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Finite control: Where movement goes wrong in Brazilian Portuguese

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1. Introduction

It is my aim in this article to deconstruct a specific line of argumentation used by Boeckx, Hornstein & Nunes (forthcoming) to support what is usually called the movement theory of control (MTC). Such line of argumentation involves the assumption that finite null subjects in Brazilian Portuguese (BP) are “controlled” in the sense that they are derived by A-movement out of finite clauses (just like controlled null subjects of nonfinite clauses are argued to be derived by A-movement).

I will contend that, despite presenting many unique characteristics, finite null subjects in BP are not controlled and are not derived by movement. In particular, I will address the movement analyses of null subjects in BP presented in Ferreira 2000, 2009 and Rodrigues 2004, and the arguments in favor of such analyses presented in Nunes 2008, 2009. I will contrast the movement analyses with the topic-chain analysis proposed in Modesto 2008. It will be shown that movement analyses have to make *ad hoc* assumptions and, even then, do not account for the BP data on null subjects. Also, I hope to show that movement analyses of finite null subjects are technically problematic, since there is no positive evidence that A-movement is possible out of finite embedded clauses (in BP at least).

The article is organized as follows. Section 2 establishes that null subjects in BP are produced by a different strategy or mechanism from the one responsible for null subjects in other romance languages. Whereas romance-type null subject languages use null pronouns, BP does

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not. Section 3 discusses movement analyses and their shortcomings. Section 4 describes the intuition behind the topic-chain analysis and one possible implementation of that idea. Section 5 presents another difficulty faced by movement analyses: they do not fit well in a framework that assumes phases. Section 6 discusses the existence of hyperraising in BP, which is used as a major argument in favor of finite control and the MTC. A conclusion is offered in section 7.

2. Null subjects in BP

Several studies have shown that BP should not be considered a typical null subject language (NSL) like other close related romance languages: its null subjects are severely restricted in their distribution (therefore much less frequent) and their interpretation (for relevant discussion, see Moreira da Silva 1983, Galves 1993, 2001, Figueiredo Silva 1994, Duarte 1995, Negrão & Müller 1996, Negrão 1997, Kato 1999, Ferreira 2000, 2009, Modesto 2000a, Rodrigues 2004, Barbosa, Duarte & Kato 2005, and the collection of papers in Kato and Negrão 2000).¹

Departing from most of the works cited above, the proponents of movement analyses have summarized the behavior on BP null subjects like this: ““referential” null subjects in BP show all the diagnostics of obligatory control” (Nunes 2008:85). Nunes then illustrates with the paradigm in (01). Example (01a) is supposed to show that null subjects in BP require an antecedent and (01b) that the antecedent must be the closest c-commanding DP. Sentences (01c-e) show that null subjects are interpreted as bound variables when the antecedent is an *only*-DP; that they obligatorily trigger sloppy readings under VP ellipsis; and that they only admit *de se* interpretations.

- (01) a. *Comprou um carro novo.
bought a car new
 ‘She/he bought a new car.’
- b. [[o João]₁ disse que [o pai d[o Pedro]₂]₃ acha que *ec**₁/*₂/₃/*₄ vai ganhar.
the João said that the father of-the P. thinks that goes win
 ‘João_i said that Pedro_j’s father thinks that he is going to win.’

¹ These remarks, of course, refer to null subjects of finite clauses; nonfinite null subjects have different properties. Only finite null subjects are dealt with in this work.

- c. Só o João acha que vai ganhar a corrida.
only the João thinks that goes win the race
 ‘Only João is an x such that x thinks that x will win the race’
 NOT: ‘Only João is an x such that x thinks that he, João, will win the race’
- d. O João ’tá achando que vai ganhar a corrida e o Pedro também ’tá.
the João is thinking that goes to.win the race and the Pedro too is
 ‘João thinks that that he’s going to win the race and Pedro does, too (think that he, Pedro, is going to win the race).’
- e. O infeliz acha que devia receber uma medalha.
the unfortunate thinks that should receive a medal
 ‘The unfortunate thinks the he should receive a medal.’

Several remarks are in order. Nunes uses “referential” in the quote above to exclude expletives, as well as arbitrary and generic null third person subjects, which are still available in BP.² The use of “null subjects” also deserves some clarification. What Nunes and most authors who have written on the subject (myself included) mean by “null subjects” is actually *null subjects of finite indicative embedded clauses interpreted in a neutral context*. The abbreviation has caused some confusion, especially in view of the comments of both JPL reviewers, so I will have to clarify some points before the actual analyses are discussed.

Null subjects are taken to be ungrammatical in matrix contexts in BP, as shown in (01a). However, that assumes neutral contexts, since null matrix subjects can still be discourse licensed, as seen in (02a). These matrix null subjects are usually taken to be dropped topics of the Germanic type (cf. Huang 1984, Modesto 2000a and Rodrigues 2004), which is supported by “intervention” effects of the kind seen in (02b) (see also Nunes 2008:ff.86):³

² Expletives, arbitrary and generic null subjects will not be considered in this work as well.

³ That movement of wh-phrases over topics (or topics over other topics) give rise to minimality effects in BP is clear from examples like (ia). Sentences like (ib), mentioned by a JPL reviewer, involve a hanging topic, in the sense of Cinque 1990, which is not expected to interact with wh-movement.

- (i) a. *Quem, esse livro, já leu?
who this book already read
 ‘Who has already read this book?’
 b. Esse livro, quem vai ler?
this book who goes to.read
 ‘This book, who will read it?’

- (02) a. A: Cadê a Maria?
where the Maria
 ‘Where is Maria?’
 B: _ saiu.
left
 ‘She has left.’
- b. A: Cadê a Maria?
where the Maria
 ‘Where is Maria?’
 B: *O que (é que) fez desta vez?
what (is that) did this time
 ‘What did she do this time?’

Embedded null subjects can also be affected by context, so (03) is grammatical as an answer to “where is Maria?” with an overt or a null topic:

- (03) (A Maria₁,) eu acho que ec₁ saiu.
the Maria I think that left
 ‘(Maria,) I think she has left.’

Due to such influence of discourse, sentences like (01b) have to be considered in an out of the blue context. What authors have tried to explain is how the null embedded subject is allowed in sentences like (01b), since BP does not allow null subjects anymore (i.e. in matrix clauses) and the sentence is considered out of the blue, so the null subject cannot be taken as the product of topic-deletion. Additionally, authors have tried to explain the restricted interpretation possibilities of such subjects, which are usually taken to be different than typical NSLs.

However, a JPL reviewer informs me that the interpretation of the empty subjects in the complement clauses in (01b)-(01e) is exactly the same in EP and other romance languages, citing Montalbetti 1984. However, the facts reported by Montalbetti are quite different from the BP facts. In particular, with respect to the pair in (04) below, the author affirms that:

“...both sentences are interpreted in the same way. Pragmatic considerations may have a preference for [(04b) MM] if the Subject of the embedded clause is intended to be coreferential with the Subject of the matrix, but leaving this aside, both pronouns (the overt and the null one) may be used in the same ways in these non quantificational structures.” (p. 85).

- (04) a. Juan cree que él es inteligente.
b. Juan cree que *pro* es inteligente.
‘Juan believes that he is intelligent.’

What I gather from this passage is that null pronouns in Spanish may be interpreted as free pronouns, just like overt pronouns, even though that might not be the preferred reading of the sentence. Free pronouns are defined by Montalbetti (citing Evans 1980:337) as “pronouns used to make reference to an object (or objects) present in the shared perceptual environment, or rendered salient in some other way” (p. 75). The author clearly states (p. 82), with respect to the pair in (05), that “both sentences can be interpreted as containing free pronouns.”

- (05) a. Muchos estudiantes creen que ellos son inteligentes.
b. Muchos estudiantes creen que *pro* son inteligentes.
‘Many students believe that they are intelligent.’

