MOVEMENT AND RESUMPTION IN NULL POSSESSOR CONSTRUCTIONS IN BRAZILIAN PORTUGUESE

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In this paper we examine null possessor constructions in Brazilian Portuguese, which display an anaphoric behavior in some contexts but a pronominal behavior in others. We show that in absence of islands separating a null possessor from its antecedent, null possessors display properties of obligatory control and, following Hornstein (2001), we analyze these instances of null possessors as traces of movement to θ -positions. Assuming with Hornstein (2001, 2007) that movement is derivationally more economical than pronominalization, we then argue that null possessors exhibit a pronominal behavior only when they sit in a position from which a licit A-movement operation cannot be launched.

1. Introduction^{*}

Scholars have long observed that (Colloquial) Brazilian Portuguese has by and large lost its third person possessive pronoun *seu* and its plural and feminine counterparts, replacing them with a periphrastic form using a preposition, as illustrated in (1) (see e.g. Silva, 1984; Perini, 1985; Cerqueira, 1993; Menuzzi, 1996; and Negrão & Müller, 1996).

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(1) a.*[[o João]_i conversou com o **seu**_i pai]

the João talked with the his father

b. [[o João]_i conversou com o pai **dele**_i]

the João talked with the father of-him

'João talked with his father.'

The unacceptability of (1a) is also standardly associated with other rearrangements in the pronominal system of Brazilian Portuguese. In most dialects, the pronoun $voc\hat{e}$ (you.SG), which triggers third person agreement, came to replace tu (you.SG), which triggers second person agreement. Accordingly, the possessive pronoun seu, which could take $voc\hat{e}$ as an antecedent, was reanalyzed as second person, replacing teu in most dialects. Thus, the sentence in (1a) is indeed acceptable in Brazilian Portuguese, but only under the reading 'João talked to your father'.

In this paper we focus our attention to constructions such as (2), which have received little attention in the literature on Brazilian Portuguese. As opposed to (1), (2) arguably involves an empty category (*ec*) as the possessor.

(2) [[o João]_i conversou com o pai *ec*_i] *the João talked with the father* 'João talked with his father.'

The paper is organized as follows. In section 2 we review Floripi's (2003) and Rodrigues's (2004) arguments in favor of a movement approach to null possessor constructions in Brazilian Portuguese, based on Hornstein's (2001) movement analysis of obligatory control.³ In section 3, we consider another set of data discussed in Floripi (2003) and Floripi & Nunes (2004), which appears to pose problems to the movement analysis presented in section 2. Following Hornstein (2001, 2007), we then argue in section 4 that when a movement operation cannot be launched from the possessor position, resumption via a null pronoun is licensed and this is what accounts for the pronominal behavior of the null possessor in these particular constructions. Finally, section 5 concludes the paper.

¹ Exceptions include the studies by Floripi (2003), Floripi & Nunes (2004), and Rodrigues (2004), who associate the emergence of constructions like (2) in (Colloquial) Brazilian Portuguese (with the properties mentioned in section 2 below) to the weakening of its nominal agreement system. As illustrated in (i), (Colloquial) Brazilian Portuguese allows nonagreeing constructions such as (ib) along with the standard agreeing version in (ia) (see e.g. Scherre & Naro, 1993 for relevant discussion).

⁽i) a. os livros amarelos
the-PL book-PL yellow-PL
b. os livro amarelo
the-PL book yellow
'the yellow books'

 $^{^2}$ To ensure that the DPs under consideration have a null possessor, we will only discuss relational nouns, which arguably have a θ -role to assign to their possessor.

³ Floripi (2003) and Rodrigues (2004) have independently argued for a movement approach to null possessors in Brazilian Portuguese based on Hornstein's (2001) list of diagnostics for obligatory control. So, details of implementation aside, the types of data to be discussed in section 2 are found in both studies.

2. NULL POSSESSORS AS TRACES

At first sight, the differences between (1b) and (2) are just a matter of phonetic realization. In other words, (2) should simply involve a null pronoun. However, when the interpretation of these sentences is taken into consideration, we find that this simple story is not correct. Take (3), for example.

