# Generalized phasal defectivity in Brazilian Portuguese

Jairo Nunes Universidade de São Paulo jmnunes@usp.br



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#### **Abstract**

Brazilian Portuguese displays a cluster of apparently unrelated properties that set it aside within Romance. On the one hand, it has lost its third person possessive pronouns (cf. Oliveira e Silva 1985, Perini 1985, Cerqueira 1996, and Müller 1996), its third person accusative and dative clitics (cf. Omena 1978, Duarte 1986, Galves 1987, Kato 1993, Nunes 1993, Cyrino 1997, and Berlinck 2006), and its null subjects and null possessors have become severely restricted (cf. Duarte 1995, Figueiredo Silva 1996, Kato 1999, Ferreira 2000, Modesto 2000, Galves 2001, Floripi 2003, and Rodrigues 2004). On the other hand, it came to allow hyper-raising constructions (cf. Ferreira 2000 and Nunes 2020b), as well as the so-called 'topic subject' constructions, where a putative topic controls verbal agreement (cf. Pontes 1987, Galves 1987, Nunes 2017, and Kato and Ordóñez 2019). Moreover, it makes a pervasive use of preposition deletion in relative clauses (cf. Tarallo 1983) and its directional verbs came to select the preposition *em* 'in' instead of *a* 'to' (cf. Wiedemer 2013). In this paper, I argue that these and other seemingly independent changes can be accounted for if there is a general process of underspecification affecting phases in Brazilian Portuguese.

**Keywords:** phases, φ-defectiveness, inherent Case, A-movement, minimality, Brazilian Portuguese.

#### 1. Introduction

It is a well-known fact that Brazilian Portuguese (henceforth *BP*) displays a much more limited distribution and restrictive interpretation for its null subjects than other null subject languages within Romance. A very influential analysis of BP null subjects was developed by Ferreira (2000, 2009), who ultimately attributes their restrictive nature to φ-deficiency in T. More specifically, Ferreira proposes that finite T in BP may be φ-complete or φ-incomplete. When T is φ-incomplete, it cannot value the Case feature of its subject, which is then forced to undergo A-movement out of its clause to have its Case licensed, yielding many of the properties of BP null subjects. Assuming that this analysis is on the right track, one wonders if the relevant φ-deficiency is an idiosyncratic property of T in BP or whether this is a reflex of a more general property of BP grammar. In this paper, I argue that a cluster of properties that set BP aside within Romance (including those involving its null subjects) can be accounted for, if its phases may be φ-defective.

The paper is organized as follows. In section 2, I review Ferreira's (2000, 2009) proposal and its reinterpretation by Nunes (2008, 2019b) in terms of φ-deficiency at the CP phase. In sections 3 and 4, I show that DP and νP phases in BP may also be φ-defective and that an argument DP within these defective phases has to undergo A-movement or be assigned inherent Case in order to be Case-licensed. In section 5, I discuss the role of inherent Case in bleeding A-minimality. In section 6, I discuss complex constructions that arise as a by-product of the interaction among different defective phases. In section 7, I present a hypothesis for the different placement pattern exhibited by third person accusative clitics in written language and formal registers of BP, based on how the effects of phasal defectivity are treated in formal schooling. Finally, some concluding remarks are offered in section 8.

#### 2. φ-defectivity at the CP Level

A consensus in the literature on BP is that it is not a prototypical null subject language (see footnote 1). As shown in (1) below, null subjects in matrix clauses may give rise to different degrees of acceptability, depending on the pronoun that is null.<sup>2</sup>

(1) a. Quem 
$$\emptyset$$
 devía-mos contratar?  $\emptyset = n \acute{o} s \rightarrow \sqrt{\text{who should-1 hire}}$  'we' 'Who should we hire?'

For relevant discussion, cf. Negrão 1986, Duarte 1995, Figueiredo Silva 1996, Kato 1999, Ferreira 2000, 2009, Kato and Negrão 2000, Modesto 2000, Galves 2001, Rodrigues 2004, Petersen 2011, Nunes 2020a, Martins and Nunes 2021, and Kato, Martins, and Nunes forthcoming.

The paradigm in (1) has *wh*-constituents in the beginning of the sentences in order to exclude potential cases of topic drop, which is independently allowed in BP (cf. Ferreira 2000, Modesto 2000, Rodrigues 2004, and Nunes 2008 for relevant discussion).

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b. ??O que \emptyset tenh-o a ver com isso?
                                                \emptyset = eu \rightarrow ??
              have-sG to see with this
                                                     'I'
     what
   'What do I have to do with this?'
c. ??Quando Ø viajara-m?
                                                \emptyset = voc\hat{e}s/eles/elas \rightarrow ??
     when
                  travel-PL
                                                      'you(PL)/they(MASC/FEM)'
   'When did {you(PL)/they} travel?'
d. *Quando Ø deve viajar?
                                                \emptyset = voc\hat{e}/ele/ela/a \ gente \rightarrow *
    when
                should travel
                                                      'you(SG)/he/she/we'
   'When are {you(SG)/we (a gente)} supposed to travel?' / 'When is {he/she}
  supposed to travel?'
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A sentence is acceptable when the null subject corresponds to the first person plural pronoun (cf. (1a)); marginal in the case of the first person singular, the second person plural, or the third person plural pronouns (cf. (1b)-(1c)); and completely unacceptable in the case of the second person singular and the third person singular pronouns, or the pronoun *a gente*, which is semantically first person plural (cf. (1d)). Martins and Nunes (2021) (cf. also Kato, Martins and Nunes forthcoming) propose that this pattern of acceptability can be accounted for if the null subjects in (1) result from pronominal ellipsis, which is licensed when the most prominent feature of Infl is valued. Crucially, they propose that Infl has its person feature valued in (1a), its number feature valued in (1b) and (1c), and no feature valued in (1d), as indicated by the glosses for the verbs (cf. Table 1 and (7) below).

Relevant to the current discussion are embedded null subjects that cannot be derived via ellipsis. Consider the data in (2) below, for example. The pragmatic bias induced by the predicate *grávida* 'pregnant' should identify the embedded null subject as being *a Maria* in all the sentences of (2). However, only in (2a), where the antecedent is the next higher subject, is the null subject properly licensed.

- (2) a. O João disse que [a Maria]<sub>i</sub> acha [que Ø<sub>i</sub> está grávida]. the João said that the Maria thinks that is pregnant 'João said that Maria<sub>i</sub> thinks that she<sub>i</sub> is pregnant.'
  - b. \*[O pai d[a Maria]<sub>i</sub>] acha [que Ø<sub>i</sub> está grávida]. the father of the Maria thinks that is pregnant 'Maria<sub>i</sub>'s father thinks that she<sub>i</sub> is pregnant.'
  - c. \*[A Maria]<sub>i</sub> disse que o João acha [que Ø<sub>i</sub> está grávida]. the Maria said that the João thinks that is pregnant 'Maria<sub>i</sub> said that João thinks she<sub>i</sub> is pregnant.'

Data such as (2) have led Ferreira (2000, 2009) to propose that finite T in BP may be associated with a complete or an incomplete φ-set. If associated with a complete φ-set, as represented in (3a) below, T values the Case of its subject, rendering it unavailable for further A-movement. On the other hand, if T is φ-incomplete, as represented in (3b), it is unable to value the Case of its subject, which must then undergo further A-movement to be Case-licensed. Crucially, Ferreira observed, a C head that selects for a φ-incomplete T does not define a strong phase in the sense of

Chomsky (2001);<sup>3</sup> thus, A-movement from within it may take place without violating Chomsky's (2001) Phase Impenetrability Condition. In other words, embedded null subjects that cannot be derived via ellipsis in BP are actually traces of A-movement. From this view, the ungrammaticality of (2b) and (2c) follows from restrictions on A-movement: in (2b) the embedded subject has moved to a non-c-commanding position, as sketched in (4a), and in (2c) it has moved to a nonlocal c-commanding position, crossing the intermediate subject, as sketched in (4b).<sup>4</sup>

- a. O João disse que [ele Tφ-complete comprou um carro]. the João said that he bought a car
  b. [O João]<sub>i</sub> disse que [t<sub>i</sub> Tφ-incomplete comprou um carro]. the João said that bought a car
  'João said that he bought a car.'
- (4) a. \*[O pai d[a Maria]<sub>i</sub>] acha [que  $t_i$  está grávida].

  †\_\_\_\_\_\_|
  b. \*[A Maria]<sub>i</sub> disse que **o João** acha [que  $t_i$  está grávida].

  †\_\_\_\_\_\_|

Independent evidence for this proposal is provided by the pair of sentences in (5) below. (5a) and (5b) involve standard impersonal constructions, where the matrix subject position is arguably occupied by a null expletive and the embedded subject is licensed with nominative Case by the embedded finite T or the inflected infinitival. By contrast, (5a') and (5b') involve hyper-raising constructions (see Ferreira 2000, 2009, Martins and Nunes 2005, 2010, Nunes 2008, 2016, 2019b, 2020b), where the embedded subject undergoes A-movement to the matrix subject position, triggering agreement with both the matrix and the embedded verb. From the perspective of Ferreira's proposal, these parallel possibilities arise depending on whether the embedded T is φ-complete, yielding (5a) and (5b), or φ-incomplete, yielding (5a') and (5b'). To put in more general terms, once the embedded T is φ-incomplete, the embedded subject may undergo A-movement targeting either a thematic position, yielding finite control constructions such as (2a) and (3b), or a nonthematic position, yielding hyper-raising constructions such as (5a') and (5b').

