Chapter 13

V2 and cP/CP

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As in Nyvad et al. (2017), we will explore a particular derivation of (embedded) V2, in terms of a cP/CP-distinction, which may be seen as a version of the CP-recursion analysis (de Haan & Weerman 1986; Vikner 1995 and many others). The idea is that because embedded V2 clauses do not allow extraction, whereas other types of CP-recursion clauses do (Christensen et al. 2013a; 2013b; Christensen & Nyvad 2014), CP-recursion in embedded V2 is assumed to be fundamentally different from other kinds of CP-recursion, in that main clause V2 and embedded V2 involve a CP (“big CP”), whereas other clausal projections above IP are instances of cP (“little cP”).

1 Introduction

Verb second (V2) has long been and continues to be a fascinating topic, as witnessed by articles and books all the way back to Wackernagel (1892) and Fourquet (1938) and up to Holmberg (2015).

This paper will briefly present an analysis of the CP-level in embedded clauses, including what is often seen as CP-recursion in cases of embedded V2. The analysis is discussed in much more detail in Nyvad et al. (2017).

We follow the suggestion in Chomsky (2000) that syntactic derivation proceeds in phases and that the syntactic categories vP and CP are phases. We also follow Chomsky (2005; 2006) in taking Internal Merge operations such as A-bar movement to be triggered by an edge feature on the phase head (in Chomsky 2000, this feature is called a P(eripheral)-feature, in Chomsky 2001 a generalised EPP-feature). Below, this feature will be referred to as an OCC (“occurrence”) feature (following Chomsky 2005: 18), which provides an extra specifier position that does not require feature matching. OCC offers an escape hatch allowing an element to escape an embedded clause.

The availability of this generic edge feature OCC together with the availability of multiple specifier positions, however, in principle permits any element from within the
phase domain to move across a phase edge, and so island effects should not exist (as also observed by Boeckx 2012: 60–61).

If instead of multiple specifiers, CP-recursion is possible, the Danish data presented in the present paper may be captured in a uniform manner. We will explore a particular derivation of (embedded) V2, in terms of a cP/CP-distinction, which may be seen as a version of the CP-recursion analysis (de Haan & Weerman 1986; Vikner 1995; Bayer 2002; Walkden 2017, and many others). Because embedded V2 clauses do not allow extraction, whereas other types of CP-recursion clauses do (Christensen et al. 2013a; 2013b; Christensen & Nyvad 2014), CP-recursion in embedded V2 is assumed to be fundamentally different from other kinds of CP-recursion:

(1) a CP with V2 (headed by a finite verb) = CP ("big CP")
a CP without V2 (headed by a functional element) = cP ("little cP")

The idea is to attempt a distinction parallel to the vP-VP distinction (Chomsky 1995: 347), with cP being above CP (cf. Koizumi 1995: 148 who posits a CP-PolP corresponding to our cP-CP, and de Cuba’s (2007) independent proposal that non-factive verbs select a non-recursive cP headed by a semantic operator removing the responsibility for the truth of the embedded clause from the speaker).

c° like v° is a functional head, whereas C° like V° should be a lexical head. The latter admittedly only works partially, in that C° is only lexical to the extent that it must be occupied by a lexical category, i.e. a finite verb.

2 C°

Although CP-spec is the specifier position that attracts topics, also in embedded clauses, its associated head, C°, does not have a topic-feature “in the ordinary way”, because verb
movement into C° would then erase that feature. The fact that C°’s topic feature is thus
different from e.g. the way c° can have a feature like wh should be related to the fact
that topicalisations are never selected for, i.e. there are verbs that select only embedded
questions, but there are no verbs that select only embedded topicalisations (maybe not
being selected is what allows verb movement into C°, whereas being selected prevents
movement into c°[wh]). The closest we get are verbs that allow embedded topicalisations,
but even such verbs never require them, e.g. vide ‘know’, tro ‘think’, etc.

Where we thus say that the C° associated with the specifier that attracts topics is
deficient/unusual in not really having a topic-feature, e.g. Julien (2015: 146) argues that
the topic head is a normal head that may contain other things than finite verbs, e.g. så
‘then’ in contrastive left dislocations, (3a):

(3) Danish
a. [Topic-sp Hvis man ikke kan sige noget pænt, ] [Topic° så ] [ForceP
   If one not can say smth. nice (then)
   [CP så ]
   man tie stille.]
   shall one keep quiet

b. [cP-spec Hvis man ikke kan sige noget pænt, ]
   [CP så ]
   If one not can say smth. nice (then)
   [C° skal ]
   shall one tie keep quiet

We take it that the fact that så also occurs in the first position in V2 clauses with no
dislocation means that it is a rather unlikely head element. We also hesitate to draw
conclusions about the syntax of embedded V2 from contrastive left dislocations, as they
are also perfectly possible in non-V2 embedded clauses (although we have no account

