## Approaching the So-Called Topic-Subjects in Brazilian Portuguese from Below



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## 1 Introduction<sup>1</sup>

Since the seminal work by Pontes (1987), the literature on Brazilian Portuguese syntax (henceforth BP) has paid special attention to the so-called "topic-subject" constructions, that is, constructions where an apparent topic functions as a subject, controlling verbal agreement (see, e.g., Galves (1987, 1998), Kato (1989), Lunguinho (2006), Avelar and Galves (2011), Munhoz and Naves (2012), de Andrade and Galves (2014), Nunes (2016, 2017), and Kato and Ordóñez (2019)). These include, among others, constructions involving "possessor raising," as in (1a), and "locative agreement," as in (1b).

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(1) [Os relógios] quebraram ponteiro. watches broke-3PL the the arm "The arms of the watches broke." b. [Essas gavetasl cabem muita coisa. these drawers fit-3PL thing many "Many things can fit in these drawers."

In (1a), the plural possessor *os relógios* "the watches" associated with the noun *ponteiro* "arm" surfaces in a preverbal position and triggers third-person plural agreement on the verb.<sup>2</sup> In (1b), in turn, the plural locative argument associated with the unaccusative verb *caber* "fit" is not headed by the expected preposition *em* "in" and is realized in a preverbal position, also triggering verbal agreement.<sup>3</sup>

(i) a. The watches had their hands broken.

b. European Portuguese:

Os relógios tiveram **seus** ponteiros quebrados. the watches had their hands broken."

In Japanese, a "topic-oriented" language, the possessor may surface with a topic marker and the possessee, with nominative Case, as illustrated in (iia) below. BP also allows constructions analogous to (iia), as illustrated in (iib). Due to space limitations, in this chapter we will not be able to discuss constructions such as (iib) in BP. For relevant discussion, see, e.g., Pontes (1987), Kato (1989), Galves (1998), Bastos-Gee (2011), and Nunes (2016).

(ii) a. Japanese:

Kono tokei-wa hari-ga oreta. clock-TOP hand-NOM broke "The watch had its hand broken."

b. Brazilian Portuguese:

O relógio, o ponteiro quebrou. the watch the arm broke "The watch had its arm broken."

like (1b), with the locative being generated as an internal argument (see Sect. 4 below).

(i) [Essas cidades] **chovem** muito no verão. these cities rain-3PL much in-the Summer "It rains a lot in these cities during Summer."

<sup>&</sup>lt;sup>2</sup> In English, a "subject-oriented" language, sentences corresponding to (1a) involve the verb *have* and a possessive pronoun, as illustrated in (ia) below. European Portuguese also has structures analogous to (ia), as shown in (ib). We will see below that the emergence of constructions such as (1a) in BP is related to the loss of third-person possessive pronouns in the language.

<sup>&</sup>lt;sup>3</sup> We take constructions with weather verbs like (i) below, where an apparent prepositionless locative adjunct controls verbal agreement, to be analyzed along the lines of unaccusative verbs

Details aside, the prevailing view in the literature is that these constructions arose in BP as it ceased to be a canonical pro-drop language due to the weakening of its verbal agreement inflection and became a topic-prominent or discourse-oriented language. From this perspective, as BP is in the course of becoming a non-pro-drop language, its [Spec,TP] tends to be overtly filled. In the case of unergative and transitive verbs, the external argument moves to this position, generally excluding the possibility of VS order commonly found in canonical Romance pro-drop languages. In the case of verbs lacking external arguments, VS is still allowed, as the subject may be licensed VP-internally. This in turn paves the way for elements other than the standard subject to occupy [Spec,TP] in constructions without an external argument. Given that BP also displays characteristics of a topic-prominent language, it is commonly held that topics came to be allowed to occupy [Spec,TP], yielding "topic-subject constructions" like the ones in (1).

Although the factors mentioned above certainly play a role in the emergence of constructions like (1) in BP, in this chapter we argue that they are not the primary causes of this new development in BP as they relate to portions of structure that are too high in the clausal domain. Assuming the general framework of the Agree-based model (Chomsky 2000, 2001), we argue instead that "topic-subjects" are regular subjects in the sense that they are derived by A-movement of a DP from a position within  $\nu$ P to [Spec,TP]. In other words, the relevant diachronic changes that gave rise to "topic-subject" constructions in BP actually involve changes in its  $\nu$ P and DP layers.

The chapter is organized as follows. In Sect. 2, we make some qualifications regarding the putative association of constructions like the ones in (1) with topics, showing that focus constructions display the same pattern of agreement seen in (1). In Sect. 3, we discuss diachronic changes affecting Case-licensing within  $\nu$ P and DP in BP, which yielded "topic-subject" constructions as a byproduct. In Sect. 4, we show why A-movement of the "topic-subject" to [Spec,TP] does not violate minimality. Section 5 discusses some fine-grained distinctions noted in Sect. 3 regarding person asymmetries and resumption in "topic-subject" constructions. Finally, Sect. 6 concludes the chapter.

## 2 "Topic-Subjects" Are Not Topics, But Subjects

Before we tackle the derivation of "topic-subject" constructions proper, a couple of comments are in order. "Topic-subject" constructions are not, strictly speaking, restricted to topics. The underlined constituents in (2) below, for example, involve

<sup>&</sup>lt;sup>4</sup> For relevant discussion, see, e.g., Pontes (1987), Kato (1989), Galves (1998), Negrão (1999), Modesto (2008), and Duarte and Kato (2008).

different types of foci and the resulting constructions are as well formed as the ones in (1). The sentence in (3), in turn, shows that "topic-subject" constructions can be appropriate answers for out-of-the-blue questions, showing that they do not necessarily convey a categorical judgment (in the sense of Kuroda (1979)), as we would expect if they were true topic constructions.<sup>5</sup>

### (2) a. Focus with só "only"

 Só
 esses relógios only
 quebraram o ponteiro.

 only these watches
 broke-3PL the arm

 "Only these watches had their arms broken."

#### b. Focus with *nem* "not even"

Nem essas gavetas cabem muita coisa.
nor these drawers fit-3PL many thing

"Not even these drawers are large enough."

#### c. Contrastive focus

 OS RELÓGIOS
 acabaram
 a
 bateria
 (não os celulares)

 the watches
 finished-3PL
 the
 battery
 not the cell.phones

## d. Aggressively non-D-linked wh-constituents

Oue diabo de carro vai fundir motor depois de passar what devil of car goes melt the engine after of pass revisão? pela through-the revision

"What kind of car has its engine stopped soon after it leaves the garage?"

## e. D-linked wh-constituents

A: — Que cidades chovem muito no verão?

which cities rain-3PL much in-the Summer

"In which cities does it rain a lot during Summer?"

### **Information focus**

B: – <u>Rio e São Paulo</u> **chovem** muito no verão. Rio and São Paulo rain-3PL much in-the Summer "It rains a lot in Rio and São Paulo during Summer."

<sup>&</sup>quot;The batteries of the watches (not the cell phones) are dead."

<sup>&</sup>lt;sup>5</sup> We thank Renato Lacerda (p.c.) for the observation regarding (3).

(3) A: – O que aconteceu? what happened "What happened?"

B: -O celular acabou a bateria. the cell.phone finished the battery "The battery of the cell phone is dead."

These observations are relevant for two reasons. First, they attenuate the putative connection between constructions such as the ones in (1) and topics. To put it in different words, (2) and (3) show that whatever makes constructions like (1) grammatical in BP, it should be structural in nature, rather than informational (see Lacerda (2020) for relevant discussion). In what follows, we will keep using the term *topic-subject* only for presentation purposes.

