NULL SUBJECTS IN BRAZILIAN PORTUGUESE: A CRITIQUE OF TWO POSSIBLE ANALYSES

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This paper discusses two trends in the analysis and explanation of constructions containing null subjects in Brazilian Portuguese that have been competing for the last few years: one involving A-movement of the embedded subject to a position in the matrix clause (Ferreira 2000, 2008, Rodrigues 2004 and Nunes 2008) and another relying on some kind of empty category identification strategy that involves A-bar binding (Modesto 2000a, 2000b, 2004, 2008). Arguments for both types of analyses are evaluated. The paper concludes that there is enough reason to prefer the A-bar binding type of analysis.

1.   Introduction

Several works have showed that null subjects of finite (embedded) clauses in Brazilian Portuguese (BP from now on) are different from null subjects in other Romance languages. They are (statistically) less common (cf. Duarte 1995, 2000), they cannot appear in the same contexts (such as matrix clauses) nor can they have the same referential freedom (cf. Figueiredo-Silva 1994), they are interpreted differently (cf. Negrão and Müller 1996 and Negrão 1997), and they are not related to the pro-drop parameter as devised in Rizzi 1982 (cf. Modesto 2000a, 2000b, Ferreira 2000, 2008).[1] Some researchers have interpreted that such peculiarities described in the works cited above, such as the need for a c-commanding (local) antecedent and their interpretation as bound-variables in VP-ellipsis contexts, were enough to take null subjects of finite clauses in BP to be "controlled" subjects, like null subjects of nonfinite clauses (cf. Ferreira 2000, 2008, and Rodrigues 2004). Following Hornstein 1999, who argues that Control is derived by movement of the controller DP from the embedded clause to its final position, they propose to derive finite null subjects in BP also by movement. The greatest problem with such analyses is that they do not account for the whole data (cf. Modesto 2007 and sections 4.1 and 4.2 below). In particular, they do not account for the fact that finite null subjects in BP are subject-oriented, i.e. the antecedent must be a higher *subject*,

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[1] I will not discuss in detail every characteristic of finite null subjects in BP since they are discussed at length on the works cited.

not a higher *object*. They also do not account for the fact that the choice of antecedent seems to be dependent on the A/A-bar status of the constituent since A-bar moved objects become possible antecedents for null subjects.

These characteristics were explained in Modesto 2004, 2008, by assuming that there is a (Spec) position in BP, which is obligatorily filled by a topic (of sorts). Null subjects are then taken to be ϕPs (in the sense of Holmberg 2005) which get identified by being A-bar bound by such a topic, forming a topic chain. Since subjects are usually closer to the topic position, objects are usually not moved there and, consequently, null subjects are usually bound by a higher subject. Objects may bind null embedded subjects if they are wh-moved, relativized, clefted, etc. In such cases, the object fills the topic position before moving into its final position, explaining the relation between A-bar movement and the possibility of being interpreted as the antecedent of a null embedded subject.

The empirical shortcomings of the movement type of analyses have been challenged in the sense that some authors have claimed that those problems are only apparent. In this paper, I will discuss some theoretical and empirical issues that surround the two types of analyses, including the issue whether movement analyses can really account for all phenomena. I will conclude in favor of the A-bar binding type of analyses. Section 2 presents the two types of analyses in greater detail; section 3 discusses some aspects of the topic-chain analysis and section 4, some aspects of the movement analysis. Section 5 concludes this chapter.

2.   Topic chain formation or finite control

The only possible interpretation of sentence (1) below in an out-of-the-blue context, i.e. the one taking the empty category to be coreferent to Joana's mother, represents the main characteristics of null subjects in BP: they must take the closest c-commanding subject as their antecedent (which obviously implies that they must have an appropriate antecedent in the sentence, making matrix null subject impossible to derive[2]):

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[2] As it is already standard in the literature, the sentences given here and below are to be read under a neutral context, such as the out-of-the-blue context, since null subjects may be created by discourse operations such as topic deletion (cf. Modesto 2000a). These discourse related null subjects do appear in matrix clauses. The null subject referred to in the text is of a different kind (especially if considered under the movement analyses), in the

(1) A Maria$_1$ disse que [a mãe da Joana$_3$]$_2$ acha que *ec*$_{*1/2/*3/*4}$ está grávida.

the Maria said that the mother of.the Joana thinks that is pregnant-FEM

'Maria said that Joana's mother thinks she is pregnant.'

Obviously, the category occupying the null subject position in (1) is different from the one in typical null subject (Romance) languages, which is usually free to refer on its own (leaving aside discourse biases and pragmatic preferences). Its lack of referential freedom (and the fact that it is necessarily interpreted as a variable in contexts of VP ellipsis, among other things) was probably the biggest motives for Ferreira 2000, 2008, and Rodrigues 2004 to analyze the empty category in (1) as a trace of A-movement of the DP *a mãe da Joana* from embedded subject position to the subject position of the higher (intermediate) clause, passing through a theta-position related to the verb *achar* (to think). The analyses presuppose that Agree with the most embedded head T was not able to value the Case feature of the DP *a mãe da Joana*, which can then be attracted to a position in the higher vP (where it receives a second theta-role) and from there to Spec IP of the intermediate clause. This last Agree with intermediate T values the DP's Case feature, which then becomes inactive.

The two analyses, i.e. Ferreira's and Rodrigues', are very similar. They differ with respect to what exactly makes embedded T not able to value the case feature of the embedded subject, or, more precisely in case of Rodrigues' analysis, what makes embedded T able *not* to check the Case feature of the subject. Rodrigues assumes (contra Chomsky 2000 and thereafter) that Agree between a functional head and a DP is not sufficient to value the DP's Case (even if it is φ-complete). To have its Case feature valued, a DP has to move to the specifier position of the functional head with which it Agrees. Moreover, she assumes that V-to-T movement in BP is enough to check the EPP feature of T, therefore, an embedded subject may stay inside vP keeping its Case feature unchecked until it moves to the matrix clause, where it finally values its Case feature. On the other hand, Ferreira assumes that BP developed the possibility of taking a finite T head from the lexicon with an incomplete set of φ-features.

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sense that it may appear in out-of-the-blue contexts. In Modesto 2008, the analysis is exactly that the two types of null subjects (the matrix, discourse related one and the embedded, possible in out-of-the-blue contexts one) are not that different after all: they are both identified by a topic. The difference being that the former is identified by a (possibly null) discourse topic and the latter by what Modesto 2008 calls a grammatical topic: a constituent moved to a topic-like position in a higher clause.

Since only Agree with a complete set of φ-features is able to value the Case of a DP, the argument agreeing with an incomplete-T would be able to move further (for Case reasons).

Both proposals have problems. For the former, it assumes that movement of a subject from Spec vP to Spec TP is greedy: it happens as a last resort because, otherwise, the DP will retain an unvalued Case feature. Such movement, however, is not driven by T or any other head, since T has already valued its own φ-features by Agree and its EPP feature by V-to-T movement. Movement of the subject to Spec TP, in that case, is counter-cyclic and seems dissonant from minimalist precepts: the system would have to keep track of unvalued features yet to be checked, moving them when a suitable head was merged. Moreover, the analysis relies on head-to-head movement, which has been argued not to exist in the syntactic component (cf. Chomsky 2000: 146, fn. 68), not to mention that it is far from clear if BP really presents long (V-to-T) movement of the verb. The differences between BP and European Portuguese (a language in which V-to-T has been argued to happen) with respect to the position of adverbs indicates otherwise.

For the latter analysis, one has to assume that, despite the fact that the inflection on verbs in embedded and matrix contexts are apparently the same, embedded Ts are different from matrix Ts in sentences containing null subjects. In addition, embedded Ts are different from other embedded Ts depending on whether the subject of that clause is null or not. Following recent accepted nomenclature, the head T of clauses containing null subjects must be taken to be *defective* in that it cannot value the Case feature of the subject. Note that, then, defectiveness is circular: null subjects appear when T is defective and T can be said to be defective always a null subject appears.[3] This circularity was also noted by Rodrigues (2004).

