Categories, features and overtteness in the CP-periphery

Julia Bacskaı-Atkari
University of Potsdam

julia.bacskaı-atkari@uni-potsdam.de

Research Institute for Linguistics of the Hungarian Academy of Sciences
Budapest
16 June 2015
Introduction

DFG research project “The syntax of functional left peripheries and its relation to information structure”
(start: February 2015, PI: Julia Bacskaï-Atkari)

website: [http://www.ling.uni-potsdam.de/~bacskaï-atkari/dfg.html](http://www.ling.uni-potsdam.de/~bacskaï-atkari/dfg.html)

flexible model for the syntactic marking in functional left peripheries

• functional left peripheries and clause-typing
• functional left peripheries and information structure
• functional left peripheries and ellipsis
Phase 1

functional left peripheries and clause-typing - hypotheses:

• Left-peripheral functional heads are syntactic cues.

• Operators moving to the left periphery are also syntactic cues.

• Functional left peripheries are defined by economy and overtness requirements.
Approaches to the CP-periphery

Rizzi (1997, 2004):

(1) ForceP (TopP) (FocP) (TopP) FinP

topics and focus: optional, topics also iterable
IntP in interrogatives may appear between ForceP and FinP
ForceP and FinP: may be headed by complementisers, hence true CP layers
Irreal comparatives in German

(2) a. Tilla läuft, als liefe sie um ihr Leben.
Tilla runs than run.SBJV.3SG she for her.N life

b. Tilla läuft, als ob sie um ihr Leben liefe.
Tilla runs than if she for her.N life run.SBJV.3SG

c. Tilla läuft, als wenn sie um ihr Leben liefe.
Tilla runs than if she for her.N life run.SBJV.3SG

d. Tilla läuft, wie wenn sie um ihr Leben liefe.
Tilla runs as if she for her.N life run.SBJV.3SG

‘Tilla is running, as if she were running for her life.’
One CP periphery

availability of *als*: cannot be combination of *as*-clause and *if*-clause 
(as would be *wie*)

cf. also Jäger (2010)

→ grammaticalised form, one single left periphery

• two C heads encoding [conditional] and [comparative] each
  ↔ Hungarian *mintha*: fused form (Bacskai-Atkari 2014a, 2014b)
• lower C position: overt complementiser or verb movement
• higher C selects the lower one - no *wie liefe*, *wie ob*
• lower C available for movement
  no violation of the Minimal Link Condition (Chomsky 1995)
Structure of irreal comparatives

(3)

\[
\begin{array}{c}
\text{CP} \\
\downarrow \\
\text{C'} \\
\downarrow \\
\text{C} \\
\downarrow \\
\text{als} \\
\downarrow \\
\text{ob} \\
\end{array}
\]
Dialectal variation in German comparatives


(4)  a. Ralf ist größer als Peter.
Ralph is taller than Peter
‘Ralph is taller than Peter.’

b. % Ralf ist größer als wie Peter.
Ralph is taller than as Peter
‘Ralph is taller than Peter.’

c. % Ralf ist größer wie Peter.
Ralph is taller as Peter
‘Ralph is taller than Peter.’
Structure of comparatives

(5) CP
   /   
  C’   C’
 /     /
C   als CP
 /     /
 C   C’
  |    |
  wie ...
cf. Thurmair 2001: 62; Erzgebirgisch: also \textit{als wie ob}:

(6) Er schreit, \textbf{als wie wenn} er beim \textit{Zahnarzt wäre.}

\textit{He is shouting as if he were at the dentist’s.}'}
Structure with three C heads

(7)

```
    CP
   /  \
C'   CP
  /    \
C    C'  
    /    \  
   als   CP   
          /  \
         C'   CP
        /    \
       C     C'
      /     /  \  
     C     wie  C' 
    /     /    /  \ 
   wenn      ...  
```
Complementisers and operators

distinction between C heads and C-operators going back to Chomsky (1977, 1981):

(8)
Specifiers as phrase-sized positions

(9) a. This is the exhibition about which I was talking.

b. A macska kövérebb, mint amilyen széles a macskaajtó volt.
   ‘The cat is fatter than the cat flap was wide.’
Doubly Filled COMP in Bavarian