The second reason why the grammaticality of the sentences in (2) is relevant is that the types of focalization seen in (2a–d) cannot be base-generated (see, e.g., Cinque (1990)), as independently shown by the fact that the focalized constituent is sensitive to islands and is incompatible with a resumptive pronoun:<sup>6</sup>

(4) a. \* Só esse relógio Maria conversou com cara O only this watch Maria the talked with the guy que queria vender (ele). that wanted sell it

"Maria talked with the guy that wanted to sell only this watch."

b.\* Nem essa gaveta o João ficou contente depois de nor this drawer the João stayed content after of consertar (ela).

IIX II

"John did not get happy even after fixing this drawer."

<sup>&</sup>lt;sup>6</sup> D-linked *wh*-constituents like the one in (2e), on the other hand, may be base-generated in BP. Accordingly, they are compatible with resumptive pronouns and do not display island effects, as illustrated in (i).

mundo (ele) resolveu Que livro todo que leu mudar vida? world life every that read it resolved "Which book is such that everyone who read it decided to change his life?"

c. *	O RELÓGIO	a		polícia	prendeu	O	ladrão	
	the watch	the		police	arrested	the	thieve	
	que	roubo	u	(ele)	não	o	celular.	
	that	stole		it	not	the	cell.pl	none
	"The police arre	ested the	e thi	eve that s	tole THE W	ATCH,	not the	cell phone.
d. *	Que diabo de c	arro	o	João	se	arrepe	endeu	depois de
	what devil of c	ar	the	João	himself	repen	ted	after of
	comprar (ele)?							
	buy-SUBJ		it					
	"What kind of o	ar did J	ohn	regret ha	ving bought	?"		

This indicates that the focalized constituents in (2a-d) are not base-generated and have reached their surface position via movement. All things being equal, the same conclusion should also apply to the classic "topic-subject" constructions in (1). In other words, the grammaticality of constructions such as (2a-d) refutes the recurring idea that the subject of "topic-subject" constructions is directly merged in [Spec,TP]. Thus, the null hypothesis is that the DPs that trigger verbal agreement in constructions such as the ones in (1) reach the standard subject position ([Spec,TP]) via movement, pretty much like the ones in (2a-d). From [Spec,TP], they may eventually move to higher A'-positions in the left periphery - an issue that is orthogonal to the derivation of "topic-subject" constructions itself.

Another fact that corroborates this conclusion was observed by Galves (1998), who noted that "topic-subject" constructions are incompatible with resumptive pronouns, thus contrasting with regular topic constructions, as illustrated in (5).

(5)	a.	[Os	relógios],	quebrou	O	ponteiro	deles.		
		the	watches	broke-3sG	the	arm	of-them		
	a'. *	[Os	relógios]	quebraram	O	ponteiro	deles.		
		the	watches	broke-3PL	the	arm	of-them		
		"The arr	ns of the wat	ches broke."					
	b.	[Essas	gavetas],	cabe	muita	coisa	nelas.		
		these	drawers	fit-3sG	many	thing	in-them		
	b'. *	[Essas	gavetas]	cabem	muita	coisa	nelas.		
		these	drawers	fit-3PL	many	thing	in-them		
		"Many things can fit in these drawers."							

The lack of verbal agreement with the topic in (5a) and (5b) signals that they instantiate a standard topic construction and the compatibility with the associated pronoun shows that the topic can be base-generated. In turn, the ungrammaticality of the "topic-subject" constructions in (5a') and (5b'), which display verbal agreement with the alleged topic, is to be expected if the subject cannot be generated where it surfaces and must therefore compete with the associated pronoun for the relevant position within vP.

So, the interim conclusion we reach is that, unless proven otherwise, the DP that triggers verbal agreement in a "topic-subject" construction in BP is not necessarily a topic (although it may later move to a topic position) and comes to occupy the subject position by moving from a  $\nu$ P-internal position. From the perspective we are exploring here, this indicates that the availability of "topic-subject" constructions is not related to some special property to be ascribed to the upper part of the clausal domain.

## 3 Changes Within vP and DP

Our starting point is Kato and Ordóñez's (2019) proposal regarding the diachronic source for the emergence of "topic-subject" constructions in BP, based on a comparison between BP and Dominican Spanish, a language that has also been analyzed as becoming non-pro-drop (see, e.g., Toribio (1996), Ordóñez and Olarrea (2008), and Kato (2012a)). The authors show that although the two languages exhibit common properties with respect to phenomena related to the loss of null subjects, Dominican Spanish does not allow "topic-subject" constructions, as illustrated in (6) below. Kato and Ordóñez also show that the grammatical versions of (6) in Dominican Spanish involve CLLD with a third-person dative clitic, instead of "topic-subjects," as can be seen in (7).

- (6) Dominican Spanish (Kato and Ordóñez 2019: (27) and (25))
  - a. \* El reloj rompió las agujas. the clock broke.3sg the needles Intended: "The hands of the clock broke."
  - b. \* Estos bosques llueven mucho. these forests rain.3PL a.lot Intended: "It rains a lot in the forests."
- (7) Dominican Spanish (Kato and Ordóñez 2019: (30) and (28))
  - a. A este reloj se le rompió la aguja.
     to this clock REFL DAT.3SG broke.3SG the needle
     "The clock's hand broke."
  - b. A estos bosques les llueve mucho. to these forests DAT.PL rain.3SG a.lot "In these forests, it rains a lot."

	Third-person	n singular		Third-person plural			
	Acc clitic	Dat clitic	Poss pronoun	Acc clitic	Dat clitic	Poss pronoun	
Eighteenth- century BP	o (MASC) a (FEM)	lhe	seu (MASC.SG) sua (FEM.SG) seus (MASC.PL) suas (FEM.PL)	os (MASC) as (FEM)	lhes	seu (MASC.SG) sua (FEM.SG) seus (MASC.PL) suas (FEM.PL)	
Twentieth- century BP	_	_	_	_	_	_	

**Table 1** Third-person accusative and dative clitics and possessive pronouns in BP in the eighteenth and twentieth centuries

Interestingly, as Kato and Ordóñez observe, BP has lost its series of third-person pronominal clitics, as well as its third-person possessive pronouns, as illustrated in the chart above, adapted from Kato (1993b) (Table 1).<sup>7</sup>

This simplification in the pronominal paradigm of BP led the authors to conclude that the real trigger for the emergence of "topic-subject" constructions in BP was the impoverishment in its clitic and possessive systems, and not in its verbal agreement paradigm. Based on the work by Barros (2006) and Torres Morais (2016), Kato and Ordóñez propose that until the nineteenth century, the functional skeleton of the extended projection of  $\nu$ P in BP included a dative phrase (in the sense of Landau (1999)), whose specifier was licensed with dative Case and its head was realized as a dative clitic, yielding CLLD constructions analogous to (7). Once third-person dative clitics became null, their associates could no longer be licensed with dative Case and had to move to [Spec,TP] to have their Case licensed, yielding "topic-subject" constructions.

In this chapter we assume the gist of Kato and Ordóñez's analysis, modifying some details of its technical implementation. In particular, we show below that the standard assumption that dative clitics are  $\theta$ -marked in their argument position before undergoing cliticization suffices to account for the facts under discussion and we provide a novel analysis of "topic-subject" constructions with locatives, as they do not seem to have a clitic structure as their diachronic source. We follow Barros (2006), Torres Morais and Salles (2016), Gonçalves and Miguel (2019), and

<sup>&</sup>lt;sup>7</sup> For relevant discussion, see, e.g., Omena (1978), Tarallo (1983), Oliveira e Silva (1984), Duarte (1986), Galves (1989), Cerqueira (1993), Kato (1993b), Nunes (1993), Cyrino (1997), Torres Morais (2007), Torres Morais and Berlinck (2006), and Torres Morais and Salles (2010, 2016).