It will be unnecessary in our present context to decide which version of the movement analysis of null subjects is best, for they account (and do not account) for nearly identical sets of data. For concreteness, let us take (2) as the derivation of a sentence with a finite null subject according to the movement theory (MT). This particular derivation, in which the

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[3] The problem spills over to the movement theory of Control (MTC) in that even in sentences like (i) below, where the verb is inflected for number and person, one has to assume that T is defective (cf. Modesto, forthcoming, for an alternative view), since the null embedded subject is obligatorily controlled by the matrix object:

(i)   A   mãe   forçou os meninos a   [T_{def} ficarem   em casa].
          The mother forced the boys   PREP   stay-INF-3PL in home
          'Their mother forced the boys to stay at home.'

For a discussion of the implications that inflected infinitives bring onto the MTC, see Modesto (forthcoming).

embedded T is specified only for number, receiving the person specification through a redundancy rule in the morphological component, is proposed by Nunes (2008),[4] who assumes Ferreira's analysis:

(2) $[_{TP} [\text{o João}]_i \, T_{[\, P:3; \, N:sg \,]} \, [_{vP} t_i \, \text{disse} \, [_{CP} \text{que} \, [_{TP} t_i \, T_{[\, N:sg \,]} \, [_{vP} t_i \, \text{comprou um carro novo}]]]]]$[5]

       the João   said   that   bought a car new

The thematic subject of *comprar* (to buy) Agrees with T, valuing its φ-features (i.e. its Number feature, according to Nunes, since T lacks the feature Person, being defective), and is then moved to its Spec position due to the EPP property of T. Because embedded T is defective (by assumption), the Case feature of the DP *o João* remains not valued (i.e. active). The derivation continues until vP is created in the matrix clause. Since there are no DPs in the numeration that could receive the theta-role that the verb *dizer* (to say) must assign, another copy of *o João* is made and re-merged in Spec vP. Then matrix T merges and probes down into the structure for similar features. It finds the DP *o João*, which values its person and number features and ends up moving to T's Spec position. Since matrix T is complete in this case (by assumption), the Case feature of the DP is valued.

Besides the circular definition of defectiveness, noted above, and the lack of morphological evidence for the difference between the two types of Ts, pointed in footnote 4,

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[4] Nunes actually gives the values of the features of both Ts in (2) as "default". He tries to explain the fact that φ-complete and φ-incomplete Ts end up with identical morphological forms. In a sentences like (i), for instance, although, according to Ferreira, embedded T is underspecified (i.e. φ-imcomplete), it is morphologically indistinct from the complete T of the matrix clause (i.e. both have 1st person singular marking). Nunes' solution is to propose the redundancy rule sketched by him in (ii):

(i)   Eu disse que vou   embora.
          I   said that go-1SG away
          'I said that I will leave.'

(ii)   When T is only specified for number (N):
          (a) Add [P:1], if N is valued as SG;
          (b) otherwise, add [P:default].

The solution is problematic in that it assumes that only the first person singular pronoun is actually specified for the feature Number. When the Number feature of T is valued by any other pronoun or DP it gets valued as "default" (for if it got valued as singular, T would get the value 1st for the feature Person in the morphological component). That means either that DPs are not specified for Number in the language or that they have "default" as their Number specification. Both alternatives are rather strange. Nouns (and DPs) are clearly specified for singular or plural and should value the Number feature of T accordingly. Singular may be the default value assigned to items with no Number specification, but "default" should not be itself a value of the Number feature of singular items, which is transferred by Agree to T. The problem of how exactly to characterize the defectiveness of embedded Ts in BP remains.

[5] Here and in other structures below, traces stand for copies for convenience.

the movement analysis of null subjects in BP is a good analysis. It explains all the peculiar characteristics seen in (1) (besides others not mentioned there) in a very simple way: null subjects are not referentially free in BP because the T with which they appear is defective.

The analysis is the mirror image of Borer's 1989 analysis of null subjects in Hebrew (or Figueiredo Silva's 1994, which is a transposition of Borer's analysis to BP). In that case, null subjects could not (co-)refer freely because Agr was anaphoric, forcing null embedded subjects to have an antecedent in the higher clause. Now, in Ferreira 2000, 2008, and Nunes 2008, the restricted interpretative possibilities of null subjects exist because T is defective. Describing the relationship between the antecedent and the null subject as binding or movement (caused either by an anaphoric character or a defectiveness of T) does not change the analysis dramatically, so the two analyses are much alike. In fact, for being similar, they suffer from the same problem[6] and were not assumed for BP by Modesto 2000a for the same reason: they predict that null subjects could be bound by or moved to matrix object positions (unless some extra assumption is made, as we discuss in section 4.1). In fact, that is how the movement analysis of Control works (cf. Hornstein 1999): the embedded DP moves to the closest position available, deriving that most ditransitive verbs are object control verbs (and making the *promise* class of verbs a black sheep, cf. Culicover & Jackendoff 2001, Landau 2003 and Boeckx & Hornstein 2003, 2004, for discussion). BP null subjects, however, cannot usually take matrix objects as their antecedent as predicted by the movement analysis, contrasting with null subjects of nonfinite clauses (cf. Modesto 2007):

(3)   a.   O Pedro$_1$ convenceu a Cilene$_2$ a $ec_{*1/2}$ jogar   futebol.
            the Pedro convinced the Cilene PREP   play-INF soccer
            'Pedro convinced Cilene to play soccer.'
       b.   O Pedro$_1$ convenceu a Cilene$_2$ que $ec_{1/*2}$ joga   futebol.
            the Pedro convinced the Cilene that   play-3SG soccer
            'Pedro convinced Cilene that he plays soccer.'

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[6] Although similar, the anaphoric Agr analysis is not circular: Agr in Hebrew is always anaphoric in that it needs to get an index. If the subject is pro, since pro does not have an index, Agr will get the index of a higher binder; if the subject is non-null, i.e. when it has an index, Agr will get the subject's index.

An alternative analysis that accounts for the data in (3) is pursued by Modesto 2000a, 2000b, 2004, 2008. Modesto 2008, trying to relate null subject characteristics to other peculiar properties of subjects in BP, proposes that there is a functional head F above TP in BP in every clause and that the specifier of that head is necessarily filled by some category. The category occupying that specifier position is interpreted as a kind of *grammatical* topic.[7] That, in fact, characterizes BP as a topic-prominent language (cf. Li and Thompson 1976: 459, Modesto 2004, 2008). That position may be filled by real topics, adverbs, etc. If nothing is in the numeration that can be merged there, some category must be moved to that position from within the structure already formed. Assuming distance to be measurable by c-command, subjects are usually the closest category to the Spec FP position, and so, are usually the ones moved there. Taking BP subjects to be a grammatical topic, Modesto explains several characteristics of BP such as high ergativity, the lack of inverse scope readings, etc. As for null subjects, he assumes that the categories occupying such positions are D-less ϕPs in the sense of Holmberg 2005. According to Holmberg, the head T of partial null subject languages like BP does not contain a D-feature as it would in other Romance null subject languages. It is that D-feature that make ϕPs be interpreted as definite (i.e. referring to an individual or a group) in null subject languages. Since T has no D in languages like BP, ϕPs cannot refer and "must be either bound by a higher DP, or else be interpreted as generic" (p. 555). Modifying Holmberg's theory, Modesto claims that the only way to interpret ϕPs in such languages is to take them to be bound variables (or else as generics). In the case of BP (and Finnish, according to Modesto 2008), subjects usually occupy the grammatical topic position and therefore embedded subjects can be interpreted as bound by them, rendering a binder-variable configuration in the semantic component (cf. the discussion in 3.1 below).

Modesto's analysis explains a curious relation between A-bar movement of the object and the possibility of being interpreted as the antecedent of a null subject. The paradigm in (4) below, contrasting with (3b) above, shows that such a relation exists:

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[7] The qualification is necessary to distinguish them from *semantic* topics, i.e. DPs sitting in this position and other phrases that are base generated in higher Topic positions. While the former may be quantified and non-referential, the latter may not.