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

(10)  

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

no *dass* (Bayer and Brandner 2008: 88, ex. 5a):

(11) *I woass aa ned,*
    I know too not
    *wer dass* allas am Sunndoch in da Kiach gwen is.
    who that all at Sunday in the church been is
    ‘I don’t know either who all has been to church on Sunday.’
Checking off the [wh] feature

(12) CP
   /   /
  C’  C
  /   /
 C[wh] ...
C-operators and lexical phrases

C-operators may take lexical phrases along:

(13) a. This is the exhibition *about which* I was talking.
b. This is the exhibition *which* I was talking *about*.
c. This is the exhibition I was talking *about*.
d. *This is the exhibition *about* I was talking.*
lexical material is licensed to co-occur in the same position with a C-operator only if the operator is overt
German V2 main clauses

verb movement to C, movement of a constituent by [EDGE] feature to the [Spec,CP] position


(14)  a. Mein Schwiegervater hat morgen Geburtstag.
     my.\(_M\) father-in-law has tomorrow birthday
     ‘My father-in-law has birthday tomorrow.’

     b. Morgen hat mein Schwiegervater Geburtstag.
     tomorrow has my.\(_M\) father-in-law birthday
     ‘My father-in-law has birthday tomorrow.’
The features [rel] and [EDGE]

[EDGE] feature projects up to the PP level:
(15) [about [which][rel]][EDGE]

[EDGE] feature does not project up to the PP level
(16) [which][rel],[EDGE]

[EDGE] feature does not project up to the PP level
(17) [rel],[EDGE]

[EDGE] feature projects up to the PP level
(18) [about [rel]][EDGE]
no unaligned features in IS-related movement or first position (German)

→ the movement of C-operators can be distinguished from movement of lexical phrases on the basis of features - difference not directly related to category label of the landing site
Embedded interrogatives

relevant features: [sub], [wh]

- [sub]: encoding finite subordination; encoded by a functional C head, does not have to be overt

- [wh]: encoding the interrogative nature of the clause; encoded either by an operator (in wh-questions) or by a functional (C or v) head (polar questions); has to be overt in embedded clauses because no intonational distinction available
English

(19) a. I asked *if* Ralph had eaten the cheese.
    b. I asked *who* had eaten the cheese.
Structures

(20)

```
CP
  C'
    C[wh],[sub]
    if[wh],[sub]
...

CP
  who[wh]
    C[wh],[sub]
    ...
```
Doubly Filled COMP pattern

(21)

\[ CP \]

\[ \text{fia woss}_{[\text{wh}]} \]

\[ C' \]

\[ C_{[\text{wh}],[\text{sub}]} \]

\[ \text{dass}_{[\text{sub}]} \]

\[ \ldots \]
Hungarian

regular split of [sub] and [wh]

(22) a. Szeretném tudni, (hogy) ki ette meg a sajtot.
   like.COND.1SG know.INF that who ate PRT the cheese
   ‘I would like to know who has eaten the cheese.’

   b. Szeretném tudni, (hogy) Mari ette-e meg a sajtot.
      like.COND.1SG know.INF that Mary ate-Q PRT the cheese
      ‘I would like to know if it was Mary who has eaten the cheese.’
(23) Structure

```
CP
  C'
    C[wh], [sub]
      (hogy)
    ...
    FP
      F'_i
        ki_j[wh]
        Mari_j
      F[wh]
        Ø
        ette_i -e[wh]
      VP
        ette t_j meg
        t_i t_j meg
```
Ordering

Germanic: \(wh + C\) head - Doubly Filled COMP effect, same CP

Hungarian: C head + \(wh\) - different left peripheries, separate CP and FP

\(\rightarrow\) marking of \([wh]\) does not require multiple CPs
Relative clauses

relevant features: [sub], [rel]

• [rel]: encoding the relative nature of the clause; encoded either by an operator or by a functional C head, does not have to be overt (if a zero [rel] head available in the lexicon, restrictions, e.g. English)
Non-finite relative clauses


(24) A desk is a dangerous place from which to view the world. (John le Carré)
This is the book that explains the difference between cats and tigers.

