

Categories in the CP-domain

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Categories in Grammar - Criteria and Limitations

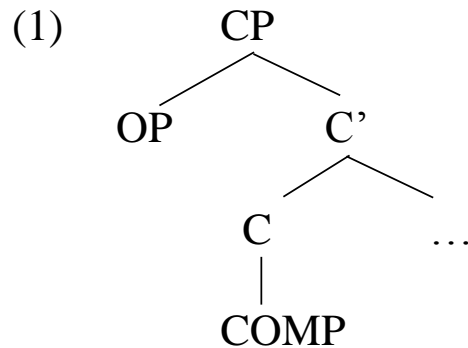
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Introduction

CP-domain: complementisers (C heads) and clause-typing operators (C-operators)

distinction going back to Chomsky (1977, 1981):



Questions

- ▶ categorial distinction between C heads and C-operators (status change implies difference)
- ▶ categorial closeness of C heads and C-operators (flexibility)

Proposal

proposal: C-operators have to lose category-specific markers incompatible with C status

C head: denotes a status and a category

↔ C-operator: denotes a status, not a category

three criteria for modelling C-operator > C head changes:

- ▶ Criterion 1 (syntactic): C-operators may take lexical XPs along, C heads may not
- ▶ Criterion 2 (morpho-phonological): ban on complementiser-incompatible features in C
- ▶ Criterion 3 (morpho-phonological): possible changes affect C-operators as a class

The distinction between C heads and C-operators

properties that distinguish C heads from C-operators - also overlaps

Syntactic category

C heads: complementisers constitute a syntactic category

C-operators: various types (e.g. DPs, AdvPs)

- (2)
- a. I hope **that** you are doing well.
 - b. I asked **if** he was doing well.
 - c. I asked **which sauce** was hot.
 - d. I know **where** your cat lives.

V2 clauses in German

- (3) Mein Schwiegervater **hat** morgen Geburtstag.
my.M father-in-law has tomorrow birthday
'My father-in-law has birthday tomorrow.'

Main clause interrogatives in English

- (4) a. Where **did** you find your cat?
b. **Have** you found your cat?

So...

no one-to-one relationship between position and syntactic category in either case

Syntactic status: head versus phrase

C heads: head-sized

C-operators: phrases (the specifier position is a phrase position)

but: phrases are not necessarily visibly phrase-sized

- (5) a. He asked me **how much** I paid in rent for my flat in Charlottenburg.
b. He asked me **how** old my turtle was.
c. Dwyer told the players **how** he wanted to win.
'Dwyer told the players that he wanted to win.' (Willis 2007: 434)

So...

head-sized C-elements are potentially ambiguous
between C head and C-operators status

Movement versus base-generation

complementisers: base-generated C heads

C-operators: typically move from a clause-internal position

but: in principle, C-operators may be base-generated in the CP-domain (if they are not arguments of e.g. the verb - see Van Gelderen 2009)

Movement to the C-position

verb movement (e.g. in German main clauses, English main clause *wh*-questions with *do*-support)

complementisers moving from C to C in one left periphery
(see Bacskai-Atkari 2014a for complex complementisers)

C-operators may also move to the head position (Bayer and Brandner 2008)

- (6) a. I told them **who** I wanted to see.
b. I told them **how** I had won the game.

Doubly Filled COMP in Bavarian (and Alemannic)

Bayer and Brandner (2008: 88, ex. 3a and 4a):

- (7) a. I frog-me, **fia** **wos** **dass-ma** an zwoatn Fernseher braucht.
I ask-REFL for what that-one a second TV needs
'I wonder what one needs a second TV for.'
- b. I hob koa Ahnung, **mid** **wos** **fia-ra** **Farb** **dass-a** zfrien waar.
I have no idea with what for-a colour that-he content would-be
'I have no idea with what colour he would be happy.'

Head-sized *wh*-elements in Bavarian (and Alemannic)

Bayer and Brandner (2008: 88, ex. 5a):

- (8) *I woass aa ned, **wer dass** allas am Sunndoch in da
I know too not who that all at Sunday in the
Kiach gwen is.
church been is

‘I don’t know either who all has been to church on Sunday.’

Movement of invisible elements

island effects in comparatives Kennedy (2002: 558, ex. 9):

- (9) a. *Michael has more scoring titles than Dennis is a guy who has.
- b. *Michael has more scoring titles than Dennis is a guy who has tattoos.

in (9): movement of a degree expression (*x-many scoring titles*, or *x-many*) rather than of *than*

So...

movement vs. base-generation cannot fully grasp the
distinction of C heads and operators

Lexical phrases

Criterion 1 (syntactic): C-operators may take lexical XPs along, C heads may not

Embedded degree clauses

- (10) a. % Mary is as tall as **how tall** Peter is.
b. % Mary is taller than **how tall** Peter is.

Comparatives in Hungarian

- (11) a. Mari magasabb, mint **amilyen magas** Péter.
Mary taller than how tall Peter
'Mary is taller than Peter.'
- b. *Mari magasabb, mint **amilyen** Péter **magas**.
Mary taller than how Peter tall
'Mary is taller than Peter.'
- c. Mari magasabb, mint **amennyire magas** Péter.
Mary taller than how.much tall Peter
'Mary is taller than Peter.'
- d. Mari magasabb, mint **amennyire** Péter **magas**.
Mary taller than how.much Peter tall
'Mary is taller than Peter.'

PPs as lexical XPs

- (12) a. This is the book **about which** I was talking.
b. This is the book **which** I was talking **about**.