(4)   a.   Quem$_2$ que o Feco$_1$ convenceu t$_2$ que e$_{*1/2}$ ganhou na   loteria?

who   that the Feco   convinced   that   won   in.the lottery

'Who did Feco convince that s/he won the lottery?'

b.   O cara$_2$ que o Feco$_1$ convenceu t$_2$ que e$_{*1/2}$ ganhou na loteria já   chegou

the guy   that the Feco convinced   that   won in.the lottery already arrived

'The guy who Feco convinced that he won the lottery already arrived.'

c.   Foi a Dani$_2$ que o Feco$_1$ convenceu t$_2$ que e$_{*1/2}$ ganhou na   loteria

was the Dani   that the Feco convinced   that   won   in.the lottery

'It was Dani that Feco warned that she won the lottery.'

d.   A Dani$_2$, o   Feco$_1$ convenceu t$_2$ que e$_{1/2}$ ganhou na   loteria.

the Dani the Feco convinced   that   won   in.the lottery

'(Speaking of) Dani, Feco convinced her that s/he won the lottery.'

The fact that a matrix object becomes a possible antecedent for a null embedded pronoun in BP when it has been wh-moved, relativized, clefted or topicalized was acknowledged by Rodrigues 2004 (who tries to explain such a relation, cf. the discussion in Modesto 2007 and section 4.2 below) and Ferreira 2008 (who assumes Rodrigues' explanation for those facts). Modesto claims that whenever the object moves, it moves through Spec TopP, forcing the subject to stay in Spec TP. In that Case, the object becomes the only possible binder for the null embedded subject.[8]

        In this section, I briefly presented two different accounts of null subjects in BP and their interpretation. In what follows, I would like to clarify some aspects of the two types of analyses.

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[8] The possible interpretation of (4d) in which the antecedent of the null subject is the matrix subject and not the topicalized object is derived by base generation of the object in a higher topic position and consequent movement of the subject to Spec FP. The relation between movement of the object and the possibility of being interpreted as the antecedent of the null subject is maintained (cf. Modesto 2000a for discussion).

3.   Discussion of the "topic-chain" analysis

3.1   Why variable binding and not just any binding

When going over Modesto's (2004, 2008) analysis, in section 2, I mentioned that Holmberg 2005:555 assumes that when a D-less φP is associated to a D-less T, as in the case of BP and Finnish, the φP "must be either bound by a higher DP, or else be interpreted as generic." What Holmberg does not make explicit is how such "binding" obtains and how it licenses a referential interpretation for the φP since φPs cannot refer when lacking a D-feature. Modesto's modification of Holmberg's theory is to say that, since φPs are just a bunch of φ-features with no D, they can be taken to be part of (or indistinguishable from) any referential category (DP) that contains the same φ-features. In other words, since φPs do not have any characteristic features that would distinguish them from other phrases (such as phonological features for instance) or any functional layer dominating them, they are completely contained by the category that binds them. That fact makes it possible for the computational system to interpret the φP and the binder as a chain. To give an example, consider the derivation of a nonfinite control structure like *John left to irritate Mary* according to the Movement Theory of Control (Hornstein 1999 and subsequent work):

(5)   [$_{TP}$ John [[$_{vP}$ ~~John~~ left] [$_{TP}$ ~~John~~ to [$_{vP}$ ~~John~~ irritate Mary]]]]

The lexical item *John* is merged in Spec vP of the adjunct clause. After T is merged, a copy of *John* is made and merged at the top of that tree. In parallel, matrix vP is formed assembling *v* and *left*. Another copy of *John* is made and merged to that vP, where it receives or checks a second theta-role, understood here as a feature. The two structures are then adjoined (pair-merged) and the resulting structure merges with matrix T. Another copy of *John* is created and merged at the top of the tree. Note that there is no movement *per se*, only applications of the operations Copy and Merge, so the several copies of John are unrelated to each other. At the end of the derivation, another operation like *Form Chain*, proposed by Nunes 1995, must apply in order to delete the lower copies making it possible for the structure to be linearized at the PF interface. Crucially, Form Chain must apply between the higher copy and the copy in

Spec TP of the adjunct clause, although those copies were not related by movement or any other operation, since *John* moved sideward to matrix vP, before moving to the highest position. The question is how does the system know that Form Chain may apply between these two positions? Presumably, the highest copy contains all the (semantic, phonologic and formal) features of the copy in Spec TP of the adjunct plus the theta-role feature acquired in matrix Spec vP and the value of its Case feature. In other words, Form Chain may apply because the lower copy is completely contained in the upper copy (and the latter c-commands the former). That is exactly what is said about the ϕP and a higher subject in BP null subject structures.

Consider any sentence containing a null subject in BP. According to Modesto, the structure will have a ϕP in Spec FP of the embedded clause and a DP in matrix Spec FP. The derivation can be assigned an interpretation by applying *Form Chain* between those two categories. The operation may apply because the ϕP is completely contained in the DP so it is indistinguishable from it (like a copy with fewer features). The result of the operation is similar to what one would have gotten by moving the ϕP from topic to topic position, with the exception that the matrix DP heads two different chains: the topic chain formed with the embedded subject and an A-chain formed with its own copy in matrix Spec TP and Spec vP positions (if the DP was a subject). In such a configuration, the ϕP is interpreted in the semantic component as a variable bound by the higher subject.

Note that binding by any other constituent, a higher object for instance, would not be able to obtain. In order for a higher object to *bind* the ϕP, *Form Chain* would have to apply between them (since there is no other available way in the minimalist program to achieve binding). In that case, the representation obtained would be indistinguishable from one in which the object DP had been moved from the embedded topic position to the matrix object position. Naturally, such operation would be barred from taking place by a number of different principles: last resort, the activation condition, improper movement, etc.

3.2   A digression on simplicity, elegance and naturality

In the description of the two analyses in section 2, I tacitly assumed that empirical coverage was the decisive factor in choosing one of them. That is not obvious and many researchers

disagree on how much empirical support is enough to make an analysis (or a theory) attractive. Many other criteria may be taken into account when comparing analyses (or theories). Researchers who have taken the Minimalist Program seriously evaluate things like simplicity, elegance and naturality as means to compare analyses. Simplicity can be (and is often) taken to be enough reason to conclude that such and such analyses are correct, despite their shortcomings in accounting for all the data. That is a legitimate theoretical posture. One may assume that if an analysis solves most problems, explains much data and goes well with a certain theoretical setting, which is assumed to be true, then it must be correct. The data not accounted for by the analysis must be explained by some other phenomena, either independent or interfering, that we have not been able to discover yet.[9] So far, so good.

When comparing the analyses of null subjects in BP, however, it is not easy to decide whether one is simpler than the other. I have the impression that people often take movement analyses to be inherently simpler without pondering on it. They are not inherently simpler. On closer inspection, those analyses involve A-movement out of a finite clause, something as or even more strange (non-simple, unnatural) than topic-chain formation, irrespectively of how one's analysis will resolve it technically. Movement analyses seem simpler because they look and feel like a minimalist analysis and, therefore, match everything else around them (i.e. the rest of the most widely assumed model in generative grammar nowadays). Therefore, some people end up preferring movement analyses due to aesthetics. This is fine, as long as one does not confuse aesthetics with theoretical simplicity. In a way, then, movement analyses may be said to be more elegant, for they match other analyses (such as control as movement) and because they use trendy apparatus (such as sideward movement) but not for being simpler. That is a different kind of elegance.

Supposing movement analyses of null subjects to be truly simpler, one must still ask oneself if that is enough to conclude they must be correct, despite their empirical shortcomings. Here (and elsewhere), I have taken empirical coverage to be the decisive factor, which is also a legitimate posture.

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[9] That seems to be the reasoning of Boecks and Hornstein 2003, 2004, 2006a, 2006b when arguing against the critics made to the Movement Theory of Control by Culicover and Jackendoff 2001, 2006 and Landau 2003, 2006, 2007.