Pragmatic preferences aside, according to Montalbetti, the null pronoun in both (04b) and (05b) can be used as a free pronoun. This does not seem to be the case in BP, in which the non-bound interpretation is very restricted, probably inexistent (cf. Negrão & Müller 1996). The difference in behavior between Spanish and BP null subjects becomes very clear in Ferreira’s (2009) discussion of some facts raised by Montalbetti, as the ones in (06), taken from Ferreira.

- (06) a. * [Todo chico]_i t_i dijo que Maria piensa que él_i es inteligente. Sp
every boy said that Mary thinks that he is intelligent
 ‘Every boy said that Mary thinks that he is intelligent.’
- b. [Todo chico]_i t_i dijo que Maria piensa que *pro*_i es inteligente.
every boy said that Mary thinks that is intelligent
 ‘Every boy said that Mary thinks that he is intelligent.’
- (07) a. [Nenhum menino]_i t_i disse que a Maria acha que ele_i é inteligente. BP
no boy said that the Mary thinks that he is intelligent
 ‘No boy said that Mary thinks that he is intelligent.’
- b. *[Nenhum menino]_i t_i disse que a Maria acha que *ec*_i é inteligente.
no boy said that the Mary thinks that is intelligent
 ‘No boy said that Mary thinks that he is intelligent.’

Montalbetti explains the ungrammaticality of (06a) with his “Overt Pronoun Constraint”. The grammaticality of (07a) seems to indicate that, either the OPC is not effective in BP, or that the overt pronoun in BP does not alternate with a null pronoun in that position, because in such contexts the OPC does not apply (even in Spanish). The ungrammaticality of (07b) seems to indicate that the empty category occupying the embedded subject position is not a null pronoun as in Spanish, since the null subject in BP cannot be linked to the higher subject (i.e. its reference is not as free as in Spanish).

If the facts in EP are like the ones in Spanish, one would expect the possible interpretations of sentence (01b) in EP, repeated below, to be different from the possible interpretations in BP. In particular, the null pronoun in embedded subject position should be able to refer to either *João* or *Pedro* in EP, when the sentence is considered in a neutral context, even if those readings are marked.

- (01) b. [[o João]₁ disse que [o pai d[o Pedro]₂]₃ acha que *ec*_{1/2/3} vai ganhar. EP?
the João said that the father of-the P. thinks that goes win
 ‘João_i said that Pedro_j’s father thinks that he is going to win.’

Even when interpreted in context, the interpretation of the sentence is expected to differ in the two languages. For instance, if *João* is taken as a discourse topic, i.e. if the sentence is the answer to a question like “do you think that João will win a medal?”, EP is expected to allow sentence (01b) with the interpretation “João₁ said that Pedro’s father thinks that he₁ will win” because the null pronoun in the embedded clause is free to refer to the matrix subject/topic. In BP, on the other hand, the reading in which the null subject refers back to the matrix subject is expected to be impossible to obtain, even if *João* is a discourse topic, the reason being that the null subject is not pronominal in that language, so it is not free to refer. The expectation is in fact borne out (with respect to BP). Movement accounts and topic-chain analyses both can handle this fact, as will be discussed in section 4.

Further indication that NSLs use a null pronoun, while BP has a different strategy to produce null subjects comes from sentences like (01d). According to both Montalbetti (1984:160) and Barbosa, Duarte & Kato (2005:47), the correspondent sentences in Spanish and EP are ambiguous between strict and sloppy interpretations, whereas the BP sentence is not ambiguous; it has the sloppy reading only. This seems to confirm that the null subject in the former two languages is a free pronoun, while that is not the case in the latter.

All these facts seem to point to a difference between EP and BP. However, recent studies like Frascarelli 2007 seem to show that well-behaved romance languages like Italian may not be so different from BP, especially if one accepts the topic-chain analyses of null subjects, which is consonant with what the reviewer reports. However, even if topics influence in the identification of null subjects in NSLs, there are still differences between those languages and BP (see Sigurðsson, to appear). For the present, I will assume that null subjects in BP and EP are really different in their interpretation and distribution, although the reviewer has challenged this assumption.

From now on, then, “null subjects in BP” will mean “null subjects of embedded finite clauses considered in a neutral context” and I will presuppose that the interpretation of null subjects is more restricted in BP than in other (romance-type) NSLs. This closes this very long parenthesis.

Going back to the data in (01), it has been shown that BP null subjects need a c-commanding (local) antecedent, they only allow *de se* and sloppy interpretations, and they are interpreted as bound variables with *only*-DP antecedents. Since these are taken to be diagnostics

of obligatory control (by Hornstein 1999, for instance), Ferreira 2000, 2009 and Rodrigues 2004 have assumed that null subjects in BP are controlled subjects, despite the fact that they appear in indicative finite clauses. Assuming also that control is derived by A-movement, as in Hornstein 1999, 2001, 2003, Ferreira and Rodrigues argue that null subjects in BP are derived by A-movement of the embedded subject to the matrix subject position. In what follows, I will discuss Nunes' (2008) implementation of Ferreira's analysis, contrasting it with a different hypothesis, presented by Modesto (2008), in which BP null subjects are derived in almost exactly the same way as matrix null subjects, i.e. topic-deletion. Since the result of both analyses is a chain between the two subjects (a movement chain in the former case and a topic-chain in the latter), they account for the data in (01) in the same manner that Hornstein (1999) accounted for similar data in nonfinite structures.⁴

In what follows, I will not describe the two analyses in great detail, referring the reader to the works cited in the text. I will concentrate on discussing some problems faced by movement analyses and how an alternative analysis can account for them. My aim will be to show that movement analyses, although attractive, do not explain the empirical facts; and, at close scrutiny, are technically very problematic. As a result, I hope to demonstrate that the BP facts cannot be used as an argument in favor of the MTC.

3. Movement analyses: the problem with A-movement out of finite clauses

As mentioned above, the facts in (01) led Ferreira (2000, 2009) and Rodrigues (2004) to analyze the empty category in (01b) as a trace of A-movement of the DP *o pai do Pedro* from embedded subject position to the subject position of the higher (intermediate) clause, passing through a θ -position related to the verb *achar* 'to think'. These analyses presuppose that Agree with the most embedded head T was not able to value the Case feature of the DP *o pai do Pedro*, which is then free to move to a position in the higher vP (where it receives a second θ -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 movement analyses differ with respect to what makes the embedded finite T not able to check the Case feature of the subject with which it Agrees.

⁴ Space limitations prevent me from going over each case, so I refer the reader to Hornstein 1999.

Nunes (2008) assumes (following Ferreira 2000, 2009) that the reduction of the verbal paradigm in BP caused a “weakening of inflection”⁵ and that such a weakening caused BP learners to assume that the head T of finite clauses could be ambiguously associated with either a complete or an incomplete set of ϕ -features.⁶ Following Chomsky (2000, 2001), he also assumes that a ϕ -incomplete T is not able to value the Case feature of the DP with which it Agrees. Assuming, then, that (08a) below instantiates a ϕ -incomplete T in the embedded clause, lack of Case for the embedded subject would allow A-movement of the embedded subject to a Case assigning position in the matrix clause (passing through a θ -position, just like in the nonfinite obligatory control derivations proposed in Hornstein 1999). The derivation of a sentence like (08a) can be seen in (08b), with English words for convenience. Sentence (08c), unlike (08a), would instantiate a ϕ -complete T in the embedded clause, allowing the overt subject to have its Case feature valued.⁷

- (08) a. O Pedro disse que *ec* comprou um carro novo.
the Pedro said that bought a car new
- b. [TP Pedro_[Case:NOM] T_{[P:default; N:default]/EPP} [_{vP} Pedro_[Case:u] say [CP that [TP Pedro_[Case:u] T_{[N:default]/EPP} [_{vP} Pedro buy a car new]]]]]
- c. O Pedro disse que ele comprou um carro novo.
the Pedro said that he bought a car new
 ‘Pedro said that he bought a new car.’