(4) Danish
Det er en skam at den her artikel den aldrig er blevet udgivet.
It is a shame that this here article it never is been published

As topicalisations are never selected for, it follows that a topicalisation-CP (i.e. with
a topic in CP-spec and with a verb moving into C°) cannot be the highest level of an
embedded clause (in most Germanic languages, e.g. Danish or English). Another level is
necessary above CP, viz. a cP with at/that in c° (though see the discussion at the end of
section 4 below). It is this higher at/that which prevents extraction from CP-spec (as a
kind of that-trace violation, perhaps derived in terms of anti-locality as in Douglas 2015),
i.e. (5d):

(5) Danish
a. * Sagde Andrea Lego-filmen havde Kaj allerede set __?
   b. * Sagde Andrea at Lego-filmen havde Kaj allerede set __?
   c. * Lego-filmen sagde Andrea __________ havde Kaj allerede set __.
   d. * Lego-filmen sagde Andrea at __________ havde Kaj allerede set __.
   (Lego-film.the) said Andrea (that) (Lego-film.the) had Kaj already seen

(Notice that (5c) is ungrammatical for the same reason as (5a): topicalisations cannot
be selected, they must be inside a cP.)
This is supported by German, which for some reason allows embedded topicalisation without this higher that, (6a), and which allows extraction via CP-spec, (6c):

(6) German
   a. * Hat Andrea gesagt, den Lego-Film hat Kai schon __ gesehen?
   b. Hat Andrea gesagt, dass den Lego-Film hat Kai schon __ gesehen?
   c. Den Lego-Film hat Andrea gesagt, __________ hat Kai schon __ gesehen.
   d. * Den Lego-Film hat Andrea gesagt, dass __________ hat Kai schon __ gesehen.
   e. (The Lego-film) has Andrea said (that) (the Lego-film) has Kai already __ seen

CP may thus be a phase in German, and also in Danish and English (where extractions via spec-CP are * that-trace violations). From this, it would follow that CPs are strong islands (cf. Holmberg 1986: 111; Müller & Sternefeld 1993: 493ff; Sheehan & Hinzen 2011), provided there is no OCC escape hatch in CP, like the one suggested for cP in §3 below:

(7) Danish
   a. Sagde Andrea at måske havde Kai allerede set Lego-filmen?
   b. * Lego-filmen sagde Andrea at måske havde Kai allerede set __?
   (Lego-film.the) said Andrea that maybe had Kai already seen (Lego-film.the)

(8) German
   a. Hat Andrea gesagt, vielleicht hat Kai den Lego-Film schon __ gesehen?
   b. * Den Lego-Film hat Andrea gesagt, vielleicht hat Kai ______ schon __ gesehen.
   (The Lego-film) has Andrea said maybe has Kai (the Lego-film) already seen

A different approach that might explain the absence of an escape hatch could be to say that embedded V2 clauses are not really embedded at all, but instead there is a radical break/restart at the beginning of an embedded V2 clause, similar to what happens at the beginning of a new main clause (as argued e.g. by Petersson 2014). Then extraction out of an embedded V2 clause like (7b/8b) would correctly be ruled out, but this would also incorrectly rule out all other potential links across the edge of embedded V2 clauses (see also Julien 2015: 157-159), so that e.g. the following c-command difference should not exist, as co-reference should incorrectly be ruled out in both (9a) and (9b):

(9) Danish
   a. * Han₁ sagde at [CP den her bog ville Lars₁ aldrig læse.]
   b. Hans₁ mor sagde at [CP den her bog ville Lars₁ aldrig læse.]
   He/His mum said that this here book would Lars never read

Both (9a,b) would be expected to be just as impossible as such links across a main clause boundary:

(10) Danish
   a. * I går mødte jeg ham₁ i bus sen. [CP Lars₁ var lige blevet forfremmet.]
   b. * I går mødte jeg hans₁ mor i bus sen. [CP Lars₁ var lige blevet forfremmet.]
   Yesterday met I him/His mum in bus-the Lars had just been promoted
3  $c^\circ$ with OCC

(11) $c^\circ$

$\triangleleft$

$\chi$

$c_{[\text{occ}]}$

$c/P/CP/IP$

$c^\circ$ can have a feature that may cause movement to $cP$-spec, and such a feature can either be a so-called occurrence-feature or a slightly more standard type feature as e.g. a $wh$-feature. (As mentioned above, for some reason $C^\circ$ cannot have an OCC-feature.)

Chomsky (2005: 18–19) suggests an OCC (“occurrence”) feature, which provides an extra specifier position “without feature matching”, i.e. the XP moves into the specifier of $c^\circ_{[\text{occ}]}$ without itself having an OCC-feature. A $c^\circ_{[\text{occ}]}$ thus offers an escape hatch which allows an XP to escape an embedded clause. In fact only those XPs that move into a $cP$-spec because of OCC will be able to move on, because they are the only XPs whose feature make up has not been altered/valued/checked as a result of the movement into $cP$-spec.