4.   Discussion of the "movement" analyses

4.1   Additional assumptions of the MT: subject orientation

In section 2 above, it has been observed that the MT of null subjects predicts that embedded subjects could move into matrix object positions, deriving an interpretation that is not available in BP. In order to account for that impossibility, proponents of movement analyses have argued that the complement clause of bitransitive verbs like *convencer* (to convince), *avisar* (to warn), *informar* (to inform), *alertar* (to alert), *prevenir* (to forewarn) and *instruir* (to instruct), among others, is in fact an adjunct to vP, as shown in the structure below.[10]

(6)
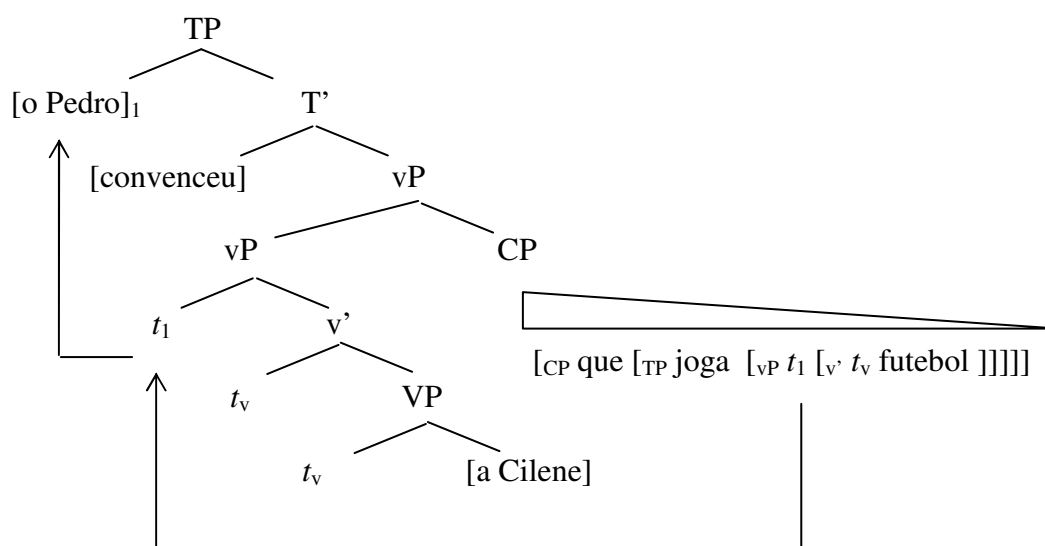
Lack of c-command between the matrix object position and the embedded subject position would then explain the impossibility of taking matrix objects as the antecedent of null embedded subjects in sentences like (3b), repeated below. If the complement clause is an adjunct in (3b), even if the DP *Cilene* moved sideward from embedded subject position to matrix object position, Form Chain would not be able to apply between the two copies because the lack of c-command and the structure would not be able to be linearized.

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[10] The structure in (6) shows the derivation of sentence (3b) according to Rodrigues 2004 in which the embedded subject is moved to matrix thematic subject position directly from the embedded vP. In Ferreira's (2000, 2008) analysis, it would move from embedded Spec TP, but that is orthogonal to the present discussion.

(3) a. O Pedro$_1$ convenceu a   Cilene$_2$ a $ec_{*1/2}$ jogar   futebol.
the Pedro convinced the Cilene PREP   play-INF soccer
'Pedro convinced Cilene to play soccer.'

   b. O Pedro$_1$ convenceu a   Cilene$_2$ que $ec_{1/*2}$ joga   futebol.
the Pedro convinced the Cilene that   play-3SG soccer
'Pedro convinced Cilene that he plays soccer.'

Indeed, the assumption that the complement clause is an adjunct would explain subject orientation of null subjects. However, can it be sustained? Firstly, one has to discuss why such complements would (or should) be merged in the structure as adjuncts, and how θ-roles would be attributed in such a structure. Without that discussion, it is not possible to evaluate whether the proposal can be seriously entertained. I can imagine that some story can be told about verbs taking two internal arguments and about how the DP and the verb have to be merged before the complement clause merges with the resulting structure (for some reason), so that adjunction of the complement clause is in fact the best solution in those cases, according to minimalist reasoning. Even supposing something like that to be the case, the contrast between (3a) and (3b) becomes very suspicious, under the adjunction hypothesis. It is clear from the sentences in (3) that one would have to assume that the complement clause of a verb like *convencer* is an adjunct just in case it is finite. If however the clause is nonfinite, it could not be an adjunct since, according to the movement theory of control,[11] the null embedded subject is moved to matrix object position in that case (which would not be able to happen if the nonfinite clause was an adjunct to vP). Therefore, whatever story one imagines to explain why an argument of the verb is adjoined, that story would be valid only for finite complements.

It must be stressed that I am not arguing that finite and nonfinite control should behave similarly just because null subjects are analyzed on a par with obligatorily controlled PRO in Hornstein's (1999) system, as remarked by Nunes 2008. I am saying that if BP adjoins complement clauses to vP, there must be a reason for it and, whatever that reason may be, it should apply only to finite complements but not to nonfinite ones (in order to explain the

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[11] I will not consider the (almost nonsensical) possibility that one would subscribe to the MT of finite subjects but not to the movement theory of control.

empirical data). Proponents of the adjunction analyses do not offer any explanation for this peculiar behavior of BP and if they did, they would still have to account for why this very reason becomes innocuous when the complement clause is nonfinite. Additionally, the mechanism of assignment/checking of theta-role of the complement clause in adjunct position would have to be spelled out. There seems to be no other circumstance in which a theta-role is attributed to an adjunct in BP. Therefore, to solve the subject-orientation problem, proponents of the movement analyses do not have to make one additional assumption (that finite clausal complements are adjoined) but several (that nonfinite clausal complements are not adjoined; that theta-roles are somehow assigned in that configuration; etc.). All of these assumptions would require at least a tentative explanation.

In view of these considerations, it seems fair to conclude that the assumption that finite clausal complements of verbs like *convencer* are adjoined to vP is not reasonable, or at least, that such an assumption would complicate the analysis so much that the analysis would become theoretically uninteresting within a minimalist setting.

As for empirical arguments, the case for adjunction does not look any more promising. The arguments given in favor of adjunction of the complement clause are: a) island effects when extracting from the clausal complement (cf. Rodrigues 2004) and b) the possibility of an epithet in embedded subject position to be coreferent to the matrix object (cf. Ferreira 2000). Both arguments are very weak. The first one rests on a supposed degradation of sentences like (7a, b) and a supposed contrast between (7c) and (7d). To my ears, however, (7a, b) are both fine, and in both (7c, d), the intended interpretation is harder to obtain than the one in which the adjunct modifies the matrix verb. Moreover, in both cases, the second interpretation is not impossible.

(7) a. Quem$_1$ (que) o João convenceu a Maria [que t_1 sabe falar   inglês]?
         who   that the João convinced the Maria that   knows to.speak English
         'Who did João convince Maria that knows how to speak English?'
     b. Do que$_1$ (que) o   João convenceu a   Maria [que o   Pedro precisa t_1]?
         of what   that the João convinced the Maria   that the Pedro needs
         'What did João convince Maria that Pedro needs?'

c　　?Quando₁ a　Dani convenceu a　Maria [que viajou　t₁] ?

　　　when　the Dani convinced the Maria　that travelled

　　　'When did Dani convince Maria that she travelled?'

d.　　?Quando₁ a　Dani disse [que viajou　t₁] ?

　　　when　　the Dani said　that travelled

　　　'When did Dani say that she travelled?'

The point here is that, the complement clause being an adjunct only in (7c), there should be a strong contrast between (7c) and (7d). However, the contrast does not seem to exist. Since assuming that the complement of verbs like *dizer* (to say) is also an adjunct would be very far-fetched, the most likely conclusion is that clausal complements of verbs like *convencer* is not an adjunct.

　　　Judgments seem clearer when the adjunct is "why". Again, both sentences in (8) are equally bad with the intended interpretation. What these data show is that the preference in interpreting the adjunct as modifying the higher clause is more likely related to processing preferences than to the adjunct/complement status of the embedded clause.

(8)　　a　　?*Por que₁ a　Dani convenceu a　Maria [que viajou　t₁] ?

　　　　why　　the Dani convinced the Maria　that travelled

　　　　'Why did Dani convince Maria that she travelled?'

　　b.　　?*Por que₁ a　Dani disse [que viajou　t₁] ?

　　　　why　　the Dani said　that travelled

　　　　'Why did Dani say that she travelled?'

The second argument involves the grammaticality of sentence (9). More specifically, it is argued that the possible coreference between the epithet and the matrix object, contrasting with the impossibility of coreference between the matrix subject and the epithet, shows that the object position does not c-command the subject of the complement clause.

