# **Chapter 17**

# Parametric variation: The case of Brazilian Portuguese null subjects

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This chapter revisits comparative and diachronic studies of linguists analysing Brazilian Portuguese (BP) with regard to the NSP, especially in view of recent debates on the existence of the so-called partial null subject languages. It will be shown that BP is losing the properties of a prototypical NSL like European Portuguese (EP), with a rich inflectional paradigm, but, as the change is very recent, there is still not a consensus regarding the target of the change. Our question is whether BP classifies as a PNS language like Finnish, Hebrew or Marathi, as was recently claimed in Holmberg (2010), and Holmberg & Sheehan (2010). Methodologically, it is our purpose to observe the overt and null subjects in real data so as to check whether eventual optionality of null and overt pronouns can be attributed to a grammatical competition from a diachronic perspective (Kroch 1994) or to some licensing possibility within a single type of grammar, which is normally a view taken by formal linguists analyzing synchronic data. Using acquisition data we will show that while null non-referential subjects are part of Brazilian core grammar, null referential subjects are not, and their existence in the production of Brazilian literate adults results from instruction through schooling. The chapter suggests that from a typological view BP is a semi-NS language like Icelandic.

# 1 The null subject parameter: A background

10.5281/zenodo.4680328 © 0

Since the advent of the principles and parameters model within the government and binding theory (Chomsky 1981; Rizzi 1982, a.o), the null subject parameter



(NSP) has received the widest range of discussions and refinements. Not only did its formal formulation deserve a lot of attention, but its typological binary concept (Chomsky 1981, based on Taraldsen 1978) gave rise to a new way to do comparative and historical linguistics. But Rizzi (1982: 144) soon pointed to the fact that what was considered a single parameter should be decomposed into two sub-parameters, distinguishing languages allowing both null referential and expletive subjects from those licensing only null expletives (what he calls *semi-pro-drop* languages)<sup>1</sup> (e.g. Italian vs. German).

Further studies in the 1980s and 1990s would show that morphological richness<sup>2</sup> was not sufficient to explain licensing and identification of null subjects. Huang's (1984) classic article showed that null subjects were also licensed in systems like Chinese, without any inflection for mood, tense, number and person, which led to a new hypothesis (Jaeggli & Safir 1989), according to which what licenses null subjects is not a "rich" inflectional verbal paradigm but its morphological uniformity. In the case of a paradigm consisting of different affixes, identification would occur through agreement markers; in the case of a paradigm consisting of a single stem, identification would be possible through a discursive topic. In the first case the NS would be a pronominal category; in the second, a variable. If, however, a paradigm is mixed, the NS would not be licensed.

Roberts (1993b) would bring new contributions to the discussion based on diachronic evidence from medieval French. He argued that a "functionally" rich paradigm, i.e. with a zero ending and two identical forms for different grammatical persons, could act as a "formally" rich one. Roberts, however, pointed out the fact that the limit of syncretic forms could not be exceeded. This proposal has been used to explain licensing of null subjects in European Portuguese and Brazilian Portuguese before the latter underwent a change in its inflectional paradigm, as we will show in §2.2.

The cluster of properties, which has been crucially related to the null-subject language (NSL) since the classical formulation of the NSP, has not been thoroughly confirmed in more than thirty years of research, which has led to negative conclusions and certain scepticism with respect to the principles and parameters theory, according to Roberts & Holmberg (2010).

In recent years, in the light of new theoretical and empirical evidence, the notion of "partially" null subject (PNS) languages has been introduced (cf. Holmberg 2005; works in Biberauer 2008; Biberauer et al. 2010, a.o.), which draws a much

<sup>&</sup>lt;sup>1</sup>Which we will later call semi-[non-NS] languages, after Biberauer (2010).

<sup>&</sup>lt;sup>2</sup>"The intuitive idea is that where there is overt agreement, the subject can be dropped, since the deletion is recoverable" (Chomsky 1981: 241).

more complex picture, leading to a proposal of parameter hierarchies, able to accommodate different parametric values. The representation in Figure 17.1, still covering languages with some sort of agreement, includes such PNS systems (cf. Holmberg & Sheehan 2010; Sheehan 2014: 6, a.o.).

