Two Types of Unstable SPECs

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Goal of the talk

- Study two types of specifiers that appear to require movement
  a) base-generated specifiers (EM SPECs)
  b) specifiers created by movement (IM SPECs)

1. Introduction

- The starting point:

  (1) Labelling algorithms
  a. In \{H, α\}, H an LI, H is the label
  b. If α is internally merged to β, forming \{α, β\} then the label of β is the label of \{α, β\}

  [from Chomsky 2008:11]

- For Chomsky, the problematic cases are those in (2):

  (2) a. \{α, β\} (first derivational step)
      b. \{αP, βP\} (creation of base SPECs)

- Boeckx (2008) argues that, in (2a), the label is determined by second-Merge (introduction of a third head, H, which, in the simplest scenario, corresponds to the phase head).

  (3) \{H, [α, β]\}

  Head of \{α, β\}
Here I want to pay attention to sub-case (2b), for which different solutions have been proposed. I list the ones I am familiar with in (4):

(4) a. Early Spell-Out (cf. Uriagereka 1999)
   b. Symmetry breaking movement (cf. Moro 2000)
   c. Label identification movement (cf. Chomsky 2008)
   e. Movement to avoid ‘too much’ checking (cf. Alexiadou & Anagnostopoulou 2001)

In particular:

(5) a. Why must complex base-SPECs leave their base position?
   b. Why must complex non-base-SPECs leave intermediate positions?

**The key issue**

In the context of this conference, what is relevant is whether (5a) and (5b) follow from phrase structure factors or not.

2. Base generated SPECs (= SPECs by EM)

(6) Ha trucat la Maria en Joan.  
    have-3.SG called-3SG the Maria the Joan  
    ‘Joan called Maria up’

- Different authors (e.g. Belletti 2004, Ordóñez 2000; 2005) have claimed that en Joan in (6) is not in situ (in SPEC-v*), but has been moved to a position close to the VP-edge (it is not crucial what that specific position is, as soon as it is not the first-Merge one).
- Low adverbs placement (see Cinque 1999)

(7) a. ?Capirà completamente Maria. (Italian)
  will-understand completely Maria
  ‘Maria will understand completely’
b. ?Capirà/spiegherà bene Maria (al direttore). (Italian)
  will-understand/explain well Maria (to-the director)
  ‘Maria will understand/explain well the director’

[from Belletti 2004]

- Extraction from derived positions (see Boeckx 2003, Fortuny 2008, Gallego 2007)

(8) a. Ha telefonato il direttore del giornale al presidente. (Italian)
  have-3SG phoned the director of-the newspaper to-the president
  ‘The director of the newspaper has called the president’
b. ?? Il giornale [CP di cui ha telefonato [il direttore t] al presidente] (Italian)
  the newspaper of which have-3SG phoned the director to-the president
  ‘The newspaper of which the director has called the president’
c. ?? Ne ha telefonato [il direttore t] al presidente. (Italian)
  of-it have-3SG phoned the director to-the president
  ‘The director (of it) has called the president’

[from Belletti 2004]

- Likewise, postverbal subjects have been related to (new information or non-contrastive) focus. Hence the contrast in (9):

(9) a. Qui ha vingut? (Catalan)
  who have-3SG come
  ‘Who came?’
b. (Ha vingut) en Joan. (Catalan)
  have-3SG come the Joan
  ‘Joan came’
c. #En Joan ha vingut. (Catalan)
  the Joan have-3SG come
  ‘Joan came’
Why does the subject move?

For Belletti (2004), much like for Ordóñez (2000; 2005), movement is related to Focus. The answer is therefore cartographic in nature, but has a feature-like motivation: a Focus head triggers movement of the subject.

\[
\text{(10) } \begin{array}{c} \text{FP} \\
\text{Gianni/Joan}_{[F]} \\
\text{F'} \\
\text{F}_{[F]} \\
\text{v*P} \\
\text{Juan ha vingut} \end{array}
\]

But why should (pseudo-semantic) features be involved? Isn’t the configuration enough?

- Belletti (2004) offers an alternative: pro is selected in the Numeration (and inserted in SPEC-T). Essentially, she assumes that a bigger Numeration has an effect on the outcome.

Belletti’s (2004) idea does not clarify why the in situ subject must independently move.

-Things get more complicated if Chomsky’s (2001) analysis of optionality is assumed. The EA is in the edge already, so why should it move to receive ‘an interpretation’?

Similar scenarios

\[
\text{(11) a. Hale & Keyser’s (1993) internal subjects.}
\]

\[
\text{b. ECM configurations (see Lasnik 2001).}
\]

\[
\text{c. Moro’s (2000) bare small clauses. (see below)}
\]
Interim summary

Movement in these situations is not obviously feature-triggered. Then we are only left with two options: a) movement is A-triggered, and b) movement is triggered by a labelling failure.