(9)   O João$_1$ convenceu a   Maria$_2$ [que [a   idiota]$_{*1/2}$ deveria assaltar um banco]

          the João convinced the Maria   that the idiot   should rob   a   bank

          'João convinced Maria that she should rob a bank.'

However, as argued by Modesto (2007), the impossibility of taking the matrix subject as the antecedent of the epithet may be just a consequence of pragmatics. In (10a), where pragmatics favors the interpretation in which the matrix subject is the antecedent, that interpretation is indeed possible. In any case, if the complement clause were an adjunct and the matrix object position did not c-command it, sentence (10b) should be possible, which is obviously false.

(10)   a.   O Maluf$_1$ convenceu o Diogo$_2$ que o desgraçado$_{1/??2/3}$ era o melhor candidato.

               the Maluf convinced the Diogo that the bastard   was the best   candidate

               'Maluf convinced Diogo that the bastard was the best candidate.'

    b.   *A Dani$_1$ convenceu ele$_2$ que o   Diogo$_2$ estava errado.

               the Dani convinced him that the Diogo was   wrong

               '*Dani convinced him that Diogo was wrong.'

The conclusion is that the additional assumption needed by movement analyses to explain the subject-orientation of null subjects in BP (i.e. that clausal complements are adjuncts) cannot be maintained and, therefore, movement analyses do not explain a crucial feature of the interpretation of null subjects. The assumptions needed to explain it would make the analysis very complicated and inelegant.

4.1.1 Dummy Prepositions

Nunes (2008) presents new and exciting data related to the optional use of a dummy preposition preceding the clausal complements of verbs of the *convencer* class, which are related to the adjunct status of the complements of such verbs. He claims that the dummy preposition *de* is used as an inherent case marker when the clause is really a complement, in contrast to sentences like (3b) in which the subordinate clause would be an adjunct. Although Nunes does not address the issues brought up above as for why BP would have such adjunction structures and how the grammatical relations are established in them, the empirical

facts deserve some discussion. Although I will not be able to discuss the data in detail, due to size constraints, it is plain to see (and the reader is invited to construct the relevant examples) that, for Nunes, the presence of *de* should eliminate the island effects argued by Rodrigues to exist; make the coreference between a matrix object and an epithet in the clausal complement impossible; and, crucially, make null subjects be able to take matrix objects as their antecedents. In fact, Nunes predicts that when the inherent case marker is inserted, the null subject should take the matrix object as its only possible antecedent. Nunes' judgment for a sentence like (11) however are that it can be interpreted with the null subject taking either the object or the subject as its antecedent:

(11) [O João]$_1$ convenceu [a   Maria]$_2$ **de** que *ec*$_{1/2}$ tinha que sair
      the João convinced the Maria of that   had that leave
      'João convinced Maria that he/she had to leave.'

To explain the ambiguity in (11), Nunes uses the fact that the preposition *de* is sometimes inserted in contexts where there is no grammatical reason for it, as a hypercorrection process and, because of that, (11) is actually ambiguous between a structure where *de* is an inherent case marker and the clausal complement is in fact a complement, and a structure in which the clausal complement is an adjunct and the preposition *de* has been inserted due to hypercorrection.

Besides data disagreement (to be discussed below), perhaps the most important thing to note here is that hypercorrection is a *production* mechanism and as such it should interfere minimally with our *perception* of sentences. Although speakers could in principal insert the preposition by hypercorrection when producing the sentence (11) when the matrix subject is the antecedent, Nunes analysis should lead one to expect that no, or very few, speakers would interpret (11) with the meaning where the matrix subject is the antecedent of the null pronoun (because hypercorrection should not play a role when understanding sentences). That is not the case. In fact, coreference between the null subject and the matrix object is debatable even in (11), which presents the preposition *de*. Speakers seem less sure about the reference of the null subject when *de* is present (maybe because the use of the preposition belongs more properly to the written variety). The modality introduced by the auxiliary *ter* (to have) also seems to have

an effect on judgments. Sentences such as the ones in (12) are more easily interpreted by informants and, in every case, the matrix subject is interpreted as the only possible antecedent for the null subject, in spite of the presence of the preposition *de*:

(12) a. O Pedro$_1$ convenceu a   Cilene$_2$ **de** que *ec*$_{1/*2}$ sabe   inglês.
          the Pedro convinced the Cilene of that   knows-3sg English
          'Pedro convinced Cilene that he knows English.'

     b. O Pedro$_1$ convenceu a   Cilene$_2$ **de** que *ec*$_{1/*2}$ vai   viajar.
          the Pedro convinced the Cilene of that   goes to.travel
          'Pedro convinced Cilene that he is going to travel.'

In any case, the crucial data from Nunes to be discussed would be the cases in which wh-movement from the clausal complement assures that the preposition actually signals a complement structure. Take the paradigm in (13). According to Nunes (and Rodrigues 2004), there is a contrast between (13a, b). For those authors, (13a) receives two question marks while (13b) is perfect. The lack of island effects in (13b) is due to the presence of the dummy preposition, which indicates that the clausal complement is not an adjunct. In that case, the preposition cannot be product of hypercorrection, otherwise island effects would ensue. The prediction, then, is that (13c) should be ungrammatical because the matrix object actually c-commands the epithet in embedded subject position. Although I agree that there is a slight contrast between (13a, b), sentence (13c) seems perfect to me.

(13) a. Como$_1$ o João convenceu a Maria [que o Pedro tinha que se   vestir
          how   the João convinced the Maria that the Pedro had   that REFL dress
          para a   festa t_1]?
          for   the party
          'How did João convince Mary that Pedro had to dress for the party?'

b. $Como_1$ o   João convenceu a   Maria de [que o   Pedro tinha que se   vestir

           how   the João convinced the Maria of   that the Pedro had   that REFL dress

           para a   festa t_1]?

           for   the party

           'How did João convince Mary that Pedro had to dress for the party?'

c. $Como_2$ o   João   convenceu [a   Maria]$_1$ de [que [a   idiota]$_1$ devia se   vestir

           how   the João convinced   the Maria   of   that   the idiot   should REFL dress

           para a   festa t_2]?

           for   the party

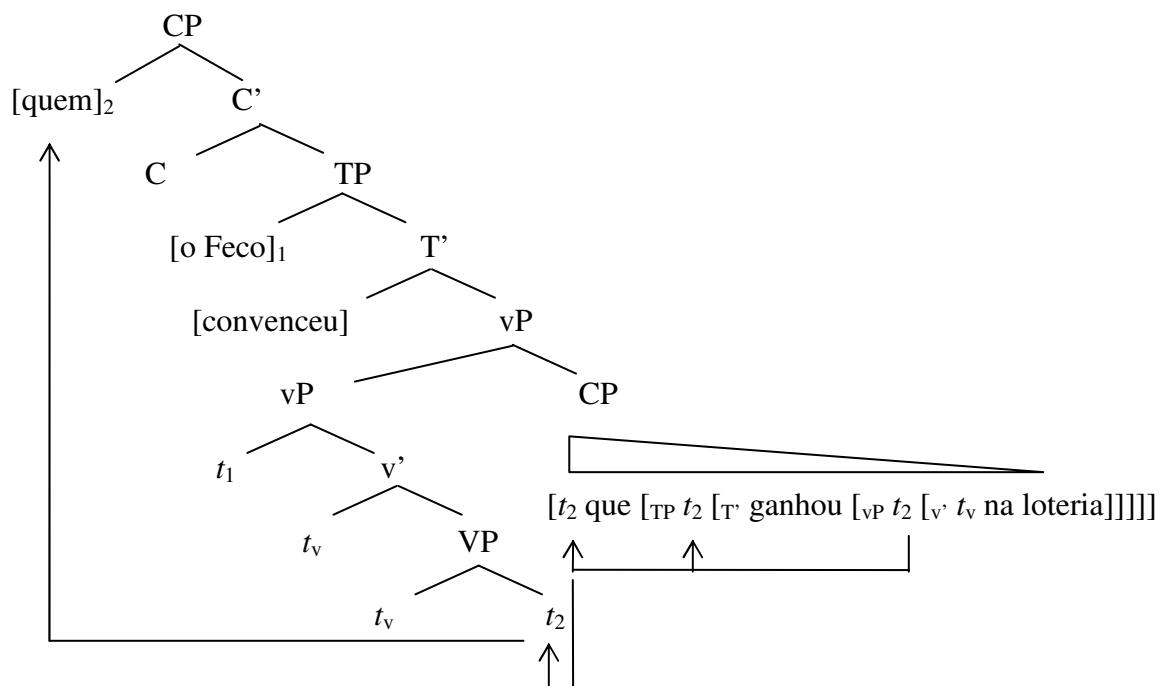   'How did João convince Maria that she should dress for the party?'

