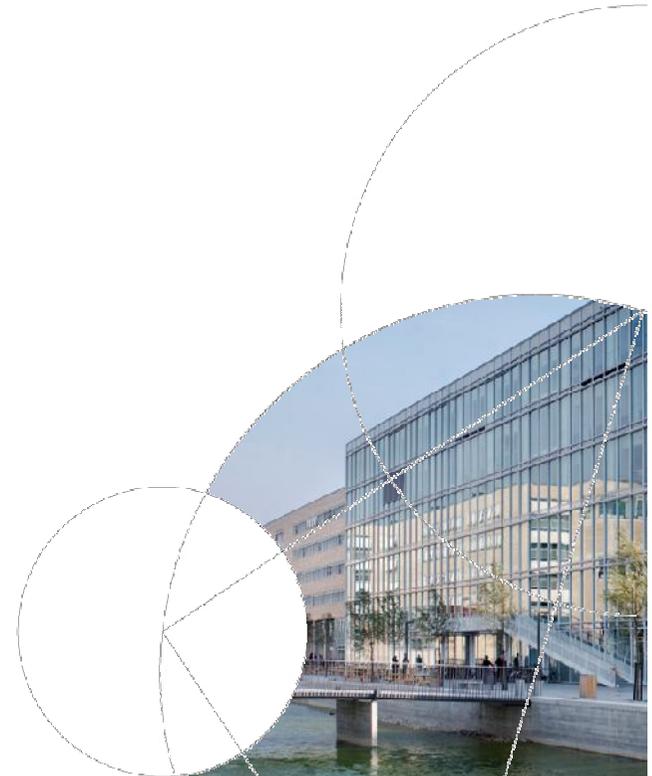




## Complementizers – semantic and grammatical issues

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## 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)
- |           |                             |                              |
|-----------|-----------------------------|------------------------------|
| <i>a.</i> | <i>I think [<b>that</b></i> | <i>he is in his office].</i> |
| <i>b.</i> |                             | <i>He is in his office.</i>  |
| <i>c.</i> | <i>I like it [when</i>      | <i>he is in his office].</i> |



## 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

- cf. Noonan (2007: 55): "... one of whose functions...".
- cf. Frajzyngier (1995), Nordström (2010)

### 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



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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*    [ $\emptyset$     *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 páró àpárâ*  
 woman 3SG.consider.HAB consider.GER  
*[ká nákô òrègò kál]*.  
 COMP girl 3SG.grind.PFV millet  
 'The woman doubts whether the girl ground the millet'.

- (2) *ńákô òkòbbì dákô*  
 girl 3SG.say.BEN.PFV woman  
*[ńí dyèl 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).

<b>System</b>	<b>No. of languages in sample</b>
Epistemic COMP(s)	13
Non-epistemic COMP	15
No COMP	14
No info	8
Total	50



## 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-ri di wa-re*                      [*u-ni-re*                      *ipo*                      *kadë-di-ji*].                      (finite)  
 3PL-know-neutral                      3sg-STATIVE                      pole                      cut-COMP-referent  
 'They know he was cutting the pole'.

(2) *E-ri di wa-re*                      [*u-i*                      *ipo*                      *kadë-di-ji*].                      (nonfinite)  
 3PL-know-neutral 3SG-NMLZ                      pole                      cut-COMP-referent  
 'They know about his cutting the pole'.



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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.

	Type 1	Type 2
Danish:	<i>at</i>	<i>om/hvorvidt</i>
Dutch:	<i>dat</i>	<i>of</i>
English:	<i>that</i>	<i>if/whether</i>
Faroese:	<i>at</i>	<i>um/hvørt</i>
German:	<i>dass</i>	<i>ob/inwiefern</i>
Icelandic	<i>að</i>	<i>hvort</i>
Norwegian:	<i>at</i>	<i>om/hvorvidt</i>
Swedish:	<i>att</i>	<i>om/huruvida</i>



## 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".

Cf. Huddleston & Pullum (2002: 956) on English,  
Faarlund & al. (1997: 982, 990) on Norwegian,  
Teleman & al. (1999) on Swedish,  
Þráinsson (2005: 145) on Icelandic.



## 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 drikker 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\***

Cf. Nordström (2010); Sitta (1971: 198) on German; Boye (2008) on Danish.

- \* 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 *eþa*, *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 *hwæþer*, *hweþer*, Old Norse *hvaðarr* 'which of two, whether'.

And

Swedish *huruvida* and Norwegian and Danish *hvorvidt* either derive from Old Norse interrogative pronoun *hwār* 'which (of two)' or from *hwār* '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 tölvann virkar].*  
 I test.PST COMP computer.DEF work.PST  
 'I tested whether the computer works'.

Swedish

- (2) *Det är ovisst om/\*att [hon kommer].*  
 it be.PRS uncertain COMP that she comes  
 '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 fór].*  
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.