- (3) a. [[o João]_i conversou com o pai delei/k] the João talked with the father of-him 'João talked with his father.' João]_i conversou com o pai *ec*_{i/*k}] with the father the João talked 'João talked with his father.'
- (3a) is not interpreted as "marked" when compared to (3b). Under (some version of) Chomsky's (1981) Avoid Pronoun principle, this then suggests that the empty category in (3b) is not a null pronoun. Moreover, although the pronoun in (3a) can take an antecedent in the sentence or in the discourse, the empty category in (3b) has an anaphoric-like behavior in that it must find its antecedent within its sentence and not in the discourse.

Further evidence for the anaphoric behavior of the empty category in (3b) is illustrated in (4) and (5).

- (4) [[a Marcela]_i disse que [o André]_k ligou para o amigo $ec_{k/*i}$] the Marcela said that the André called to the friend 'Marcela_i said that André_k called his_k/*_i friend'
- João]_i]]_k telefonou para a mãe $ec_{k/*i}$] (5) [[o amigo [d[o the friend of-the João called to the mother '[João_i's friend]_k called his_{k/*i} mother'
- (4) shows that the sentence-internal antecedent required by the null possessor must be local and (5), that the null possessor must be c-commanded by such an antecedent.

However, in one point null possessors differ from overt anaphors. As is well known, anaphors within picture-NPs optionally allow for reconstruction, as shown in (6) below, where himself can take either the matrix or the embedded subject as its antecedent (see e.g. Chomsky 1993). Despite being within a DP, null possessors contrast with the anaphors found in picture-NPs in requiring obligatory reconstruction, as exemplified in (7), where the null possessor must be interpreted as the embedded subject. And again, we find a contrast with pronouns, which allow either the matrix or the embedded subject reading, as illustrated in (8).

- (6) John_i wonders which picture of himself_{i/k} Bill_k saw
- (7) [[o João]_i perguntou que amigo $ec_{k/*i}$ [o Pedro]_k vai visitar] the João asked which friend the Pedro goes visit 'João_i asked which friend of his_k Pedro_k is going to visit'

(8) [[o João]_i perguntou que amigo dele_{k/i/m} [o Pedro]_k vai visitar] the João asked which friend of-him the Pedro goes visit 'João_i asked which friend of his_{k/i/m} Pedro_k is going to visit'

Facts such as (3)-(5) have led Floripi (2003), Floripi & Nunes (2004), and Rodrigues (2004) to analyze null possessor constructions in Brazilian Portuguese along the lines of Hornstein's (2001) analysis of obligatory control.⁴ According to Hornstein, a standard obligatory control structure such as (9a) is to be analyzed as in (9b), where the Caseless embedded subject moves to the matrix [Spec, vP], where it receives the external θ -role, before reaching the matrix subject position and having its Case-checked (see also Boeckx, Hornstein & Nunes, forthcoming for further discussion).

(9) a. John tried to leave.b. [TP John_i [vP t_i v [vP tried [TP t_i to leave]]]

Floripi (2003) and Rodrigues (2004) observe that if null possessors in constructions like (3b) are traces of movement to a thematic position, as represented in (10) below, we have a straightforward account of their anaphoric behavior. Being traces, null possessors must have a local c-commanding antecedent (cf. (3b)-(5)). Also, if null possessors are traces, they are not subject to Chomsky's (1981) Avoid Pronoun principle, which explains why null and overt possessors do not contrast in terms of markedness (cf. (3)).

(10) [TP [o João]_i [$_{VP}$ t_i v [$_{VP}$ conversou com [o pai t_i]]]] the João talked with the father 'João talked with his father.'

A trace analysis also accounts for the difference between null possessors and overt anaphors in *picture*-NPs. In a strictly cyclic computation, the derivation of (7), for instance, involves the steps depicted in (11) below, where the embedded subject moves from the possessor position leaving a trace behind (cf. (11a)). Further movement of the object DP to [Spec, CP] in (11b) does not alter the fact that the null possessor is a trace of *o Pedro* and, therefore, cannot acquire another interpretation (say, as co-referential with the matrix subject) in the course of the derivation (cf. (11c)).

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(11) a. [TP] [o Pedro]<sub>k</sub> vai [vP] tk v [VP] visitar [que
                                                           amigo t_k]]
             the Pedro goes
                                          visit
                                                  which friend
    b. [CP [que amigo t_k]_w [TP [o Pedro]_k vai [vP t_k v [vP visitar t_w]]]
            which friend
                                    the Pedro goes
                                                              visit
    c. [TP][O] João]_i perguntou [CP][QU] amigo t_k]_w [TP][O] Pedro]_k vai
            the João asked
                                        which friend
                                                                    the Pedro goes
        [vP t_k v [vP visitar t_w]]]
                   visit
        'João<sub>i</sub> asked which friend of his<sub>k</sub> Pedro<sub>k</sub> is going to visit'
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⁴ See also Ferreira (2000, this volume) and Augusto (2003, this volume) for further discussion on movement to θ -positions in Brazilian Portuguese.