In conclusion, although the presence or absence of dummy prepositions may alter some judgments for poorly understood reasons, Nunes assumption that the presence of the preposition marks when the clausal complement is not an adjunct makes wrong predictions and should not be taken as an argument for the claim that clausal complements usually are adjuncts to vP.

4.2   Additional assumptions of the MT: A-bar movement sensitivity

In section 2 above, I demonstrated that, in BP, a matrix object may be taken to be the antecedent of a null embedded subject once it is wh-moved, relativized, clefted or topicalized. Rodrigues 2004 tries to account for that fact arguing that such structures resemble the structures of parasitic gaps: although the matrix object does not c-command the embedded subject, an embedded subject may move to matrix object position if it will ultimately move to a c-commanding (A-bar) position later. Ferreira 2008 assumes her proposal. As discussed in Modesto 2007, however, the parasitic gap parallelism does not explain or account for the data. Consider the derivation in (14) of a sentence like (4a), repeated here:

(4)   a. $Quem_2$ (que) o $Feco_1$ convenceu t_2 que $e_{*1/2}$ ganhou na   loteria?

            who   that the Feco   convinced   that   won   in.the lottery

            'Who did Feco convince that s/he won the lottery?'

(14)

```
                    CP
           ┌─────────┴─────────┐
      [quem]₂              C'
        ↑           ┌───────┴───────┐
        │           C              TP
        │       [o Feco]₁      ┌────┴────┐
        │      [convenceu]    T'
        │                ┌─────┴─────┐
        │               vP          vP
        │          ┌─────┴─────┐
        │         vP          CP
        │     ┌────┴────┐
        │    t₁        v'
        │         ┌─────┴─────┐
        │        tᵥ          VP
        │              ┌─────┴─────┐
        │             tᵥ          t₂
        └────────────────────────────
```

$[t_2$ que $[_{TP}\ t_2\ [_{T'}$ ganhou $[_{vP}\ t_2\ [_{v'}\ t_v$ na loteria$]]]]]$

Rodrigues' reasoning is the following: the wh-phrase is moved to Spec CP in the embedded clause. This move is necessary, in her proposal, in order for the wh-phrase to be extracted out of a phase (the embedded CP). Moving to Spec CP, the wh-phrase leaves a variable in Spec TP position. When matrix VP is being formed (supposedly, after the CP complement is already formed), either a DP is taken from the numeration and merged as the complement of the matrix verb, as in a "normal" subject (finite) control derivation, as the one in (6) above, or merge-over-move is ignored and the wh-phrase moves sideward from Spec CP to the complement position of the matrix verb. The latter option must be taken. According to Rodrigues, if merge-over-move is obeyed and *Feco* is merged as the complement of the matrix verb, a copy of the wh-phrase will be the only possible DP able to check the θ-role attributed by matrix *v*. However, moving the wh-phrase to subject position will cause a principle C violation since the variable in Spec TP will be A-bound by one of its copies. So, the wh-phrase re-merges in matrix complement position, *Feco* assumes the subject position and later the wh-phrase is moved to Spec CP in the matrix clause. It seems to be the fact that the wh-phrases move to Spec CP in the embedded clause that creates the parasitic gap effect. In fact, supposing the wh-phrase did not move to embedded Spec CP, one would derive the sentence

in (15). Since (15) must be indeed possible to derive, one must assume that what differentiates the two derivations is whether embedded C is taken from the lexicon with an EPP feature or not. However, as we have just seen, the movement of the null embedded subject is what makes it possible for it to move out of its phase. The conclusion is that sentence (15) cannot be derived in Rodrigues's system.

(15) Quem$_1$ t_1 convenceu o   Feco$_2$ que t_1 ganhou na   loteria ?
      who   convinced the Feco that won   in.the lottery
      'Who convinced Feco that he won the lottery?'

There are other problems with (14). Firstly, the wh-phrase seems to be able to check case twice: once in the embedded clause and another time in the matrix clause. Rodrigues, in fact, assumes that that is exactly what happens. She assumes that a Case feature becomes re-activated when a copy leaves a phase. There is not a lot of evidence in favor of that assumption, however. Secondly, even if the strategy of adding an EPP feature to embedded C is able to derive sentences like (4a) with the correct interpretation, Rodrigues' parallelism with parasitic gaps is not able to explain how to prevent the derivation of the impossible reading of (4a). Taking the same numeration, in its version without the EPP on the embedded C, a sentence can be construed as follows: start assembling the embedded CP using *Feco* as the thematic subject of the verb *ganhar* (to win). After that CP is formed, merge the matrix verb and the wh-phrase as its complement and merge v to the resulting VP. Then, make a copy of the DP *Feco* from the already formed CP and merge it (sideward) as the specifier of matrix vP. Adjoin vP and CP. Merge T. Move Feco to the matrix Spec TP position. Merge C. Move the wh-object to Spec CP position. That completely licit derivation should derive the impossible sentence (16):

(16) *Quem$_2$ o   Feco$_1$ convenceu t_2 que t_1 ganhou na   loteria.
       who   the Feco convinced   that won   in.the. lottery
      'Who did Feco convince that he won the lottery.'

In other words, even accepting that the embedded CP is an adjunct and all other assumptions Rodrigues makes, the parasitic gap parallelism cannot derive the fact that when a matrix object is A-bar moved, it becomes the only possible antecedent for the null embedded subject. This is so because nothing in her system prevents derivation (16) from happening.

In Ferreira's system, things are slightly different. Since he assumes that embedded T may be defective, the double case-checking problem ceases to exist. However, since the embedded CP is not a phase for Ferreira,[12] movement to Spec CP of the embedded clause becomes harder to explain. However, if that movement does not take place, one looses the explanation of why merge-over-move may be neglected in (14), so Ferreira cannot simply assume Rodrigues' explanation without provisos and, therefore, cannot explain the data in (4) either.

Technical details aside, it is important to note that the parasitic-gap parallelism does not answer the primary question of why should there be a relation between being A-bar moved and becoming a possible antecedent for the null subject. In Rodrigues' parasitic gap explanation, the relation seems accidental. The topic chain analysis, on the other hand, explains why that should be so. Even more importantly, the parasitic gap parallelism does not account for the data: it is unable to derive sentence (15), which is a possible sentence; and it cannot prevent the derivation of a sentence like (16) which has an impossible interpretation. The topic chain analysis does account for all those cases.

4.3   Phases

In the last subsection, it was commented that an important difference between Rodrigues' and Ferreira's analysis is that the finite embedded clause in which the null subject appears is a phase in the former but not in the latter. The problem for Rodrigues' analysis is obvious since she has to devise some kind of mechanism like movement of the embedded subject to the edge of the phase in order to be able to move it out of the embedded clause. However, there is no reason for such a movement besides making it possible for the subject to escape the phase, so her system diverges from minimalist directives.

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[12] Ferreira (2000:55) suggests that if C selects a ϕ-incomplete T, it does not define a strong phase, thus allowing A-movement from within its TP complement.

Ferreira's assumption that the embedded finite clause is not a phase is also not devoid of problems. Take a sentence like (17) below. Within traditional assumptions, the most likely analysis is that the unaccusative verb *parecer* (to seem) takes the embedded clause as its argument and that clause is a phase, therefore, inaccessible for probing by matrix T. When matrix T probes its domain to value its uninterpretable ϕ-features, it finds no suitable goal and assumes default values for person and number (third person singular). A null expletive is then inserted in its specifier position to satisfy its EPP property. Crucially, matrix T does not Agree with the expletive since it is not in its c-command domain.

(17)   Parece que as meninas saíram.
        seems that the girls   left
        'It seems that the girls left.'