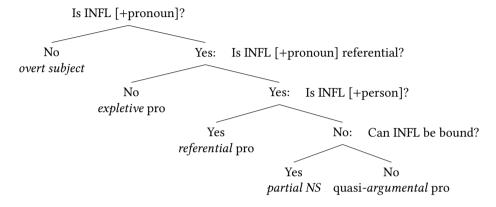


Figure 17.1: Null subject parameter hierarchy (preliminary)

Based on evidence coming from a number of languages of different families, Roberts & Holmberg list, beside non-null subject languages, <sup>3</sup> the following types of NSLs: consistent NSLs, such as Italian, Greek and Turkish, with "rich" inflection; null expletive languages (also referred as semi pro-drop), which do not allow referential NSs, among which we can find German and some varieties of Dutch and many creoles, such as Capeverdian, Haitian, and Jamaican; radical null subject languages (discourse pro-drop), such as Chinese, Japanese and Thai, with no agreement marker, which allow null subjects and objects in appropriate discursive conditions; and finally, partial null subject languages, including Finnish, Hebrew, Icelandic, Russian, Marathi (a variety spoken in western India) and Brazilian Portuguese. According to the authors, they constitute a more difficult type to define because the languages under this label may show a very diverse range of characteristics. Brazilian Portuguese (BP), on the contrary, instead of creating a lexical expletive like French, shows a competition between a null subject, and a prominent constituent moved to the structural subject position, resembling constructions of discourse configurational languages.

The proposal of parameter hierarchies can be related to the notion of *micro*-parameters (Kayne 1996), which could explain small differences among similar

<sup>&</sup>lt;sup>3</sup>We must keep in mind that non-null subject languages do not admit null subjects in neutral contexts. We do not ignore the fact that such systems can exhibit null subjects, pragmatically identified in non-neutral contexts (see, for instance, null first person subjects in English diaries, Haegeman 1990).

systems. According to Roberts (2012), each formal feature defines a distinct parameter, and he also argues that parameters move from "macro" to "micro" levels; thus, it would be natural to expect lower layers in the hierarchy to become more marked, showing a more complex behaviour than upper layers. The relevance of the parameter hierarchy for acquisition should be the prediction that higher options would be preferred as they are less marked; as more marked options appear in the primary data, the learner moves to lower levels, until the definition of a parametric setting compatible with the data is accomplished. The distinction between *micro*- and *macro*-parameters would not be, according to Roberts (2012: 310), part of Universal Grammar (UG), but a property that emerges as a result of the interaction of the learner with the primary data and UG. These hierarchies also include some predictions about diachronic changes: they should happen in the direction of upper hierarchies, less marked, driven by functional pressures or linguistic contact.

Finally, refining Figure 17.1, Roberts & Holmberg (2010) proposed the NSP hierarchy in Figure 17.2, suggesting that each functional head defines its parametric hierarchy.

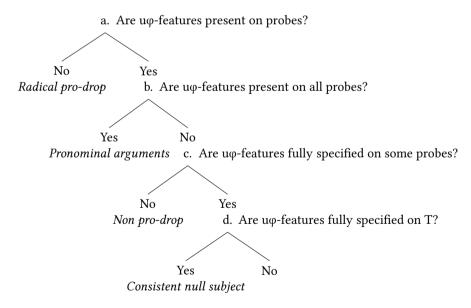


Figure 17.2: Null subject parameter hierarchy

In sum, the attempt to accommodate different hierarchies, keeping the binary values of each parameter, is in itself evidence that it is not an easy enterprise.

As for the label NSP in the interpretation it has in the theory of principles and parameters today, it seems to include several sub-types of languages, as argued by Biberauer (2010). We will see that BP exhibits a very peculiar behaviour in this regard.

#### 2 Preliminaries

#### 2.1 Our aims

The aim of this chapter is to revisit the comparative and diachronic studies of linguists analysing BP with regard to the NSP, especially in view of recent debates on the existence of the so-called PNS languages. It is a well known fact that BP is losing the properties of a prototypical NSL, like European Portuguese (EP), with a rich inflectional paradigm, but, as the change is very recent, there is still not a consensus regarding the target of the change. Our question is whether BP classifies as a PNS language like Finnish, Hebrew or Marathi, as was recently claimed in Holmberg (2010) and Holmberg & Sheehan (2010). Methodologically, it is our purpose to observe the overt and null subjects in real data so as to check whether eventual optionality of null and overt pronominals can be attributed to a grammatical competition from a diachronic perspective (Kroch 1994) or to some licensing possibility within a single type of grammar, which is normally a view taken by formal linguists analysing synchronic data. Using acquisition data (Magalhães 2003 and Kato 2011), we will try to see how the Brazilian child selects their grammar, and will follow the hypothesis that null referential subjects in the Brazilian literate adult are not residues of the old grammar, but the result of instruction through schooling.