In other words, the contrast between (6) and (7) replicates the contrast between (12a) and (13a) below, which Huang (1993) argues is due to the fact that in (13a), the moved *wh*-phrase contains a trace of the embedded subject locally binding *each other* and precluding binding by a more remote subject, as represented in (13b).

- (12) a. [they_i weren't sure which stories about [each other]_{i/k} [the kids]_k read] b. [they_i weren't sure [[which stories about [each other]_{i/k}]_w [the kids]_k read t_w]]
- (13) a. [[the teachers]_i weren't sure how proud of [each other]_{k/*i} [the students]_k were]
 - b. [[the teachers]_i weren't sure [[t_k how proud of [each other]_k/*_i]_w [the students]_k were t_w]

Three other pieces of data provide further evidence for the proposal that null possessors in Brazilian Portuguese are to be analyzed as obligatorily controlled PROs/A-traces. An obligatorily controlled PRO necessarily triggers a sloppy reading under ellipsis, a bound reading when its antecedent is an "only-DP", and a de se interpretation in "unfortunate" contexts (see e.g. Hornstein, 2001 and Boeckx, Hornstein & Nunes, forthcoming), as respectively shown in (14).

- (14) a. [John₁ wants [PRO₁ to win]] and [Bill does too] ('... and Bill wants himself to win'/*'... and Bill wants John to win')
 - b. [[only Churchill]₁ remembers [PRO₁ giving the BST speech]]

 ('Only Churchill is such that he remembers himself giving the BST speech'

 NOT 'Nobody else remembers that Churchill gave the BST speech')
 - c. [[the unfortunate]₁ expects [PRO₁ to get a medal]] (#although he doesn't expect himself to get a medal)

As discussed by Floripi (2003) and Rodrigues (2004), null possessors in Brazilian Portuguese also trigger obligatory sloppy reading under ellipsis (cf. (15a) below), require a bound interpretation with an *only*-DP as an antecedent (cf. (16a)), and can only be associated with a *de se* reading (cf. (17a)). Moreover, this behavior of null possessors systematically contrasts with the behavior of overt pronouns, as shown in the *b*-sentences of (15)-(17).

- (15) a. [[o João]_i vai telefonar para a mãe *ec*_i] e [a Maria também vai]] the João goes call to the mother and the Maria also goes 'João will call his mother and Mary will call *her* mother, too.' (sloppy reading only)
 - b. [[o João]_i vai telefonar para a mãe **dele**_i] e [a Maria também vai]] *the João goes call to the mother of-him and the Maria also goes* 'João will call his mother and Mary will call **his/her** mother, too.' (sloppy and strict readings available)
- (16) a. [[só o João] ligou para a mãe ec]
 only the João called to the mother
 'Only João called his mother → Nobody else called his own mother'
 NOT 'Nobody else called João's mother.'

- b. [[só o João] ligou para a mãe dele] only the João called to the mother of-him
 'Only João called his mother → Nobody else called his own mother' or 'Nobody else called João's mother.'
- (17) [Non-de se context: Reagan doesn't remember who he is or that the person under discussion is his brother]
 - a. #[Reagan passou a admirar o irmão ec]
 Reagan passed to admire the brother
 'Reagan came to admire his brother.' (de se reading only; infelicitous in this context)
 - a. [Reagan passou a admirar o irmão **dele**]

 Reagan passed to admire the brother of-him

 'Reagan came to admire his brother.' (non-de se reading available)

To summarize, the contrast between the a- and b-sentences of (15)-(17) points to the conclusion that the null possessors in these constructions are not null pronouns and that a movement analysis as developed by Hornstein (2001) to handle obligatory control captures the configuration properties of the antecedent, as well as the interpretive properties of the null possessor. However, we will see in the next section that this cannot be the whole story.

3. POTENTIAL PROBLEMS

Consider the contrast between the sentences in (18) and (19) below.