Consider now what happens in Ferreira's system. The embedded clause may not be a phase, i.e. when a defective T is taken from the lexicon.[13] In that case, when matrix T probes its domain, it should find the DP *as meninas* (the girls), which would be still accessible, and value its features with third person plural. If an expletive is in the lexical array, the impossible sentence (18) should be derived:[14]

(18)   *Parecem que as meninas saíram.
         seem-PL that the girls   left
        'It seems that the girls left.'

Therefore, the assumption that embedded finite clauses in BP may not be phases leads to wrong predictions.

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[13] Naturally, Ts marked for plural may be defective in Ferreira's system, otherwise there would be no way to derive sentences like (i):
(i)   As meninas disseram que saíram.
         the girls   said   that left
         'The girls said that they left.'
[14] The derivation discussed in the text would proceed much similarly to the derivation of (i) below, which most likely also contains an expletive that does not enter into Agree with T:
(i)   Chegaram umas cartas.
         arrived   some letters
         'There arrived some letters.'

4.4   Hyperraising

One empirical advantage that has been raised for the MT of null subjects involves what Ferreira 2008 calls hyperraising (after Ura 1994). The argument goes as follows: in sentences like (19) below, which are acceptable in BP, the matrix subject could not have been directly inserted in the matrix clause, since it would violate the Theta Criterion.

(19)   João parece que comprou um carro novo.
        João seems that bought   a   car   new
        'João seems to have bought a new car.'

To explain the grammaticality of such sentences, then, one would have to argue that *João* in (14) is actually a topic, related to the subject position of the embedded clause, and followed by a null expletive in the subject position of the matrix clause; or, if that turns out to be wrong, one would have to accept that the subject is raised from the embedded clause to its matrix position. Ferreira 2000, 2008, argues that the topic nature of *João* in (19) cannot be maintained because that DP may be replaced by a weak pronominal (20a) or a bare quantifier (20b). Since those elements cannot be topicalized, as shown in (21), according to Ferreira, sentence (19) provides strong evidence in favor of the MT. Showing that raising is possible out of finite clauses in BP, it supports the claim that all null subjects are deleted copies produced by movement.

(20)   a.   Cê   parece que está doente.
               you$_{weak}$ seem   that is   sick
               'You seem to be sick.'
        b.   Alguém parece que está doente.
               someone seem   that is   sick
               'Someone seems to be sick.'

(21) a.   * Cê,   João me   disse que vai   ser aprovada.

                  you_{weak} João to.me told   that will be   approved-FEM

                  'You, João told me that you   will be approved.'

       b.   * Alguém, João me disse que   seria   aprovado.

                  someone João me   told   that   would.be approved-FEM

                  '*Someone, João told me that someone would be approved.'

Before taking Ferreira's conclusion for granted, one needs to acknowledge explicitly that the analysis of (19) involving a topic must be maintained, irrespectively of the existence of hyperraising in BP. This is because, for most Brazilian and all European speakers, when the higher DP is plural, the verb shows no agreement inflection (see (22a)). In that case, the higher "subject" should be analyzed as a topic followed by a null expletive. Sentences (22b, c), which are possible in some registers of BP, on the other hand, could be analyzed as hyperraising structures, since the verb and the higher subject agree.

(22) a.   As meninas parece   que compraram um carro novo.

                the girls   seem-3SG that bought   a   car   new

                'The girls seem to be have bought a new car.'

       b.   As meninas parecem   que compraram um carro novo.

                the girls   seem-3PL that bought   a   car   new

                'The girls seem to be have bought a new car.'

       c.   Cês   parecem   que compraram um carro novo.

                you_{weak}-PL seem-3SG that bought   a   car   new

                'You seem to be have bought a new car.'

Still, as discussed in Modesto 2008, the higher subjects of the constructions discussed by Ferreira may still be taken to be topics despite the facts shown in (20-21) and (22b, c). In Modesto's analysis, the Spec FP position is a *grammatical* topic position (what Martins and Nunes 2005 call the *unmarked* topic position), and that position may host weak pronouns and bare quantifiers (else, sentences such as (23) would not be derivable):

(23) a. Cê   disse que tá doente.
          you$_{weak}$ said that is sick
          'You said that you are sick.'
      b. Alguém disse que tá doente.
          someone said that is sick
          'Someone said that he is sick.'

In that case, it is possible to analyze the higher subjects in (22b, c) as being merged in matrix Spec TP and then being moved to the unmarked topic position (Spec FP).[15] From that position, the matrix subject would be able to bind a ϕP in embedded subject position. Therefore, if one assumes Modesto's topic-prominence analysis of null subjects, the facts in (20-21) do not immediately lead to the conclusion that there is hyperraising in BP.

A similar argument in favor of the hyperraising analysis is constructed by Martins and Nunes (2005). They claim that sentences such as (24a) retain their idiomatic reading while sentences like (24b) can only be interpreted literally. That would imply that the DP, which appears in the matrix clause, could not be a topic, since topics do not participate in idiom chunks, as shown in (24b).

(24) a. A vaca parece que foi   pro   brejo.
          the cow seems that went to.the swamp
          'Things went wrong.'
      b. A vaca, o João disse que foi   pro   brejo.
          the cow the João said that went to.the swamp
          'João said that the cow went to the swamp.'

Again, although the facts are really as shown in (24), things cannot be that simple. European Portuguese (EP) is a language in which Martins and Nunes assume there to be no hyperraising and, therefore, assume that the DP that appears in the matrix clause in raising structures with finite complements are topics. The prediction, then, seems to be that sentences like (25) in EP

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[15] That is also the analysis of Martins and Nunes 2005 for similar sentences containing an overt subject in the embedded clause.

should not retain the idiomatic reading. According to Pilar Barbosa (p.c.), the prediction is not borne out. In fact, a simple *google* search reveals that (25) is indeed used idiomatically:

(20) A   montanha parece que pariu   um rato.
      the mountain seems that gave.birth.to a   mouse
      'What was expected did not come about.'

The conclusion to which one seems to be forced is that both in BP and EP, there is an unmarked topic position that allows idiom chunks to appear retaining their idiomatic interpretation. That is a different position than the one seen in (24b), where marked topics appear.

The conclusion of the discussion so far is that there is no real strong argument to abandon the analysis of the matrix clause DP in sentences like (14) as topics, which needs to be maintained independently for EP. There is no undisputable argument in favor of hyperraising either. However, there is also no real strong argument indicating that those DPs are in fact topics. In what follows, then, I will pursue an alternative explanation for the data in (22b, c): that the DP in the matrix clause is in fact the thematic subject of the verb *parecer*, understood as a transitive verb with a meaning close to the verb *to resemble* or *to look like*.

Firstly and foremost, it has to be said that whatever the hyperraising data shows must be taken with some skepticism for it is based on the behavior of one and only one verb: *parecer*. No other raising verb in BP allows for similar constructions (cf. Duarte and Henriques 2005). That seems to imply that structures like (19) are possible because of some characteristic of *parecer* (to seem) and not because hyperraising is a possible structure in the grammar of BP. Clearly, if the latter were true, other raising predicates would show the same behavior.

Ferreira 2008 explicitly says that his analysis is falsified if one finds a language in which null subjects of the type attested in BP are found but hyperraising is not. Finnish seems to be such a language. Null subjects in Finnish have the same interpretative limitations and behave exactly as null subjects in BP (cf. Rodrigues 2004, Modesto 2008). Finnish, however, does not allow for hyperraising structures. When the subject is in the matrix clause, the

complement of a raising verb like *näkyä* (to seem) must contain a nonfinite (participle) form of the verb; a finite complement is ungrammatical:

(26) a. Pekka näkyy ansaitsevan paljon rahaa pörssissä.[16]

            Pekka seems gain-PART-N much money stock.exchange-INE

            'Pekka seems to have earned a lot of money in the stock exchange.'

    b. *Pekka näkyy että ansaitsee paljon rahaa pörssissä

            Pekka seems that gained much money stock.exchange-INE

            '*Pekka seems that earned a lot of money in the stock exchange.'

In view of these facts, let us entertain the possibility that "hyperraising" facts are created in BP due to a peculiarity of the verb *parecer*. That the verb *parecer* has a transitive use is clear from the sentences in (27).

