A peripheral mirage within non-finite IPs

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1   The problem

- Main question: do infinitives project a left periphery (in the sense of Rizzi (1997)) or discourse shells (Emonds, 2004)?

- In particular: how feasable it is for topics to appear at the left periphery of an infinitive? (we will refer to them as Infinitival Topics (IT) hereafter).

- Illustration with English:

  (1)   a.   ?I have decided that [a flight to Chicago]$_i$ I will book t$_i$ today.[1]
          b.   *I have decided [a flight to Chicago]$_i$ to book t$_i$ today.

  (2)   a.   [A flight to Chicago]$_i$ I have decided that I will book t$_i$ today.
          b.   [A flight to Chicago]$_i$ I have decided to book t$_i$ today.

    – **Derivational theories:** Infinitival T is somewhat defective (in terms of agreement) and thus cannot move to the periphery and project (Roberts, 1993; Gallego, 2010).
    – **Cartographic theories:** Infinitives do not have a Force projection. TopicP is dependent on Force (Haegeman, 2004; Hernanz, 2011).

- Stating that infinitives do not project/allow left peripheral activity is untrue if we look at Romance languages. In this talk we focus on Catalan and Spanish.

2   The data

2.1   Licensing ITs

- A generalization can be made:

  (3)   *The Quant/Interrog Condition on ITs*
          An IT is allowed as long as the infinitival clause is introduced by a quant/interrog element.

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[1] There is variation as to whether native speakers allow these kinds of embedded topicalization, but this issue is irrelevant here.

(4) a. Dudaba, el cordero, **si** hacerlo al horno.
       doubted (he) the lamb whether to make.it in the oven
       He wondered whether to cook the lamb in the oven.[2] (*Spanish*)

   b. Juan ya ha propuesto, este verano, **dónde** ir.
       John already has proposed this summer where to go
       John has already proposed where to go this summer. (*Spanish*)

   c. En Joan es pregunta, el sopar, **on** fer- lo.
       the John to himself asks the dinner where to make it
       John is wondering where to dine. (*Catalan*)

   d. En Joan dubta, a la festa, **si** anar- hi o no.
       the John doubts to the party whether to go LOC or not
       John is wondering whether to go to the party or not. (*Catalan*)

- However, aside from (4), there are other cases where (3) clearly falls short of empirical coverage.[3],[4]

(5) *Catalan*

   a. Crec, les ulleres, haver- les vist a la cuina.
       believe (I) the glasses, to have them seen in the kitchen
       I reckon I have seen your glasses in the kitchen.

   b. Prefereixo, als convidats, escriure' ls personalment.
       prefer (I) to the guests to write to them personally
       I prefer to address the guests myself.

   c. Em fastigueja, amb la Maria, discutir- m' hi dia sí, dia també.
       to me disgusts with the Mary to argue DAT LOC day yes day also
       It bores me to argue with Mary day after day.

   d. Pretenen, al Parlament, entrar- hi divendres.
       intend (they) to the Parliament to go in LOC Friday
       They intend to go into the Parliament on Friday.

   e. Espero, amb la Maria, no haver-hi de parlar mai més.
       hope (I) with the Mary no to have.cl to speak never more
       I hope I don't have to talk to Mary any more.

   f. Lamento, La Traviata, haver de cantar- la afònica.
       regret (I) La Traviata to have to sing it hoarse
       I regret having to sing La Traviata without voice.

(6) *Spanish*

   a. Creo, tu libro, haberlo visto encima de la mesa.
       believe (I) your book to have.it seen on top of the table
       I believe to have seen your book on the table.

   b. Temo, el solomillo, dejarlo como la suela de un zapato.
       fear (I) the sirloin to leave.it like the sole of a shoe
       I fear to overcook the sirloin.

   c. Me duele, a María, decirle que no puede ir a la fiesta.
       to me hurts (it) to Mary to tell.her that no can (she) go to the party
       It hurts me to tell Mary she cannot go to the party.

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[2]The topic may follow the interrogative particle *si* as well, although the grammaticality of *si*>top is slightly worse. We refer the reader to Hernanz (2011) for discussion on this issue.