- (5) a. Parece que [os meninos] estão gostando bastante da nova escola. seems that the boys are liking a.lot of.the new school 'It seems that the boys are enjoying their new school a lot.'
  - a'. [Os meninos]<sub>i</sub> parece-**m** que  $t_i$  estão gostando bastante da nova escola. the boys seem-**PL** that are liking a.lot of.the new school 'The boys seem to be enjoying their new school a lot.'
  - b. É difícil d[esses professores] elogiare-m alguém. is difficult of.these teachers praise.INF-PL someone 'It is unusual for these teachers to praise someone.'

See below for a reinterpretation of this proposal in terms of Chomsky (2008).

<sup>&</sup>lt;sup>4</sup> Cf. Ferreira 2000, 2009 and Rodrigues 2004 for additional arguments for a movement analysis of embedded null subjects in BP.

b'. [Esses professores]<sub>i</sub> **são** difíceis de  $t_i$  elogiare-m alguém. these teachers **are** difficult of praise.INF-PL someone 'These teachers rarely praise someone.'

Ferreira's proposal that verbal agreement in BP may be somehow defective also seems to correlate with the fact that in Nonstandard BP, one may find dialects/idiolects with just two distinctive agreement forms in two tenses (the indicative present and perfective past) and no distinction at all in the other tenses (cf. Lemle and Naro 1977 and Galves 1993), as illustrated in (6), where -a in (6a) and (6c), -e in (6b), and -o in (6b) are not agreement morphemes, but allomorphs of the thematic vowel (TV) indicating the conjugation of the verb.

#### (6) *Nonstandard BP*:

- a. Eu danç-o bem.
  - I dance-INDIC.PRES.1SG well.
  - 'I dance well.'
- a'. {Você/ele/nós/a gente/vocês/eles} danç-a bem. you.SG/he/we/we/you.PL/they dance-TV well
  - '{You/he/we/they} dance well.'
- b. Eu danc-e-i bem.
  - I dance-TV-INDIC.PERF.PAST.1SG well.
  - 'I danced well.'
- b'. {Você/ele/nós/a gente/vocês/eles} danç-o-u bem. you.SG/he/we/we/you.PL/they dance-TV-INDIC.PERF.PAST well '{You/he/we/they} danced well.'
- c. {Eu/você/ele/nós/a gente/vocês/eles} danç-a-va bem. I/you.SG/he/we/we/you.PL/they dance-TV-INDIC.IMPERF.PAST well '{I/you/he/we/they} used to dance well.'

Although suggestive, the paradigm in (6) raises the question of how exactly, under Ferreira's proposal, the same verbal form can be associated with a complete or incomplete  $\phi$ -set in *Standard* BP. In (3), for example, the verbal form *comprou* is taken to be associated with a complete  $\phi$ -set in (3a), but an incomplete  $\phi$ -set in (3b). Nunes (2008, 2019b) shows that the potentially problematic ambiguity seen in (3) is actually an opacity effect induced by the application of an elsewhere condition in the correspondence rules for verbal agreement inflection in BP. Reinterpreting Ferreira's proposal, Nunes (2008, 2019b) takes a  $\phi$ -complete set to involve the features person and number and a  $\phi$ -incomplete set to involve only number. Assuming that nominative pronouns in BP have become morphosyntactically underspecified (cf. Nunes 2019b), as shown in the second column of Table 1 below, T only has features valued when agreeing with the pronouns *eu*, *nós*, *vocês*, *eles*, and *elas* (the period between P and N in Table 1 indicates that these attributes are fused). And if T's person or number feature remain unvalued (*u*), it does not receive a morphological exponent, in accordance with the correspondence rule in (7d).<sup>5</sup>

When the pronoun does not have a morphological value for person and number (i.e. *você*, *a gente*, *ele*, and *ela*), Case valuation as nominative takes place under matching between

,	<b>Table 1.</b> Ambiguity of finite T in BP				
		Morphosyntactic			
	Nominative	specification for	φ-c		

Nominative pronouns	Morphosyntactic specification for person and number	φ-complete T: [P:u; N:u]	φ-incomplete T: [N:u]	Output: dançar 'dance' indicative present
eu 'I'	[P.N:SG]	[P. <b>N:SG</b> ]	%[N:SG]	danç <b>o</b>
			%*	
você 'you.sg'	[P; N]			
ele/ela 'he/she'		[P:u; N:u]	[N:u]	dança
a gente 'we'	[P.N]			
nós 'we'	[P.N:1]	[ <b>P</b> .N:1]	*	dança <b>mos</b>
vocês 'you-PL'	[P; N:PL]	[P:u; <b>N:PL</b> ]	[N:PL]	dança <b>m</b>
eles/elas 'they'				

**Source:** Nunes (2019b: 38.)

(7) Correspondence rules for verbal agreement inflection in BP (adapted from Nunes 2019b):

```
a. [P.N:1] \leftrightarrow \{-mos\}
b. [P.N:SG] \rightarrow \{-o\} / INDIC.PRES —
                \rightarrow {-i} / INDIC.PERF.PAST —
c. [N:PL] \leftrightarrow \{-m\}
d. Ø elsewhere.
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The shaded cells in Table 1 show that regardless of whether the relevant pronouns agree with a T head with person and number or a T head with just number, the surface form of the verb is the same, due to the elsewhere condition in (7d). Going back to (3), this amounts to saying that in (3a), both the person and the number features of the embedded T are unvalued and in (3b), the sole number feature is also unvalued; hence, the verbal form in both (3a) and (3b) surfaces with no agreement morphology (comprou), in consonance with (7d).

Table 1 also shows that given that the pronoun *nós* has its person and number fused and valued as 1 (a value for person), it can only be associated with the morpheme -mos when it is the subject of a T head specified for both person and number (cf. (7a)). Finally, the behavior of the pronoun eu is less uniform across speakers (which is also observed in the case of null subject sentences such as (1b)). Descriptively speaking, it's as if some speakers do not allow T with just number to agree with a pronoun with its number feature fused with its person feature (eu is morphosyntactically specified as [P.N:SG]), whereas other speakers tolerate this agreement because the feature amalgam associated with eu is valued as SG – a possible value for the sole number feature of T. These fine-grained distinctions can be clearly seen in hyper-raising constructions (cf. Nunes 2019b), as illustrated in (8) below, for a pronominal ellipsis analysis for the embedded subjects is arguably unavailable (otherwise, the matrix subject would violate the  $\theta$ -Criterion).

the attributes person and number of T and the relevant pronoun (cf. Nunes 2020a and Kato, Martins, and Nunes forthcoming).