<sup>&</sup>lt;sup>8</sup> Old Portuguese had a locative clitic *hi* "there," which could be doubled by a locative expression, but this clitic was lost a couple of centuries before the emergence of "topic-subject" constructions and the loss of third-person dative clitics and possessive pronouns in BP. For relevant discussion on the disappearance of locative clitics, see Castillho (2012).

Kato and Ordóñez (2019) in assuming that until the nineteenth century, the extended projection of  $\nu P$  in BP included a projection that was able to assign dative Case, yielding external possessor constructions in the sense of Vergnaud and Zubizarreta (1992), as illustrated by the sentences in (8) below, by the nineteenth century author Machado de Assis. In (8a), the dative element in bold is an R-expression and in (8b), a clitic pronoun.

- (8) (Nineteenth-century BP; Torres Morais and Salles 2016: (33b–c))
  - Clara não sequer a. tinha tempo de remendar roupa Clara not had hardly clothes time to mend the ao marido.

the husband.DAT

"Clara hardly had time to mend her husband's clothes."

b. Clara estendeu mão ao marido amparar-lhe como Clara extended her husband.DAT give-3sg.DAT hand the as to 0 ânimo. the support

"Clara extended her hand to her husband, as a way to give him support."

Once  $\nu P$  became unable to assign dative Case in BP, external possessor constructions with an R-expression such as (8a) simply died out in the grammar. Let us then consider how DP<sub>1</sub> in the abstract transitive  $\nu P$  structure depicted in (9) below can be licensed, after BP lost the dative licensing projection at the  $\nu P$  level, as well as its third-person dative clitics and third-person possessive pronouns.

(9) 
$$[_{TP} T [_{\nu P} DP_3 [_{\nu'} \nu [_{VP} V [_{DP2} D ... [_{NP} N DP_1]]]]]]$$

In (9), DP<sub>2</sub> is arguably Case-licensed by  $\nu$ , and DP<sub>3</sub> by T. Given that the extended projection of  $\nu$  is no longer able to license dative Case in BP, the only possibility for DP<sub>1</sub> to have its Case licensed is to receive inherent Case by the noun that  $\theta$ -marks it (see Chomsky 1986). If the inherently Case-marked DP<sub>1</sub> in (9) is a first- or second-person pronoun, it may be realized as a possessive pronoun, as illustrated in (10a) below, or as a dative clitic, as illustrated in (10b).

(10) a. A Maria segurou [a [{minha/sua}<sub>i</sub> [mão  $t_i$ ]]] the Maria held the my/your hand b. A Maria {me/te}<sub>i</sub> segurou [a [mão  $t_i$ ]]] the Maria me.DAT/you.DAT held the hand "Maria held my hand."

On the other hand, if the inherently Case-marked  $DP_1$  in (9) is a third-person pronoun, neither possibility is available, as shown in (11a) and (11b) below, for BP has lost the genitive and dative forms for third-person pronouns. A third-person pronoun occupying the position of  $DP_1$  in (9) may, however, be realized preceded by the dummy preposition de, as shown in (11c), a possibility that is also available for R-expressions, as shown in (11d), but not for first- and second-person pronouns, as shown in (11e).

(11)	a. *	[A	Maria] <sub>i</sub>	segurou	a	$sua_k$	mão.		
		the	Maria	held	the	his	hand		
	b. *	A	Maria	lhe	segurou	a	mão.		
		the	Maria	him.DAT	held	the	hand		
	c.	A	Maria	segurou	a	mão	dele.		
		the	Maria	held	the	hand	of-him		
		"Mar	ia held his l	nand."					
	d.	A	Maria	segurou	a	mão	do	Pedro.	
		the	Maria	held	the	hand	of-the	Pedro	
		"Mar	ia held Pedı	ro's hand."					
	e. *	A	Maria	segurou	a	mão	{de	mim/de	você}.
		the	Maria	held	the	hand	of	me/of	you
		"Mar	ia held {my	/your} hand.'	,				

The contrast between (11c,d) and (11e) may be described as showing that de is only allowed if the expression it licenses does not have an independent form for the realization of inherent Case (genitive or dative, in this particular scenario). In other words, de-insertion is a last resort strategy for the realization of the inherent Case assigned by the noun in (9).

Notice that the asymmetries seen in (10) and (11) between first and second persons, on the one hand, and third person, on the other, were handled based solely on the Case properties and Case realizations within  $DP_2$  in (9), in a way quite independent from the properties of  $\nu$ . This leads us to expect that these asymmetries should not be restricted to transitive verbs, as in (9), but could also be found with unaccusative verbs. Kato and Ordóñez (2019) show that this is indeed the case. Take the monoargumental unaccusative structure in (12) below, for instance. Like what we saw above,  $DP_1$  in (12) is assigned inherent Case and is realized as a possessive pronoun or a dative clitic if it is a first- or second-person pronoun (see (13a–b)) or by an oblique form preceded by the preposition de if it is a third-person pronoun (see (13c)).

## (12) $[_{TP} T [_{vP}v [_{VP} V [_{DP2} D ... [_{NP} N DP_1]]]]]$

(13)	a.	Ainda	não	nasceu	a	{minha/sua}	barba.
		still	not	was.born	the	my/your	beard
	b.	Ainda	não	{me/te}	nasceu	a	barba.
		still	not	me.DAT/you.DAT	was.born	the	beard
		"I/you l	nave no	ot grown a beard yet.	,,		
	c.	Ainda	não	nasceu	a	barba	dele.
		still	not	was.born	the	beard	of-him
		"He has	not gr	own a beard yet."			

Given that unaccusative structures do not involve an external argument,  $DP_1$  in (12) may also be Case-licensed in BP by moving to [Spec,TP], yielding "topic-subject" constructions. Interestingly, "topic-subject" constructions also display sensitivity with respect to person, with third-person pronouns (and R-expressions) yielding the best outputs, as shown in (14).

(14)	a. %*	Eu	ainda	não	nasci	a	barba.	
		I	still	not	was.born.1sg	the	beard	
		"I have n	ot grown	a beard ye	et."			
	b. %??	Você	ainda	não	nasceu	a	barba.	
		you	still	not	was.born	the	beard	
		"You hav	e not grov	vn a beard	l yet."			
	c.	{Ele/o	João}	ainda	não	nasceu	a	barba.
		he/the	João	still	not	was.born	the	beard
		"{He/Joã	o} has not	grown a	beard yet."			

A similar state of affairs is found with unaccusative structures with two internal arguments, as sketched in (15) below. Given that unaccusative verbs are not associated with structural Case (Burzio's Generalization), at least one of the arguments of V in (15) must be assigned inherent Case. Suppose that V assigns inherent dative Case to  $DP_1$ .  $DP_1$  then surfaces as a dative clitic if it is a first or second person, but as an oblique form preceded by the preposition a if it is a third-person pronoun, as shown in (16). (15) may also give rise to a "topic-subject" construction, again displaying person sensitivity, with third-person pronouns and R-expressions being the best results, as shown in (17).

<sup>&</sup>lt;sup>9</sup> The amelioration effect with the pronoun  $voc\hat{e}$  in (14b) (and in (17b) and (39b) below) is undoubtedly related to the fact that this pronoun, as well as its plural counterpart  $voc\hat{e}s$ , triggers third-person agreement, despite being a second-person pronoun from a semantic point of view. It is thus unsurprising that speakers display more variation in their judgments when "topic-subject" constructions involve the second-person pronouns  $voc\hat{e}$  and  $voc\hat{e}s$ . Due to space considerations, we will put further discussion of this variation aside.