According to Nunes, a problem faced by Ferreira’s proposal is that it is not clear why finite Ts may be specified as ϕ -complete or ϕ -incomplete, given that the verbal agreement morphology associated with each specification is the same. In other words, in that analysis, some Ts are different from other Ts, although verbal inflection is the same in both cases, depending on whether the subject of that clause is null or not. Following recent accepted nomenclature, the

⁵ There is a long tradition in considering that BP inflection has become “weak”, influenced by works such as Galves (1993). Ferreira’s analysis follows that tradition.

⁶ I will concentrate on Nunes’ analysis, which subsumes Ferreira’s, but Rodrigues’ analysis is discussed in Modesto 2007, 2009.

⁷ Note that a ϕ -incomplete T could, in principle, be selected when building the matrix clause of the sentences in (08). That is only *in principle* because selection of a ϕ -incomplete T in matrix contexts would always lead to a crash of the derivation due to lack of Case for the matrix subject.

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 in this particular case: null subjects appear when T is defective and T can be said to be defective always (and only when) a null subject appears.⁸ This circularity was also noted by Rodrigues (2004). To solve this problem, Nunes proposes that the ambiguity should be interpreted in terms of the derivational timing at which person and number features are combined: whether in the numeration or in the morphological component. Taking the agreement verbal paradigm in BP to be as shown in (09), Nunes argues that the three different forms of the verb in (09) can be obtained if T enters the numeration with both [number] and [person] or if T enters the numeration only with [number], and the person feature is added in the morphological component in accordance with the redundancy rule in (10), as shown in (11).

(09) Verbal agreement paradigm in (colloquial) BP (from Nunes 2008:87)

Cantar ‘to sing’, indicative present

Eu	(I)	canto	P:1, N:sg
Você	(you)	canta	P:default, N:default (=3sg)
Ele/ela	(he/she)		
A gente	(we)		
Vocês	(you.pl)	cantam	P:default, N:pl (=3pl)
Eles/elas	(they)		

(10) When T is only specified for number (N):

- (i) Add [P:1], if N is valued as SG;
- (ii) Otherwise, add [P:default].

⁸ The problem spills over to the movement theory of Control (MTC) as discussed in Modesto 2010. Since obligatorily controlled nonfinite verbs may be inflected for person and number in object control structures in (Brazilian) Portuguese, nonfinite inflection has to be considered defective. That creates the expectation that all nonfinite verbs in control structures should at least possibly be inflected. The prediction is not borne out since inflection is usually impossible to occur in subject control structures. It seems, then, that in both finite and nonfinite contexts, there is nothing that would help the language learner to decide whether inflection is defective or not, except for the control characteristic readings. But the readings are supposed to be derived from the fact that inflection is defective and not the other way around, since it would be very implausible that a child would have access to the reading of sentences in order to decide about their structure.

(11) Cantar ‘to sing’, indicative present

Valuation of T in the syntactic component	Addition of [person] in the morphological component	Surface form of the verb
N: sg	P:1, N:sg	canto
N: default	P:default, N:default	canta
N: pl	P:default, N:pl	cantam

The idea then is that if T is associated with both [person] and [number] in the numeration, it will function as a Case-valuing element; by contrast, if T enters the derivation with just a number feature, it will behave as a defective head throughout the syntactic computation and will be unable to value the Case of the clausal subject. However, it is unclear how Nunes’ proposal solves the problem faced by Ferreira’s analysis. Clearly, the DP that agrees with T (either when the DP is pronominal or not) has no “default” feature. So, if the agreeing DP is the pronoun *ele* ‘he’, the number feature of T should be valued as ‘sg’, not as ‘default’. T should then receive the feature [person] in the morphological component valued as [P:1] and the surface form of third person singular verbs should be identical to the first person singular forms. Putting the problem another way, there is no “default” feature. What is “default” is the *value* given to a certain feature (number or person), not the feature itself; therefore, “default” cannot be manipulated by syntax (since it is not a feature). For Nunes proposal to fly, it would have to be assumed that DPs are not specified for [number] in BP. However, DPs are clearly specified for singular or plural (in BP) 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 to T by Agree. Therefore, the problem of how exactly to characterize the defectiveness of embedded Ts in BP remains.

There is another problem with rule (10). It does not take into consideration the first person plural pronoun *nós* ‘we’ (which is in free variation with the treatment form *a gente* ‘lit. the people’ in all regions of Brazil) and the corresponding first person plural inflection morpheme -*mos*. It is possible that first person plural morphemes have disappeared from non-standard BP (we don’t really know), but it is certainly still used in (colloquial) standard BP. The dialect under investigation here is the standard one, the one in which null subjects are found. It makes little sense, then, to exclude the first person plural morpheme from the verbal paradigm. Therefore, the

paradigm in (09) should contain another form *cantamos* ‘sing.1pl’, which is marked for [P:1] and [N:pl], that cannot be derived by the rule (10) above. The conclusion is that the system designed by Nunes cannot explain how or why finite T would be taken to be ambiguous between having a complete or an incomplete set of ϕ -features.

Another problem with the logic of Nunes’ argument is the assumption that loss of verbal inflection caused finite T to be ambiguous in BP. A similar development in French did not cause the same result (see Adams 1987). Moreover, as noted by Nunes, weak verbal morphology cannot be the whole story, for in English, for instance, verbal morphology is considerably weak, but finite control is not allowed. Nunes claims that the solution to this learnability problem lies in the existence of inflected infinitives in Portuguese. Since some of the nonfinite forms of all Portuguese verbs are ambiguous between the inflected and the noninflected varieties, successful acquisition of infinitives requires that learners postulate that (certain) infinitival forms are ambiguous between being ϕ -complete or ϕ -incomplete. That being the case, he suggests that the specific weakening of finite verbal morphology seen in (09) led BP learners to generalize the nonfinite pattern and regularize the whole paradigm, taking both infinitival and indicative Ts to be systematically ambiguous. This argumentation is, to a certain extent, inconsistent in that the ambiguity arises for the nonfinite forms inflected by a zero morpheme (the singular forms in BP). All nonfinite forms that are inflected by an overt morpheme (the plural forms) are unambiguously ϕ -complete; why then would the finite forms, most of which are inflected by overt morphemes, be taken to be ambiguous?

I can see the appeal of movement analyses. They explain all the peculiar characteristics of null subjects seen in (01) in a very simple way: null subjects are not referentially free in BP because the T with which they appear is defective.⁹ However, the problems discussed above should not be underestimated. A-movement out of finite clauses is very rare crosslinguistically,

⁹ As noted by Modesto (2009), the movement analysis resembles Borer’s (1989) analysis of null subjects in Hebrew (or Figueiredo Silva’s (1994) analysis, which is a transposition of Borer’s analysis to BP). In those analyses, 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, 2009, 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 defectiveness of T) does not change the analysis dramatically, so the two analyses are much alike. 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. The movement analysis of null subjects, on the other hand, is circular in that it postulates that T in BP is defective only when a null subject appears.

so any theory that postulates it should also answer why such phenomenon is so rare, and how it is possible to take place in that particular language which is argued to instantiate it. The movement theory of null subjects does not answer these questions. On the contrary, it implies that defective finite Ts should be quite common since learners of any language that, throughout its history, has suffered a reduction of its verbal inflection paradigm could have assumed an ambiguous feature specification for T. As far as we know, however, even languages with very poor inflectional systems do not allow A-movement out of finite clauses.

3.1. Null subjects in BP are not controlled

Even if the question of how children come to postulate that finite T in BP is (ambiguously) defective could be satisfactorily answered, movement analyses face a different kind of problem: they do not account for the empirical data (at least not without resorting to unsupported assumptions) and end up making the wrong predictions. If finite null subjects in BP are controlled, they are expected to behave like controlled null subjects of nonfinite clauses, but they do not. As discussed in Modesto 2000a, 2000b, null subjects in BP cannot take a higher object as their antecedents, only higher subjects (in the unmarked case). In this respect, null subjects of finite clauses in BP contrast with null subjects of nonfinite clauses in a very evident manner.