```
a. {Você/ele/ela/a gente}i parece [que ti T dança bem].
(8)
          you(SG)/he/she/we
                                seem
                                        that
                                                dance well
         '{You(SG)/he/she/we} {seem/seems} to dance well.'
       b. {Vocês/eles/elas}i
                                  parecem [que t_i T dança-m bem].
          you(PL)/they(MASC/FEM) seem
                                                     dance-PL well
                                             that
         '{You(PL)/they} seem to dance well.'
       c. *Nósi parecemos [que ti T dança-mos bem].
                                   dance-1
          we seem
                           that
         'We seem to dance well.'
       d. % Eui pareço [que ti T danç-o
                                         bem].
                               dance-SG well
               seem
                        that
         'I seem to dance well.'
```

As discussed above, in order for an embedded subject to undergo further Amovement, the embedded clause must be associated with a T head specified only for number. This can perfectly happen in the case of (8a) and (8b), for the superficial form of the embedded verb is the same, regardless of whether the embedded T has person and number or just number (cf. the shaded cells of Table 1). The embedded subject can then move to the matrix clause and have its Case feature licensed by a φ-complete T. In the case of (8c), things completely change. If the embedded T is only associated with number, it cannot give rise to the agreement morpheme -mos on the embedded verb, given the correspondence rule in (7a); hence, (8c) is literally underivable if the embedded T only has number. If it has both person and number instead, the verbal form with -mos is correctly derived in consonance with (7a), but once T is  $\phi$ -complete, it values the Case of its subject, freezing it for purposes of additional A-movement; again, the derivation of (8c) leads to an ungrammatical result. Finally, speakers split with respect to (8d). Some speakers do not allow T with just number to be valued by a pronoun whose number feature is fused with person. So, for these speakers the sentence in (8d) is underivable, for the correspondence rule in (7b) is not activated and accordingly, the embedded verb cannot surface with the morpheme -o. Other speakers are more sensitive to the value of the fused cluster, namely, SG, and allow agreement between the pronoun eu and a T head with just number; the embedded verb then surfaces with the agreement morpheme -o and the embedded subject moves to the matrix clause, where it has its Case valued by a φ-complete T.

Nunes (2008, 2019b) also reinterprets Ferreira's proposal in terms of Chomsky's (2008), according to which the clausal  $\phi$ -features associated with T are actually lexically hosted by C, the head of the CP phase. This theoretical revision does not change the essence of Ferreira's analysis of null subjects in BP, but brings new questions to light. In particular, if  $\phi$ -defectivity in BP is not an idiosyncratic property of T, but a property of its CP phase, one wonders whether other phases in BP may also be  $\phi$ -defective. This is the route I explore in the next sections.

A reviewer asks why English is not like BP in not allowing hyper-raising, for instance, despite the fact that it has a defective verbal agreement system, with *am* arguably being the only unambiguous verbal form that encodes person.

It should be first pointed out that the analysis reviewed here does not take ambiguity of verbal forms to be a necessary condition for a language to allow hyper-raising; rather, the proposal attempted to account for why some verbal forms in BP may be interpreted as being

## 3. \phi-defectivity at the DP Level

There are several phenomena in BP that indicate that its DP phases have also become φ-defective. The most suggestive piece of evidence in this regard is that in Nonstandard BP, the plural morpheme may be realized on the determiner only (cf. Scherre 1988), as exemplified in (9):

(9) a. aquele-s carro-s amarelo-s (Standard BP)
that-PL car-PL yellow-PL
b. aquele-s carro amarelo (Nonstandard BP)
that-PL car yellow
'those yellow cars.'

BP also allows bare singulars with count nouns (cf. Saraiva 1997, Schmitt and Munn 2002, Müller and Oliveira 2004, Pires de Oliveira and Rothstein 2011, and Cyrino and Espinal 2015), as illustrated in (10) below. The fact that such bare singulars are compatible with both singular and plural readings, as respectively shown in (11), suggests again that number may be underspecified within DPs in BP.

- (10) O João nunca compra **livro usado**. the João never buys book used 'João never buys second-hand books.'
- (11) a. O João comprou **livro usado** ontem, mas **ele** não era barato. the João bought book used yesterday but it not was cheap 'João bought a second-hand book yesterday, but it was not cheap.'
  - b. O João comprou livro usado ontem, mas eles não eram baratos. the João bought book used yesterday but they not were cheap 'João bought second-hand books yesterday, but they were not cheap.'

Finally, BP has also undergone changes regarding the syntactic encoding of possession. It has lost external possession constructions (in the sense of Vergnaud and Zubizarreta 1992) such as (12) below (cf. Barros 2006 and Torres Morais and Salles 2016), as well as its third person possessive pronouns (cf. Oliveira e Silva 1984, Perini 1985, Cerqueira 1996, and Müller 1996). The possessive pronoun *seu* and its feminine

reviewer's point is well taken. There must be a property that leads the learner to interpret opacity in verbal agreement in terms of ambiguity between φ-completeness and φ-incompleteness in BP, but not in English. Nunes (2019b) has argued that the defectivity in DP phases in BP (see section 3 below) has led to a drastic morphosyntactic underspecification in its pronominal system (cf. second column of Table 1). Extending this argument, my conjecture is that the diachronic change that has yielded defective DP phases in BP set in motion a reorganization in the whole grammar, allowing all of its phases to be optionally defective. English, on the other hand, has no indication that its DPs phases are defective that could lead

associated with a  $\phi$ -complete or a  $\phi$ -incomplete agreement inflection. That aside, the

the learner to interpret its ambiguous verbal agreement morphology in terms of defectivity at the CP phase. These speculations make specific predictions regarding the order of the diachronic emergence of some of the properties of BP discussed here, which I hope to explore in future work.

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and plural counterparts, which were ambiguous between second and third person in previous stages of the language, have become generally restricted to second person interpretation, as illustrated in (13).

- (12) \*O Pedro consertou o carro **a**-o João. the Pedro fixed the car to-the João 'Pedro fixed João's car.'
- (13) a. O João lavou o {meu/nosso} carro. the João washed the my/our car 'João washed {my/our} car.'
  - b. O João lavou o seu carro.the João washed the your car'João washed {your/\*his/\*her/\*their} car.'

Based on facts like (9)-(13), I would like to propose that the analysis of CP phases in BP discussed in section 2 should be extended to DP phases, as well. Concretely, I would like to propose that DP phases in BP may also be  $\phi$ -complete or  $\phi$ -incomplete.<sup>7</sup> That being so, let us consider how DP<sub>1</sub> in a configuration such as (14) can have its Case licensed.

#### (14) $[_{DP2} D_2 ... [_{NP} N DP_1]]$

If  $D_2$  (or a head of its extended projection, cf. footnote 7) is  $\phi$ -complete, it should be able to license  $DP_1$  with structural genitive Case. This is exemplified by the possessive pronouns in (13), for instance. The more interesting situation is when  $DP_2$  is  $\phi$ -incomplete. In this scenario,  $DP_1$  cannot be assigned structural genitive Case within  $DP_2$  and has to look for alternative ways to have its Case licensed. Like what we saw in section 2 with respect to defective CP phases in BP,  $DP_2$  in (14) should count as a defective phase when  $\phi$ -incomplete and allow A-movement of  $DP_1$  from within it. We thus predict that null possessors in BP should pattern like its embedded null subjects. The data in (15) and (16) show that this prediction is borne out (cf. Floripi 2003 and Rodrigues 2004).

- (15) a. [DP1 O Pedro] i ligou para [DP2 o irmão  $\mathcal{O}_i$ ]. the Pedro called to the brother 'Pedro called his brother.'
  - b. \*[A médica d[ $_{DP1}$  o Pedro] $_{i}$ ] ligou para [ $_{DP2}$  o irmão  $\boldsymbol{\emptyset}_{i}$ ]. the doctor of the Pedro called to the brother '[[ $_{Pedro_{k}}$ 's doctor] $_{i}$  called her $_{i}$ /\*his $_{k}$  brother.'
  - c.  $[_{DP1} O \text{ suspeito}]_i$  disse que o detetive interrogou  $[_{DP2} os \text{ amigos } \emptyset]$ . the suspect said that the detective interrogated the friends

I will leave to another opportunity a more detailed discussion of the features that constitute a complete or incomplete  $\phi$ -set at the DP level, as well as the specific head or heads within the extended projection of D that carry these features.

<sup>&</sup>lt;sup>8</sup> For additional data and further discussion, cf. Floripi 2003, Rodrigues 2004, 2010, Floripi and Nunes 2009, and Nunes 2018.