No lexical XP for certain operators

but: there are operators that regularly take no lexical XP

e.g. VP-adverbs

cyclic changes in Hungarian comparatives: reanalysis of original operators
hogy ‘how’ and later *mint* ‘how’ (similarly: *als* and *wie* in German, see Jäger 2010)

↔ present-day Hungarian degree operators typically can take lexical XPs, see (11) above (cf. Bacskai-Atkari 2014a)

English *how*: no reanalysis in comparatives (takes lexical APs)

↔ *how* as a VP-adverb reanalysed as a subordination marker ‘that’

So...

reanalysis for the same element across categories (e.g. *how*) or for different elements with similar function (e.g. Old Hungarian *mint* 'how' vs. Modern Hungarian *amilyen* 'how') can be licensed/blocked depending on whether a lexical XP is present

Criterion 1: universal one-way implications

- ▶ co-presence of lexical XP → C-element is a C-operator
- ▶ absence of lexical XP ← C-element is a complementiser (C head)

Complementiser-incompatible features

Criterion 2 (morpho-phonological): ban on complementiser-incompatible features in C

Grammaticalisation

prerequisite for grammaticalisation: loss of C-incompatible features

features may be overt or covert → lack or disappearance of overt features decisive

some categories have fewer visible features - e.g. VP-adverbs

e.g. *als* and *wie* in German: 'how' → 'as' / 'than'

nominal elements - case, number, person features may be present

case: if lexical case, also a PP projection - ruled out as a lexical phrase

lack of overt marking - e.g. English: grammaticalisation of *that*

see Van Gelderen (2004, 2009)

Grammaticalisation in Old/Middle Hungarian

- ▶ grammaticalisation possible for adverbs

hogy ‘how’ → ‘that’ (before Old Hungarian, partially Early Old Hungarian)

ha ‘when’ → ‘if’ (before Old Hungarian)

mint ‘how’ → ‘as/than’ (during Old Hungarian, Early Middle Hungarian)

mert ‘why’ → ‘because’ (during Old Hungarian, Early Middle Hungarian)

- ▶ no grammaticalisation for ordinary relative operators in the same period

e.g. *ki* ‘who’, *mi* ‘what’ - always marked for case, person, number

C heads incompatible with such features in Hungarian (all periods)

Cross-linguistic variation

operators moving to C in Bavarian/Alemannic: *wer* 'who.NOM', *wen* 'who.ACC', *was* 'what', *wie* 'how', *wo* 'where' (Bayer and Brandner 2008: 89)

question of *wen* - marked for case

proposal: complementiser-incompatible features are subject to cross-linguistic variation

Complementiser agreement in Bavarian

Fuß (2004: 60, exx. 1a und 3a):

(13) a. **ob-st** noch Minga **kumm-st**
 whether-2SG to Munich come-2SG
 ‘whether you come to Munich’

b. **ob-st** DU noch Minga **kumm-st**
 whether-2SG you.SG to Munich come-2SG
 ‘whether you come to Munich’

So...

reanalysis of an operator into a C head only if complementiser-incompatible features lost, but these features are subject to cross-linguistic variation

Criterion 2: universally applicable, language-specific one-way implications

- ▶ presence of complementiser-incompatible features
→ C-element is a C-operator
- ▶ absence of complementiser-incompatible features
← C-element is a complementiser

Changes affecting operators

Criterion 3 (morpho-phonological): possible changes affect C-operators as a class

Changes in Old Hungarian relative operators

	Old Hungarian		Middle/Modern Hungarian	
	interrogative	relative	interrogative	relative
'who'	<i>ki</i>	<i>ki</i>	<i>ki</i>	<i>aki</i>
'what'	<i>mi</i>	<i>mi</i>	<i>mi</i>	<i>ami</i>
'where'	<i>hol</i>	<i>hol</i>	<i>hol</i>	<i>ahol</i>
'when'	<i>mikor</i>	<i>mikor</i>	<i>mikor</i>	<i>amikor</i>

Changes in the morphophonological shape

relative operators starting with *a-* (reanalysed from a matrix pronominal element, see Bacskai-Atkari and Dékány 2015 for a formal analysis)

similar morphological distinction between interrogative and relative operators in several languages - e.g. Slovene (*kdo* 'who.INT' vs. *kdor* 'who.REL')

Grammaticalised forms

but: already grammaticalised complementisers not affected

e.g. *mint* ‘as/than’ in comparatives

individual examples of *mint* ambiguous between ‘how’ and ‘as’
before relative pronouns grammaticalise in the *a*- forms:

(14) Mèt iftèn nem vgā fenègèt **mēt** èmber
because God not so threatens how/as human
‘for God does not threaten as/in the way a human being does’

but: after *a*-forms grammaticalise, no ambiguity

So...

reanalysis may not show surface distinctions until non-reanalysed forms undergo change

problems: distinction only over time (no disambiguation of individual examples), morphophonological changes affecting the (sub)class in question not necessary

Criterion 3: universally applicable, language-specific two-way implications

- ▶ changes affecting operators attested \leftrightarrow C-element a C-operator
- ▶ changes affecting operators not attested \leftrightarrow C-element a complementiser (C head)

Conclusion

categorial distinction and closeness between C heads and C-operators
status change implies difference and flexibility

proposal: C-operators have to lose category-specific markers incompatible with C status

three criteria for modelling C-operator > complementiser changes:

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Thank you!
Danke!



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