$c^\circ_{[\text{occ}]}$ may be above another $cP$, and then the $cP$-layer headed by a $c^\circ$ carrying an OCC-feature is transparent to selection in the same way as e.g. NegP is in constituent negation (e.g., she ate not the bread but the cake) or quantificational layers (as in she ate all/half the cake), cf. the notion of extended projections (Grimshaw 2005). However, $c^\circ_{[\text{occ}]}$ may also be inside another $cP$, in which case nothing further needs to be said.

4  $c^\circ$ with other features, e.g. $wh$

(12) a. $cP$

$\triangleleft$

$wh$

$c'$

$c_{[\text{WH}]}$

$c/P/CP/IP$

b. $cP$

$\triangleleft$

$OP$

$c'$

$c_{[\text{OP}]}$

$c/P/CP/IP$

We take the basic distinction between $CP$ and $cP$ to be whether or not there is verb movement into the head, but we want this to go hand in hand with other basic distinc-
tions between the two, e.g. that C° is the potential host of the topic feature, whereas c° is the relevant/necessary head for the outside context, e.g. as the highest head of embedded questions or of relative clauses (= in the terms of Rizzi 1997: 283, cP is ‘facing the outside’ whereas CP is ‘facing the inside’).

In other words, we want to link the difference c°/C° not just to individual features (much like the difference between different heads in the C-domain is linked to features in the cartographic approach, Rizzi 1997; Wiklund et al. 2007; Julien 2015; Holmberg 2015…) – but we also want to link the difference to whether or not the head is the landing site of verb movement.

Spec-cP[wh] in (12a) is where the wh-phrase in an embedded question occurs, and spec-cP[OP] in (12b) is where we find the empty operator that may occur in e.g. som-relative clauses in Danish (and in that-relative clauses in English).

It appears that a wh-element that has moved into such a specifier cannot move on from here:

(13) Danish

a. Spurgte Andrea [cP hvilken film c°[wh] Kaj
   (Which film) asked Andrea (which film) Kaj
   allerede havde set]?
   allerede havde set]?
   already had seen

This may be because the embedded clause in (13b) with an empty specifier and an empty c° can no longer be identified as a wh-clause, as is required of an object clause of the verb ask (cf. clausal typing, Cheng 1991).

Following Rizzi & Roberts (1996: 20), Vikner (1995: 50), Grimshaw (1997: 412), the reason why there can be no verb movement into c°[wh] is that this would change the properties of the selected head (i.e. c°[wh]), and therefore this head would no longer satisfy the requirements of the selecting matrix expression. In fact, according to McCloskey (2006: 103), a head modified in this way (by movement into it) is not an item that could possibly be selected by a higher lexical head (it is not part of the “syntactic lexicon”), which would lead to the prediction that there could not be movement into heads of complements of lexical heads (which may very well be too strong, cf. that it would have consequences for many other cases, e.g. N°-to-D° movement in Scandinavian would have to be something like N°-to-Num° movement).

If, on the other hand, there is a cP (with the declarative Complementizer at in c°) above the CP in which V2 takes place, then this problem does not arise. The selected clause is a cP, its head is a c° containing a complementiser, and the C° into which there is verb movement is situated lower down inside the cP.

(Embedded topicalisations in German, embedded questions in Afrikaans, and embedded questions in some variants of English might be exceptions to the above in that they seem to have embedded V2 into the highest selected complementiser head. In such cases, an “invisible” cP above the embedded V2 CP have been suggested, e.g. in McCloskey
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(2006: 101) and in Biberauer & Roberts (2015: 12–13). In fact, being inside such an "invisible" cP might even be a possible analysis for those Danish examples with embedded V2 but not preceded by at, which do occur sometimes, e.g. (ii) in Jensen & Christensen (2013: 55), although we find such examples ungrammatical.

5 c° without features

(14)

\[
\begin{array}{c}
cP \\
\downarrow \\
c' \\
\downarrow \\
c° \\
\downarrow \\
c° \\
\downarrow \\
at \end{array}
\]

(15) Danish

a. Sagde Andrea at Kaj allerede havde set
b. Sagde Andrea at Lego-filmen havde Kaj allerede set?
  Said Andrea that (Lego-film.the) (had) Kaj already (had) seen
  Lego-filmen?