- (12) a. O Pedro₁ convenceu a Cilene₂ a *ec**_{1/2} jogar futebol.
the Pedro convinced the Cilene PREP to.play soccer
 ‘Pedro convinced Cilene to play soccer.’
- b. O Pedro₁ convenceu a Cilene₂ (de) que *ec*_{1/*2} joga futebol.¹⁰
the Pedro convinced the Cilene (of) that play soccer
 ‘Pedro convinced Cilene that he plays soccer.’

In control structures like (12a), the MTC (Hornstein 1999, *et seq.*) requires the embedded DP to move to the closest position available, according to the Minimal Link Condition, deriving the fact

¹⁰ Judgments regarding the impossibility of taking the matrix object as the antecedent of the null subject are undisputed (they have been confirmed by Rodrigues (2004) and Nunes (2009)). Nunes (2009), however, claims that, when the preposition *de* ‘of’ precedes the complement clause, the matrix object becomes a possible antecedent. For

that most ditransitive verbs are object control verbs (and making *promise*-class verbs black sheep; see Culicover & Jackendoff 2001, Landau 2003 and Boeckx & Hornstein 2003, 2004, for discussion). The verb *convencer* ‘to convince’, therefore, is a well behaved object control verb. A movement “finite-control” analysis of BP null subjects would naturally predict, then, that null subjects of finite clauses under *convencer* should be controlled by the higher object (the closest c-commanding DP), but that prediction is not borne out. Note that *any* analysis equating the interpretation of null subjects in BP with control will have this problem: they predict that null subjects should be controlled by or moved to matrix object positions (unless some extra assumption is made), when, in reality, null subjects cannot take matrix objects as antecedents (in the unmarked case, but see section 4).

Proponents of movement analyses of null subjects in BP, therefore, are forced to claim that there is no c-commanding relation between the object of *convencer* and the null subject of the embedded clause. In particular, Rodrigues (2004) and Nunes (2009) assume that the complement clause in (12b) is actually an adjunct (at least when not preposed by *de* ‘of’).¹¹ Such an assumption is crucial for movement analyses to have any validity, since subject-orientation of null subjects in BP is a fact. As extensively argued in Modesto 2007, 2009, however, the adjunct status of such clauses is unsupported. Firstly, the contrast between (12a) and (12b) itself becomes mysterious if that assumption is taken to be true, for the complement of a verb like *convencer* would be an adjunct just in case it was finite. When the complement is nonfinite, it cannot be an adjunct or object control (witnessed in (12a)) would be unexpected (under a movement theory of control).¹² Secondly, the complement clause is undoubtedly θ -marked by the *convencer*-class of verbs and it is unclear how a verb could θ -mark an adjunct.¹³ Thirdly, there is ample empirical evidence against the claim that the clausal complement of the *convencer*-class verbs is an adjunct.

all people I have consulted, the presence of the preposition does not change the interpretative possibilities of the sentence. For a discussion of Nunes’ 2009 data on dummy prepositions see Modesto 2009.

¹¹ In fact, the proposal has to be that the complement clause of the whole class of bitransitives verbs that take a finite complement is an adjunct, since all those verbs behave like *convencer*, i.e. a null subject in their finite complement cannot be interpreted as referring to the matrix object (see (i)). This class includes *avisar* ‘to warn’, *informar* ‘to inform’, *alertar* ‘to alert’, *prevenir* ‘to forewarn’, *dizer* ‘to say’, *falar* ‘to say’, *contar* ‘to tell’, among others.

(i) O Pedro₁ avisou/informou/alertou a Cilene₂ que *ec*_{1/*2} vai chegar tarde.
 the Pedro warned/informed/alerted the Cilene that goes to.arrive late
 ‘Pedro warned/informed/alerted Cilene that he will be late.’

¹² I will not consider the (almost nonsensical) possibility that one would subscribe to a movement analysis of finite subjects but not to the MTC.

The ungrammaticality of sentence (13) shows that the matrix object does c-command the embedded subject, since coreference between them causes a principle-C type violation. The sentences in (14) show that the complement clause is not an adjunct since extraction of wh-phrases is possible (cf. the contrast with (15)):

- (13) *O Pedro₁ convenceu ela₂ que a Maria₂ é bonita.
the Pedro convinced her that the Maria is beautiful
 ‘Pedro convinced her that Maria is beautiful.’
- (14) a. Quem₁ (que) o Pedro convenceu a Cilene que t₁ vai viajar?¹⁴
who that the Pedro convinced the Cilene that goes to.travel
 ‘Who is the person that Pedro convinced Cilene that he will travel?’
- b. O que₁ (que) o João convenceu a Maria que o Pedro precisa comprar t₁?
what that the João convinced the Maria that the Pedro needs to.buy
 ‘What did João convince Maria that Pedro needs to buy?’
- (15) *Quem₁ o Pedro viu a Cilene enquanto t₁ fazia compras?
who the Pedro saw the Cilene while did shopping
 ‘*Who did Pedro see Cilene while was shopping?’

Sentence (15) shows that wh-extraction from an adjunct clause causes ungrammaticality. Since extraction is possible in (14), the complement clause cannot be an adjunct. Nunes (2009:256) gives two question marks to sentences like the ones in (14) and adds another example, (16), which he marks with a star. I present his example below with my own judgment.

¹³ Postulating that the complement clause is moved to an adjunct position after it has been formed in complement position departs from minimalist expectations (what would drive such a movement?) and would, therefore, have to be extremely well documented by empirical data. Supporting data for that claim is very feeble, though.

¹⁴ That subject extraction from complements is possible in most Romance languages is known since Rizzi (1982), who explains the insensitivity to complementizer-trace effects in those languages by assuming an expletive *pro* in preverbal subject position and the wh-subject extracted from the thematic (or some other low) position. Although BP does not usually permit post verbal subjects (cf. Chao 1981), BP does have expletive null pronouns so, as argued in Menuzzi 2000, Rizzi’s analysis can be maintained. Rizzi and Shlonsky 2007 relates the ungrammaticality of post verbal subjects in BP to the unavailability, in that language, of predicate-internal focalization, as proposed in Belletti 2001, 2004, which does not affect extraction of subjects from clausal complements.

- (16) ??Como_i o João convenceu a Maria que o Pedro tinha que se vestir para a festa t_i?
how the João convinced the Maria that the Pedro had that REFL dress for the party
 ‘How_i did João convince Maria that Pedro had to dress for the party t_i?’

The sentences in (14) are perfectly grammatical, especially when compared to the grossly ungrammatical (15). Sentence (16), however, is in fact difficult to be processed, but that is probably due to a processing constraint, as discussed in Modesto 2009.¹⁵ The fact that the choice of adverb makes the sentence easier or worse to process shows that we are most likely not dealing with a real island violation (see (17a, b)). The relevant interpretation of (17b) is very easy to obtain. Additionally, extraction of (some) wh-adjuncts from complements of transitive verbs like *achar* ‘to think’ is also difficult to process, as seen in (17c). It would be highly implausible to assume that the complement of *achar* is an adjunct, so the fact that (16) is bad cannot be used as an argument to that effect with respect to *parecer*.

- (17) a. *Por que_i o João convenceu a Maria que o Pedro viajou t_i?
why the João convinced the Maria that the Pedro travelled
 ‘Why did João convince Maria that Pedro travelled?’
- b. ?Quando_i o João convenceu a Maria que o Pedro vai casar t_i?
when the João convinced the Maria that the Pedro goes to marry
 ‘When did João convince Maria that Pedro will get married?’
- c. *Por que_i o João acha que a Maria viajou t_i?
why the João thinks that the Maria travelled
 ‘Why does João think that Mary travelled?’