## (15) $[_{TP} T [_{\nu P} \nu [_{VP} DP_2 V DP_1]]]$

faltou (16)a. Me/te sorte. me.DAT/vou.DAT lacked luck "I was/you were unlucky." h. Faltou sorte a ele. lacked luck to he

"He was unlucky."

(17)a. \* Eu faltei sorte. T lacked.1SG luck "I was unlucky." b. %?? Você faltou sorte. vou lacked luck "You were unlucky." c. Ele faltou sorte. he lacked luck "He was unlucky." d. Meus times faltaram sorte. my teams lacked.3PL luck

"My teams were unlucky."

The data in (14) and (17) seem to show that inherent Case assignment by N and V is obligatory when the relevant DP is a first- or second-person pronoun, thus blocking its movement to [Spec,TP] (see (14a,b)/(17a,b)), but optional when the relevant DP is a third-person expression, optionally allowing it to move to [Spec,TP], yielding a "topic-subject" construction (see (14c)/(17c,d)). This conceptually odd result may however be disentangled if we observe that the relevant difference is likely to be related to the loss of third-person possessive pronouns and dative clitics in BP. In other words, inherent Case assignment may be taken to apply obligatorily in the cases discussed above and the additional possibility available to third-person expressions may have to do with the realization of inherent Case. Under the standard assumption that an inherent Case is linked to a  $\theta$ -role, we tentatively propose that if the target of inherent Case assignment cannot morphologically realize the Case it has received, two different repair strategies can be employed (with equal derivational cost): (i) the expression is realized with default Case morphology and a linker is added to encode the dependency relation with respect to the  $\theta$ -marking head, or (ii) the expression "repels" the Case associated with the  $\theta$ -role in the sense that it does not incorporate the Case morphology/specification associated with the  $\theta$ -role, thus remaining active for the purposes of Case and agreement.

The possibility in (i) is illustrated by sentences such as (11c), (13c), and (16b). Crucially, with the loss of third-person dative and accusative clitics and third-person

possessive pronouns in BP, the nominative form came to be used and licensed in all syntactic positions, for nominative is the default Case in BP. In other words, what we described in (11c), (13c), and (16b) as a third-person pronoun in its oblique form seems to be more adequately described as the default form preceded by a linker (the same applies to the R-expression in (11d), for instance). As for the possibility (ii), it is exemplified by "topic-subject" constructions such as (14c) and (17c,d), where the argument of N in (14c) and V in (17c,d) repels the "unrealizable" Case assigned and moves to [Spec,TP], where it gets licensed with nominative Case in the standard way. Importantly, a similar derivation is not available to first- and second-person pronouns (see (14a,b) and (17a,b)) because the last resort saving strategy is not applicable, for the inherent Case assigned can be morphologically realized.

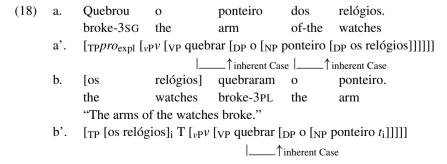
Assuming that something along these lines may be on the right track, let us now examine some details of the derivation of "topic-subject" constructions.

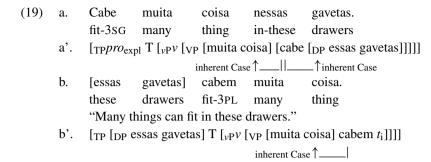
## 4 The Role of Inherent Case in "Topic-Subject" Constructions

We saw in Sect. 3 that the loss of the projection licensing dative Case at the  $\nu P$  level, coupled with the loss of third-person dative clitics and third-person possessive pronouns, considerably reduced the possibilities for Case licensing within  $\nu P$  in BP. However, given that we are talking about the  $\nu P$  level, structural Case is not the only possibility for Case licensing. Crucially,  $\nu P$  is also a thematic domain and, therefore, a domain where inherent Case may be available. Our proposal is that with the reduction of structural Case assignment possibilities at the  $\nu P$  level, BP came to make pervasive use of inherent Case within the verbal domain, extending it to the adjectival and nominal domains, as well.

This innovation developed is interesting in that it provides a single solution for the two general puzzles posed by "topic-subject" constructions in BP: (i) how the relevant DPs are Case-licensed and (ii) why the relevant A-movement involved in these constructions does not violate minimality (see Nunes (2017)). Let us consider each of them in turn.

Take the alternation in (18) and (19), for example.





In (18a'), the verb *quebrar* and the noun *ponteiro* both assign inherent Case to their arguments, which are then licensed in situ. The inherent Case assigned by the noun is morphologically realized with the help of the preposition *de* (see Sect. 3). Recall that a given expression may also have the option of repelling a given inherent Case if it cannot morphologically realize it (see Sect. 3). This option is exercised in (18b'), where the DP *os relógios* "the watches" repels the inherent Case assigned by *ponteiro* "arm" and then moves to [Spec,TP], where it triggers verbal agreement and is assigned nominative Case. As for (19a), the verb *caber* "fit" assigns inherent Case to both of its arguments, which surface in situ, and the inherent Case assigned to the locative is realized with the help of the preposition *em* "in." If the complement exercises the option of repelling the inherent Case assigned by *caber*, as sketched in (19b'), it may get licensed by moving to [Spec,TP], triggering verbal agreement and receiving nominative Case in the standard way (cf. (19b)).

One could say that the absence of *em* in (19b) is not a strong argument for taking *em* in (19a) as a marker of inherent Case, for the verb *caber* "fit" selects a location for its complement and *em* can be used as a true preposition with a locative meaning. There is however independent evidence that the preposition *em* in BP may be used as a realization of inherent Case in contexts unrelated to a locative meaning. Discussing the role of *em* in marking the complement of verbal nominalizations with the suffix *-ada* in BP, as shown in (20) below, Scher (2004:198) points out that *em* cannot be inserted to Case-mark the subject of a small clause, as illustrated by the contrast in (21). Given that *os papeis* "the papers" is an argument of the verb in (21a) but not in (21b), Scher interprets the contrast in (21), showing that *em* in these contexts is a realization of inherent Case. <sup>10</sup>

<sup>&</sup>lt;sup>10</sup> Andrade and Galves (2014) propose that "topic-subject" constructions such as (ia) and (iia) below are launched from the structures in (ib) and (iib), respectively, where R is a relator in the sense of den Dikken (2006) and P is a null preposition that gets incorporated into R.

- (20)Maria deu organizada dados. Α uma nos the Maria gave organize-NOMZ in-the data a "Maria has organized the data."
- (21) a. O João deu classificada uma nos papeis. classify-NOMZ the João gave a in-the papers "João has classified the papers."
  - b. \* 0 João deu classificada uma nos papeis como the João classify-NOMZ in-the gave a papers as interessantes. interesting

b.

- "João has classified the papers as interesting."
- (i) Andrade and Galves (2014: 118, 137):

  a. A mesa quebrou o pé.
  the table break-PAST-3SG the foot
  "The table leg broke."
- (ii) Andrade and Galves (2014: 120, 138):

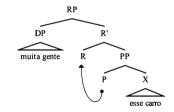
  a. Esse carro cabe muita gente.
  this car fit-3sG many people
  "Many people fit in this car."

DP
D'
a mesa
D
RP

o
DP
R'

R
NP

b.



