Complementisers, word order and a non-cartographic approach to the CP-domain

Julia Bacskai-Atkari

University of Potsdam

julia.bacskai-atkari@posteo.de

1 Introduction

complementiser – strictly speaking, an element that turns the clause into a complement clause (e.g. *that*)

(1)   a.   Ralph has already finished the report.
       b.   I know [**that** Ralph has already finished the report].
       c.   [**That** Ralph has already finished the report] is surprising.

CP-domain: functional left periphery of the clause, more complex than just a single C

Doubly Filled COMP:

(2)   They discussed a certain model, but they didn't know **which model that** they discussed.
       (Baltin 2010: 331, ex. 1)

multiple complementisers e.g. in hypothetical comparatives:

(3)   a.   Mary speaks **as though** she were afraid.

       b.   Tilla läuft, **als**   **wenn** sie um ihr   Leben liefe.
            Tilla runs   than if   she for her.N life   run.SBJV.3SG
            'Tilla is running, as if she were running for her life.'
            (Jäger 2010: 469)

question: how to model the CP-domain and maintain constraints on word order

various possibilities:

- COMP – as in Chomsky & Lasnik (1977)

- CP (compatible with normal X-bar theoretic notions)

- various designated CP layers, including information-structural notions – cartographic approach, going back to Rizzi (1997)

- flexible minimalist approach – no rigid X-bar-specific notions or cartographic template

proposal here: flexible approach (see Bacskai-Atkari 2018b) – focus on clause-typing elements (not on information structure)

2 Doubly Filled COMP

original idea of Chomsky & Lasnik (1977): COMP

(4) a. [$_{S'}$ [$_{COMP}$ **for**][$_S$ John to leave]] _____ would be a mistake
     b. [$_{S'}$ [$_{COMP}$ **that**][$_S$ John has left]] _____ is obvious
     c. [$_{S'}$ [$_{COMP}$ **whether**][$_S$ John left]] _____ is unclear
         (Chomsky & Lasnik 1977: 426, ex. 4)

all elements in (4) base-generated in COMP (*whether* an operator but no movement, see Bianchi & Cruschina 2016)

wh-movement also targets COMP:

(5) a. I know **who** has finished the report.
     b. I know the man **who** has finished the report.

wh-element placed to the left of the complementiser (Chomsky & Lasnik 1977: 434) – actual co-occurrence (doubly-filled COMP) blocked by a surface filter:

(6) *[$_{COMP}$ *wh*-phrase complementiser]
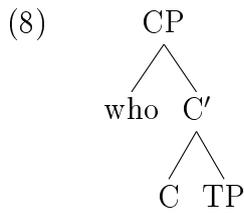   (Chomsky & Lasnik 1977: 435, cf. Keyser 1975)

problems:

- COMP not compatible with X-bar notions, head-adjunction of complex *wh*-phrases to COMP problematic → CP instead of COMP

- filter not universal (not even in English)

complementisers in X-bar schema:

(7)
```
        CP
        |
        C′
       /\
      C  TP
      |
     that
```

wh-elements in X-bar schema:

(8)
```
        CP
       /  \
    who    C′
          /  \
         C    TP
```

Doubly Filled COMP patterns common in West Germanic (dialectally):

(9)   a. %They discussed a certain model, but they didn't know **which model that**
           they discussed.
           (Baltin 2010: 331)

        b. %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.'
           (Bayer & Brandner 2008: 88)

        c. %Peter vroeg   **wie dat** er   boeken leuk   vindt.
           Peter asked.3SG who that of.them books   likeable finds
           'Peter asked who liked books.'
           (Bacskai-Atkari & Baudisch 2018)

logical possibility:

(10)
```
              CP
             /  \
    which model   C′
                 /  \
                C    TP
                |
               that
```
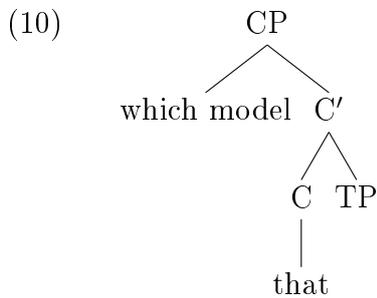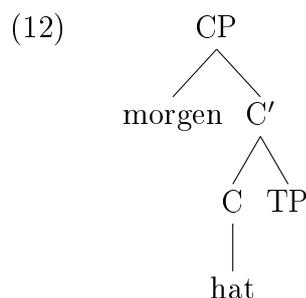
Doubly Filled COMP: (10)