- (18) *[[o irmão ec] viajar]

 the brother goes travel

 'His/her brother is going to travel'
- (19) [[o João]_i disse que [[o irmão ec_{i/*k}] vai viajar]] the João said that the brother goes travel 'João said that his brother is going to travel.'

At first sight, the contrast between (18) and (19) is exactly what we should expect. If null possessors are traces, they must have an antecedent. Thus, (18) is ruled out and the null possessor in (19) must be interpreted as *João*. However, upon close inspection, we are faced with a problem. If the null possessor of (19) is a trace, the matrix subject must have moved from within the embedded subject position, a standard (CED) island configuration. The contrast in (20), for instance, clearly shows that movement from such position is not allowed in Brazilian Portuguese.

⁵ See Floripi (2003) and Rodrigues (2004) for additional evidence and further discussion.

⁶ (18) is ill-formed even if an antecedent is provided in the discourse, as shown in (i).

 ⁽i) A: — [a Maria]_i viajou ontem the Maria travelled yesterday 'Maria traveled yesterday.'
 B: — O irmão ?*(dela) também the brother of-her too 'Her brother, too.'

(20) a. [[o João]_i acha que [[o irmão [de quem]] vai viajar]] the João thinks that the brother of who goes travel b. *[[de quem]_i [[o João]_i acha que [[o irmão t_i] vai viajar]] of who the João thinks that the brother goes travel 'Whose brother does João think is going to travel?'

However, when null possessors are involved, the number of apparent island violations can even increase without altering the acceptability of the sentence, as illustrated in (21), where the null possessor is embedded within the subject of the relative clause.

(21) [[o João]_i adorou o presente [que [uma amiga ec_i] deu para a Maria] the João adored the gift that a friend gave to the Maria 'João loved the gift that a friend of his gave to Maria.'

An obvious approach to sentences such as (19) and (21) suggests itself, namely, that in these constructions the null possessor is a null resumptive pronoun rather than a trace and, as such, it is not subject to island effects. Although we will at the end adopt such an analysis, let us first point out three problems that it has to solve if it is to be seriously entertained.

First, if null possessors in Brazilian Portuguese can be null pronouns, one must explain why such null pronouns cannot be employed in the structures discussed in section 2. Why, for instance, do the null possessors discussed so far require a local c-commanding antecedent and do not have the interpretation associated with an overt pronoun?

The second problem has to do with the general availability of the hypothesized null resumptive pronoun. Although Brazilian Portuguese does allow null resumptive pronouns in the object position (see e.g. Galves, 1989; Kato, 1993; Ferreira, 2000; Kato & Nunes, this volume; and Nunes & Santos, this volume), as shown in (22a) below, it does not admit null resumptives in the subject position, as shown in (22b) (see e.g. Figueiredo Silva, 1996; Ferreira, 2000, this volume; and Rodrigues, 2004). Thus, if the null possessors of (19) and (21) are resumptive *pros*, we have to explain what they have in common with resumptive null objects, which sets them apart from resumptive null subjects.

- (22) a. [[esse livro]_i [as pessoas [que leram ec_i]] mudaram de vida]] this book the people who read changed of life 'This book, people who read it changed their lives.'
 - b. *[[esse médico]_i, [o paciente [que_k ec_i atendeu t_k]] saiu do hospital hoje]] this doctor the patient that treated left of-the hospital today 'This doctor, the patient that he treated left the hospital today.'

Finally, if null possessors in constructions such as (19) and (21) are null pronouns, we have to explain how they are Case-licensed, for an overt DP in the position of the empty category requires a dummy Case-marking preposition, as seen in (23).

(23) [[o João]_i conversou com o pai *(**d**)ele_i] *the João talked with the father of-him* 'João talked with his father.'

Let us then see how these problems can be circumvented.

4. NULL POSESSORS AS NULL PRONOUNS

4.1 Null Resumptive Possessors and Derivational Economy⁷

The old idea that (resumptive) pronouns are employed as a last resort saving strategy has been recently reinterpreted within the Minimalist Program in terms of derivational economy. Specifically relevant to our discussion is Hornstein's (2001, 2007) (see also Aoun, Choueri & Hornstein, 2001) proposal that movement is less costly than pronominalization, as pronouns are not present in the numeration that feeds the derivation.

To illustrate the general intuition explored by Hornstein, consider the contrast in (24).