```
\emptyset = o \text{ suspeito 'the suspect'} \rightarrow *
\emptyset = o \text{ detetive 'the detective'} \rightarrow \sqrt{}
'[The suspect]<sub>k</sub> said that [the detective]<sub>i</sub> interrogated his<sub>i/*k</sub> friends.'
```

- (16) a. [O João]<sub>i</sub> 'tá achando [que t<sub>i</sub> vai ganhar a corrida] the João is thinking that goes win the race e a Maria também 'tá. and the Maria also is 'João is thinking that he's going to win the race and Maria is thinking that she's going to win the race, too.'
  - a'. [DP1 O Pedro]i vai telefonar para [DP2 a mãe  $\mathcal{O}_i$ ] the Pedro goes call to the mother e a Maria também vai.
    - e a Maria também vai. and the Maria also goes
    - 'Pedro is going to call his mother and Maria is going to call **her** mother, too.'
  - b. [Só o João]<sub>i</sub> disse que t<sub>i</sub> fez a tarefa.
    only the João said that did the homework
    'Only João is an x such that x said that x did the homework.'
  - b'. [DP1 Só o Pedro]<sub>i</sub> ligou para [DP2 o irmão  $\phi_i$ ]. only the Pedro called to the brother 'Only Pedro called **his own** brother.'

(15a) shows that BP allows a null possessor if it finds an antecedent in its sentence. However, if the antecedent is not in a c-commanding position, as in (15b), or is not the closest potential antecedent, as in (15c), the sentence is unacceptable under the relevant interpretation. Notice that the data in (15b) and (15c) are pragmatically biased. In an out-of-the-blue context, one would expect the doctor to call a family member of the patient's to talk about the patient's health and the detective to interrogate the suspect's friends. However, (15b) and (15c) actually have the least expected interpretations in an out-of-the-blue context: the doctor called her own brother and the detective interrogated his own friends. This paradigm replicates the type of restrictions on the interpretation of the null subjects in (2), which suggests that null possessors in BP may also be derived via A-movement. If so, (15b) is excluded under the relevant interpretation, because *o Pedro* is moving from within the defective DP<sub>2</sub> to a non-c-commanding position and (15c) is ruled out under the relevant reading because *o suspeito* violates minimality as it crosses *o detetive* on its way to the matrix clause.

Let us now examine (16). (16a) shows that null subjects in BP trigger sloppy identity under ellipsis and (16b), that they receive a bound variable interpretation when anteceded by an *only*-DP (cf. Negrão 1986). (16a') and (16b') show that we find the same restrictions when null possessors are involved. In sum, we may conclude, based on the parallelism between null possessors and embedded null subjects in BP, that the symbol  $\emptyset$  in (15) and (16a') and (16b') is a trace left by the movement of DP<sub>1</sub>.

In addition to A-movement, there is still another possibility for  $DP_1$  in (14) to have its Case licensed if  $DP_2$  is  $\phi$ -defective, namely, if it receives inherent Case from N. Bearing this in mind, let us consider the data in (17) below, which show that the inalienable possession relation associated with the noun  $m\tilde{a}o$  'hand' may be realized

by means of dative Case if the possessor is first or second person (cf. (17a)), but via the preposition de 'of' if it is third person (17b'). Crucially, de cannot introduce a first or second person inalienable possessor (cf. (17a')).

(17)a. A Maria {me/te}i segurou [ $DP_2$  a [ $m\tilde{a}o t_i$ ]] the Maria me.DAT/you.DAT held the hand a'. \*A Maria segurou a mão {de mim/de você}. the Maria held the hand of me/ of you 'Maria held {my/your(SG)} hand.' b. \*A Maria lhei segurou [a [mão  $t_i$ ]] the Maria him/her.DAT held the hand b'. A Maria segurou a mão {**d**-ele/**d**-ela}. the hand of-he/of-she the Maria held 'Maria held {his/her} hand.'

Generalized phasal defectivity in Brazilian Portuguese

The fact that BP has lost external possession constructions (cf. (12)) coupled with the contrasts between (17a) and (17a'), on the one hand, and between (17a') and (17b'), on the other, suggests that the noun within DP<sub>2</sub> in (17) assigns inherent Case to DP<sub>1</sub>, which is realized as a dative clitic if DP<sub>1</sub> is a first or second person pronoun, but as the preposition de if DP<sub>1</sub> is a third person pronoun. Crucially, de is used as a last resort strategy for the realization of the inherent Case assigned to third person pronouns (cf. (17b')), for BP has also independently lost third person dative clitics, as we will see in section 4; hence the unacceptability of (17a') in contrast with (17b').

We will return to this usage of de as a marker of inherent Case within DP in section 5 below, as it proves especially important for the emergence of the novel 'topic subject' constructions in BP.

#### 4. φ-defectivity at the νP Level

Thus far, sections 2 and 3 have shown that BP resorts to A-movement to license a Caseless DP within a defective CP phase, but to A-movement or inherent Case when defective DP phases are at stake. It should be observed, though, that the additional inherent Case solution for the problem of licensing a DP within a defective DP phase is not available at the CP level, for principled reasons. Given that inherent Case is associated with thematic assignment (cf. Chomsky 1986), the DP subject in a configuration such as (18) below is not in a position where it can be assigned a  $\theta$ -role. Thus, if the CP phase in (18) is defective, the subject DP cannot be assigned inherent Case and only A-movement to the subordinating clause may allow it to have its Case licensed. That being so, one wonders whether we also find  $\phi$ -defectivity at the  $\nu P$  phase in BP and if so, whether vP also resorts to the two solutions for Case-licensing seen above (A-movement and inherent Case).

(18) 
$$\left[ \operatorname{CP} C_{\phi} \left[ \operatorname{TP} DP \left[ \operatorname{T}^{,} T \ldots \right] \right] \right]$$

There is compelling evidence that transitive vP phases in BP have also become defective. First, BP can no longer license third person accusative clitics, as shown in (19) below (cf. Omena 1978, Tarallo 1983, Duarte 1986, Galves 1989, 2001, Corrêa,

1991, Kato 1993, Nunes 1993, and Cyrino 1997). Third person accusative clitics are acquired via schooling and are thus associated with written language and formal registers (cf. Duarte 1986, Corrêa, 1991, and Kato, Cyrino, and Corrêa 2009). Interestingly, in these formal registers they also display a distinct placement pattern, as will be discussed in section 7 below.

(19) \*A Maria {me/te/\*o/\*a/\*os/\*as} viu ontem. the Maria me/you/him/her/them(MASC/FEM) saw yesterday 'Maria saw {me/you/him/her/them} yesterday.'

BP has also undergone changes in the licensing of indirect objects (cf. Berlinck 1996, Salles 1997, Torres Morais 2007, Torres Morais and Berlinck 2007, Torres Morais and Salles 2010, and Calindro 2020). The preposition a 'to', which was arguably a realization of dative case, was replaced by the preposition para 'for', as illustrated in (20) below. In addition, third person dative clitics were also lost, as shown in (21).

- (20) A Maria deu um livro **para** o João. the Maria gave a book for the João 'Maria gave a book to João.'
- (21) A Maria {me/te/\*lhe/\*lhes} deu um livro. the Maria me/you/{him/her}/them gave a book 'Maria gave {me/you/him/her/them} a book.'

BP is also losing reflexive clitics that do not bear a regular  $\theta$ -role, as illustrated in (22) below (cf. d'Albuquerque 1984, Galves 1987, Nunes 1995, and Carvalho 2021). Dialects may vary regarding the classes of verbs that allow this process, though. The Mineiro dialect, for instance, admits deletion for all the verbs of (22), whereas the majority of the other dialects resist deletion in the case of (22c) and (22d).

- (22) a. Eu (**me**) lembrei que amanhã é feriado. I REFL.1SG remembered that tomorrow is holiday 'I remembered that tomorrow is a holiday.'
  - b. O João (se) machucou. the João REFL.3SG hurt 'João got hurt.'
  - c. Você **%(se)** arrependeu do que você fez? you REFL.3SG repented of what you did 'Did you repent from what you did?'
  - d. Eu **%(me)** magoei com o que você disse. I REFL.1SG hurt with what you said 'I got hurt with what you said.'

BP has also lost passive *se* constructions, as shown in (23) below (cf. Galves 1986, Nunes 1991, and Martins and Nunes 2016), and its middle constructions need not involve middle *se* (Galves 1987, Rodrigues 1998, Pacheco 2008, and Carvalho

2016, 2019), as illustrated in (24), with the version without middle *se* being much more frequent.

- (23) a. \*Comeram-se os bolos. ate-SE the cakes b. \*Os bolos comeram-se. the cakes ate-SE 'The cakes were eaten.'
- (24) Esse material (se) lava fácil. this material SE wash easy 'This material washes easily.'

The data illustrated in (19)-(24) indicate that  $\nu P$  phases in BP have also become defective. Putting aside the issue of how exactly such defectivity is to be expressed in terms of features or which heads of the extended projection of  $\nu$  carry such features, I would like to extend the approach discussed in sections 2 and 3 and propose that  $\nu$  in BP may be  $\phi$ -complete or  $\phi$ -incomplete. That being so, the relevant question is how DP<sub>1</sub> can be Case-licensed within a defective  $\nu P$  in the configuration such as (25), with a  $\phi$ -incomplete  $\nu P$ .