[3]A word of warning is in order: we are aware that there are slight differences with respect to how people judge the sentences in (5) and (6) but in general they are accepted by most speakers of Catalan and Peninsular Spanish respectively. For some reason though, Catalan speakers seem more reluctant to accept these sentences. We come back later to this issue.

[4]Note also that the use of the comma is not indicative of a comma intonation.

    d.   Juan pretende, a María, regalarle   las flores.
         john intends   to Mary to give.her the flowers
         John intends to give Mary the flowers

    e.   Espero, los resultados, tenerlos   el lunes.
         hope (I) the results   to have.them the Monday
         I expect to have the results on Monday.

    f.   Lamentó,   aquellas noticias, haberlas   dado en aquellos momentos.
         regretted (he) those   news   to have.them given in those   moments
         He regretted having to give those news in such moments.

- Note, crucially, that ITs are subject to certain licensing conditions:

(7)   a. *Crec, les ulleres, haver-les vist. (cf. (5-a))   (*Catalan*)
       b. *Prefereixo, als convidats, escriure'ls. (cf. (5-b))
       c. *Lamento, La Traviata, haver de cantar-la. (cf. (5-f))
       d. ??Creo, tu libro, haberlo visto. (cf.(6-a))   (*Spanish*)
       e. *Temo, el solomillo, cocinarlo. (cf. (6-b))

- The presence of non-pressuposed/assertive material seems to be licensing ITs. Reminiscent of Hooper & Thompson (1973)'s Assertion Hypothesis:

(8)   The more asserted the complement of a given verb is, the more compatible it is with V2 (and other root phenomena).

- They propose to classify verbs as to whether they select for +/–assertive content.

- Details aside, they correctly predict that the availability of embedded V2 differs as to whether the selecting verb is an assertive predicate (e.g. *say*, (9)) or a non-assertive one (e.g. *doubt*, (10)):[5]

(9)   Han sa   at [denne sangen]$_i$ kenne han t$_i$ synge i bryllupet.
          He said that this   song the could he   sing in wedding the
          He said that this song, he could sing in the wedding.   (*Norwegian*)

(10)   *Han tvilte   på at   [denne mannen]$_i$ hadde hun ikke t$_i$ møtt
         he   doubted on that this   man the had   she not   met
         She doubted that she hadn't met this man.   (*Norwegian*)

- Bentzen (2009) shows that Hooper & Thompson (1973)'s generalization does not quite hold.[6] For instance, complements of semi-factive verbs (*discover, find out...*) are generally pressuposed (non-assertive) and should not allow embedded V2, contrary to the fact:

(11)   Jeg oppdaget   at   [denne boka]$_i$ hadde jeg ikke t$_i$ lest.
         I   discovered that this   book the had   I   not   read
         I discovered that I had not read this book.

- Bentzen proposes that the availability of embedded V2 does not hinge on the type of predicate but on the availability of a main point of an utterance (MPU). Roughly put, the MPU is the linguistic material that renders a declarative sentence relevant in the discourse.

- We would like to propose that the availability of ITs is a focus feature in the syntax which, by its very nature, introduces assertive content.

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[5]The Norwegian data are taken from Bentzen (2009).

[6]See Jiménez-Fernández & Miyagawa (2013) for empirical arguments against Hooper & Thompson (1973)'s generalization in Spanish and Japanese.

(12)   *The Focus Condition on ITs*
An IT is allowed as long as a the infinitival clause is focalised.

- Given that quant/interrog elements are focal operators of some sort, the generalization in (12) is superior to (3).

2.2   Topics vs parentheticals

- If the IT were a parenthetical, we would not expect an asymmetry between raising and control predicates, contrary to the fact, as shown by Catalan and Spanish:

(13)   a. ??En Joan sembla, a la platja, anar- hi   molt sovint a jutjar pel   seu color de
the John seems   to the beach to go LOC very often   in judge for the his colour of
pell.
skin
John seems to go to the beach very often considering his skin colour.   (*Catalan*)
b. ??Mi hermana parece, esa   ropa,   comprarla/haberla comprado en el   mercadillo.
My sister   seems   those clothes to buy.it/to have.it bought   in the flea-market
My sister seems to have bought these clothes at the flea market.   (*Spanish*)

- ITs are thus licensed in CP contexts and not TPs.[7]

- The same raising-control distinction is observed in (14) and (15) as given by Haegeman (2004, p.82-83, her (41)-(43)):