→ Doubly Filled COMP Filter: *[CP wh that]

notion of a filter problematic from a minimalist perspective – can alternatively be viewed
    as an economy principle ruling out the co-occurrence of elements with largely over-
    lapping functions, cf. Van Gelderen (2009) – applicable in relative clauses but more
    problematic in embedded interrogatives

also: CP "doubly filled" in V2 – V in C, another constituent moving to [Spec,CP] due to [edge] feature (see Fanselow 2002; 2004a;b, Frey 2005, Den Besten 1989)

(11)   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.'

structure:

(12)

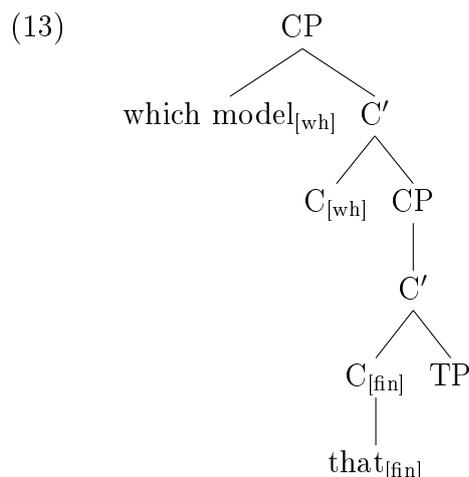

question: whether and how (10) and (12) are related

3   Doubly Filled COMP in a cartographic framework

idea of Baltin (2010): no genuine Doubly Filled COMP in the sense of (10), but rather two separate CPs with designated functions, ForceP and FinP, following Rizzi (1997)

schematic representation with features:

(13)

fine structure of the left periphery by Rizzi (1997: 297):

(14)   Force   Top*   Focus   Top*   Fin   IP

modified fine structure of the left periphery by Rizzi (2004: 242):

(15)   Force   Top*   Int   Top*   Focus   Mod*   Top*   Fin   IP

structure in (13) can correspond to:

- Force–Fin (probably most typical assumption in cartographic-style analyses, also by Baltin 2010)

- Int–Fin (interpreting *wh* primarily as interrogative)

- Focus–Fin (*wh*-elements targeting FocP, see Rizzi 1997)

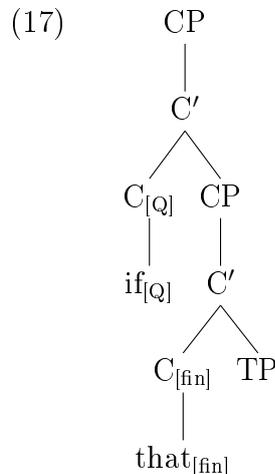Problem 1: *wh*-phrase + *that* word order always produces *that* as a Fin head

problem: *that* assumed to be primarily a Force head by Rizzi (1997), if the CP is split – extraction asymmetries (agreement between Fin and subject gap):

(16)   a. *Who do you think [that [*t* ∅ [*t* will win the prize]]]?
        b. Who do you think [*t* ∅ [*t* will win the prize]]?
           (Rizzi 1997: 312 and 314)

→ Doubly Filled COMP pattern apparently not in harmony with the basic cartographic template

Problem 2: (13) with a separate interrogative phrase does not exclude combinations like **if that* in English and **ob dass* in German

hypothetical structure:

(17)

```
            CP
            |
            C'
           /  \
        C[Q]   CP
         |      |
       if[Q]    C'
               /  \
           C[fin]  TP
             |
         that[fin]
```

(17) could correspond to Force–Fin or to Int–Fin

difference between features [wh] and [Q] – interrogative and disjunctive (see Bayer 2004, Bacskai-Atkari to appear(c))

→ possible solution: *wh* in FocP and *if* in IntP (following Rizzi 2004) – difference between constituent questions and polar questions encoded in the template, different selectional restrictions

problem: doubling in polar interrogatives possible – English *whether* and Dutch *of*

(18) a. If þai ani child miht haue, **Queþer þat** it ware scho or he
          'If they might have any child, whether it were a she or he.'
          (*Cursor Mundi* 10205, Van Gelderen 2009: 155)

      b. I just wondered **whether that** as a next step we might look to see why this
          seems to be the case.
          (*Corpus of Spoken English* FACMT97, Van Gelderen 2004: 96)

      c. Ik vraag me af   **of dat** Ajax de volgende ronde haalt.
          I   ask   me PRT if that Ajax the next   round reaches
          'I wonder whether Ajax will make it to the next round.'
          (Bayer 2004: 65, quoting Hoekstra 1993)

status of interrogative element (operator vs. complementiser, cf. Boef 2013: 141–142 on
    of) more decisive in Doubly Filled COMP than [Q] vs. [wh]