# (25) $\left[ \dots \left[ v_P \mathbf{DP_2} \left[ v_P v_{\phi\text{-incomplete}} \left[ v_P \mathbf{V} \mathbf{DP_1} \right] \right] \right] \right]$

A-movement is not a possibility for  $DP_1$  to be Case-licensed outside the defective  $\nu P$  phase in (25), as the presence of  $DP_2$  should block such a movement. Interestingly, BP seems to have found a way to circumvent this restriction by dropping  $DP_2$ ! The literature has systematically called attention to unaccusative structures found in BP that are crosslinguistically rare, as illustrated in (26) below (cf. Galves 1987, Ciríaco and Cançado 2009, Negrão and Viotti 2010, Amaral and Cançado 2017, and Carvalho 2019). Although speakers may vary with respect to the classes of transitive verbs or individual lexical items that may allow this frame, it seems to be a plain fact that BP has gained an optional process of 'unaccusativization' of certain classes of transitive verbs. From the perspective of our proposal, this has arisen as a solution for the tension in (25) involving  $\nu P$  phases being optionally  $\phi$ -complete and the minimality problem induced by an external argument.

- (26) a. A revista tá **xerocando**. the magazine is xeroxing 'The magazine is being xeroxed.'
  - b. A casa ainda não **alugou**. the house still not rented 'The house has not been rented yet.'
  - c. Essa ponte **construiu** rápido. this bridge built quicky 'This bridge was built quickly.'

<sup>&</sup>lt;sup>9</sup> Cf. Carvalho and Calindro 2018 for a concrete proposal and relevant discussion.

- d. O caminhão já carregou.
   the truck already loaded
   'The truck has already been loaded.'
- e. Esse brinquedo já não **fabrica** mais. this toy already not make more 'This toy is no longer made.'

Let us now consider the other possibility available for  $DP_1$  to be licensed in (25), namely, by inherent Case. Tarallo (1983) has shown that BP allows a pervasive use of prepositionless relatives, as illustrated in (27) below. Kato and Nunes (2009) have argued that rather than involving preposition deletion, relative clauses like the ones in (27) involve a *pro* in the object position, marked with inherent Case. In other words, the prepositions in (27) have been reanalyzed as realizations of inherent Case, which is phonetically expressed just in case the internal argument is phonetically realized.

- (27) a. Eu conversei/competi \*(com) aquele estudante.
  - I talked/competed with that student
  - 'I talked/competed with that student.'
  - a'. O estudante [que eu conversei/competi Ø ontem] viajou. the student that I talked/competed yesterday travelled 'The student who I talked/competed with yesterday travelled.'
  - b. Eu dei um presente \*(para) um amigo.
    - I gave a present to a friend
    - 'I gave a present to a friend.'
  - b'. O amigo [que eu dei um presente  $\emptyset$ ] tinha me ajudado no trabalho. the friend that I gave a present had me helped in the job 'The friend that I gave a present to had helped me at work.'
  - c. Eu confio \*(n-)aquele candidato.
    - I trust in-that candidate
    - 'I trust that candidate.'
  - c'. O candidato [que eu mais confiava  $\emptyset$ ] me decepcionou. the candidate that I more trusted me disappointed 'The candidate that I trusted more disappointed me.'

The preposition *em* 'in' in (27c) is especially interesting for two reasons. First, we have independent evidence that it is used as a marker of inherent Case in other environments. Consider the data in (28) below, for example (cf. Scher 2004). The verb *classificar* 'classify' takes a DP for its complement in (28a), but a small clause in (28b). Observe that a nominalization alternative is allowed in (28a'), with *em* licensing the DP *os papeis* 'the papers', but not in (28b'). The contrast between (28a') and (28b') can be accounted for if *em* in (28) is a realization of inherent Case.

- (28) a. O João classificou os papeis.
  - the João classified the papers
  - a'. O João deu uma classifica-da **n**-os papeis. the João gave a classify-NMLZ in-the papers

- 'João has classified the papers.'
- b. O João classificou [SC os papeis como interessantes]. the João classified the papers as interesting
- b'. \*O João deu uma classifica-da **n**-[os papeis como interessantes]. the João gave a classify-NMLZ in-the papers as interesting 'João has classified the papers as interesting.'

The second related reason is that BP has undergone a wholesale change affecting its directional verbs, which came to select the preposition em 'in' instead of a 'to' (cf. Wiedemer 2013), as illustrated in (29) below. Given that the lexical meaning of the preposition em encodes location and that em can be independently used as a marker of inherent Case in BP (cf. (27c,c') and (28a',b')), the change that has affected its directional verbs may be seen as another by-product of the resort to inherent Case due to the general possibility for  $\phi$ -defectivity at the vP phase.

- (29) a. O João foi **n**-o mercado. the João went in-the market 'João went to the market.'
  - b. A Maria já chegou **em** casa. the Maria already arrived in house 'Maria has already arrived home.'
  - c. O Pedro veio **n**-a festa. the Pedro came in-the party 'Pedro came to the party.'
  - d. A Maria levou o filho **n**-o cinema hoje. the Maria took the son in-the movies today 'Maria took her son to the movies today.'

## 5. Defective Phases, Inherent Case, and Minimality

In sections 3 and 4, we have seen that inherent Case has played a key role in the licensing of DPs within defective DP and  $\nu$ P phases. In this section we will see that the generalized resort to inherent Case in BP has additional implications within its grammar. Before we get to them, let us first consider a well-known puzzle in English, illustrated in (30) below. The Principle C effect in (30a) induced by the pronoun indicates *him* c-commands into the embedded clause, despite the fact that it does not block movement of the embedded subject to the matrix clause, as shown in (30b).

(30) a. \*[Mary<sub>i</sub> seems to him<sub>k</sub> [ $t_i$  to like John<sub>k</sub>]] b. [Mary<sub>i</sub> seems to **him** [ $t_i$  to be nice]]

Chomsky (1995) suggests that the experiencer in (30) is assigned inherent Case and that *to* is not a true preposition, but just the realization of the inherent Case the pronoun receives (hence the Principle C effect in (30a)). Exploring this suggestion, Nunes (2008) (cf. also Nunes 2016, 2017 and Nunes and Kato forthcoming) argues

that inherent Case renders a given element inert for purposes of A-movement in Relativized Minimality computations, which amounts to saying that elements marked with inherent Case do not count as interveners for A-movement.

This discussion proves to be extremely relevant for the analysis of the so-called 'topic subject' constructions in BP (cf. Pontes 1987, Galves 1987, 1998, Kato 1989, Munhoz and Naves 2012, Andrade and Galves 2014, Nunes 2017, Kato and Ordóñez 2019, and Nunes and Kato forthcoming), as illustrated in (31a') and (31b') below. The impersonal constructions in (31a) and (31b) suggest that the prepositionless possessee in (31a') and the prepositionless locative in (31b') raise from within  $\nu$ P to the subject position, triggering verbal agreement. The question is how these putative movements are allowed, given that in (31a') the moved DP crosses the DP that dominates it (an A-over-A violation) and in (31b'), the locative crosses the theme.

(31) a. Quebrou o ponteiro dos relógios. broke the arm of the watches

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- a'. Os relógios quebrara-m o ponteiro. the watches broke-PL the arm. 'The arms of the watches broke.'
- b. Cabe muita coisa nessas gavetas. fit many thing in.these drawers
- b'. Essas gavetas cabe-m muita coisa. these drawers fit-PL many thing 'Many things can fit in these drawers.'

From the perspective of our proposal, the derivation of the sentences in (31a) and (31a') proceeds along the lines of (32) below. In (32a), the unaccusative verb *quebrar* 'break' assigns inherent Case to  $DP_2$  and the noun *ponteiro* 'arm' assigns inherent Case to  $DP_1$ .  $DP_1$  then surfaces with the preposition de (cf. (31a)) and a null expletive fills the subject position. In (32b), on the other hand, the noun does not assign Case to  $DP_1$ . If  $DP_2$  were  $\phi$ -complete and  $DP_1$  were a first or second person pronoun,  $DP_1$  could be licensed with genitive case. This is not the state of affairs in (32b), though. Thus,  $DP_1$  can only be Case-licensed under A-movement, which would require a derivation in which  $DP_2$  is  $\phi$ -incomplete. However, this is not a problem, for this possibility is generally available in BP, as we saw in section 3. Crucially, in (32b)  $DP_2$  does not induce a minimality violation (of the A-over-A type) for movement of  $DP_1$  because  $DP_2$  has been assigned inherent Case by the verb.  $DP_1$  then moves to the subject position, triggers verbal agreement, and is licensed with nominative Case.

(32)	a. [TP expl T [VP V [VP quebrou [DP2 o [NP ponteiro [DP1 os relógios]]]]]]			
	inherent Case inherent Case			
	b. $[TP[\mathbf{DP_1 os relógios}]_i T[_{vP} v[_{vP} quebraram[_{DP_2} o[_{NP} ponteiro t_i]]]]]$			
	inherent Case			

Similar considerations apply to the derivation of (31b) and (31b'), as sketched in (33) below. In (33a), the verb *caber* 'fit' assigns inherent Case to both its specifier and its complement. The inherent Case assigned to the complement is realized as the preposition *em* (cf. (31b)), which we saw in section 4 can be independently employed as a realization for inherent Case. If, on the other hand, *caber* only assigns Case to its

specifier, as represented in (33b),  $DP_1$  must undergo A-movement to be Case licensed. The sentence in (31b') is then derived after  $DP_1$  moves to the subject position and has its Case valued as nominative under agreement with  $\phi$ -features of C, after it enters the derivation (see section 2). Crucially,  $DP_2$  does not count as a proper intervener as it has been assigned inherent Case.

(33) a. 
$$[TP expl T [vP v [VP [DP2 muita coisa] [cabe [DP1 essas gavetas]]]]]$$

inherent Case  $]$ 

b.  $[TP [DP1 essas gavetas]_i T [vP v [VP [DP2 muita coisa] cabem t_i]]]$ 