Because such an at/that has no special features, it may also occur below other complementisers, when these are selected from above, e.g. below a wh- or a relative cP-layer. As an extra complementiser, at is preferred over other complementisers, which have more content:

(16) Danish (Tom Kristensen, Livets Arabesk (novel), 1921, cited in Hansen 1967: III: 388; in Vikner 1995: 122, (149c); and in Nyvad 2016: 368, (10)).
  ... hvis at det ikke havde været så sorgeligt.
  if that it not had been so sad

6 Predictions concerning extraction

The above suggestions (especially the OCC escape hatch in cP) make the prediction that extraction is possible almost everywhere (i.e. except topic islands), which is much more
general than usually assumed (including in Vikner 1995). However, it turns out that such unexpectedly acceptable examples are fairly widespread, including extractions from relative clauses:

(17) Danish (Christensen & Nyvad 2014: 35, (13c,d))
   a. Pia har engang mødt en pensionist som havde sådan en hund. Pia has once met a pensioner that had such a dog
   b. Sådan en hund har Pia engang mødt [DP en [NP pensionist ]
      Such a dog has Pia once met a pensioner
      \[cP \rightarrow \text{c}^*_\text{occ}] \ [cP \text{ OP}_2 \ [c^\circ \text{ som } ] \ [\text{IP} \rightarrow \text{havde } \rightarrow 1.]]\)

... and extractions from embedded questions (wh-islands):

(18) Danish (Christensen et al. 2013a: 63)
   a. Hvilken båd foreslog naboen [cP \rightarrow \text{c}^*_\text{occ}] \ [cP
      Which boat suggested neighbour.the
      hvor billigt [IP vi skulle sælge \rightarrow 1.2.]]
      how cheaply we should sell
   b. Hvor billigt foreslog naboen [cP \rightarrow \text{c}^*_\text{occ}] \ [cP
      How cheaply suggested neighbour.the
      hvilken båd [IP vi skulle sælge \rightarrow 1.2.]]
      which boat we should sell

   Om morgenen skulle jeg give dem medicinen, noget brunt
   In morning-the should I give them medicine-the, some brown
   stads, [cP \text{ OP}_1 \ [cP jeg ikke ved \rightarrow \text{c}^*_\text{occ}] \ [cP \text{ havd}_2 \text{c}^*_\text{wh}]
   stuff, that I not know
   [\text{IP} \rightarrow \text{var } \rightarrow 2.]]\)
   was

... as well as extractions from adverbial clauses:

(20) Danish (Knud Poulsen, 1918, cited in Hansen 1967, I: 110)
   ... men det bliver han så vred [cP \rightarrow \text{c}^*_\text{occ}] \ [cP \text{ OP } \ [c^\circ \text{ når } ]
   but that becomes he so angry when
   \[\text{IP } \text{ man } \text{ siger } \rightarrow 1.]]\)
   one says
7 Conclusion

We have presented an analysis of the CP-level in embedded clauses, including what is often seen as CP-recursion in cases of embedded V2. The analysis, which is discussed in much more detail in Nyvad et al. (2017), attempts to unify a whole range of different phenomena related to extraction and embedding, while acknowledging that extraction in Danish is considerably less restricted than has often been assumed.

The CP-recursion that takes place in syntactic environments involving movement out of certain types of embedded clauses seems to be fundamentally different from that occurring in embedded V2 contexts, and hence, we propose a cP/CP distinction: The CP-recursion found in complementiser stacking and long extractions requiring an OCC-feature involves a recursion of cP, (21a), whereas the syntactic island constituted by embedded V2 involves the presence of a CP, (21b).

\[(21)\]

\[\begin{align*}
\text{a.} & \quad \text{cP} \\
& \quad t_{WH} \quad c' \\
& \quad c'_{[OCC]} \quad \text{cP} \\
& \quad \text{wh}/\text{OP} \quad c' \\
& \quad c'_{[WH]/[OP]} \quad \text{IP} \\
\text{b.} & \quad \text{cP} \\
& \quad c' \\
& \quad c^\circ \quad \text{CP} \\
& \quad \text{at} \quad \text{topic} \quad C' \\
& \quad C^\circ \quad \text{IP} \\
& \quad \text{verb}_{[\text{fin}]} \end{align*}\]

The exact structure of CP-recursion may be subject to parametric variation: German does not seem to allow CP-recursion given that extraction from embedded wh-questions is ungrammatical irrespective of which function the extracted element has (unless it moves via spec-CP, (6c)), and that embedded V2 is in complementary distribution with the presence of an overt complementiser in C\(^\circ\).

Whether a cartographic approach to the structure of the CP-domain in the Scandinavian languages will turn out to be more appropriate than a CP-recursion analysis (e.g. Rizzi 1997; Wiklund et al. 2007; Julien 2015; Holmberg 2015), we will leave for future research to decide. Until we have data that support a fine-grained left periphery in the relevant structures in Danish, the version of CP-recursion as argued for here would appear promising, as it captures the data presented here while making perhaps slightly fewer stipulations than e.g. the cartographic approach or the multiple specifier analysis.
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