This is the book which explains the difference between cats and tigers.
Structures

(26)

```
CP
  \[\text{C'}\]
  \[\text{C_{[rel],[sub]}}, \text{...}\]
  \[\text{that}_{[rel],[sub]}\]

CP
  \[\text{which}_{[rel]}\]
  \[\text{C'}\]
  \[\text{C_{[rel],[sub]}}, \text{...}\]
```
van Gelderen (2013: 59, ex. 85):

(27) a. This program in which that I am involved is designed to help low-income first generation attend a four year university and many of the resources they...

   b. it’s down to the community in which that the people live.
(28)

\[ \text{CP} \quad \text{C'} \quad \text{C}_{[rel],[sub]} \quad \text{...} \]

\text{in which}_{[rel]}
Relative heads

inserted head: also a [rel] head, not any complementiser ↔ interrogatives

evidence from South German: wo instead of dass ‘that’ in relative clauses

see Brander (2008), Brandner and Bräuning (2013)

• regular relative complementiser: wo
• relative operators also possible (triggering V2) - borrowing (Standard German)
• doubling also possible (wh wo...V), cf. Weise (1917)

→ [rel] head filled either by an element lexically specified as [rel] or V-movement
The lack of overt relative operators

[rel] head filled in varieties that do not have relative operators genuinely.

Also: Middle English wh-based relative operator an innovation alongside that head.

Other languages without operators: Modern Icelandic sem and er (Thráinsson 2007).

Further possibility: relative operators merging as heads during reanalysis phase.

Ez az az ember, aki felette a sajtomat.

‘This is the person who has eaten up my cheese.’
Structure of Hungarian relative clauses

(30) CP

aki[rel] C’

C[rel],[sub] ...

Doubling-like pattern in Old and Middle Hungarian

*hogy* ‘that’ + relative pronoun, and *ha* ‘if’ + relative pronoun


not the dominant pattern (see Dömötör 2014)

(31) olőaat tezōk raťtad *hogy kőtoľ felz*
such.ACC do.1SG you.SUP that who.ABL fear.2SG
‘I will do such a thing on you that you are afraid of.’
see Bacskai-Atkari (2014a, 2014b); Bacskai-Atkari and Dékány (2014, 2015):

(32)
Separate layer for marking [sub]

question: why a separate layer for [sub], if overt marking of [sub] no necessary otherwise

Bacskai-Atkari and Dékány (2015): reinforcement

possible source: embedded degree clauses

cf. Bacskai-Atkari (2014a, 2014b) on the parallelism with relative clauses

also: comparative/equative subclauses are relative clauses (cf. Chomsky 1977)

original comparative complementiser *hogy* ‘that’ gradually replaced by *mint* ‘as/than’
Reanalysis in comparatives

(33) \[ \text{hogy}_{[\text{compr}],[\text{sub}]} \]
\[ \downarrow \]
\[ \text{hogy}_{[\text{compr}],[\text{sub}]} \quad \text{mint}_{[\text{compr}]} \]
\[ \downarrow \]
\[ \text{hogy}_{[\text{compr}],[\text{sub}]} \quad \text{mint}_{[\text{compr}],[\text{sub}]} \]
\[ \downarrow \]
\[ \text{hogy}_{[\text{sub}]} \quad \text{mint}_{[\text{compr}],[\text{sub}]} \]
\[ \downarrow \]
\[ \text{mint}_{[\text{compr}],[\text{sub}]} \]
Ordering

Germanic: relative Op. + C head - Doubly Filled COMP effect, same CP

Hungarian: C head + relative Op. - different CPs because overt C head not [rel]

if two CPs, lower one contains the operator - Minimal Link Condition satisfied

↔ strict cartographic approaches would assume a double CP for Germanic too (avoiding Doubly Filled COMP effects, as in Baltin 2010)

but: no explanation for ordering differences cross-linguistically

→ marking of [rel] does not require multiple CPs, but projection of an extra layer possible if [sub] C head not equipped with [rel]
Embedded degree clauses

relevant features: [sub], [rel], [compr], [pol:neg]