- Option (a) can be argued for in the case of the EPP (raising to SPEC-T), as Boeckx (2008) recently proposes:

(12) \[
\begin{array}{c}
[ C_[φ] \ldots [ T_[φ] \ldots [ Subject_[φ] \ldots ]] ]
\end{array}
\]

- Crucially, in the case of post-verbal subjects, there is no minimality scenario, and the logic of Chomsky’s (2000; 2001) Long-distance Agree is compatible with EA remaining in situ. So we are back to the question: why does the subject move?

- Small clauses

(13) *pro sono [ [molte foto del muro] [la causa della rivolta] ]
    be-3PL many pictures of-the wall the cause of-the riot
    ‘The cause of the riot is many pictures of the wall’
    [from Moro 2007]

(14) *pro és [ [en Joan] [el meu amic] ]
    be-3SG the Joan the my friend
    ‘Joan is my friend’

(15) *pro es [ [tu hermana] [tonta] ]
    be-3SG your sister stupid
    ‘Your sister is stupid’
    [from Uriagereka 2001]
(16) a. Essas actividades, são consideradas [ t, úteis para o país]  
    those activities be-3PL considered useful to the country
b. *São consideradas [ essas actividades [úteis para o país] ]  
    be-3PL considered those activities useful to the country
   ‘Those activities are considered useful to the country’
   [from Raposo & Uriagereka 1990]

- Apparent counterexamples

(17) [ Que és [ [na Maria] [sa culpable] ] ara t’ho demostraré.  
    that be-3SG the Maria the guilty now CL.to-you-it will-show-1SG
   ‘That Maria is responsible now I will prove to you’
   [from Rosselló 2008]

(18) Considero [ [ a tu hermano] [el candidato ideal] ]  
    consider-1SG to your brother the candidate ideal
   ‘I consider your brother the ideal candidate’

(19) Considero [ [ tu propuesta] [la mejor opción] ]  
    consider-3SG your proposal the best option
   ‘I regard your proposal as the best option’

But: (17) is not really a counterexample, since, as (20) shows, simple sentences reject the 
{XP, YP} pattern.

(20) *És la Maria la culpable.  
    be-3SG the Maria the guilty
   ‘Maria is responsible’

As for (18) and (19) –cases of internal subjects–, if Torrego (1998) and Boeckx (2008) are right, the DPs always leave their base position. In Torrego’s (1998) account, Case-marked
DOs move to SPEC-v*, and, given the logic of Boeckx’s (2008) account of the EPP, even non-Case-marked objects must raise too.
2. Derived SPECs (= SPECs through IM)

- Consider (21):

(21) [ Ha [ estat [ [ detingut l’assassí ] ] ] ]

have-3SG been arrested the-assassin

‘The assassin has been put under arrest’

And, then, compare it to the paradigm in (22), where I assume successive cyclic movement targets all the SPECs (see Boeckx 2007).

(22) a. [L’Assassí ha [ t estat [ t detingut t ] ] ]

b. *[ Ha [ l’assassí estat [ t detingut t ] ] ]

c. *[ Ha [ t estat [ l’assassí detingut t ] ] ]

- Why can’t l’assassí (Eng. the assassin) remain in intermediate SPECs?

**Answer A:** successive cyclic movement does not target (all the) intermediate positions.

(see Abels 2003)

**Answer B:** intermediate SPECs do not have ‘what it is required’ for the DP to stay.

(what is required? φ-features? EFs?)

- Answer A needs empirical motivation (since it is not the null hypothesis). Furthermore, one should explain what positions are targeted, and, also, account for the parametric differences we are about to see.

- Answer B is, to some extent, Chomsky’s (2008).

In a probe-goal relation, the goal can be spelled out only in-situ (under long-distance Agree) or at the probe (under internal Merge) [...] the goal cannot stop at some intermediate point of the derivation, in particular, at intermediate SPEC-T positions through which it must pass in successive-cyclic A-movement (including ECM constructions). [from Chomsky 2008:22 –emphasis mine, AJG]

- Even if answer B is correct, one wants to know why. Since all LIs have EF, they could in principle create a SPEC, even if they are along the movement path of the DP.
Note that Chomsky (2008) assumes that only heads that contain φ-features (= probing heads) can maintain that DP stable enough. Thus, the problem here is independent from phrase structure, and must be related to the Case/agreement systems.