(27) a. Você parece um fantasma.

            you seem a ghost

            'You look like a ghost.'

    b. O Pedro parece o pai dele.

            the Pedro seem the father of.him

            'Pedro resembles his father.'

Supposing that "hyperraising" sentences are actually derived using a verb that possesses a different diathesis than raising verbs, one should expect the interpretation of those sentences to depart in some situations. That is exactly what happens. Take the sentences in (28). In a situation in which the host of a party is anxious about the arrival of the guests, it is possible to say (28a) or (28c) but not (28b). The oddness of (28b) seems to come from the fact that it is interpreted as saying that *nobody is an x such that x looks like x has not arrived yet*, which is nonsensical.

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[16] In (26), PART stands for participle and INE stands for inessive case. The final *n* in the verb form in (26a) is a marker for this kind of structures. I thank Hannu Reime (p.c.) for giving me those examples.

(28) a.   Parece que ninguém chegou ainda.
            seems that nobody   arrived yet
            'It seems that nobody has arrived yet.'

      b.   *Ninguém parece que chegou ainda.
             nobody   seems that arrived yet
            'Nobody seems to have arrived yet.'

      c.   Ninguém parece ter   chegado ainda.
            nobody   seems to.have arrived   yet
            'Nobody seems to have arrived yet.'

This line of thought explains why some "hyperraising" sentences are felt to be odd and are not readily accepted by all speakers while others are felt to be perfect. While (29b) sounds perfect, (29a) sounds very odd. This seems to be because it is natural for someone to look as if he or she is happy. On the other hand, it is not natural for someone to look as if he or she had been here or there. So, if we take sentences like (19) to be derived involving a transitive *parecer*, the contrast shown in (29) is easily explained.

(29) a.   ?As meninas parecem   que vieram aqui.
            the girls   seem-3PL that came   here
            'The girls seem to have come here.'

      b.   As meninas parecem   que estão felizes.
            the girls   seem-3PL that are   happy
            'The girls seem to be happy.'

5   **Conclusion**

In this article, I opposed two different types of analyses of null subjects in BP: one involving movement, and one exploring the idea that BP is a topic-prominent language. I have argued that the MT of null subjects is not inherently simpler than the topic-prominence analysis. The operation that creates the dependency between the higher subject and the embedded one in the

latter analysis is just the Form Chain operation, which is independently needed. I also hope to have shown that the MT, although an elegant analysis, does not account for all the data that the topic-prominence analysis does. Since they cannot really be differentiated on simplicity and naturalness alone (for it is difficult to measure which one would be in fact simpler), empirical coverage should decide the matter in favor of the latter.

As for empirical evidence in favor of the MT of null subjects, I showed that the so called hyperraising structures can be analyzed as involving an unmarked topic position, which allows for weak pronouns and bare quantifiers (since such a position is necessary in the topic-chain analysis any way). Despite that, I have also argued that "hyperraising" structures may be the product of an innovative use of transitive *parecer*, which already existed in the language. The latter analysis explains why "hyperraising" structures are only found with *parecer* and not with any other raising verb in the language; it explains why some "hyperraising" structures are degraded and why some cannot even be generated (as in the case of sentence (28b)).

In conclusion, I hope to have shown that there is no gain (empirical or theoretical) in assuming movement out of finite clauses in BP.

6.   References

Boeckx, Cedric & Norbert Hornstein. 2003. Reply to 'Control is not movement'. *Linguistic Inquiry* **34**: 269–280.

Boeckx, Cedric & Norbert Hornstein. 2004. Movement under Control. *Linguistic Inquiry* **35**: 431-452.

Borer, Hagit. 1989. Anaphoric agr. In: Osvaldo Jaeggli & Kenneth J. Safir. Eds.. *The Null Subject Parameter*. Dordrecht: Kluwer. 69-109.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In: Roger Martin, David Michaels & Juan Uriagereka. Eds.. *Step by step: Essays on Minimalist syntax in honor of Howard Lasnik*. Cambridge, Mass., MIT Press. 89-156

Culicover, Peter W. and Ray Jackendoff. 2001. Control is not movement. *Linguistic Inquiry* **32**: 493-511.

Duarte, Maria Eugênia L. 1995. A perda do princípio "Evite Pronome" no português brasileiro. Doctoral dissertation, Unicamp.

Duarte, Maria Eugênia L. 2000. The loss of the Avoild Pronoun Principle in Brazilian Portuguese. In: Mary Kato & Esmeralda Vailati Negrão. Eds.. *Brazilian Portuguese and the Null Subject Parameter*. Frankfurt, Vervuert-Iberoamericana. 17-36.

Duarte, Maria Eugênia Lamoglia & Fernando Pimentel Henriques. 2005. Uma análise comparativa das construções com verbos de alçamento na fala e na escrita. *Cadernos do CNLF* (CiFEFil) **15**: 140-150.

Ferreira, Marcelo. 2000. Argumentos Nulos em Português Brasileiro. MA thesis, Unicamp.

Ferreira, Marcelo. 2008. Null Subjects and Finite Control in Brazilian Portuguese. Ms., Universidade de São Paulo.

Figueiredo Silva, Maria Cristina 1994. La Position Sujet en Portugais Bresilien. Doctoral dissertation, Universite de Geneve.

Holmberg, Anders. 2005. Is there a little pro? Evidence from Finnish. *Linguistic Inquiry* **36**: 533-564.

Hornstein, Norbert. 1999. Movement and Control. *Linguistic Inquiry* **30**: 69-96.

Landau, Idan. 2003. Movement Out of Control. *Linguistic Inquiry* **34**: 471-498.

Martins, Ana M. & Jairo Nunes. 2005. Raising Issues in Brazilian and European Portuguese. *Journal of Portuguese Linguistics* **4**: 53-77.

Modesto, Marcello. 2000a. On the Identification of Null Arguments. Doctoral dissertation. University of Southern California.

Modesto, Marcello. 2000b. Null Subjects without 'Rich' Agreement. In: Mary Kato & Esmeralda Vailati Negrão. Eds.. *Brazilian Portuguese and the Null Subject Parameter*. Frankfurt, Vervuert-Iberoamericana. 147-174.

Modesto, Marcello. 2004. Sujeitos nulos em línguas de tópico proeminente. *Revista da Abralin* **3**: 121-148.

Modesto, Marcello. 2007. Null Subjects in Brazilian Portuguese and Finnish: They are not derived by movement. In: William D. Davies & Stanley Dubinsky. Eds.. *New Horizons in The Analysis of Control and Raising. Vol. 71: Studies in Natural Language and Linguistic Theory*. Amsterdam, Springer. 231-248.

Modesto, Marcello. 2008. Topic Prominence and Null Subjects. In: Theresa Biberauer. Ed.. *The Limits of Syntactic Variation. Vol. 132: Linguistics Today*. Amsterdam, John Benjamins. 375–409.

Modesto, Marcello. Forthcoming. What Brazilian Portuguese Says about Control: a reply to Boeckx and Hornstein. *Syntax*.

Negrão, Esmeralda Vailati 1997. Asymmetries in the distribution of overt and empty categories in Brazilian Portuguese. In: James R. Black & Virginia Motapanyase. Eds.. *Clitics Pronouns and Movement. Vol. 140: Current Issues in Linguistic Theory*. Amsterdam, John Benjamins. 217-235.

Negrão, Esmeralda. Vailati & Ana Müller. 1996. As Mudanças no Sistema Pronominal do Português do Brasil: Substituição ou Especialização de formas?. *D.E.L.T.A*. **12**: 125-152.

Nunes, Jairo. 1995. The Copy Theory of Movement and Linearization of chains in the Minimalist Program. Doctoral dissertation, University of Maryland, College Park.

Nunes, Jairo. 2008. Dummy prepositions and the licensing of null subjects in Brazilian Portuguese. Ms., Universidade de São Paulo.

Rizzi, Luigi. 1982. *Issues in Italian Syntax*. Dordrecht: Foris.

Rodrigues, Cilene. 2004. Impoverished Morphology and A-movement out of Case Domains. Doctoral dissertation, University of Maryland, College Park.

Ura, Hiroyuki. 1994. Varieties of raising and the feature-based bare phrase structure theory. *MIT occasional papers in linguistics* **23**: 297-316.