• [compr]: encoding the comparative nature of the clause; encoded either by an operator or by a functional C head, has to be overt

• [pol:neg]: encoding the negative polarity of the clause in the absence of a negative operator (degree negation, not clausal negation); encoded by a functional head (Pol or C), has to be overt (negation and negative polarity marked morphologically, cf. Dryer 2013)
equative clauses (as-clauses) and comparative clauses (than-clauses):

(34)  a. Ralph is as tall as Peter is.
    b. Ralph is taller than Peter is.
comparative subclauses are negative polarity environments (Seuren 1973):

(35) She would rather die than lift a finger to help her sister.

reason: equatives express degree equality (d=d'), while comparatives express degree inequality (d≠d', either d>d' or d<d'), cf. Bacskaï-Atkari (2015)
Equatives in Hungarian

(36) a. Mari olyan magas, mint amilyen (magas) Péter.
    Mary so tall as how.REL tall Peter
    ‘Mary is as tall as Peter.’

    b. Mari olyan magas, mint Péter.
    Mary so tall as Peter
    ‘Mary is as tall as Peter.’

    c. Mari olyan magas, amilyen (magas) Péter.
    Mary so tall how.REL tall Peter
    ‘Mary is as tall as Peter.’
Comparatives in Hungarian

(37)  

a. Mari magasabb, **mint amilyen** (magas) Péter.  
Mary taller as how.REL tall Peter  
‘Mary is taller than Peter.’

b. Mari magasabb, **mint** Péter.  
Mary taller as Peter  
‘Mary is taller than Peter.’

c. *Mari magasabb, **amilyen** (magas) Péter.  
Mary taller how.REL tall Peter  
‘Mary is taller than Peter.’
Double marking in equatives

(38)

\[
(\text{mint} \text{[sub], [compr]}) 
\downarrow 
(\text{amilyen} \text{[rel], [compr]}) 
\downarrow 
(\text{C’}) 
\downarrow 
(\text{C[rel], [sub]}) 
\downarrow 
\ldots
\]
Single CP in equatives

lower CP also specified for [compr]

(39)
Elliptical pattern in equatives

C head with [rel] specification is missing

→ no operator movement triggered

→ [rel] uninterpretable on a non-moved XP: ellipsis saves the construction

see Bacskaï-Atkari (2014), Bacskaï-Atkari and Kántor (2011, 2012) for comparatives
Double marking in comparatives

(40)

\[
\begin{align*}
CP & \downarrow \\
C' & \downarrow \\
C & \downarrow \\
\text{mint} & \quad \text{amilyen} \\
C_{[\text{sub},[\text{compr}],[\text{pol:neg}]} & \quad C_{[\text{rel}],[\text{compr}]} \\
C_{[\text{rel}],[\text{sub}]} & \quad \ldots
\end{align*}
\]
Single CP in comparatives

• illicit configuration:

(41)

```
CP
   /\  
 amilyen[rel],[compr]  C'
   /\  
   C[rel],[compr],[sub],[pol:neg]  ...
```
Elliptical pattern in comparatives

C head with [rel] specification is missing, same as for equatives
Ordering

(cross-linguistically well attested): comparative C head + comparative operator

- comparative C heads not encoding [rel]
- Minimal Link Condition

→ equatives need not have multiple CPs but may, due to the feature distribution of [rel] and [compr], comparatives by default do have a double CP because [rel] and [pol:neg] not marked on the same head
Conclusion

aim: providing a flexible, feature-based approach to the CP-periphery clause-typing heads and operators different from IS-related movement, formal movement

realisation of layers largely depends on overtness requirements - syntactic encoding

• embedded interrogatives: mostly single CP (possibly with Doubly Filled COMP), layer spreading (Hungarian)
• relative clauses: mostly single CP (possibly with Doubly Filled COMP), double CP if [sub] marked separately (Old Hungarian)
• embedded degree clauses: mostly double CP - [rel] carried by a lower C than [compr] and [pol:neg]

lower C in double layers: related to operator movement (if any) → number of layers, ordering can be modelled on the basis of features
Thank you!
Danke!
😊
ICH HABE EINE FRAGE
References


References


References

References

References


References