inherent Case  $]$ 

inherent Case  $]$ 

In the derivation of the 'topic subject' constructions in (31a') and (31b'), the moving DP only crosses one intervener on its way to the subject position. However, this analysis predicts that the relevant A-movement could cross more than one potential intervener as long as they have been assigned inherent Case. Nunes (2017) shows that this prediction is correct. BP also allows 'extralong' A-movement, as illustrated in (34).

- (34) a. Diminuiu o tamanho da hélice do motor desses barcos. diminished the size of the fan of the engine of these boats
  - a'. Esses barcos diminuíra-**m** o tamanho da hélice do motor. these boats diminished-**PL** the size of the fan of the engine 'These boats had the size of the fans of their engine reduced.'
  - b. Cabe muita coisa na parte interna da lateral desses porta-malas. fit many thing in.the part internal of.the lateral of.these car-trunks
  - b'. Esses porta-malas cabe-**m** muita coisa na parte interna da lateral. these car-trunks fit-**PL** many thing in the part internal of the lateral 'Many things can fit in the internal part of the side of the trunks of these cars.'

In the impersonal constructions in (34a) and (34b), the verb and all the nouns assign inherent Case to their arguments. The nominal arguments then surface with *de*, the complement of *caber* surfaces with *em*, and a null expletive occupies the subject position. Let us now examine the 'topic subject' constructions in (34a') and (34b'). The only relevant difference with the impersonal counterparts is that the nouns *motor* 'engine' in (34a') and *parte* 'part' in (34b') exercise their option of not assigning inherent Case, as respectively illustrated in (35a) and (35b) below. Their nominal arguments *esses barcos* 'these boats' in (35a) and *esses porta-malas* 'these car trunks' in (35b) then move all the way to the subject position, triggering verbal agreement and getting nominative Case. Crucially, all the DPs that are crossed in both movements have been assigned inherent Case and do not induce minimality violations. <sup>10</sup>

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Here I have only discussed 'simple' instances of inherent Case. Instances of quirky Case, which arguably involve the combination of structural and inherent Case, present more complex scenarios with respect to minimality. Holmberg and Hróarsdóttir (2004), for example, show that in Icelandic raising constructions, an unmoved experiencer or a *wh*-trace of the experiencer blocks agreement between the matrix T and an embedded subject, but an A-trace of the experiencer does not. The authors propose an insightful analysis of this pattern in terms of the derivational timing when agreement takes place, coupled with the proviso that

(35)	a. [ <sub>VP</sub> diminuíram [ <sub>DP</sub> o [ <sub>NP</sub> ta	manho [ <sub>DP</sub> a [	NP hélice [DP 0 [NP m	otor [DP esses		
	inherent Case		t Caseinherent Case	barcos]]]]]]]		
	a'. [TP [DP Esses barcos] i T [ $\nu$ P $\nu$ [ $\nu$ P diminuíram [DP o [NP tamanho [DP a					
	$[NP \text{ hélice } [DP \text{ o } [NP \text{ motor } t_i]]]]]]]]$					
	b. [VP [muita coisa] [V cabem [DP a parte interna [DP a lateral [DP esses porta-					
	inherent			malas]]]]]		
	Case	Case	Case			
	b'.[TP [DP Esses porta-malas			$_{\mathrm{V}},t_{cabem}$ [DP a		

The 'extralong' A-movements in (35a') and (35b') in BP are made possible thanks to its pervasive resort to inherent Case, which in turn is motivated by the optional defectivity of its phases. Given the discussion in sections 2-4, we should also expect cases of long distance A-movement to be possible by other combinations of defective phases. This is the topic of the next section.

#### **6. Combining Defective Phases**

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Nunes (2016) has shown that 'topic subject' constructions can be combined with hyper-raising, yielding sentences like (36a) and (37a) below. The DPs os carros 'the cars' in (36) and essas gavetas 'these drawers' in (37) are not assigned inherent Case and move to the embedded [Spec,TP] with no violation of minimality, for the crossed DPs have been assigned inherent Case. In [Spec,TP], the moved DPs trigger verbal agreement, but the embedded CPs are φ-incomplete (see section 2), as represented in (36b) and (37b), and are therefore unable to value Case. The moved DPs must then undergo further A-movement to the matrix subject position, where they again trigger verbal agreement and can get nominative Case if the matrix CP is φ-complete (see section 2).

- (36) a. Os carros parece-**m** que furara-**m** o pneu.

  the cars seem-**PL** that punctured-**PL** the tire

  'The cars seem to have a flat tire.'

  b. [TP [Os carros] i parecem [CP que\_b-incomplete [TP t\_i furaram o pneu t\_i]]]
- a. Essas gavetas parece-m que cabe-m muita coisa. these drawers seem-PL that fit- PL many thing
  'It seems that many things can fit in these drawers.'
  b. [TP [Essas gavetas]<sub>i</sub> parecem [CP queφ-incomplete [TP t<sub>i</sub> cabem muita coisa t<sub>i</sub>]]]

Given the general discussion of phasal defectivity in sections 2-5, other possibilities also arise. For instance, given the process of 'unaccusativization' of transitive verbs in BP discussed in section 4, one would expect the relevant

A-traces are not copies of the moved element. Space limitations prevent me from making a comparison between Icelandic and BP regarding minimality. For an approach to the transparency or opacity of traces that still maintains that all traces are copies, see Nunes 2022.

constructions to interact with hyper-raising if an embedded CP containing a  $\phi$ -defective vP is also  $\phi$ -defective. The sentences in (38) show that this prediction is borne out.

- (38) a. Os apartamentos acabara-**m** que não alugara-**m**. the apartments finished-**PL** that not rented-**PL** 'The apartments ended up not being rented.'
  - a'. [[Os apartamentos]i acabaram [ $_{CP}$  que $_{\phi}$ -incomplete [ $_{TP}$   $t_i$  [ $_{T'}$  T não [ $_{VP}$  V  $_{\phi}$ -incomplete [ $_{VP}$  alugaram  $t_i$ ]]]]]]
  - b. Os caminhões parece-**m** que já carregara-**m**. the trucks seem-**PL** that already loaded-**PL** 'It seems that the trucks have already been loaded.'
  - b'. [[Os caminhões]i parecem [CP que $\phi$ -incomplete [TP  $t_i$  [T' T já [ $\nu$ P  $\nu$   $\phi$ -incomplete [ $\nu$ P carregaram  $t_i$ ]]]]]]

Another possibility is for a  $\phi$ -defective DP to be embedded in a  $\phi$ -defective  $\nu$ P, yielding a 'topic subject' construction with verbs that have undergone 'unacusativization', as illustrated in (39).

- (39) a. Os caminhões carregara-**m** a carroceria pela metade. the trucks loaded-**PL** the bed by.the half 'The truck beds were half loaded.'
  - a'. [[Os caminhões]i [<sub>VP-defective</sub> carregaram [<sub>DP-defective</sub> a carroceria *t*<sub>i</sub>] pela metade]]
  - b. Esses carros não fabrica-**m** mais a embreagem. these cars not make-**PL** more the clutch 'The clutch of these cars is no longer made.'
  - b'. [[Esses carros]<sub>i</sub> não [ $_{\nu P\text{-defective}}$  fabricam mais [ $_{DP\text{-defective}}$  a embreagem  $t_i$ ]]]
  - c. As teses tinha-**m** xerocado só a folha de rosto. the theses had-**PL** xeroxed only the sheet of face 'Only the front page of the theses had been xeroxed.'
  - c'. [[As teses]i tinham [,P-defective xerocado [DP-defective só a folha de rosto ti]]]
  - d. Os prédios ainda não alugara-**m** o andar térreo. the buildings still not rented-**PL** the floor ground 'The ground floor of the buildings has not been rented yet.'
  - d'. [[Os prédios]i ainda não [ $\nu$ P-defective alugaram [DP-defective o andar térreo  $t_i$ ]]]

The constructions in (36)-(39) are not meant to exhaust the possible combinations, but just illustrate how apparently complex and unusual constructions in BP may receive a straightforward analysis if we assume that phases in BP generally have the option of being  $\phi$ -defective.

## 7. Dealing with Phasal Defectivity at School

In section 4, I mentioned that one of the indications that  $\nu P$  phases in BP have become defective is that it has lost third person accusative clitics, which have been replaced by the third person pronouns ele(s) and ela(s) or a null object, as illustrated in (40) (cf.

Omena 1978, Tarallo 1983, Duarte 1986, Galves 1989, Corrêa, 1991, Kato 1993, Nunes 1993, and Cyrino 1997).

(40) a. Eu **os** comprei ontem. (written BP, formal register)

I them.CL bought yesterday

b. Eu comprei eles ontem.

I bought they yesterday

c. Eu comprei Ø ontem.

I bought yesterday

'I bought them yesterday.'

Third person accusative clitics are acquired at school and are thus associated with formal registers and written language (cf. Duarte 1986, Corrêa, 1991, and Kato, Cyrino, and Corrêa 2009). Interestingly, it is not the case that this process of acquisition via schooling simply adds one more clitic to the inventory of clitics available in BP. Nunes (2015, 2019a) has shown that third person accusative clitics may differ from first and second person clitics with respect to their placement, as illustrated in (41).

### (41) Formal registers of BP:

a. **Te** vi ontem na universidade. you saw yesterday in.the university 'I saw you yesterday at the university.'

a'. \*A vi ontem na universidade. her saw yesterday in.the university 'I saw her yesterday at the university.'

b. O João tinha [**me** visto]. the João had me seen 'João had seen me.'

b'.\*O João tinha [os visto]. the João had them seen

b". \*O João tinha-**os** visto. the João had-them seen

b". O João **os** tinha visto. the João them had seen 'João had seen them.'

c. \*O João vai contratar-te.the João goes hire-you'João is going to hire you.'

c'. O João vai contratá-**las**. the João goes hire-them