Another argument used to back the claim that complements to the *convencer*-class verbs are adjuncts is binding of epithets. Binding by the matrix object does not induce a Principle C effect with respect to epithet inside the embedded CP, so it is argued that the matrix object does not c-command into the embedded clause, despite the clear indication that it does, provided by (13) above. Binding of epithets is a very weak argument, since matrix subjects can also bind epithets

¹⁵ The fact that BP has a processing constraint on the interpretation of wh-adjuncts may in fact be caused by the fact that subjects in BP occupy an A-bar position, as argued in section 4. For reasons of space, I cannot discuss all the ramifications of that analysis.

in the complement clause, as seen in (18), without inducing a Principle C violation, but it would be very hard to argue that the matrix subject does not c-command the complement, even if it is an adjunct.

- (18) O Maluf₁ convenceu o Diogo₂ 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.'

In conclusion, I have shown that Nunes' revision still presents the same problems of Ferreira's analysis. It has to assume that finite Ts in BP are ambiguous between having a full or an incomplete set of features, but that assumption is problematic with respect to learnability since it is not based on any morphological evidence (i.e. it is an *ad hoc* assumption). It also has to assume that the complement of a whole class of verbs is actually adjoined to vP – but only when it is finite! – despite the lack of any good evidence in that respect. Without that (*ad hoc*) assumption, movement analyses cannot explain one of the most salient properties of (finite) null subjects in BP, i.e. the fact that they are subject-oriented. In the following sections, I will provide more arguments against movement analyses. Before that, however, I will describe an alternative analysis that takes BP null subjects as a kind of elided topic.

4. The topic chain analysis

BP has been argued to be a topic-prominent language in the sense of Li & Thompson 1976 (see Pontes 1987, Galves 1993 and Negrão & Viotti 2000). The particular implementation of that idea proposed in Modesto 2008¹⁶ was to assume a projection FP between TP and CP which, in topic-prominent languages, would be assigned an EPP feature. In such languages, then, the specifier of FP would necessarily be filled by some category. The constituent occupying Spec FP position would be interpreted as a kind of *grammatical* topic,¹⁷ standing in an aboutness relation with the rest of the sentence (see Reinhart 1981 and Lambrecht 1994). Some indication that such a

¹⁶ Modesto 2000a presents a different implementation of the same idea.

¹⁷ The qualification is necessary to distinguish them from semantic topics, i.e. phrases that are base generated in (or moved to) higher Topic positions. While grammatical topics may be quantified and non-referential, semantic ones may not.

position really exists in BP is given by (19). Having lost the indefinite clitic *se*, BP should allow generic statements such as (19a). However, (19a) is unacceptable unless some constituent occupies the first position of the sentence:

- (19) a. *Usa saia curta.
 wear skirt short
 ‘People wear short skirts.’
- b. No Brasil usa saia curta.
 in.the Brazil wear skirt short
 ‘In Brazil, people wear short skirts.’

As seen above, Spec FP may be filled by real topics, adverbs, locatives, etc. If nothing is in the numeration that can be merged there, Modesto assumed that some category must be moved to that position from within the structure already formed. Alternatively, the whole TP may be moved there, in the case ofthetic sentences (see Kuroda 1972). 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. The derivation of a sentence like (08c), repeated below as (20a) would then be as in (20b) where both matrix and embedded subjects are moved to Spec FP, each in its own clause.

- (20) a. O Pedro disse que ele comprou um carro novo.
 the Pedro said that he bought a car new
 ‘Pedro said that he bought a new car.’
- b. [FP *o Pedro*₁ [TP *t*₁ *disse* [CP *que* [FP *ele*₁ [TP *t*₁ *comprou um carro novo*]]]]]
 the Pedro said that he bought a car new
- c. O Pedro disse que comprou um carro novo.
 the Pedro said that bought a car new
 ‘Pedro said that he bought a new car.’

Since both subjects occupy a topic-like position, the lower subject can be deleted by the same discourse mechanism that creates matrix null subjects in BP, producing the sentence (20c).

Modesto assumed that, since the lower subject has the same features of the matrix subject (in fact, a subset of the matrix subject features once phonological features are discarded), they are undistinguishable from each other (like copies) so the operation Form Chain may apply between them.

4.1. Empirical advantages of the topic-chain analysis

Recall from section 3.1 that sentences like (21a) below can only be interpreted with the null subject taking the matrix subject as its antecedent but not the matrix object. This effect (subject-orientation) is straightforwardly explained by the topic-chain analysis, since the object sits in an A-position so no chain can be formed between the matrix object and the embedded subject in Spec FP.

The analysis also predicts that the null subject will be interpreted as coreferential to whatever constituent is moved to (or merged in) Spec FP of the matrix clause. It then explains a surprising correlation between A-bar movement and the interpretation possibilities of null subjects in BP that is rarely mentioned by the proponents of movement analyses.¹⁸ The paradigm in (21) below, discussed in Modesto 2000a, 2000b, 2004, 2008, shows that such a relation exists:

- (21) a. O Feco₁ convenceu a Dani₂ que e_{1/*2} ganhou na loteria.
the Feco convinced the Dani that won in.the lottery
 ‘Feco convince Dani that he won the lottery?’
- b. Quem₂ que o Feco₁ convenceu t₂ 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?’
- c. O cara₂ que o Feco₁ convenceu t₂ 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.’

¹⁸ Exception has to be made for Rodrigues 2004. Her account of the facts involving A-bar movement is discussed in Modesto 2007, 2009.

- d. Foi a Dani₂ que o Feco₁ convenceu t₂ 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.’
- e. A Dani₂, o Feco₁ convenceu t₂ 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 data in (21) shows that whenever the object moves, it moves through Spec FP, forcing the subject to stay in Spec TP (movement of a wh-phrase, for instance, over the subject in Spec FP would create a minimality effect). In that Case, the object becomes the only possible binder for the null embedded subject.¹⁹ Confirming evidence for the topic-chain analysis comes from the fact that, whenever it can be shown that the matrix object has not been moved, the matrix subject once again is the only possible antecedent, since it will be moved to Spec FP. This happens with wh-in-situ and with base generated topics related to resumptive pronouns, as shown in (22).

- (22) a. O Feco₁ convenceu quem₂ que e_{1/*2} ganhou na loteria?
the Feco convinced who that won in.the lottery
 ‘Who did Feco convince that he won the lottery?’
- b. A Dani₂, o Feco₁ convenceu ela₂ 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.’

It is unclear how movement analyses would account for the relation between A-bar movement and the interpretation of null subjects. In particular, it is unclear how such analyses would prevent the generation of the impossible sentence (23), which is excluded as a minimality violation in the topic-chain analysis.

¹⁹ The possible interpretation of (16e) 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. Base generation is not an option for wh-phrases, relative operators and cleft phrases. 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). Notice also that the topic in (16e) could be a null discourse topic since, as mentioned in section 2, discourse may alter the interpretation possibilities of null subjects. Even in that case, if the null discourse topic is construed as moving from the object position, it will be interpreted as the

- (23) *Quem₂ o Feco₁ convenceu t₂ que t₁ ganhou na loteria.
who the Feco convinced that won in.the. lottery
 ‘Who did Feco convince that he won the lottery.’

It should also be clear by now why only certain discourse topics may alter the interpretation of sentences like (01b) in BP, as discussed in section 2. The sentence is repeated below. Even if that sentence is an answer to “do you think that João will win a medal?”, the higher subject, even taken as a discourse topic, cannot be taken as the antecedent of the null subject since the DP *o pai do Pedro* occupies Spec FP in the intermediate clause and is, then, a closer antecedent for the constituent in Spec FP of the most embedded clause. A topic chain involving the null subject and *João*, over the intermediate subject/topic, therefore, cannot be formed. Movement analyses derive the same effects.

- (01) b. [[o João]₁ disse que [o pai d[o Pedro]₂]₃ acha que *ec**_{1/3} vai ganhar.
the João said that the father of-the P. thinks that goes win
 ‘João_i said that Pedro_j’s father thinks that he is going to win.’