(14)   *Italian*
a.   Gianni pensa, il   tuo   libro, di conoscerlo bene.
Gianni thinks the your book *di* to know it well
b. *?Gianni sembra, il   tuo   libro, conoscerlo bene.
Gianni sems   the your book to know it well

(15)   *French*
a. ??Je pense, ton   livre, pouvoir   le comprendre.
I   think   your book to be able it to understand
b. *Marie semble, ton   livre, pouvoir   le comprendre.
Marie seems,   your book, to be able it to understand

- Parentheticals are claimed to be "invisible constituents" (de Vries, 2006, p.212, his (30b)). This can be illustrated with Q-binding:

(16)   a.   Nobody$_i$ claimed that he$_i$ was thinking about Hank.
b. *Nobody$_i$ was, he$_i$ claimed, the dumbest guy in the room.

- However, Q-binding is indeed possible, as the following Catalan example shows:

(17)   Tot$_i$ pare odia, del   seu$_i$ fill, explicar- ne   els draps bruts.
every dad hates about the his   son to explain of it the cloths dirty

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[7]We are assuming that control predicates are CPs and raising predicates TPs in line with Chomsky (1980); Chomsky & Lasnik (1993); Landau (2006). For an opposed view, see Bošković (1997); Hornstein (1999); San Martin (2004).

- "Visibility" effects are also observed if we take into account the scope interaction between a sentential negation and *un solo* in Spanish:[8]

  (18)   ?No espero, los resultados de un solo alumno, tenerlos   el   lunes.
                  no   expect the results   of a   only student   to have.them the monday

- Note that, (thorough) acceptability aside, this sentence is ambiguous with respect to the scope of $\neg$. If the IT was invisible, we would not expect the $\neg > solo$ interpretation.

- Also, note that QPs do not make good ITs. This follows from the topic analysis given that quantificational elements are bad topics in general:

  (19)   *En Joan espera, molts llibres, llegir- los   aquest estiu.
                 the John hopes   many books   to read them this   summer

- Hence, a parenthetical analysis is empirically inadequate.

- Note that we are not dealing with hanging topics either. First, PPs can also be ITs:

  (20)   a.   Proposo, d'aquestes pomes, fer-   ne   una bona melmelada.
                     propose of these   apples to make of it a   good jam
                     I propose to make a great jam out of these apples.   (*Catalan*)
             b.   Hemos   propuesto, con   estas manzanas, hacer   una compota.
                     we have proposed   with these apples   to make a   jam
                     We have proposed to make a jam with these apples.   (*Spanish*)

- Second, ITs are derived by movement as suggested by the following ungrammatical sentence:

  (21)   *Propuse,   el cordero, ir   a ver   a mi madre antes   de cocinarlo.
                 proposed (I) the lamb   to go to to see to my mother before of to cook.it
                 I proposed to go and see my mother before cooking the lamb.   (*Spanish*)

2.3 Conditions on the matrix V

- We have treated control verbs as a homogeneous group. Do all of them accept ITs?

- *Non-stance* (factive, non-asserted) predicates (Cattell, 1978; Etxepare, 1996) do not:

  (22)   ??Juan mencionó, su   coche, haberlo   aparcado en zona verde.
               john mentioned his car   to have.it parked   in   zone green
               John mentioned to have parked his car at the green zone.   (*Spanish*)

- If the availability of ITs is related to assertive content, the ungrammaticality of (22) follows from the fact that non-stance verbs never introduce assertive content.

3 The analysis

3.1 A previous account: Haegeman (2004)

- Infinitival sentences project until FinP.

- In Romance languages, as opposed to English or Japanese, a topic may be licensed in spec,FinP by means of phi-agreement on Fin.

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[8]We thank Yurena M. Gutiérrez for this observation.