c''. \*O João **as** vai contratar. the João them goes hire 'João is going to hire them.'

As discussed by Nunes (2019a), the intricate pattern of placement exhibited by third person accusative clitics in (41) constitutes a fine example of Plato's Problem (cf. Chomsky 1986), for children are not told at school that these clitics may not

occupy the same position as first and second person clitics. The emphasis in Portuguese classes in Brazil in this regard is to show that one should use third person accusative clitics in addition to or in place of the third person pronouns ele(s) and elas(s) 'he/she/they' in object position (cf. (40b)). The question is then how children acquire the pattern in (41).

Nunes (2015, 2019a) argues that the position of third person accusative clitics in formal registers of BP is determined by the interaction of four conditions: (i) they cannot surface clause-initially (cf. (41a')); (ii) their host must be potential agreement bearers, as illustrated by the contrast between infinitives, which can be inflected, and past participles, which cannot (cf. (41c') vs. (41b')); (iii) they compete with subject agreement for a morphological slot and subject agreement takes precedence (cf. (41b'') vs. (41b''')); and (iv) climbing only takes place as a saving strategy (cf. (41b''') vs. (41c''')). Relevant to our current discussion are the conditions in (ii) and (iii), which led Nunes (2015, 2019a) to propose that 'third person accusative clitics' in formal registers of BP are acquired as (object) agreement markers.

Suppose that this is correct and let us consider another highlighted point in Portuguese classes in Brazil, namely, verbal agreement and agreement within DP. We have seen in sections 2 and 3 that Nonstandard BP may allow only two distinctions for verbal agreement and plural may be encoded just on D, as illustrated in (6) and (9), repeated below in (42) and (43), for convenience.

#### (42) *Nonstandard BP*:

- a. Eu danç-o bem.
  - I dance-INDIC.PRES.1SG well.
  - 'I dance well.'
- a'. {Você/ele/nós/a gente/vocês/eles} danç-a bem. you.SG/he/we/we/you.PL/they dance-TV well
  - '{You/he/we/they} dance well.'
- b. Eu danc-e-i bem.
  - I dance-TV-INDIC.PERF.PAST.1SG well.
  - 'I danced well.'

'those yellow cars.'

- b'. {Você/ele/nós/a gente/vocês/eles} danç-o-u bem. you.SG/he/we/we/you.PL/they dance-TV-INDIC.PERF.PAST well '{You/he/we/they} danced well.'
- c. {Eu/você/ele/nós/a gente/vocês/eles} danç-a-va bem. I/you.SG/he/we/we/you.PL/they dance-TV-INDIC.IMPERF.PAST well '{I/you/he/we/they} used to dance well.'
- (43) a. aquele-s carro-s amarelo-s (Standard BP)
  that-PL car-PL yellow-PL
  b. aquele-s carro amarelo (Nonstandard BP)
  that-PL car yellow

It is worth observing that the pedagogical chastising of (42a'), (42b'), and (43b) is generally taken to involve a single topic or two connected topics in Portuguese classes in Brazil, unrelated to the pedagogical chastising of (40b) in favor of (40a). However, from the perspective of the current paper, the loss of third person accusative clitics (cf.

(19)) and the patterns in (42) and (43b) are all indicative of BP's general phasal defectivity. One may then conjecture that what Brazilian students do is interpret the school's prescriptions as telling them to use more agreement to overcome BP phasal defectivity, which in turn may have led to a reanalysis of third person accusative clitics as agreement markers. Although admittedly speculative, these notes raise interesting hypotheses regarding the effects of schooling on the different signs of phasal defectivity in BP, something that I will leave for another occasion.

## 8. Concluding remarks

In this paper I have discussed several apparently unrelated properties of BP grammar that may be subject to a unified account if BP phases generally have the option of being φ-defective. For instance, φ-defectivity at the CP level has given rise to restrictions on the distribution and interpretation of null subjects in BP, as well as the appearance of hyper-raising constructions in the grammar; φ-defectivity at the νP level has paved the way for a process of 'unaccusativization' of certain classes of transitive verbs; and φ-defectivity at the DP level has restricted the interpretation of null possessors and given rise to 'topic subject' constructions. Defective phases of different types may also interact, yielding constructions that seem very complex and unusual at first sight but can reduce to simple computations once the role of inherent Case in bleeding A-minimality is taken into account. Many details remain to be spelled out such as feature composition of defective DP and νP phases, as well as the relevant heads involved. However, I hope to have convinced the reader that the fact that BP displays all the properties discussed here is by no means accidental.

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#### References

Amaral, Luana and Márcia Cançado. 2017. Alternância de transitividade com verbos agentivos em PB: A louça já lavou, a casa já vendeu, o caminhão já carregou. *Revista de Estudos da Linguagem* 25: 1871-1904.

Andrade, Aroldo de and Charlotte Galves. 2014. A unified analysis for subject topics in Brazilian Portuguese. *Journal of Portuguese Linguistics* 13: 117-147.

- Barros, Evângela. 2006. Construções de posse com clítico no PB: Percurso diacrônico. Doctoral dissertation, Universidade Federal de Minas Gerais.
- Berlinck, Rosane. 1996. The Portuguese dative. In *The dative: Descriptive studies*, ed. by William van Belle and Willy van Langendonck, 119-151. Amsterdam/Philadelphia: John Benjamins.
- Calindro, Ana. 2020. Ditransitive constructions: What sets Brazilian Portuguese apart from other Romance languages? In *Dative constructions in Romance and beyond*, ed. by Anna Pineda and Jaume Mateu, 75–95. Berlin: Language Science Press.
- Carvalho, Janayna. 2016. A morfossintaxe do português brasileiro e sua estrutura argumental: Uma investigação sobre anticausativas, médias, impessoais e a alternância agentiva. Doctoral dissertation, Universidade de São Paulo.
- Carvalho, Janayna. 2019. Beyond *break*, *melt* and *open*: Transitive alternation with agentive verbs in Brazilian Portuguese. Ms., Universidade Federal de Minas Gerais.
- Carvalho, Janayna. 2021. What do naturally reflexive sentences tell us about the reflexive sentences of a language? Paper presented at the V Congresso Internacional de Linguística Histórica, Universidade Estadual de Campinas, 7/19/21.
- Carvalho, Janayna and Ana Regina Calindro. 2018. A unified account for the loss of third person clitics in Brazilian Portuguese. In *Pronomes: Morfossintaxe e semântica*, ed. by Danniel Carvalho and Dorothy Brito 91–110. Salvador: Edufba.
- Cerqueira, Vicente. 1996. A sintaxe do possessivo no português brasileiro. Doctoral dissertation, Universidade Estadual de Campinas.
- Chomsky, Noam. 1986. *Knowledge of language: Its nature, origin and use*. New York: Praeger.
- Chomsky, Noam. 1995. The minimalist program. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. by Michael Kenstowicz, 1-52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2008. On phases. In *Foundational issues in linguistic theory: essays in honor of Jean-Roger Vergnaud*, ed. by Robert Freidin, Carlos P. Otero, and Maria Luisa Zubizarreta, 133-166. Cambridge, MA: MIT Press.
- Ciríaco, Larissa and Márcia Cançado. 2006. Inacusatividade e inergatividade no PB. *Cadernos de Estudos Linguísticos* 46: 207-225.

Corrêa, Vilma. 1991. O objeto direto nulo no português do Brasil. Master's thesis, Universidade Estadual de Campinas.

- Cyrino, Sonia. 1997. O objeto nulo no português do Brasil: Um estudo sintáticodiacrônico. Londrina: Editora UEL.
- Cyrino, Sonia and M. Teresa Espinal. 2015. Bare nominals in Brazilian Portuguese: More on the DP/NP analysis. *Natural Languages and Linguistic Theory* 33: 471-521.
- d'Albuquerque, Alair. 1984. A perda dos clíticos num dialeto mineiro. *Tempo Brasileiro* 78/79.
- Duarte, Maria Eugênia. 1986. Variação e sintaxe: Clítico acusativo, pronome lexical e categoria vazia no português do Brasil. Master's thesis, Pontificia Universidade Católica de São Paulo.
- Duarte, Maria Eugênia. 1995. A perda do princípio "Evite Pronome" no português brasileiro. Doctoral dissertation, Universidade Estadual de Campinas.
- Ferreira, Marcelo. 2000. Argumentos nulos em português brasileiro. Master's thesis, Universidade Estadual de Campinas.
- Ferreira, Marcelo. 2009. Null subjects and finite control in Brazilian Portuguese. In *Minimalist essays on Brazilian Portuguese syntax*, ed. by Jairo Nunes, 17-49. Amsterdam/Philadelphia: John Benjamins.
- Figueiredo Silva, Maria Cristina. 1996. *A posição do sujeito no português brasileiro: Frases finitas e infinitivas*. Campinas99: Editora da UNICAMP.
- Floripi, Simone. 2003. Argumentos nulos dentro de DPs em português brasileiro. Master's thesis, Universidade Estadual de Campinas.
- Floripi, Simone and Jairo Nunes. 2009. Movement and resumption in null possessor constructions in Brazilian Portuguese. In *Minimalist essays on Brazilian Portuguese syntax*, ed. by Jairo Nunes, 51-68. Amsterdam/Philadelphia: John Benjamins.
- Galves, Charlotte. 1986. *Aluga-(se) casas: Um problema de sintaxe portuguesa na teoria de regência e vinculação*. Campinas: Preedição 2.
- Galves, Charlotte. 1987. A sintaxe do português brasileiro. *Ensaios de Linguística* 13: 31-50.
- Galves, Charlotte. 1989. O objeto nulo no português brasileiro: Percurso de uma pesquisa. *Cadernos de Estudos Lingüísticos* 17: 65-90.

- Galves, Charlotte. 1993. O enfraquecimento da concordância no português brasileiro. In *Português brasileiro: Uma viagem diacrônica*, ed. by Ian Roberts and Mary A. Kato, 387-408. Campinas: Editora da UNICAMP.
- Galves, Charlotte. 1998. Tópicos, sujeitos, pronomes e concordância no português brasileiro. *Cadernos de Estudos Lingüísticos* 34: 7-21.