Addressing the issue of the Case of the postverbal DP in "topic-subject" constructions, Andrade and Galves (2014: fn. 5) suggest in passing that "the V/Root valued this element with inherent Case, much in spirit of Belletti (1988)." It should be noted, though, that in Andrade and Galves's analysis, the postverbal DP in "topic-subject" constructions such as (19b) are located in the specifier of RP, which is the actual complement of the verb (cf. (iib)). However, as argued by Chomsky (1986) and Belletti (1988), one does not find the analogue of ECM when  $\theta$ -relations are involved, that is, a given head may assign Case to the specifier of its complement, but not a  $\theta$ -role (see the contrast in (21), for instance). Given the necessary association between inherent Case and  $\theta$ -role (see Chomsky 1986), it appears that Andrade and Galves's analysis must resort to another sort of Case licensing for "topic-subject" constructions like (iia) (see Nunes (2022) for additional problems and further discussion).

The discussion to be presented below in the text is framed under the standard assumption that a given head H may only assign  $\theta$ -roles/inherent Case to elements in its minimal domain (i.e., elements with which H or a projection of H has merged). For the purpose of exposition, we assume Chomsky's (1986) original coarse-grained distinction between structural (non- $\theta$ -related) and inherent ( $\theta$ -related) Case, putting aside Woolford's (2006) refinements, according to which nonstructural Case should be divided in two subclasses: inherent Case, which is predictably associated with specific  $\theta$ -roles, and lexical Case, which is idiosyncratically linked to specific lexical items.

Also relevant to the present discussion is the fact that directional verbs in BP underwent a diachronic change replacing the preposition a "to" by the preposition em "in" as the head of their complements (see, e.g., Wiedemer 2013), as illustrated in (22) below. This change seems to have connected the double role played by em as an independent true preposition with locative meaning and as a marker of inherent Case assignment (see (21)), according well with our proposal that BP underwent a diachronic change that greatly expanded the use of inherent Case in its grammar.

- (22) 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."
  - Α Maria levou d. filho no cinema hoje. Maria the took the in-the movies today son "Maria took her son to the movies today."

Let us now consider the connection between inherent Case and minimality, by examining the English data in (23).

- (23) a.\* [Mary seems to  $him_k [t \text{ to like } John_k]$ ]
  - b. [Mary<sub>i</sub> seems to him [ $t_i$  to be nice]]
  - c.\* [To him] seems t [Mary to be nice]

The sentence in (23a) displays a Principle C effect, suggesting that the preposition does not prevent the pronoun from c-commanding into the embedded clause. That being so, the fact that it does not block movement of the embedded subject on (23b) becomes rather puzzling. Chomsky (1995:306) observes that the experiencer should get inherent Case within the lexical VP shell and suggests (fn. 77) that the preposition *to* is adjoined to the experiencer DP as a kind of Casemarker, explaining why it does not affect c-command. Building on these premises, Nunes (2008a) proposes that inherent Case renders a given element inert for the purposes of A-movement, as shown in (23c), removing it from computations of Relativized Minimality. To put it in different terms, inherent Case makes an element transparent for A-movement across it. This is exactly what happens in

<sup>&</sup>lt;sup>11</sup> To be precise, inherent Case may be assigned alone or in association with structural Case (for instances of *quirky* Case assignment, see, e.g., Zaenen et al. (1985)). Only when it is assigned in

(18b') and (19b'). The DPs *o ponteiro* "the arm" in (18b') and *muita coisa* "many things" in (19b') do not block A-movement of the "topic-subject," for they have become transparent after receiving inherent Case. 12

As shown in Nunes (2017), this proposal also provides a straightforward account of "mixed" and "extralong" "topic-subject" constructions such as (24) and (25).

- (24) a. [Esses porta-malas] **cabem** muita coisa na lateral. these car-trunks fit-**3PL** many thing in-the lateral "Many things can fit on the side of the trunk of these cars."
  - b.  $[TP [DP esses porta-malas]_i T [vPV [VP [DP muita coisa] [cabem [DP a lateral <math>t_i]]]]]$
- inherent Case ↑\_\_ - 11 (25)**Esses** barcosl diminuíram do 0 tamanho hélice these boats diminished-3PL the size of-the fan of-the motor engine
  - "These boats had the size of the fans of their engine reduced."
  - b.  $[TP [DP esses barcos]_i T [VPV [VP diminuíram [DP o tamanho [DP a hélice [DP o motor <math>t_i]]]]]]$   $[TP [DP esses barcos]_i T [VPV [VP diminuíram [DP o tamanho [DP a hélice [DP o motor <math>t_i]]]]]]$

From the perspective taken here, apparently complex structures like the ones in (24) and (25) receive the same analysis as (18b) and (19b): given that the potential interveners receive inherent Case, they become transparent for A-movement across them, as sketched in (24b) and (25b), in the same way the pronoun in (23b) does not block A-movement of the embedded subject. In (24b), the verb *caber* assigns inherent Case to both the theme in its specifier and the locative in its complement (which is realized as *em* in the morphological component) and they become inert for the purposes of intervention. The argument of *lateral*, which has exercised the option of repelling inherent Case, can then move to [Spec,TP] to get Caselicensed without incurring in a minimality violation. As for (25b), the verb *diminuir* 

b.  $[_{VP}V [_{VP} \text{ beijou } [_{DP1} [_{DP2} \text{ o João}]_i [_{D^*} \text{ o rosto } t_i]]]]]$ 

isolation does it render an element inert for A-movement purposes. See Sect. 5 below for further discussion of quirky Case.

 $<sup>^{12}</sup>$  Janayna Carvalho (p.c.) brought to our attention the relevance of constructions such as (ia) below (see, e.g., Meireles and Cançado (2020)), which are also found in European Portuguese. From the perspective of our proposal, sentences such as (ia) are derived along the lines of (ib), where the main verb assigns inherent Case to its DP complement, whose head is then realized with the preposition em "in," and v agrees with o João in the specifier of DP<sub>2</sub>, valuing its Case as accusative. Crucially, DP<sub>1</sub> does not induce a minimality violation for the agreement relation between v and DP<sub>2</sub> because it has received inherent Case.

<sup>(</sup>i) a. Ela beijou o João no rosto. she kissed the João on-the face "She kissed João on the cheek."

"diminish" and the nouns tamanho "size" and hélice "fan" assign inherent Case to their arguments and the DP esses barcos "these boats" repels the inherent Case assigned by the noun motor "engine." Esses barcos then receives nominative Case after moving to [Spec,TP] and the inherent Case assigned by the nouns is realized as the preposition de, yielding the "topic-subject" construction in (25a), which involves an "extralong" instance of A-movement, but all the potential interveners have become inert after receiving inherent Case.

The amplification of the use of inherent Case in BP had widespread consequences in the grammar. Take the contrast in (26) below, for example.

(26)	a.	[Esse	livro] <sub>i</sub> ,	todo	mundo	[que	gosta <b>Ø</b> i]	vira	pacifista.
		this	book	every	world	that	likes	becomes	pacifist
		"Every	body who i	read this bo	ok become	s a pacifi	st."		
	b.	Todo		mundo	gosta	*(de)	filme	de	detetive.
		every		world	likes	of	movie	of	detective
		"Every	one likes d	etective mo	vies."				

The sentence in (26a) has a null object within a relative clause island, suggesting that it is a *pro* linked to the base-generated topic, rather than a trace. In turn, (26b) shows that the verb *gostar* "like" is not a Case assigner, requiring the preposition *de* in order to license its complement. That being so, one wonders how *pro* in (26a) is Case-licensed. To account for this sort of problem, Ferreira (2000) has proposed that *pro* in BP may be defective in not having a Case feature. However, Kato (2010, 2012b) shows that this cannot be what is behind the grammaticality of sentences such as (26a), for the apparently exceptional licensing of *pro* is lexically conditioned. The complement of the verb *rir* "laugh," for instance, must also be preceded by the preposition *de*, as shown in (27). However, whereas *gostar* licenses a null object linked to a topic, *rir* doesn't, as shown in (28).