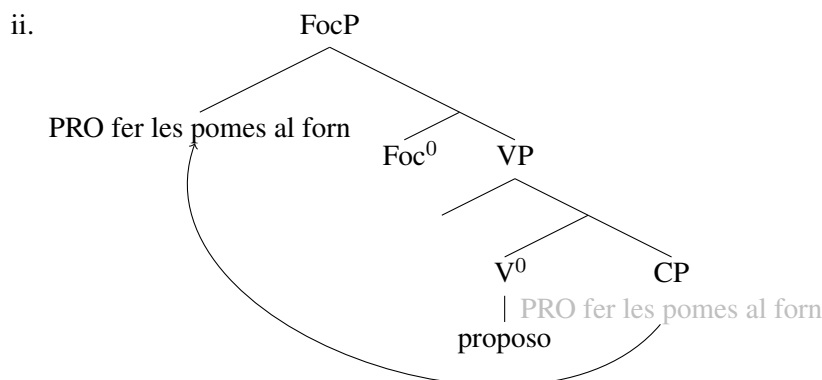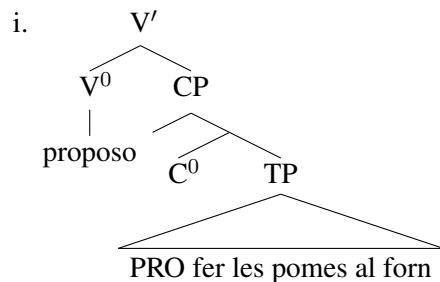- Fin agrees with I in terms of the subject phi-features. Besides,

  "By virtue of the clitic on I, languages with CLLD spell out object phi-features on I. If Fin and I agree in phi-features, then it is a natural step to propose that in Romance CLLD structures Fin agrees with I not only for subject phi-features but also for object phi features."   (Haegeman, 2004, p.84)

- Main objections:

  - Is there a semantic difference between a topic in spec,FinP and in spec,TopP? If not, why should we bother projecting TopP in finite clauses?

  - If topichood is related to speaker's anchoring, and the latter is in turn related to Force, what is the implication for a topic to be in spec,FinP?

  - Haegeman's proposal clearly overgenerates. Under her system, there is no way to rule out (7).
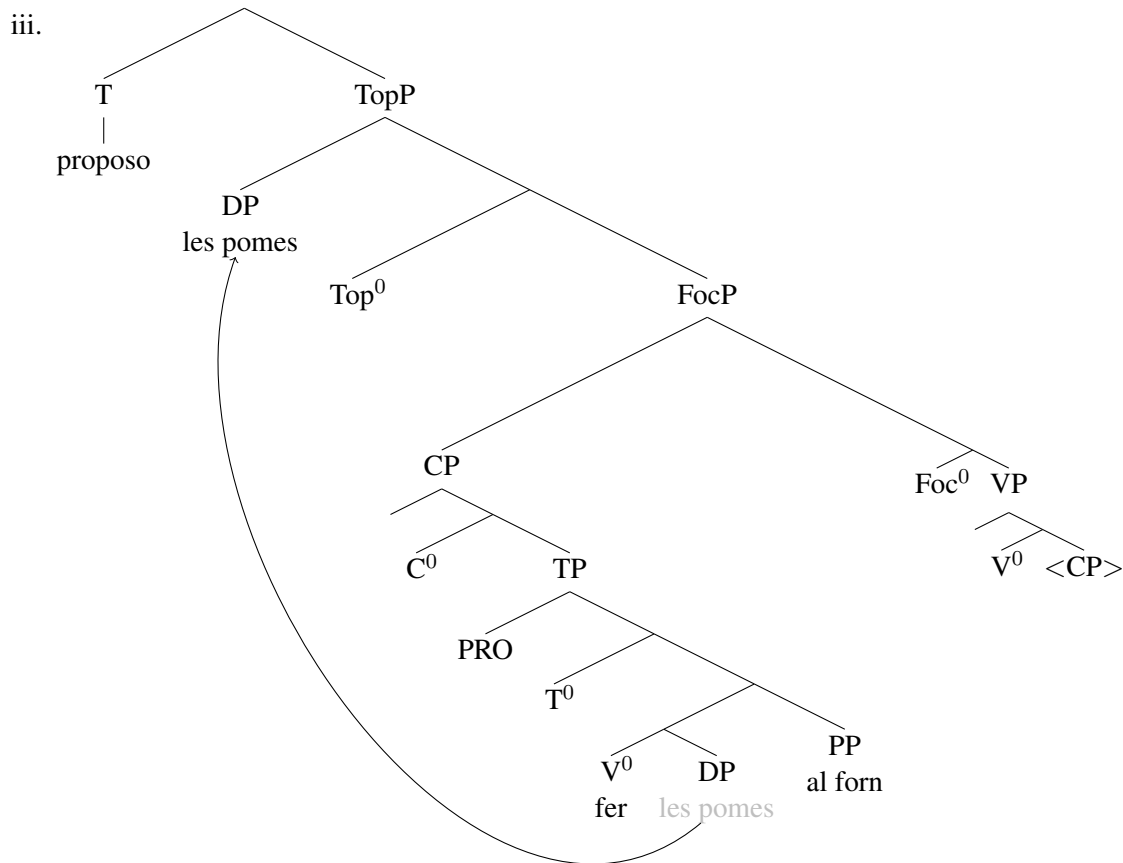
3.2 Our proposal