Our upcoming sections are organized as follows: §2.2. describes the BP diachronic facts; §3 brings some considerations on acquisition data; §4 contains a comparative analysis of BP with four types of languages: §4.1 with EP, a consistent NSL, with rich Agr inflection; §4.2 with Japanese, a radical type, or a discourse configurational language type, with no Agr inflection; §4.3 with Finnish, a partial NSL; §4.4 with English, a [-NS] language; and §4.5 with Icelandic, the so-called <code>semi[NS]</code> language.

In the conclusions we will summarize the findings of the article, namely that BP core grammar is set to a [-NS] language with referential subjects and to a [+NS] language with regard to non-referential ones. With regard to the literate Brazilians' E-language it will be shown to exhibit a competition with regard to referential subjects, between overt pronominal subjects of the English type, and

NSs, of the radical type. With regard to non-referential subjects, the literate adult maintains the same types of NSs exhibited by the child.

#### 2.2 From Old Portuguese to Modern Brazilian Portuguese

As is well known among Romanists, Old French (OFr) was "a sort of V2 type of language" (cf. (1a)) and also a NSL (cf. 2a) (Adams 1987, Roberts 1993b, a.o.). The latter property was lost when OFr lost this characteristic. According to Ribeiro (1995), Old Portuguese (OP) was also a NSL and a "sort of V2 type of language" (cf. 1b). EP retained both properties, while BP lost both the same way OFr did.

# (1) a. Old French V2

Eisint revindrent li mesage en la ville. then returned the messenger to the town 'Then the messenger returned to town.'

#### b. Old Portuguese V2

Maravilhosas **son** estas cousas que co'ntas, padre... beautiful are these things that tell.2sg, father 'Beautiful are the things that you tell us, father.'

However, contrary to Germanic languages, OFr and OP could both exhibit the V1 pattern (cf. Kaiser 1999; Ribeiro 1995), which in French was restricted to VS, while in Portuguese it exhibited a null subject:

#### (2) a. Old French V1

Respundi li evesches. answered the bishop 'The bishop answered.'

#### b. Old Portuguese V1

**Quero** que m'o digas e desejo mui de coraçon a saber... want.1sg that me=it tell.2sg and wish.1sg much of heart to know 'I want you to tell me, and I strongly wish to know...'

If we take fronted Focus structures (FocusVS) as a diagnostic of V2 structures in older periods of Portuguese, we can say that these started to disappear in the 18th century in the BP variety (Kato & Ribeiro 2009). On the other hand, the

<sup>&</sup>lt;sup>4</sup>Cf. Ribeiro (1995) for OP and Torres Moraes (1993) for the Classic period. Brazilian authors acknowledge that Romance V2 is not exactly like the Germanic V2. See also Kaiser (1999) and Rinke (2009) against Old Portuguese as a V2 language.

optionality between NS and overt pronominal subjects in BP started to appear by the end of the 19th century (Tarallo 1985; Duarte 1993). It is clear, therefore, that V2 structures started to disappear one century before the NS began to decline, suggesting that the two changes were independent in BP, contrary to what has been observed in French.

A number of investigations on the morphosyntax of Brazilian Portuguese point to the conclusion that variable phenomena have a very regular distribution in the country. In fact, the polarization to which Lucchesi (2009) refers should be related particularly to variation in the use of agreement markers. The author, in a recent overview of sociolinguistic polarization in Brazil (Lucchesi 2015), distinguishes those processes of variation and change that reach all sectors of Brazilian society *in the same direction* from those processes which take opposite directions, setting apart high and middle sectors from those at the base of the social pyramid. In spite of that, the author recognizes a sort of "leveling" towards non-standard variants.