(24) a. Harry_i hates [PRO_i kissing Mary] b. *Harry_i hates [him_i kissing Mary]

According to Hornstein, movement always preempts pronominalization if a convergent result obtains. Thus, if co-reference between the two subject positions in (24) can be obtained via movement, as illustrated in (25) (under the movement analysis of obligatory control), resort to a pronoun in (24b) is blocked by economy considerations; hence, the obviation effect seen in (24b).

(25) [Harry₁ [$_{vP}$ t_1 [v [$_{vP}$ hates [t_1 kissing Mary]]]]]

Assuming that Hornstein's proposal is essentially correct, let us examine in detail the contrast between (26), where the null possessor cannot pick an antecedent outside its clause, and (27), where it can.

- (26) [[a Marcela]_i disse que [o André]_k ligou para o amigo $ec_{k/*i}$] the Marcela said that the André called to the friend 'Marcela_i said that André_k called his_{k/*i} friend.'
- (27) [[o João]_i disse que [[o amigo ec_{i/*k}] vai viajar]] the João said that the friend goes travel 'João said that his friend is going to travel.'

If movement is the preferred option in terms of economy, one has to give a chance for movement to take place before considering the pronominalization alternative. Thus, the derivation of (26) should proceed along the lines of (28) below, where *amigo* first merges with the possessor DP, as shown in (28a), and later the vP structure in (28b) is assembled. When the derivational step in (28b) is reached, the possessor can move to [Spec, vP] to receive the external θ -role (cf. (28c)), as it has not checked its Case yet (Recall that a DP cannot surface in the position depicted in (28a) unless a Case-marking preposition is inserted; cf. (23)). If movement is possible, it then rules out an alternative derivation where a null pronoun is inserted in the

⁷ This section is based on Floripi (2003) and Floripi & Nunes (2004).

possessor position to be later coindexed with some other element. In other words, the null possessor in (26) is bound to be interpreted as the subject of its clause as it is actually a copy/trace of it.

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(28) a. [amigo DP]

friend

b. [vP V [vP ligou para o [amigo DP]]]

called to the friend

c. [vP DP<sub>i</sub> v [vP ligou para o [amigo t<sub>i</sub>]]]

called to the friend
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In turn, the derivation of (27) also starts with merger of *amigo* and the possessor DP, but the larger DP is then inserted in a specifier position and moved to another specifier position, as show in (29).

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(29) a. [amigo DP]

friend

b. [o amigo DP]

the friend

c. [vP [o amigo DP] [v v [vP viajar]]]

the friend travel

d. [TP [o amigo DP]i vai [vP ti [v v [vP viajar]]]]

the friend goes travel
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Given that movement of the possessor DP from within the specifier should give rise to an island violation (a nonconvergent result), the system is then allowed to resort to pronominalization, which in turn permits that a null possessor can take an antecedent outside its clause.⁸

To sum up, postulating a null resumptive possessor does not lead to overgeneration, as pronominalization is crucially conditioned by economy considerations. Only when the kinds of movements discussed in section 2 are blocked can pronominalization be employed.

4.2 Null Resumptive Possessors and Case

Let us now tackle the issue of why an overt DP cannot appear in the position of a null resumptive possessor unless the dummy preposition *de* is inserted, as exemplified in (30).

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(30) a. [[o João]<sub>i</sub> disse que [[o amigo pro<sub>i</sub>] vai viajar]] the João said that the friend goes travel
b. [[o João]<sub>i</sub> disse que [[o amigo *(d)ele<sub>i</sub>] vai viajar]] the João said that the friend of-him goes travel 'João said that his friend is going to travel.'
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Kato & Nunes (this volume) have argued that contrasts between *pro* and overt DPs similar to the one in (30) can be accounted for if the preposition is a marker of inherent Case (see Chomsky, 1986), which is only realized if the Case-marked

⁸ From this perspective, the unacceptability of (18) is due to the fact that no movement has taken place (as there is no antecedent for the null possessor).

element is overt. Assuming this to be the case in (30), we now have an answer for why a resumptive null pro can be licensed as the object of certain verbs (see Kato, 2008; and Kato & Nunes, this volume) and as a null possessor, but not as a regular subject (cf. (22b)). Like null objects in Brazilian Portuguese, null possessors can be licensed by inherent Case; in other words, the relational noun may assign an inherent Case to its possessor, which will be realized by the dummy preposition de if the possessor is overtly realized. Null subjects, on the other hand, are not as lucky. It has been convincingly argued in the literature on null subjects in Brazilian Portuguese that with the weakening of its verbal agreement, pro can no longer be licensed/identified by Infl (see e.g. Duarte, 1995; Figueiredo Silva, 1996; Kato, 1999; Ferreira, 2000, this volume; Galves, 2001; and Rodrigues, 2004 for discussion). Moreover, resumptive null subjects cannot be licensed by inherent Case either, for T is not an inherent Case-assigner (it is not a θ -role assigner).