- (27) a. Ela não gostou \*(**d**)o palhaço. she not liked of-the clown "She didn't like the clown."
  - b. Ela não riu \*(d)o palhaço.
     she not laughed of-the clown
     "She didn't laugh at the clown."
- (28)[Aquele palhaço]<sub>i</sub>, ela não a. gostou *pro*i that clown she liked not "That clown, she didn't like him." b. \* palhacoli, [Aquele ela não riu *pro*<sub>i</sub> that clown she not laughed "That clown, she didn't laugh at him."

Kato and Nunes (2009) argue that the difference between these two verbs is that *rir* selects for a PP headed by *de*, whereas *gostar* assigns inherent Case to its complement, which is realized as *de* if the complement is phonetically realized. Interesting empirical evidence for this proposal is the fact that *gostar* licenses an inherently Case-marked reflexive/reciprocal clitic, but *rir* doesn't, as shown in (29) (see Nunes (2008b)).

```
(29)
       a.
             Eles
                                 gostam
                                            muito.
             they
                     REFL.CL
                                 like
                                            much
             "They like each other a lot."
       h *
             Eles
                     se
                                 riram
                                            bastante.
             they
                     REFL.CL
                                 laughed
                                            much
             "They laughed a lot at each other."
```

Kato and Nunes (2009) also show that the salient resort to inherent Case in the grammar of BP also accounts for the existence of what Tarallo (1983) called PP-chopping relatives in the language. In his seminal work on relative clauses in BP, Tarallo postulated three types of relativization strategies, each of which with a different sociolinguistic status: the standard strategy with movement of a PP, as illustrated in (30a) below; the resumptive strategy with an overt resumptive pronoun, as illustrated in (30b); and the chopping strategy, with no visible presence of the relevant PP, as illustrated in (30c).

(30)	a.	a	pessoa	com	quem	eu	conversei	
		the	person	with	who	I	talked	
	b.	a	pessoa	que	eu	conversei	com	ela
		the	person	that	I	talked	with	her
	c.	a	pessoa	que	eu	conversei		
		the	person	that	I	talked		
		"the	person I t	alked to	)"			

For Tarallo, the chopping version in (30c) involves a null resumptive pronoun and the preposition is deleted in the phonological component, as BP does not allow preposition stranding. However, Kato (1993a) observes that if the chopping strategy involved preposition deletion because prepositions cannot be left stranded in BP, the counterpart of (30a) given in (31a) below should be grammatical under the derivation sketched in (31b), where the relative pronoun *quem* undergoes A'-movement and the stranded preposition is deleted in the phonological component.

(31) a. \* a pessoa quem eu conversei the person who I talked "the person I talked to"

b. a pessoa [quem<sub>i</sub> eu conversei <del>com</del> t<sub>i</sub>]

Kato and Nunes (2009) reanalyze Tarallo's proposal in terms of phonetic realization. According to them, the verb *conversar* "talk" assigns inherent Case to its complement, which is realized as the preposition *com* "with" if the argument is phonetically realized. This is transparent in the case of (30b), as the overt resumptive pronoun is realized in its thematic position. In (30a), the verb assigns inherent Case to the relative pronoun before it moves to [Spec,CP] and it then surfaces accompanied by the preposition. In (30c), the preposition is not phonetically realized because the complement of the verb (*pro*) has no phonetic realization. Finally, under the assumption that the relative pronoun *quem* cannot be basegenerated in its surface position (see Kato and Nunes (2009) for arguments and relevant discussion), it must have merged with the verb before moving to the left periphery, and once it receives inherent Case from *conversar*, it must surface with the preposition, explaining why (31a) is not acceptable.

It is thus not surprising that verbs of movement that came to take the preposition *em* preceding their locative complement (see (22)) freely allow chopping relatives, as illustrated in (32) below. This is exactly what we should expect if *em* may be a realization of inherent Case, as proposed above.

- (32) a. o mercado que o João foi the market that the João went "the market João went to"
  - b. o lugar que a Maria chegou the place that the Maria arrived "the place Maria arrived at"
  - c. a festa que o Pedro veio the party that the Pedro came "the party Pedro came to"
  - d. 0 cinema Maria filho que levou 0 the movies that the Maria the took son "the movie theater Maria took her son to"

Kato and Nunes (2009) also observe that their reanalysis of Tarallo's (1983) account of chopping relatives also extends to free relatives in BP. Lessa de Oliveira (2008) notes that free relatives in BP can be of the "chopping" variety, as illustrated in (33) below, whose embedded verbs require a PP complement, as shown in (34).

- (33)Eu visitar simpatiza muito. a. vou quemi você I visit who sympathize much go you "I'm going to visit who you like a lot."
  - Eu encontrei o que você gosta.
     I found what you like
     "I found what vou like."
- (34) a. O João simpatiza \*(com) a Maria. the João sympathizes with the Maria "João likes Maria."
  - b. O João gosta \*(de) romances.
     the João likes of novels
     "João likes novels."

If "chopping" free relatives like (33) also involve inherent Case assignment to an object *pro*, one would expect contrasts such as the one in (28) to be replicated in free relative clauses. Kato and Nunes (2009) show that this prediction is borne out, as shown in (35).

- a. \* (35)0 João sempre critica quem ele ri. the João criticizes always who he laughs "João always criticizes whoever he laughs at."
  - O João b. sempre critica quem ele gosta. the João always criticizes likes who he "João always criticizes whoever he likes."

As seen above, *gostar* assigns inherent Case, but *rir* doesn't. Hence, the embedded object position in (35b) can be licensed (if it is *pro*), but not the embedded object position in (35a) (regardless of whether it is *pro* or a trace).

Let us finally examine another domain where we can directly see the connection between inherent Case and A-minimality. Galves (1987) has observed that *tough*-predicates in BP display a very distinctive behavior. In addition to the standard interpretation as the object of the embedded predicate, the subject of a *tough*-construction such as (36), for instance, may also be interpreted as the embedded subject.

(36) O João é difícil de elogiar. the João is difficult of praise-INF Tough-interpretation: "It is hard to praise João." Raising interpretation: "João rarely praises someone."

Nunes (2008a) notes that the adjectival predicates that allow the crosslinguistic uncommon subject reading optionally take a preposition before its infinitival complement, as illustrated in (37a) and (38a) below. Interestingly, the optionality does not hold constant across different constructions. If the preposition is present, the infinitival cannot move to the matrix subject position, as shown in (37b) and (38b). Conversely, the embedded subject can only move to the matrix subject position if the preposition is present, as illustrated in (37c) and (38c).

```
(37) a. É
                  difícil
                                (d)esses
                                                jornalistas elogiarem
                                                                            alguém].
                  difficult
                               of-these
                                                journalists praise-INF-3PL somebody
       ic
       "It is rare for these journalists to praise someone."
     b. (*D)esses jornalistas elogiarem
                                                alguém
                                                                difícil.
       of-these journalists praise-INF-3PL somebody is
                                                                difficult
       "For these journalists to praise someone is very rare."
     c. [esses
                  jornalistas]; são
                                                difíceis
                                                           *(de)t<sub>i</sub> elogiarem
                                                                                       alguém.
       these
                  journalists are
                                                difficult
                                                           of
                                                                    praise-INF-3PL
                                                                                       somebody
       "These journalists rarely praise someone."
```

- estava previsto (para) (38) a. Não as aulas começarem amanhã. not predicted for the start-INF-3PL tomorrow was classes b. (\*Para) as aulas começarem amanhã não estava previsto. for classes start-INF-3PL tomorrow not predicted was "It was not expected that the classes should start tomorrow."
  - c. As aulas estavam previstas \*(para) começarem amanhã.
    the classes were predicted for start-INF-3PL tomorrow
    "The classes were not expected to start tomorrow."