Another advantage of the topic-chain analysis is that it explains the interaction between null subjects and other topics. Although Nunes (2008) claims that his account explains why a left dislocated element should block the putative A-movement out of an embedded subjunctive clause in Romanian (see example (24a) from Grosu and Horvath 1987, cited by Nunes), it is unclear that it does. It is in fact surprising that a left dislocated adverb should interact with A-movement since minimality is relativized (see Rizzi 1990). The same effect can be seen in BP, as shown in (24b) discussed in Modesto 2008, adapted from original examples from Rodrigues 2004.

- (24) a. *Bombele pot ca în orice moment sa explodeze.
the.bombs can.PRES.3PL that in any moment SUBJ explode
 ‘The bombs can go off any minute.’

antecedent of the null pronoun; if, on the other hand, it is construed as base generated in a higher topic position, the matrix subject will be interpreted as the antecedent of the null subject.

- b. O Feco₁ me falou que na praia e*₁ vende cachorro quente.
 the Feco to.me said that on beach sells dog hot
 ‘Feco told me that hot dogs are sold at the beach.’

The intervention effect seen in (24b) is explained by the topic-chain analysis. The presence of the left dislocated locative prevents the null subject to be interpreted as an elided topic since a topic-chain cannot be formed over the left dislocated element. The null subject in that sentence, therefore, is necessarily interpreted as arbitrary.

Let us pause and take stock. With respect to the data in (01), both analyses fare equally well. According to both, the null subject is a not null pronominal; it needs a c-commanding antecedent because either it is the product of movement of that very same antecedent or because it can only delete when bound by a higher topic. Since it is bound, the null subject behaves as a variable. The unavailability of strict and *de re* readings follows from the null subject being either a lower link of a movement chain, or a bound variable. With respect to subject-orientation, on the other hand, the topic-chain analysis handles it very smoothly, whereas movement analyses have to make at least two *ad hoc* assumptions: that T in BP is ambiguous and that some complements are adjuncts when they are finite. The topic-chain analysis also handles the fact that A-bar moved objects become possible antecedents for the null subject, since that fact follows from the A-bar character of Spec FP plus minimality, without any further assumption. It is unclear how movement analyses would derive the relation between A-bar movement and the possibility of being an antecedent for the null subject. The attempt to explain (21b) found in Rodrigues 2004 needs at least two assumptions: sideward movement (to escape an island violation, since the complement clause is actually an adjunct in her system) and the assumption that the wh-phrase can have its Case feature valued twice. (For a detailed discussion of this aspect of Rodrigues’ proposal, see Modesto 2009).

5. Another technical problem: phases

When discussing a construction he calls “hyperraising” (to be discussed in the next section), exemplified in (25a) below, Nunes (2008) notes that such structures raise technical questions related to the phase system proposed by Chomsky (2000, 2001). Nunes representation of the

structure of (25a) is given in (25b), with English words. The author says: “The matrix vP in [(25b) MM] does not count as a (“strong”) phase as its head is not a “transitive” light verb (see Chomsky 2000, 2001). But what about the embedded CP? Isn’t it a phase and, accordingly, shouldn’t the movement of the embedded subject be prevented?” (Nunes 2008:95).

- (25) a. O João parece que comprou um carro novo.
the João seems that bought a car new
 ‘John seems to have bought a new car.’
- b. [TP João_[Case:NOM] T_{[P:default; N:default]/EPP} [vP seems [CP that [TP João_[Case:u] T_{[N:default]/EPP} [vP João_[Case:u] bought a car new]]]]]

Nunes discusses three different proposals that have been made to address this issue. Rodrigues’ (2004) proposal is not assumed by Nunes because, according to him, it runs into problems concerning constructions where T agrees with a nominative object across a quirky subject in Spec vP. Ferreira’s (2000) approach is to assume that a C head that selects for a ϕ -incomplete TP does not count as a strong phase. Nunes, citing Martins & Nunes (forthcoming), points out that this assumption incorrectly rules out “topic hyperraising” constructions in BP such as (26a), which Martins and Nunes (2005, forthcoming) argue to involve movement of an embedded topic to the matrix subject position, as sketched in (26b).²⁰

- (26) a. Os meninos parecem que eles viajaram ontem.
the boys seem-3PL that they traveled-3PL yesterday
 ‘The boys seem to have traveled yesterday.’
- b. [TP [os meninos]_i T_[N:P] parecem [CP que [TOPP *t_i* [TP eles viajaram ontem]]]]]
the boys seem-3PL that they traveled-3PL yesterday

Nunes then assumes, following Martins & Nunes (forthcoming), that Chomsky’s (2001) version of Phase Impenetrability Condition in (27) below is able to account for both subject and topic hyperraising in BP. He explains:

²⁰ It is unclear to me why (26b) is not an instance of improper movement (cf. Chomsky 1981: 195-204, Abels 2007).

“According to [(27) MM], Spell-Out is required to apply to the complement of the head of the CP phase only when the next strong phase head is introduced in the derivation. Given that neither TP nor the VP/vP associated with raising verbs qualify as strong phases, Spell-Out need not apply to the embedded TP in [(25b) MM] or TopP in [(26b) MM] before the matrix C (the next strong phase head) is added to the derivation. Hence, the matrix T can establish a probe-goal relationship with the embedded subject in [(25b) MM] or the embedded topic in [(26b) MM] before merger of the matrix C.” (Nunes 2008: 97-98).

- (27) “The domain of H [the head of the strong phase HP; JN] is not accessible at ZP [the smallest strong phase dominating HP; JN]; only H and its edge are accessible to such operations.” (Nunes 2008: 97).

Although Chomsky’s (2001) version of the PIC is in fact able to account for hyperraising and topic-hyperraising, Nunes 2008 fails to state that it is not able to account for the finite control derivations he had just discussed. Take for example the derivation in (08b), repeated here as (28b):

- (28) a. O Pedro disse que *ec* comprou um carro novo.
the P. said that bought a car new
- b. [TP Pedro_[Case:NOM] T_{[P:default; N:default]/EPP} [_{VP} Pedro_[Case:u] say [CP that [TP Pedro_[Case:u] T_{[N:default]/EPP} [_{VP} Pedro buy a car new]]]]]

In the derivation of a finite control sentence such as (28a), shown in (28b), the embedded clause is the complement of the verb *dizer* ‘to say’, a transitive verb. When the “transitive” light verb is added to the derivation, being a (strong) phase, it should trigger Spell-Out of the complement of the C head and the embedded subject should be unavailable to be copied and re-merged to the matrix light verb. It is then impossible to derive finite control structures with the version of the PIC used by Nunes (2008).

I confess I see no way out of this conundrum. If Chomsky’s (2001) theory of phases is assumed, there is no way to derive finite control (unless some stipulation is assumed, as in

Rodrigues 2004). If Ferreira’s version of the phase theory is assumed, then topic-hyperraising is unaccounted for. Of course, my point is not to advocate for one version of phase theory or another, or to guarantee that topic-hyperraising is derived. My point is to show that movement accounts are also problematic within the framework they sprang from.

6. Hyperraising

To date, the strongest argument in favor of movement analyses of null subjects in BP is a construction discussed by Ferreira (2000), which he calls hyperraising, exemplified in (29b) below. The argument goes as follows: if A-movement out of a finite embedded clause is allowed in BP, there is no reason for such movement necessarily to target a thematic position. That is, in addition to finite control constructions, BP should also allow hyperraising from impersonal constructions like (29a). The derivation of (29b) as proposed by Nunes (2008) is given in (29c).

- (29) a. Parece que o João comprou um carro novo.
seems that the João bought a car new
 ‘John seems to have bought a new car.’
- b. O João parece que comprou um carro novo.
the João seems that bought a car new
 ‘John seems to have bought a new car.’
- c. [TP João_[Case:NOM] T_{[P:default; N:default]/EPP} [_{vP} seems [_{CP} that [TP João_[Case:u] T_{[N:default]/EPP} [_{vP} João_[Case:u] bought a car new]]]]]

Both Ferreira and Nunes give arguments showing that the “raised subject” in (29b) cannot be a topic: that matrix DP agrees with the raising verb, the position can hold weak pronouns and negative quantifiers, which cannot be topicalized, and idiom chunks maintain their idiomatic interpretation when they occupy that position. The logic of the argument then is that if the matrix DP in that construction is not a topic, then it has to be A-moved there from the embedded clause. The fact is, however, that not being a topic does not imply that the matrix subject has been A-moved there from the embedded clause. Naturally, there are other possible analyses.