Let us now consider the data in (31) and (32).

- (31) a. Ontem eu conversei com um primo.
 yesterday I talked with a cousin
 'Yesterday I talked to a cousin of mine.'
 b. Você não ia contratar um primo?
 you not went hire a cousin
 - 'Weren't you going to hire a cousin of yours?'
 c. O João contratou um primo.

 the João hired a cousin

 'João hired a cousin of his.'
- (32) a. *Ontem eu conversei com o primo.

 yesterday I talked with the cousin

 'Yesterday I talked to my cousin.'
 b. *Você não ia contratar o primo?

 you not went hire the cousin

 'Weren't you going to hire your cousin'
 - c. O João contratou o primo.

 the João hired the cousin

 'João hired his cousin.'
- (31) shows that a null possessor within an indefinite DP may take first, second, or third person antecedents. In turn, (32) shows that when the null possessor is inside a definite DP, only a third person antecedent is allowed. Interestingly, the contrast above is correlated to whether or not an overt possessor is allowed postnominally, as illustrated in (33).
- (33) a. um primo meu/seu/dele

 a cousin my/your/of-him

 'a cousin of mine/yours/his'
 b. um *meu/*seu/*dele primo

 a my/your/of-him cousin

 'a cousin of mine/yours/his'

⁹ Furthermore, the null possessor in (31a) and (32b) displays all the anaphoric properties discussed in section 2.

d. o meu/seu/*dele primo the my/your/of-him cousin 'my/your/his cousin'

The data in (32) and (33) can be accounted for if inherent genitive Case is optionally assigned to the postnominal position and structural genitive is assigned to the prenominal position when the definite article is involved. Thus, in the case of first and second persons, when the pronoun moves to the prenominal position and values its Case, it becomes frozen and cannot leave the DP; hence, the unacceptability of possessor raising constructions in (32a) and (32b). In the case of third persons, by contrast, they can only be licensed via inherent Case in the postnominal position (cf. (33c) vs. (33d)), because Brazilian Portuguese lost the 3rd person seu. Thus, if a third person pronoun does not get inherent Case, it must undergo possessor raising, regardless of whether the DP containing it is definite or indefinite (cf. (31c) and (32c)).

Finally, the unacceptability of (33c) with first and second persons can be accounted for if inherent Case is realized only as a last resort strategy, that is, when realization of structural Case is not available. If definite DPs can license structural Case for first and second persons (cf. (33d)), realization of inherent Case is blocked, ruling out the first and second persons in (33c). Thus, the contrast between (33c) and (33d) with respect to first and second persons in a sense replicates the paradigm in (34) (see Hornstein, Martins & Nunes, 2008 and Nunes, 2008 for relevant discussion), where the preposition *of* realizes inherent Case only if structural genitive (the possessive 's) is not available.

(34) a. [the destruction of [the city]] b. [[the city]'s destruction *t*]] c. *[[the city]'s destruction of *t*]]

4.3 Some Consequences

In section 4.1 we have seen that when possessor movement cannot take place, resumption is allowed, explaining why a null possessor can take an antecedent outside its clause in these circumstances. This proposal also predicts that in the cases resumption is allowed as last resort, the locality and c-command requirements on the antecedent of the null possessor (see section 2) should no longer matter. That this prediction is correct is shown in (35).

- (35) a. [[a Maria]_k acha que [o João]_i disse que [[o amigo *pro*_{i/k}] vai viajar]] *the Maria thinks that the João said that the friend goes travel* 'Maria thinks that João said that his/her friend is going to travel'
 - b. [[o namorado d[a Maria]_w]_k saiu quando [um parente $pro_{k/w}$] entrou] the boyfriend of-the Maria left when a relative entered 'Maria's boyfriend left when a relative of hers/his got in'

In (35a) the null possessor can take the nonlocal matrix subject as its antecedent and in (35b), it can be co-referential with the non c-commanding DP *a Maria*. Recall that such possibilities are excluded when movement of the possessor is possible, as shown in (4) and (5), repeated in (36).