- Galves, Charlotte. 2001. Ensaios sobre as gramáticas do português. Campinas: Editora da UNICAMP.
- Holmberg, Anders and Thorbjörg Hróarsdóttir. 2004. Agreement and movement in Icelandic raising constructions. *Lingua* 114: 651-673.
- Kato, Mary A. 1989. Tópico e sujeito: Duas categorias em sintaxe? *Cadernos de Estudos Lingüísticos* 17: 109-132.
- Kato, Mary A. 1993. The distribution of pronouns and null elements in object position in Brazilian Portuguese. In *Linguistic Perspectives on Romance languages: Selected Papers from the XXI Linguistic Symposium of Romance languages*, ed. by William Ashby, Marianne Mithun, and Giorgio Perissinotto, 225-235. Amsterdam/Philadelphia: John Benjamins.
- Kato, Mary A. 1999. Strong pronouns, weak pronominals and the null subject parameter. *Probus* 11: 1-37.
- Kato, Mary A., Sonia Cyrino, and Vilma Corrêa. 2009. Brazilian Portuguese and the recovery of lost clitics through schooling. In *Minimalist inquiries into child and adult language acquisition: Case studies across Portuguese*, ed. by Acrisio Pires and Jason Rothman, 245-272. Berlin/New York: De Gruyter Mouton.
- Kato, Mary A., Ana Maria Martins, and Jairo Nunes. Forthcoming. *The syntax of Portuguese*. Cambridge: Cambridge Academic Press.
- Kato, Mary A. and Esmeralda Negrão (eds.). 2000. *Brazilian Portuguese and the null subject parameter*. Madrid and Frankfurt am Main: Iberoamericana and Vervuert.
- Kato, Mary A. and Jairo Nunes 2009. A uniform raising analysis for standard and nonstandard relative clauses. In *Minimalist essays on Brazilian Portuguese syntax*, ed. by Jairo Nunes, 93-120. Amsterdam/Philadelphia: John Benjamins.
- Kato, Mary and Francisco Ordóñez. 2019. Topic subjects in Brazilian Portuguese and clitic left dislocation in Dominican Spanish. *Syntax* 22: 229-247.
- Lemle, Miriam and Anthony J. Naro. 1977. Competências básicas do português. Final research report, MOBRAL-MEC/Fundação Ford, Rio de Janeiro.

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

- Martins, Ana Maria and Jairo Nunes. 2010. Apparent hyper-raising in Brazilian Portuguese: Agreement with topics across a finite CP. In *The complementiser phase: Subjects and operators*, ed. by Phoevos Panagiotidis, 142-163. Oxford: Oxford University Press.
- Martins, Ana Maria and Jairo Nunes. 2016. Passives and *se* constructions. In *Handbook of Portuguese linguistics*, ed. by Leo Wetzels, João Costa, and Sergio Menuzzi, 318-337. Malden: Wiley Blackwell.
- Martins, Ana Maria and Jairo Nunes. 2021. Brazilian and European Portuguese and Holmberg's 2005 typology of null subject languages. In *Romance languages and linguistic theory 2018: Selected papers from Going Romance 2018, Utrecht*, ed. by Sergio Baauw, Frank Drijkoningen, and Luisa Meroni, 171-190. Amsterdam/Philadelphia: John Benjamins.
- Modesto, Marcello. 2000. On the identification of null arguments. Doctoral dissertation, University of Southern California.
- Müller, Ana. 1996. A gramática das formas possessivas no português do Brasil. Doctoral dissertation, Universidade Estadual de Campinas.
- Müller, Ana and Fátima Oliveira. 2004. Bare nominals and number in Brazilian and European Portuguese. *Journal of Portuguese Linguistics* 3: 9-36.
- Munhoz, Ana and Rozana Naves. 2012. Construções de tópico-sujeito: Uma proposta em termos de estrutura argumental e de transferência de traços de C. *Signum* 15: 245-265.
- Negrão, Esmeralda. 1986. Anaphora in Brazilian Portuguese complement structures. Doctoral dissertation, University of Wisconsin.
- Negrão, Esmeralda and Evani Viotti. 2010. A estrutura sintática das sentenças absolutas no português brasileiro. *Revista Linguística da ALFAL* 23: 37-58.
- Nunes, Jairo. 1991. Se apassivador e se indeterminador: O percurso diacrônico no português brasileiro. Cadernos de Estudos Lingüísticos 20: 33-57.
- Nunes, Jairo. 1993. Direção de cliticização, objeto nulo e pronome tônico na posição de objeto em português brasileiro. In *Português brasileiro: Uma viagem diacrônica*, ed. by Ian Roberts and Mary A. Kato, 207-222. Campinas: Editora da UNICAMP.
- Nunes, Jairo. 1995. Ainda o famigerado se. D.E.L.T.A. 11: 201-240.

- Nunes, Jairo. 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, Jairo. 2015. De clítico a concordância: O caso dos acusativos de terceira pessoa em português brasileiro. *Cadernos de Estudos Linguísticos* 57: 61-84.
- Nunes, Jairo. 2016. Subject and topic hyper-raising in Brazilian Portuguese: A case study on reference sets for economy computations. In *The morphosyntax of Portuguese and Spanish in Latin America*, ed. by Mary A. Kato and Francisco Ordóñez, 107-134. Oxford: Oxford University Press.
- Nunes, Jairo. 2017. Circumventing φ-minimality: On some unorthodox cases of Amovement in Brazilian Portuguese. In *Romance languages and linguistic theory* 12: Selected papers from the 45th Linguistic Symposium on Romance languages, ed. by Ruth Lopes, Juanito Avelar, and Sonia Cyrino, 159-183. Amsterdam/Philadelphia: John Benjamins.
- Nunes, Jairo. 2018. Movimento-wh e controle de adjunto em português. In *O apelo das árvores: Estudos em homenagem a Miriam Lemle*, ed. by Alessandro Medeiros and Andrew Nevins, 45-77. Campinas: Pontes.
- Nunes, Jairo. 2019a. Clíticos acusativos de terceira pessoa em PB como concordância de objeto. In *Português brasileiro: Uma segunda viagem diacrônica*, ed. by Mary A. Kato, Charlotte Galves, and Ian Roberts, 151-172. Campinas: Editora da UNICAMP.
- Nunes, Jairo. 2019b. Remarks on finite control and hyper-raising in Brazilian Portuguese. *Journal of Portuguese Linguistics* 18: 1-50.
- Nunes, Jairo. 2020a. Especificação morfológica de pronomes nominativos, concordância verbal e sujeitos nulos em português brasileiro. *Fórum Linguístico* 17, n.º especial, 4658-4672.
- Nunes, Jairo. 2020b. Hiperalçamento em português brasileiro. *Cuadernos de la ALFAL* 14: 199-227.
- Nunes, Jairo. 2022. Agreeing and moving across traces: On why lower copies may be transparent or opaque. Philosophies 7, no. 1: 3.
- Nunes, Jairo and Mary A. Kato. Forthcoming. Approaching "topic-subjects" in Brazilian Portuguese from below. To appear in *Formal approaches to languages of South America*, ed. by Cilene Rodrigues and Andrés Saab. New York: Springer.
- Oliveira e Silva, Giselle. 1984. Variação no sistema possessivo de terceira pessoa. *Tempo Brasileiro* 78/79: 54-72.

Omena, Nelise. 1978. Pronome pessoal de terceira pessoa: Suas formas variantes em função acusativa. Master's thesis, Pontificia Universidade Católica do Rio de Janeiro.

- Pacheco, Juliana. 2008. As construções médias do português do Brasil sob a perspectiva teórica da morfologia distribuída. Master's thesis, Universidade de São Paulo.
- Perini, Mário. 1985. O surgimento do sistema possessivo do português coloquial: Uma abordagem funcional. *D.E.L.T.A.* 1: 1-16.
- Petersen, Maria Carolina. 2011. O licenciamento do sujeito nulo em orações subjuntivas no português brasileiro: Contribuições para a teoria de controle por movimento. Master's thesis, Universidade de São Paulo.
- Pires de Oliveira, Roberta and Susan Rothstein. 2011. Bare singular noun phrases are mass in Brazilian Portuguese. *Lingua* 121: 2153-2175.
- Pontes, Eunice. 1987. O tópico no português do Brasil. Campinas: Pontes.
- Rodrigues, Cilene. 1998. Aspectos sintáticos e semânticos das estruturas médias no português do Brasil: um estudo comparativo. Master's thesis, Universidade de Brasília.
- Rodrigues, Cilene. 2004. Impoverished morphology and A-movement out of Case domains. Doctoral dissertation, University of Maryland.
- Rodrigues, Cilene. 2010. Possessor raising through thematic positions. In *The movement theory of control*, ed. by Norbert Hornstein and Maria Polinsky, 119-146, Amsterdam/Philadelphia: John Benjamins.
- Salles, Heloisa. 1997. *Prepositions and the syntax of complementation*. Doctoral dissertation, University of Wales.
- Saraiva, Maria Elizabeth. 1997. "Buscar menino no colégio": A questão do objeto incorporado em português. Campinas: Pontes.
- Scher, Ana Paula. 2004. As construções com o verbo leve *dar* e as nominalizações em *-ada* no português do Brasil. Doctoral dissertation, Universidade Estadual de Campinas.
- Scherre, Maria Marta. 1988. *Reanálise da concordância nominal em português*. Doctoral dissertation, Universidade Federal do Rio de Janeiro.
- Schmitt, Cristina and Alan Munn. 2002. The syntax and semantics of bare arguments in Brazilian Portuguese. *Linguistic Variation Yearbook* 2: 185-216.

- Tarallo, Fernando. 1983. Relativization strategies in Brazilian Portuguese. Doctoral dissertation, University of Pennsylvania.
- Torres Morais, Maria Aparecida. 2007. Os dativos. "Tese de livre docência", Universidade de São Paulo.
- Torres Morais, Maria Aparecida and Rosane Berlinck. 2007. "Eu disse pra ele" ou "Disse-lhe a ele": A expressão do dativo nas variedades brasileira e europeia do português. In *Descrição, aquisição e história do português brasileiro*, ed. by Ataliba de Castilho, Maria Aparecida Torres Morais, Ruth Lopes, and Sonia Cyrino, 61-83. Campinas: Pontes/FAPESP.
- Torres Morais, Maria Aparecida and Heloisa Salles. 2010. Parametric change in the grammatical encoding of indirect objects in Brazilian Portuguese. *Probus* 22: 181-209.
- Torres Morais, Maria Aparecida and Heloisa Salles. 2016. The external possessor construction in European Portuguese and Brazilian Portuguese. In *The morphosyntax of Portuguese and Spanish in Latin America*, ed. by Mary A. Kato and Francisco Ordóñez, 204-235. Oxford: Oxford University Press.
- Vergnaud, Jean-Roger and Maria Luisa Zubizarreta. 1992. The definite determiner and the inalienable constructions in French and in English. *Linguistic Inquiry* 23: 595-652.
- Wiedemer, Marcos. 2013. Variação e gramaticalização no uso de preposições em contextos de verbo de movimento no português brasileiro. Doctoral dissertation, Universidade Estadual Paulista.