- **Subjects in VSO sentences (see Gallego 2007 and Ordóñez 2005)**

(23) a. Hoy comprará Juan comida. (Spanish)
    today will-buy-3SG Juan food
    ‘Juan will buy food today’

   b. *?Avui comprarà en Joan menjar. (Catalan)
    today will-buy-3SG the Joan food
    ‘Juan will buy food today’

   [from Ordóñez 2005]

(24) a. Hoy hablará Juan de Barcelona. (Spanish)
    today will-talk-3SG Juan about Barcelona
    ‘Juan will talk about Barcelona today’

   b. *?Si parla en Joan d’això. (Catalan)
    if talk-3SG the Joan about-this
    ‘If Joan talks about this’

   [from Ordóñez 2005]

(25) a. Por fin puede Juan dormir. (Spanish)
    by end can-3SG Juan sleep-INF
    ‘Finally Juan can sleep’

   b. *?Finalment pot en Joan dormir. (Catalan)
    finally can-3SG the Joan sleep
    ‘Joan can finally sleep’

   [from Ordóñez 2005]
- Crucially, subjects in VSO must be derived

a) Adverb placement

\[ [ \text{V} \left[ \text{bien/mal} \left[ \text{VP} \text{V} \text{Object} \right] \right] ] \]

(26) a. Pintan tus hermanos cuadros bien. (Spanish)
    paint-3PL your brothers paintings well
    ‘Your brothers paint paintings well’

b. *Pintan bien tus hermanos cuadros. (Spanish)
    paint-3PL well your brothers paintings
    ‘Your brothers paint paintings well’

[from Ordóñez 2005]

In Catalan (and Italian), subjects cannot access projections higher than the adverbs.

(27) a. *No pinta en Joan bé. (Catalan)
    not paint-3SG the Joan well
    ‘Joan does not paint paintings well’

b. *No pinta en Joan quadres bé. (Catalan)
    not paint-3SG the Joan paintings well
    ‘Joan does not paint paintings well’

[from Ordóñez 2005]

b) Floating quantifiers

\[ [ \text{V} \text{QPs} \left[ \text{bien/mal} \left[ \text{VP} \text{V} \text{Object} \right] \right] ] \]

(28) a. Lo hace todo bien Pedro. (Spanish)
    CL-it do-3SG all well Pedro
    ‘Pedro does everything well’

b. *Lo hace bien todo Pedro. (Spanish)
    CL-it do-3SG well all Pedro
    ‘Pedro does everything well’

[from Ordóñez 2005]
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(29) a. Ayer lo hizo Juan todo bien. (Spanish)
yesterday CL-it did-3SG Juan all well
‘Juan did everything well yesterday’
b. *?Ayer lo hizo todo Juan bien. (Spanish)
yesterday CL-it did-3SG all Juan well
‘Juan did everything well yesterday’

[from Ordóñez 2005]

- Again, Catalan cannot move subjects above floating Qs.

(30) ??Ahir ho va fer en Joan tot bé. (Catalan)
yesterday CL-it AUX do-INF the Joan all well
‘Joan did all well yesterday’

[from Ordóñez 2005]

- Ordóñez (2005) takes this facts to conclude that subjects in VSO move to SPEC-T, below AgrSP. According to him “the analysis implies that Spec TP in Spanish has an EPP feature that Catalan lacks.”

- The account cannot be maintained if all LIs have the EPP feature/property. But still, even if EPP features were restricted to some heads, one should explain why Spanish T (but not Catalan’s) has one.

- Details aside, the situation we have is (31):


- I will not try to provide an account for (31), as there are various ways to proceed. At any rate, what should be clear is that no phrase-structure constraint seems to be at stake. It must be the case that the problem is related to the Case/agreement
systems (see Gallego 2007, where I propose an account that adopts Uriagereka’s 1988 ideas about “morphological richness” and “heavy/light categories”).

- Existentials, passives, and related structures (see Boeckx 1999, Campos 2001, Martin & Uriagereka 2000, and others)


(33) a. There seems to have been someone arrested. (cf. 32b)
   b. Someone seems to have been arrested.
   
   [from Martin & Uriagereka 2000]
3. Conclusions

Complex SPECs must leave their base position, a situation which is not \textit{a fortiori} required by Chomsky’s Probe-Goal system—it is, plausibly, a phrase structure matter.

We have seen that this is confirmed in the case of EAs, which, even in Romance languages, always abandon their first-Merge position.

If correct, this provides support for Chomsky’s (2008) claim that this is a labelling (=phrase structure related) problem.

XPs cannot stop at all the SPECs they find in their movement path—just in some of them. This is not obviously a phrase structure issue, and appears to be related to properties of the Case/agreement systems.

If so, one expects for data to vary from language to language; as we have just seen, this is indeed the case.
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