- Consider the following example...

  (23) Proposo   les pomes fer-   les al   forn.
        propose (I) the apples to make them in the oven

- ...which we analyse as follows:

  i.

  ii.

iii.

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                    T                TopP
                    |
                 proposo
                              DP              FocP
                           les pomes
                                    Top⁰
                                          CP              Foc⁰  VP
                                       C⁰    TP                V⁰  <CP>
                                          PRO
                                             T⁰
                                               V⁰   DP      PP
                                               fer  les pomes  al forn
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3.3 Deriving the properties

- This analysis captures the Focus Condition on ITs (12).

- ITs are incompatible with raising predicates because of an independent ban against TP fronting in the syntax. CPs are not subject to this prohibition.

- **The Sp/Cat asymmetry**: Assuming that (i) the topic position in the middle field is the position for right dislocated elements (Cecchetto, 1999, a.o.), (ii) that right dislocation is the product of aligning the specifier of this topic position to the right (López, 2009a,b) and (iii) that right dislocation is not a natural construction in Spanish (Villalba, 2007), the reason why the Catalan examples are slightly worse is due to the fact that the topical element should be pronounced rightmost in the string.

- **Verum foci incompatibility**: If verum foci (Leonetti & Escandell, 2009) are related to polarity (Batllori & Hernanz, 2009), and polarity is syntactically encoded in the clausal left periphery we expect verum focussed constituents to be ungrammatical in these constructions.

(24) *Juan dice, mucho turista, haber visto en Lloret.
      John says a lot   tourist to have seen in Lloret
      John says he has seen a lot of tourists in Lloret.   (*Spanish*)

- **Postverbal subjects**: Note that the FocP that we are using in our analysis corresponds to the projection where postverbal subjects in Romance move to according to Zubizarreta (1998); Belletti (1998). Therefore we expect postverbal subjects to be incompatible with focussed CPs as the following Catalan examples show:

(25) a. *Va   proposar, les pomes, en Joan, fer-   les   al   forn.
          PAST propose   the apples the John to make them in the oven

       b. ??Va   proposar, en Joan, les pomes, fer-   les   al   forn.
             PAST propose the John the apples to make them in the oven

4 Further research

- Even though our analysis raises interesting issues, some questions still remain highly dubious.

  - **Movement of the CP**. If this operation is independent of topicalisation (and there is no reason to think otherwise) then we predict that the following sentences have different syntactic representations:

  (26)   a.   Proposo [$_{CP}$ cantar la Traviata].
            b.   Proposo [$_{CP}$ cantar la Traviata afònica]$_i$ t$_i$.

  - In particular, we must stipulate that in (26-b) the CP occupies the specifier of FocP.

  - **Extending the proposal** It is not clear how we can extend our proposal to other cases such as (4).

- Towards a more minimal analysis?

- Suppose that the IT is indeed in the left periphery of the embedded clause (so we can at least more intuitively capture the data in (4)). We obviously need to ban this as a default option: see data in (7). But how could we implement (12)?

- Miyagawa (2010), drawing on data from Uriagereka (1995); Holmberg & Nikanne (2002) proposes that there exists crosslinguistically a functional projection between IP and CP which he calls αP. This αP projects only when required (languages differ as to when they need to project αP).

- One of the contexts where αP projects in Japanese is when a sentence contains a topic and a focus (Miyagawa, 2010, p.82), which looks similar to what we are presenting here.

- Appealing as it may be, trying to apply Miyagawa's proposal to the issue of ITs requires us to make many stipulations (at present), but we will keep working on it ☺

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