Problem 3: functional split not tenable in relative clauses (cf. Bacskai-Atkari 2018b;
    Doubly Filled COMP Filter proposed mainly for relative clauses by Chomsky &
    Lasnik 1977)

English: *wh*-element + *that* both in interrogative and relative Doubly Filled COMP
    patterns

(19) a. %They discussed a certain model, but they didn't know **which model that**
         they discussed.
         (Baltin 2010: 331)

      b. %It's down to the community **in which that** the people live.
         (Van Gelderen 2013: 59)

relative operators should be located in ForceP (Rizzi 1997)

status of *that*:

- finiteness marker: functional split (as in Baltin 2010) implies *that* is in Fin (again,
  clash with the assumption made by Rizzi 1997 that it is in Force)

- Force marker, in Force → Doubly Filled COMP pattern, which the proposal of
  Baltin (2010) intended to avoid

German: *wh*-element + *dass* in interrogatives, and relative pronoun + *wo* in relative clauses

(20) a. I frog mich **wege wa** **dass** die zwei Autos bruchet.
I ask REFL for what that they two cars need
'I wonder why they need two cars.'
(Alemannic; Bayer & Brandner 2008: 88)

b. Des Geld, **des** **wo** ich verdiene, des geheert mir.
the.N money that.N REL I earn.1SG that.N belongs I.DAT
'The money that I earn belongs to me.'
(Hessian; Fleischer 2017)

c. Ich suech ebber **wo** mer helfe künnt.
I search someone REL I.DAT help.INF could
'I am looking for someone who could help me.'
(Alemannic; Brandner & Bräuning 2013: 140)

wo: general relative marker in South German dialects – (20c)

→ no functional split (two relative elements), hence no separate designated projections – Doubly Filled COMP arises in relative clauses anyway, question why not in interrogatives (not ruled out in principle, cf. also V2 and T-to-C)

→ cartographic-style split for avoiding Doubly Filled COMP problematic even for descriptive adequacy

4   A feature-based approach to Doubly Filled COMP

proposal: single CP for canonical Doubly Filled COMP structures – direct merge to complementiser

lexicalisation of [fin] in C: generally observed in German (and Germanic; English: T-to-C structures: interrogatives)

declaratives in German:

(21) a. Ralf **hat** eine Torte gebacken.
Ralph has a.F cake baked.PTCP
'Ralph has baked a cake.'

b. Ich weiß, **dass** Ralf eine Torte gebacken hat.
I know.1SG that Ralph a.F cake baked.PTCP has
'I know that Ralph has baked a cake.'

structures:

(22) a.
```
            CP
           /  \
     Ralf[edge]  C′
               /   \
        C[fin],[edge]  TP
            /  \
          hat   C
```

b.
```
         CP
          |
          C′
         /  \
    C[fin]   TP
      |
   dass[fin]
```
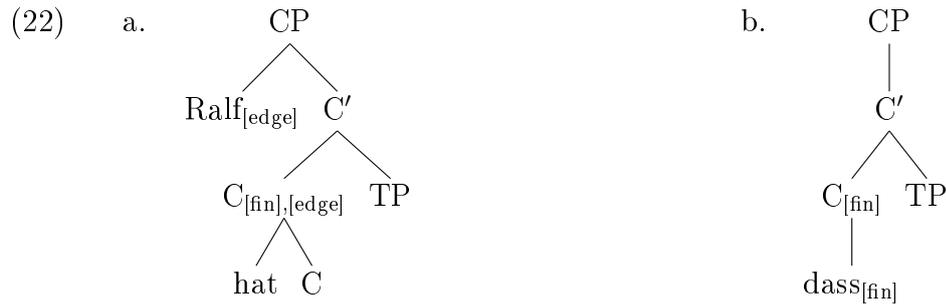
polar interrogatives in German:

(23) a. **Hat** Ralf   eine Torte gebacken?
          has   Ralph a.F cake   baked.PTCP
          'Has Ralph baked a cake?'