- (36) a. [[a Marcela]_i disse que [o André]_k ligou para o amigo $ec_{k/*i}$] the Marcela said that the André called to the friend 'Marcela_i said that André_k called his_{k/*i} friend.'
 - b. [[o amigo [d[o João]_i]]_k telefonou para a mãe $ec_{k/*i}$] the friend of-the João called to the mother '[João_i's friend]_k called his_{k/*i} mother'

These welcome results lead to another prediction. As discussed in section 2, the interpretive properties of configurations where possessor movement is possible in Brazilian Portuguese mirror the properties of obligatory control. Accordingly, we should expect that the interpretive properties of configurations where possessor movement is blocked should parallel the interpretive properties of non-obligatory control, which Hornstein (2001) argues involves a last resort pronominalization strategy. Consider the sentences in (37), for instance.

- (37) a. John₁ thinks that Mary said that PRO₁ shaving himself is vital
 - b. John's₁ friends believe that PRO₁ keeping himself under control is vital if he is to succeed.
 - c. John₁ thinks that PRO₁ getting his resumé in order is crucial and Bill does, too.
 - d. Only Churchill remembers that PRO giving the BST speech was momentous.
 - e. [the unfortunate] believes that PRO getting a medal is unlikely.

(37a) shows that a non-obligatorily controlled PRO may have a nonlocal antecedent and (37b), that the antecedent need not command it. In other words, the lack of structural requirements on the antecedent for the null possessor in (35) parallels what we observe in the non-obligatory control constructions in (37a-b). As for interpretive properties, the sentences in (37c-e) are not restricted in interpretation: (37c) allows for both strict and sloppy readings, (37d) for both bound and co-referential readings, and (37e) for both *de se* and non-*de se* interpretations (see e.g. Hornstein, 2001 and Boeckx, Hornstein & Hornstein, forthcoming). The same looseness in interpretation is found in null possessor configurations such as (38)-(40) below, where movement of the possessor is blocked. That is, VP-ellipsis may yield sloppy and strict readings in (38); the null possessor in (39) can be interpreted either as being co-referential with *o João* or being bound by *só o João*; and a *de se* reading is not obligatory in (40).

(38) [[a Maria]_i vai recomendar a pessoa [que [um amigo **pro**_i] entrevistou] the Maria goes recommend the person that a friend interviewed e [o João]_k também vai.

and the João also goes

'Maria is going to recommend the person that a friend of hers interviewed and

'Maria is going to recommend the person that a friend of hers interviewed and João is also going to recommended a person that a friend of **his/hers** interviewed ' (sloppy and strict readings available)

- (39) [[só o João] leu o livro [que [a mãe pro] indicou]] only the João read the book that the mother recommended
 'Only João read the book that his mother recommended → Nobody else read the book that his own mother recommended' or 'Nobody else read the book that John's mother recommended'
- (40) [Non-de se context: Reagan doesn't remember who he is or that the person under discussion is his brother]
 Reagan_i se surpreendeu [quando [o irmão proi] fez um discurso]
 Reagan REFL surprised when the brother made a speech
 'Reagan got surprised when his brother made a speech.' (non-de se reading available)

The data above thus further corroborate the idea that the two types of null possessor constructions in Brazilian Portuguese should be assimilated to the distinction between obligatory and non-obligatory control. More specifically, it provides additional evidence for Hornstein's (2001, 2007) proposal that movement and pronominalization compete for economy purposes and that movement blocks pronominalization if both lead to a convergent result.

5. CONCLUSION

This paper has examined an apparent paradoxal situation in Brazilian Portuguese in which null possessors display anaphoric behavior in some cases and pronominal behavior in others. We have argued that a solution to this paradox can be found if movement is taken to be more economical than pronominalization, as proposed by Hornstein (2001, 2007). Thus, null possessors will display pronominal behavior only when they sit in a position from where movement cannot be launched.

To the extent that the approach explored here is on the right track, it not only offers an account of an intricate set of interpretive facts involving null possessors in Brazilian Portuguese, but also provides additional evidence for the proposal that movement to θ -positions is licit (see Hornstein, 2001 and Boeckx, Hornstein & Nunes, forthcoming).

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