Nunes (2008a) argues that these prepositions are actually realization of an inherent Case optionally assigned by the impersonal predicates to their infinitival complement, much like what Chomsky (1995) has proposed for the preposition *to* preceding the experiencer of raising constructions like (23). Like what we saw with the prepositioned experiencer in (23b), the prepositioned infinitivals in (37b) and (38b) cannot undergo A-movement because they have already been Case-marked. The inherent Case also renders the infinitival transparent for A-movement from within it, in the same way we saw in "topic-subject" constructions like (25); hence, A-movement from within the infinitival (37c) and (38c) can only take place if the preposition is present.

To summarize, with the weakening of structural Case licensing at the  $\nu P$  level in BP seen in Sect. 3, the grammar came to explore to its limits the other possibility for Case licensing, namely, inherent Case assignment. This expansion of the use of inherent Case reverberated across different domains in the grammar, yielding as byproducts apparent Caseless null objects, chopping relative clauses, hyper-raising constructions out of infinitivals, and topic-subject constructions.

# 5 Further Issues on Person Asymmetries and "Resumption" in "Topic-Subject" Constructions

As we saw in Sect. 3, Kato and Ordóñez (2019) observe that "topic-subject" constructions display a sensitivity to the value of the feature [person]. Whereas third-person pronouns (and R-expressions) function as good candidates as "topic-subjects," first- and second-person pronouns in general do not yield well-formed results or exhibit considerable variation across speakers (see fn. 9), as seen in (14), repeated here in (39).

(39)	a. %*	Eu	ainda	não	nasci	a	barba.	
		I	still	not	was.born.1sG	the	beard	
		"I have i	not grown	a beard y	vet."			
	b. %??	Você	ainda	não	nasceu	a	barba.	
		you	still	not	was.born	the	beard	
		"You ha	ve not gro	wn a bea	rd yet."			
	c.	{Ele/o	João}	ainda	não	nasceu	a	barba.
		he/the	João	still	not	was.born	the	beard
		"{He/Jo	ão} has no	ot grown a	a beard yet."			

This asymmetry seems to be lexically conditioned, though. In (40) below, for instance, there is no difference of acceptability among the different persons in the "topic-subject" versions.

(40)	a.	Inchou	O	meu	pé.					
		swelled	the	my	foot					
	a'.	Eu	inchei	O	pé.					
		I	swelled.1SG	the	foot					
		"My foot got swollen."								
	b.	Inchou	O	seu	pé.					
		swelled	the	your	foot					
	b'.	Você	inchou	O	pé.					
		you	swelled	the	foot					
		"Your foo	"Your foot got swollen."							
	c.	Inchou	O	pé	dele.					
		swelled	the	foot	of-he					
	c'.	Ele	inchou	o	pé.					
		he	swelled	the	foot					
		"His foot	got swollen."							

Rodrigues (2020) in fact argues that possessor raising constructions in BP have a subclass in which the moving element moves directly to [Spec,TP] and another one in which the moving element lands in an intermediate position, where it receives the θ-role of affected entity. According to her, the contrast between the two sentences in (41) below can be accounted for if *esturricar* "burn" is a member of the second subclass, and accordingly, it requires that the moving element be affected, hence the pragmatic oddity of (41b), for the pig is dead and cannot be affected in the relevant sense. In turn, *cair* "fall" belongs to the first class and is not subject to this pragmatic restriction, for the possessor moves directly to [Spec,TP]; hence, (42) is acceptable even if the falling event occurs after Lincoln's death.

- (41) (Rodrigues 2020, glosses and translation added)
  - a. Eu esturriquei o dedo na frigideira. I burnt the finger in-the frying.pan "I burned my finger on the frying pan."
  - b.# O porco esturricou a costela na frigideira.
    the pork burnt the ribs in-the frying.pan
    "The pork's ribs got burned."
- (42)(Rodrigues 2020, glosses and translation added) O Lincoln caiu os dentes (depois de morto). the Lincoln fell. the teeth after of dead "Lincoln's teeth fell off (after he was dead)."

What is relevant for our purposes is that the subclasses identified by Rodrigues seem to correlate with the person asymmetry noted by Kato and Ordóñez (2019). Specifically, verbs that are not associated with an affectedness  $\theta$ -role in Rodrigues's sense are the ones that display person sensitivity. The verb *cair* "fall," for example, admits possessor raising with an R-expression, as seen in (42), or a third-person pronoun, as shown in (43a), but not with a first-person pronoun, as shown in (43b). By contrast, verbs that arguably involve the affectedness  $\theta$ -role such as *esturricar* "burn" and *inchar* "swell" do not display person restrictions, as seen in (41a) and (40).

(43)Elas caíram cabelo. a. 0 they.F fell-3PL the hair "Their hair fell out." b.%\* Eu caí cabelo. 0 fell-1sg the hair "My hair fell out."

From an abstract point of view, the behavior of these two types of possessor raising in BP resembles the patterns of control and raising of DPs marked with quirky Case in Icelandic. The embedded main verbs of (44) below, for example, assign quirky dative to their complements. Dative morphology is preserved in standard raising constructions, as shown in (44a), but not in control constructions, as shown in (44b).

#### (44) Icelandic:

- a. Mönnunum/\*Mennirnir virðist báðum hafa verið hjálpað.
  men.the.DAT/\*NOM seems both.DAT have been helped.DFLT
  "The men seem to have both been helped."
  (Sigurðsson 2008)
- b. Hann/\*Honum vonast til að verða bjargað af fjallinu.

  he.NOM/\*DAT hopes for to be rescued.DFLT of the.mountain

  "He hopes to be rescued from the mountain."

  (Andrews 1990)

As is well known, quirky Case appears to involve a mixture of inherent and structural Case (see footnote 11). On the one hand, it behaves like inherent Case in establishing a connection between a specific  $\theta$ -role and a specific piece of morphological information; on the other hand, it behaves like structural Case in its need to be licensed by a  $\phi$ -complete probe. Assuming the Movement Theory of Control, Boeckx et al. (2010a, b) accounted for contrasts like the one in (44), by assuming that the additional  $\theta$ -role assignment present in control breaks the connection between morphology and  $\theta$ -role in inherent Case. The derivation of (44b), for example, proceeds along the lines sketched in (45) (with English words for convenience).

- (45) a. Assignment of quirky Case:
  - [rescued  $he_{[\theta 1\text{-}DAT]}$  from the mountain]
  - b. Movement to [Spec,TP]:
    - $[TPhe_{\theta_1-DAT}]$  to be rescued t from the mountain]
  - c. Applications of Merge:
    - $[_{vP}v_{\theta 2}]$  [VP hopes [CP C [TP $he_{[\theta 1-DAT]}$  to be rescued t from the mountain]]]]
  - d. Movement and  $\theta$ -assignment:
    - $[v_P \mathbf{he}_{[\theta 2+\theta 1]}]$   $[v_P \mathbf{hopes}]$   $[v_P \mathbf{hopes$
  - e. Movement to [Spec,TP] and nominative Case assignment:
    - $[\mathsf{TP}\mathbf{he}_{\boldsymbol{[\theta2+\theta1]}\text{-}\mathbf{Case}:\mathbf{NOM}} \ [\mathsf{T'} \ \mathsf{T} \ [_{vP}t \ [_{v'} \ [\mathsf{VP} \ \mathsf{hopes} \ [\mathsf{CP} \ \mathsf{C} \ [\mathsf{TP}t \ \mathsf{to} \ \mathsf{be} \ \mathsf{rescued} \ t \ \mathsf{from \ the \ mountain}]]]]]]]$

In (45a) the verb assigns quirky dative Case to the pronoun, which then moves to the embedded TP, yielding (45b). After the matrix  $\nu$  enters the derivation in (45c), the embedded subject moves to [Spec, $\nu$ P] and receives an additional  $\theta$ -role, as shown in (45d). Boeckx, Hornstein, and Nunes argue that the assignment of an additional  $\theta$ -role in (45d) ends up breaking the previously established connection between  $\theta_1$  and dative Case, for there are two  $\theta$ -roles associated with the pronoun.