There are at least three facts that weaken the hyperraising argument considerably. First, the construction in question is quite marginal for many Brazilian speakers. This is surprising, considering that constructions with null subjects are not marginal at all for any speakers. If defective finite T is responsible for creating both null finite subjects and hyperraising, the two should be exactly parallel and speakers who do not accept hyperraising should not accept null subjects. This is not the case. Second, if finite T in BP is always possibly defective, one would expect to find hyperraising with all sorts of raising verbs, but the construction seems to be restricted to the verb *parecer* ‘to seem’. Duarte & Henriques 2005 investigated raising verbs in both oral speech and written corpora. They did find many hyperraising structures with *parecer* but none with any other raising verbs.²¹ Third, sentences in which an embedded thematic subject of a finite clause agrees with a matrix raising verb are also possible in (a dialect of) EP, as seen in (30). Rooryck & Costa (2000) discuss such construction in EP, which they call “pseudo-raising”.²²

- (30) Tu pareces que estás doente. EP (from Rooryck & Costa 2000:54)
you seem that are sick
 ‘You seem to be sick.’

If the conclusions in section 2 are correct and null referential subjects in EP are pronominal, there is no reason to assume that finite T is defective in EP; therefore, the construction in (30) cannot be a hyperraising structure. In fact, the analysis in Rooryck & Costa 2000 of that construction does not involve raising. That should at least raise some doubts that the corresponding sentences

²¹ Nunes (2008) gives examples of hyperraising with two other verbs besides *parecer*: *acabar* ‘turn out’, and *perigar* ‘be on the verge of’. (All his examples are ungrammatical to me and many other speakers, though). In his analysis, these verbs assign inherent Case to the complement CP, which freezes the CP in place and makes it possible for the embedded subject to be raised to matrix subject position. He claims that hyperraising with *perigar* is not as acceptable as with *parecer*, for some speakers, and that his analysis accounts for that, since inherent Case is a lexical property that is to some extent idiosyncratic. The problem with his logic is that, if a BP speaker does not impute to the verb *perigar* the lexical property of assigning inherent Case to its complement, then sentence (i) below should be acceptable to that speaker, according to Nunes. Sentences like (i), however, are not acceptable to any speaker. In fact, if a speaker accepts or not hyperraising structures does not correlate with he or she accepting movement of the CP to the matrix clause, which is always impossible with verbs like *parecer*. Therefore, Nunes does not account for variation among speakers with respect to which raising verb allows hyperraising or not. His movement analysis predicts all raising verbs to allow hyperraising. This prediction does not seem to be borne out.

(i) *Que aqueles funcionários vão ser demitidos periga.
that those employees go to.be fired is-in-danger
 ‘Those employees are in danger of being fired.’

in BP are a product of hyperraising. There would be at least three ways to go. It could be argued that the BP construction is like the one in EP, which involves strong binding and not raising, as argued by Rooryck & Costa 2000. Or, it could be argued that the matrix subject in “hyperraising” structures actually occupies a topic-like position: the position of grammatical topics argued to exist by the topic-chain analysis, which can in fact host weak pronouns and negative quantifiers. Finally, it could be argued that what has been called “hyperraising” is just another use of the thematic *parecer*, which can be translated in English as “to look like”.²³ In face of everything that has been discussed here, however, it does not seem extremely important to decide what derives “hyperraising” in BP. If Duarte & Henriques 2005 are correct that “hyperraising” occurs only with the verb *parecer*, it is a peripheral structure, a lexical quirk, and does not tell anything about the BP system.

7. Conclusion

Boeckx, Hornstein & Nunes (forthcoming) take the existence of finite control in BP to be evidence in favor of the MTC. However, I argued here that null subjects in BP are not controlled; that movement analyses of null subjects in BP are empirically flawed and technically problematic. They require a series of unfounded assumptions. I also argued that, if some process of topic deletion must be postulated to exist in BP (regardless of how one analyzes null subjects in embedded clauses), then a very similar process may be responsible for producing those null embedded subjects. If these claims are correct, then BP should not be taken as an argument in favor of the MTC.

The fact that movement analyses are technically problematic should not come as a surprise. A-movement out of finite complement clauses is very rare, if it really exists. As discussed in the text, a theory that postulates A-movement out of finite clauses, should also answer why such phenomenon is so rare and how it is possible to take place in the languages which are argued to instantiate it. The movement analysis of null subjects does not answer these questions. The movement analysis rests on the plausibility of the following assumption: BP learners started assuming that finite T could be ϕ -complete or ϕ -incomplete without any

²² I thank one JPL reviewer for directing me to that paper.

²³ This last option was raised by Modesto 2009 and also by one JPL reviewers.

morphological cue which could differentiate the two; or, that some forms of the nonfinite paradigm that are inflected by a *zero* morpheme have caused children to assume that finite forms inflected by an *overt* morpheme were actually ϕ -incomplete. The movement analysis also raises the question of why it should be so rare that children postulate ϕ -incomplete finite Ts, even in languages that have no or very poor overt inflection morphemes.

On the empirical side, the movement analysis rests on the plausibility of the assumption that the complement of all ditransitive verbs in BP is actually an adjunct (when it is finite). Empirical arguments in favor of the movement analysis seem to be solely based on the structures called hyperraising, which are most likely restricted to one verb. I am personally more inclined to believe, as argued by Negrão & Viotti (2000), that the changes in BP are not a product of weakening of inflection, that the distinction between subject-prominent and topic-prominent languages (Li & Thompson 1976) is real, and that it was the change from subject-prominent to topic-prominent that contributed to the erosion of the verbal paradigm in BP. Viewing BP as a topic-prominent language opens up the possibility of explaining far more than just null subjects (although there was no space in here to discuss those other facts).

8. References

- Abels, K. (2007) Some implications of improper movement for Cartography. Ms., University College London.
- Adams, M. (1987) From old French to the theory of pro-drop, *Natural language and Linguistic Theory*, **5**, 1-32.
- Barbosa, P., Duarte M. E. & Kato, M. (2005) Null subjects in European and Brazilian Portuguese. *Journal of Portuguese Linguistics*, **4**, 11-52.
- Belletti, A. (2001) "Inversion" as focalization. In *Inversion in Romance and the theory of universal grammar* (A. Hulk & J.-Y. Pollock, editors), pp. 60-90. New-York & Oxford: Oxford University Press.
- Belletti, A. (2004) Aspects of the low IP area. In *The structure of IP and CP* (L. Rizzi, editor), pp. 16-51. New York & Oxford: Oxford University Press.
- Boeckx, C. & Hornstein, N. (2003) Reply to "Control is not movement", *Linguistic Inquiry*, **34**, 269-280.