      b. Ich weiß   nicht, **ob** Ralf   eine Torte gebacken   hat.
          I   know.1SG not   if Ralph a.F cake   baked.PTCP has
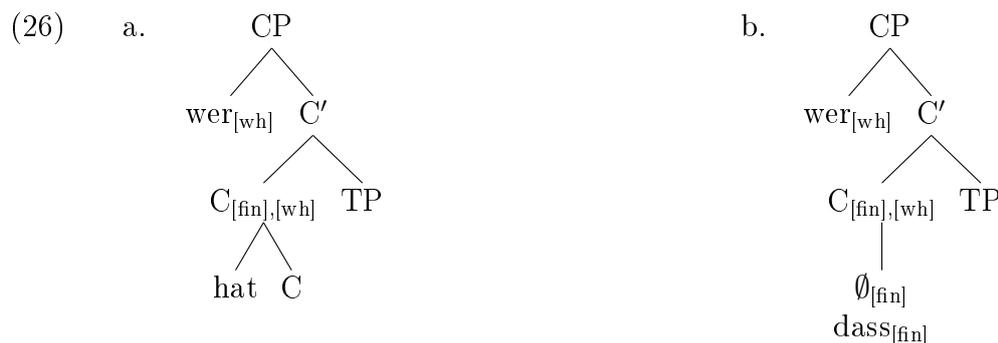   'I don't know if Ralph has baked a cake.'

structures:

(24) a.
```
            CP
           /  \
     Op.[Q]    C′
              /   \
        C[fin],[Q]  TP
            /  \
          hat   C
```

b.
```
            CP
           /  \
     Op.[Q]    C′
              /   \
        C[fin],[Q]  TP
            |
        ob[fin],[Q]
```

constituent questions in German:

(25) a. Wer **hat** eine Torte gebacken?
          who has a.F   cake   baked.PTCP
          'Who has baked a cake?'

      b. Ich weiß   nicht, wer (%**dass**) eine Torte gebacken   hat.
          I   know.1SG not   who   that a.F cake   baked.PTCP has
          'I don't know who has baked a cake.'

structures:

(26) a.
```
            CP
           /  \
     wer[wh]   C′
              /   \
        C[fin],[wh]  TP
            /  \
          hat   C
```

b.
```
            CP
           /  \
     wer[wh]   C′
              /   \
        C[fin],[wh]  TP
            |
          ∅[fin]
         dass[fin]
```

8

relative clauses in German:

(27) a. Der   Mann, der   am   Fenster steht, ist mein Nachbar.
          the.M man   who.M at.the window stands is my.M neihgbour
          'The man who is standing by the window is my neighbour.

      b. %Der   Mann, (der) **wo** am   Fenster steht, ist mein Nachbar.
          the.M man   who.M REL at.the window stands is my.M neihgbour
          'The man who is standing by the window is my neighbour.

structures:

(28) a.   CP   b.   CP
            ╱   ╲   ╱   ╲
        der$_{[rel]}$ C′   (der)$_{[rel]}$ C′
                    ╱   ╲   ╱   ╲
              C$_{[fin],[rel]}$ TP   C$_{[fin],[rel]}$ TP
                    | |
                 $\emptyset_{[fin]}$ wo$_{[fin],[rel]}$

Doubly Filled COMP patterns in line with the general syntactic paradigm in German
    (and Germanic; English: interrogatives)

word order: arises naturally (merge)

difference between standard and non-standard patterns: lexical difference (not in terms
    of syntactic projections)

question: whether classical CP (specifier + head) always sufficient

proposal: more complex structures can arise (more features, more lexical elements)

split of [Q] and [wh] in Dutch dialects (and beyond, see Bayer 2004): multiple specifiers
    or double CP (Bacskai-Atkari to appear(a))

(29) Ze weet **wie of dat** hij had willen opbellen
      she knows who if that he had want   call
      'She knows who he wanted to call.'
      (Bayer 2004: 66, citing Hoekstra 1993)

double CP in comparative subclauses due to comparative semantics (Bacskai-Atkari
    2018a; 2016; 2014)

(30) a. %Mary is taller **than how tall** Susan is.

      b. %Ich bin gresser **als   wie** du
          I   am taller   than as   you
          'I am taller than you.' (Upper Saxonian)
          (Jäger 2016: 230, citing Weise 1918: 174)

double CP in hypothetical comparatives due to semantics reasons: combination of a conditional and a comparative clause (Bacskai-Atkari to appear(b))

(31)   a.   Mary speaks **as though** she were afraid.

       b.   Tilla läuft, **als**   **wenn** sie um ihr   Leben liefe.
           Tilla runs than if   she for her.N life   run.SBJV.3SG
           'Tilla is running, as if she were running for her life.'
           (Jäger 2010: 469)

ordering restrictions: semantics

5   Conclusion

Doubly Filled COMP effects in Germanic and the CP

- COMP – not even descriptively adequate

- cartographic approach – problems regarding descriptive adequacy OR even more refined differences expressed via even more distinct projections: problematic for explanatory adequacy (amounts to description)

- single CP – sufficient for ordinary Doubly Filled COMP but not for more complex combinations

- flexible CP based on features

proposal takes into account more general properties of the given lexical element (cf. syntactic paradigm) and may explain why certain elements are preferably present

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