Accordingly, the dative specification is deleted. The pronoun then undergoes standard movement to the specifier of a finite TP, triggering verbal agreement and receiving nominative Case (see (45e)).

A similar derivation appears to be found in the subclass of possessor raising constructions that Rodrigues (2020) argues involves an additional affectedness  $\theta$ -role, with one proviso. Thus far, we have followed the standard wisdom according to which an element marked with inherent Case cannot undergo A-movement. This was exemplified above by (23c) in English and (37b) and (38b) in BP. It should be noted that the cases discussed both in English an BP involve A-movement for Case/agreement/EPP reasons, and if one assumes the Movement Theory of Control, A-movement also encompasses movement driven by  $\theta$ -reasons, as seen in (45c–d). We would like to propose here that inherent Case actually renders a given element inert for the purposes of Case/agreement/EPP related movement, but not for  $\theta$ -related movement. That being so, consider the abstract representation in (46) in BP, where N has assigned inherent Case to DP<sub>1</sub> (see Sect. 3).

## (46) $\left[ v_P v_{\theta 2} \left[ v_P V \left[ D_{P2} D \left[ N_P N DP_{1-[\theta 1-inherent Case]} \right] \right] \right] \right]$

Suppose  $DP_1$  is a first- or second-person pronoun. All things being equal,  $DP_1$  should surface as a possessive pronoun (see (10a)) or a dative clitic (see (10b)). Things are not equal in (46), though, for there is still a  $\theta$ -role to be assigned. If inherently Case-marked elements can move for  $\theta$ -related reasons, as proposed above,  $DP_1$  can move to [Spec, vP] and receive a second  $\theta$ -role, as illustrated in (47a) below. Like what we saw with quirky Case in control constructions (see (45d)), assignment of an additional  $\theta$ -role to  $DP_1$  removes the previously established association between  $\theta_1$  and inherent Case morphology.  $DP_1$  then moves to [Spec,TP] and receives nominative Case, yielding sentences such as (40a'), (40b'), or (41a). Nothing essentially changes if  $DP_1$  is a third-person pronoun (see (40c')). To put it in general terms, the availability of an additional  $\theta$ -role in (46) obliterates person distinctions as far as possessor raising is concerned.

(47) a. 
$$[_{\nu P} DP_{1-[\theta 2+\theta 1]} [\nu_{\theta 2} [_{VP} V [_{DP2} D [_{NP} N t]]]]$$
  
b.  $[_{TP} DP_{1-[\theta 2+\theta 1]-Case;NOM]} [T [_{\nu P} t [_{\nu \theta 2} [_{VP} V [_{DP2} D [_{NP} N t]]]]]]]]$ 

Let us finally consider the data in (48) and (49).

- (48) a. Eu inchei o (meu) pé. I swelled.1SG the my foot "My foot got swollen."
  - b. Eu arranhei o **(meu)** braço. I scratched.1SG the my arm
    "My arm got scratched."
  - c. Ele quebrou o braço (dele) no jogo. he broke.3sG the arm of-him in-the game "He broke his arms during the game."
- (49)Eles ainda barba (\*deles). não a. nasceram a they still the beard of-they not were.born "They haven't grown a beard yet."
  - b. Os bebês cresceram o cabelo (\*deles).
    the babies grew.3PL the hair of-they
    "The babies' hair has grown."

The class of verbs that do not display person asymmetries optionally allow the realization of a possessor within the internal argument, as seen in (48), whereas the class of verbs that require that "topic-subjects" be third person do not, as seen in (49). Notice that the verbs in (48) belong to the subclass that has an additional affectedness  $\theta$ -role, but not the ones in (49). This entails that if the possessor gets independently licensed within the internal argument in (48), another element could in principle be independently merged in the specifier of  $\nu$ P and be assigned the affected  $\theta$ -role, yielding the versions of (48) with the possessive pronoun overtly realized. This possibility is not available in (49) even if the possessor is realized with inherent Case, for there is no additional  $\theta$ -role to be assigned to the "topic-subject."

This correlation between person sensitivity and "resumption" also seems to account for variation among speakers with respect to specific lexical items. Take the verb *furar* "puncture," for example. Sentences such as (50a) below, with the "topic-subject" being an R-expression, are uniformly judged well formed by BP speakers, whereas sentences such as (50b) (under the relevant non-agentive "topic-subject" reading) find variation among speakers (the first author, for instance, admits them, but the second author doesn't). Interestingly, speakers who allow (50b) also allow the corresponding sentences with a possessive pronoun in (51). This can be captured if the difference is reduced to whether or not the grammar of individual speakers encodes the unaccusative verb *furar* with an additional affectedness  $\theta$ -role. If it does, all the sentences in (50) and (51) will be allowed; if it doesn't, only (50a) is permitted.

(50)	a.	(	O	carro		furou		O	pneu		ontem.
		t	he	car		puncti	ıred	the	tire		yesterday
	"The car had a flat tire				at tire	yesterd	lay."				
	b. %		Eu	furei		O	o		onter	n.	
			[	punctured-1sG		the		tire	tire yester		
	"I had a flat tire yesterday."										
(51) a	. %	Eu	fu	rei	o	meu	pneu	onte	em.		
		I	punctured-1SG		the	my	tire	yest	erday		
		"I ha	ad a f	flat tire yesterd	ay."						
b	b. % Eu		fu	rei	o	pneu	do	meu	l	carro	ontem.
		I	pu	nctured-1sG	the	tire	of-th	e my		car	yesterday
		"My	car	had a flat tire y	esterd	ay."					

The data in (48)–(51) thus provide independent support to both Rodrigues's (2020) distinction between two subclasses of possessor raising constructions in BP and our account of the person asymmetries observed by Kato and Ordóñez (2019).

## 6 Conclusion

"Topic-subject" constructions have received a lot of attention in the syntactic literature on BP. Details aside, the prevailing view is that the emergence of this type of construction in the grammar of BP is somehow related to the fact that it is no longer a canonical pro-drop language. Following Kato and Ordóñez (2019), we argued in this chapter that although BP's becoming a non-pro-drop language has surely contributed to this innovation in the grammar, it is certainly not its primary cause. Developing Kato and Ordóñez's insight, we proposed that with the weakening of structural Case licensing at the  $\nu$ P level and the loss of third-person dative clitics and third-person possessive pronouns, BP came to make extensive use of inherent Case. This ended up amplifying the possibilities for a Caseless DP to move to [Spec,TP], trigger verbal agreement, and receive nominative Case, as potential interveners have been rendered inert for minimality computations after receiving inherent Case (see Chomsky (1995) and Nunes (2017)). The general conclusion is that "topic-subject" constructions in BP are in fact a byproduct of changes at the  $\nu$ P level and its pronominal system.

Although there remain technical details to be further worked out, we believe that a major achievement of our proposal is that it provides a unified analysis for a series of distinct phenomena in BP that are apparently unrelated to "topic-subject" constructions such as the change of the preposition associated with directional verbs, the pervasive use of chopping relatives, and the emergence of hyper-raising out of infinitivals licensed by prepositions.

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