- Boeckx, C. & Hornstein, N. (2004) Movement under control. *Linguistic Inquiry*, **35**, 431-452.
- Boeckx, C., Hornstein, N. & Nunes, J. (Forthcoming) *Control as movement*. Cambridge: Cambridge University Press.
- Chao, W. (1981) Pro-drop languages and nonobligatory control. *University of Massachusetts Occasional Papers in Linguistics*, **7**, 46-74.
- Chomsky, N. (1981) *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, N. (2000) Minimalist inquiries: the framework. In *Step by step: essays on minimalist syntax in honor of Howard Lasnik* (R. Martin, D. Michaels & J. Uriagereka, editors), pp. 81-155. Cambridge, Mass.: MIT Press.
- Chomsky, N. (2001) Derivation by phase. In *Ken Hale: a life in language* (M. Kenstowicz, editor), pp. 1-52. Cambridge: MIT Press.
- Cinque, G. (1990). *Types of A'-dependencies*. Cambridge, Mass.: MIT Press.
- Culicover, P. & Jackendoff, R. (2001) Control is not movement. *Linguistic Inquiry*, **30**, 483-512.
- Duarte, M. E. (1995) A perda do princípio “Evite Pronome” no português brasileiro. Doctoral dissertation, Universidade Estadual de Campinas.
- Duarte, M. E. (2000) The loss of the “Avoid Pronoun” principle in Brazilian Portuguese. In *Brazilian Portuguese and the null subject parameter* (M. Kato & E. Negrão, editors), pp. 17-36. Frankfurt: Vervuert-Iberoamericana.
- Duarte, M. E. & Henriques, F. P. 2005. Uma análise comparativa das construções com verbos de alçamento na fala e na escrita. *Cadernos do CNLF (CiFEFil)*, **15**, 140-150.
- Evans, G. (1980) Pronouns. *Linguistic Inquiry*, **11**, 337-362.
- Ferreira, M. (2000) Argumentos nulos em português brasileiro. M.A. thesis, Universidade Estadual de Campinas.
- Ferreira, M. (2009) Null subjects and finite control in Brazilian Portuguese. In *Minimalist essays on Brazilian Portuguese syntax* (J. Nunes, editor), pp. 17-49. Amsterdam: John Benjamins.
- Figueiredo Silva, M. C. (1994) La position sujet en Portugais Brésilien. Doctoral dissertation, Université de Genève.
- Frascarelli, M. (2007) Subjects, topics and the interpretation of referential pro, *Natural language and Linguistic Theory*, **25**, 691–734.

- Galves, C. (1993) O enfraquecimento da concordância no português do Brasil. In *Português Brasileiro: uma viagem diacrônica* (I. Roberts & M. Kato, editors), pp. 387-408. Campinas: Editora da Unicamp.
- Galves, C. (2001) *Ensaio sobre as gramáticas do português*. Campinas: Editora da Unicamp.
- Grosu, A. & Horvath, J. (1987) On non-finiteness in extraction constructions. *Natural Language and Linguistic Theory*, **5**, 181-196.
- Hornstein, N. (1999) Movement and control. *Linguistic Inquiry*, **30**, 69-96.
- Hornstein, N. (2001) *Move! A minimalist theory of construal*. Oxford: Blackwell.
- Hornstein, N. (2003) On control. In *Minimalist syntax* (R. Hendrick, editor), pp. 6-81. Oxford: Blackwell.
- Huang, C.-T. J. (1984) On the distribution and reference of empty pronouns. *Linguistic Inquiry*, **15**, 531-574.
- Kato, M. (1999) Strong and weak pronominals in the null subject parameter. *Probus*, **11**, 1-27.
- Kato, M. & Negrão, E. (2000) *Brazilian Portuguese and the Null Subject Parameter*. Frankfurt: Vervuert-Iberoamericana.
- Kuroda, S.-Y. (1972) The categorial and the thetic judgment. *Foundations of Language*, **9**, 153-185.
- Lambrecht, K. (1994) *Information structure and sentence form: Topic, focus and the mental representations of discourse referents*. Cambridge: Cambridge University Press.
- Landau, I. (2003) Movement out of control. *Linguistic Inquiry*, **34**, 471-498.
- Li, C. N. & Thompson, S. A. (1976) Subject and topic: a new typology of language. In *Subject and topic*. (C. Li, editor), pp. 457-489. New York: Academic Press.
- Martins, A. M. & Nunes, J. (2005) Raising issues in Brazilian and European Portuguese. *Journal of Portuguese Linguistics*, **4**, 53-77.
- Martins, A. M. & Nunes, J. (Forthcoming) Apparent hyper-raising in Brazilian Portuguese: agreement with topics across a finite CP. In *The Complementizer Phase: Subjects and Wh-dependencies* (E. P. Panagiotidis, editor). Oxford: Oxford University Press.
- Menuzzi, S. (2000) That-trace effects in Portuguese. *Fórum Lingüístico*, **2**, 13-39.
- Modesto, M. (2000a) On the identification of null arguments. Doctoral dissertation, USC, Los Angeles.

- Modesto, M. (2000b) Null subjects without rich agreement. In *Brazilian Portuguese and the null subject parameter* (M. Kato & E. Negrão, editors), pp. 147-174. Frankfurt: Vervuert-Iberoamericana.
- Modesto, M. (2004) Sujeitos nulos em línguas de tópico proeminente. *Revista da ABRALIN*, **3**, pp. 121-148.
- Modesto, M. (2007) Null subjects in Brazilian Portuguese and Finnish: they are not derived by movement. In *New horizons in the analysis of control and raising* (W. D. Davies & S. Dubinsky, editors), pp. 231-248. Dordrecht: Springer.
- Modesto, M. (2008) Topic prominence and null subjects. In *The limits of syntactic variation* (T. Biberauer, editor), pp. 375-409. Amsterdam: John Benjamins.
- Modesto, M. (2009) Null subjects in Brazilian Portuguese: a critique of two possible analyses. In *História do Português Caipira* (Maria Aparecida C. R. Torres Morais & Maria Lúcia da C. V.de O. Andrade, editors), vol. 2, p. 99-123. Campinas: editora da UNICAMP.
- Modesto, M. (2010) What Brazilian Portuguese says about control: remarks on Boeckx and Hornstein. *Syntax*, **13**, 78-96.
- Moreira da Silva, S. (1983) Études sur la symetrie et l'asymetrie SUJET/OBJET dans le Portugais du Brésil. Doctoral dissertation, Université Paris VIII.
- Negrão, E. (1997) Asymmetries in the distribution of overt and empty categories in Brazilian Portuguese. In *Clitics Pronouns and Movement* (Current Issues in Linguistic Theory 140, J.R. Black & V. Motapanyase, editors), pp. 217-235. Amsterdam: John Benjamins.
- Negrão, E. & Müller, A. (1996) As mudanças no sistema pronominal do português do Brasil: substituição ou especialização de formas?. *D.E.L.T.A.*, **12**, 125-152.
- Negrão, E. & Viotti, E. (2000) Brazilian Portuguese as a discourse-oriented language. In *Brazilian Portuguese and the null subject parameter* (M. Kato & E. Negrão, editors), pp. 105-125. Frankfurt: Vervuert-Iberoamericana.
- Nunes, J. (2008) Inherent case as a licensing condition for A-movement: the case of hyper raising constructions in Brazilian Portuguese. *Journal of Portuguese Linguistics*, **7**, 83-108.
- Nunes, J. (2009) Dummy prepositions and the licensing of null subjects in Brazilian Portuguese. In *Romance Languages and Linguistic Theory 2007* (E. O. Aboh, E. van der Linden, J. Quer & P. Sleeman, editors), pp. 243-265. Amsterdam: John Benjamins.
- Pontes, E. (1987) *O Tópico no português do Brasil*. Campinas: Pontes.

- Reinhart, T. (1981) Pragmatics and linguistics: An analysis of sentence topics. *Philosophica*, **27**, 53-94.
- Rizzi, L. (1982) *Issues in Italian syntax*. Dordrecht: Foris.
- Rizzi, L. (1990) *Relativized minimality*. Cambridge: MIT Press.
- Rizzi, L. & Shlonsky, U. (2007) Strategies of Subject Extraction. In *Interfaces + Recursion = Language? Chomsky's Minimalism and the View from Syntax-Semantics* (U. Sauerland & H-M. Gärtner, editors), pp. 115–160. Berlin: Mouton de Gruyter.
- Rodrigues, C. (2004) Impoverished morphology and A-movement out of case domains. Doctoral dissertation, University of Maryland.
- Rooryck, J. & Costa, J. (2000) Pseudo-raising. In *Configurations of Sentential Complementation*. (J. Rooryck), pp. 54-72. London: Routledge.
- Sigurðsson, H. Á. (To appear) Conditions on argument drop. *Linguistic Inquiry*.