In fact, the alleged contrast may be valid when we consider the rural—urban continuum. Results for contemporary Brazilian morphosyntax show that, when we take into account Brazilian Portuguese spoken in the cities, many so-called "non-standard" variants have reached all sectors of society, in such a way that it has become inappropriate to use the distinction standard/non-standard to refer to spontaneous speech produced by people with fewer or more years of school attendance. A possible explanation for that could be in the successive migration flows from 1940, which would give rise to intense contact among a wide range of linguistic varieties from all over the country and might, thus, be among the causes of the implementation of non-standard variants in the city, moving towards a new concept of the "standard norm". The fact is that, as far as the cities are concerned, descriptions of BP morphosyntax do not allow us to set a boundary to separate varieties.

In an attempt to trace the expression of referential subjects, Duarte's (1993; 2012) diachronic analysis shows the loss of the "avoid pronoun principle" (Chomsky 1981) in popular theatre plays, written in Rio de Janeiro in the 19th and the 20th centuries. The results for referential subjects can be seen in Figure 17.3.

The rates of null subjects across the periods analysed suggest three stages in the process of change, which coincide with changes in the inflectional paradigm triggered by apocope in the second person singular, a very common phenome-

<sup>&</sup>lt;sup>5</sup>The rural exodus, with data from the Brazilian Institute of Geography and Statistics, shows the deep transformation related to those intense migration flows. Brazil, an eminently rural country in 1940, reached the year of 2000 with 80% of its population in the cities.

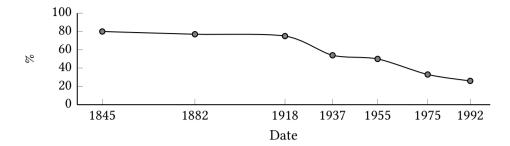


Figure 17.3: Null subjects in Brazilian Portuguese in two centuries (from Duarte 1993)

Table 17.1: Evolution of verbal inflectional paradigm in BP – cantar 'to	
sing' (adapted from Duarte 1993)	

	Nominative pronouns	Paradigm 1 19th century	Paradigm 2 20th century/1	Paradigm 3 20th century/2
1sg	eu	canto	canto	canto
2sG	tu	cantas	cantas	canta(s)
	você	_	canta∅	canta∅
3sg	ele, ela	canta∅	canta∅	canta∅
1pl	nós	canto mos	canta <i>mos</i>	canta <i>mos</i>
	a gente	_	canta∅	canta∅
2pl	vós	canta <i>is</i>	_	_
	vocês	canta <i>m</i>	canta <i>m</i>	canta(m)
3pl	eles, elas	canta <i>m</i>	canta <i>m</i>	canta(m)

non, and third person plural, a socially constrained phenomenon, as well as by two important changes in the set of nominative pronouns, shown in Table 17.1.  $^6$ 

The plays written in the first three periods, exhibit six and sometimes five different forms, with a syncretism, represented by the address forms o(a) senhor(a) 'the lord', 'the lady' and Vossa  $Merc\hat{e}$  'Your Grace', which all combine with third person unmarked form for singular. This is what we attest for European Portuguese. The reduction of null subjects in the 1930s and the 1950s is triggered

<sup>&</sup>lt;sup>6</sup>Considering that the first author was born in 1815 and the fourth in 1884, we could assume that the change took place at the turn of the century. We are aware of the fact that tracing linguistic change over long periods of time implies using documents that do not capture the vernacular of their writers. Quoting (Labov 1994: 11), "historical linguistics can then be thought of as the art of making the best use of bad data".

by the grammaticalization of *Vossa Mercê* as você, which is fully inserted in the pronominal system as second person reference, while the pronoun tu is abandoned by some authors. Those who insist in keeping tu and você in the paradigm usually mix both forms to address the same person, not only in nominative function but in accusative and dative functions as well. This change was further aggravated by the entry of *a gente* ('the folks', 'the people', similar in meaning to French 'on'), in Paradigm 3, replacing first person plural nós (we), also requiring the unmarked third person singular agreement, due to its nominal origin.

We have enough evidence from diachronic research, according to which both processes started before the 19th century. With respect to a gente, Lopes (2003) shows that after a transitory period of ambiguity between a nominal reading or its interpretation as a pronoun, it is at the end of the 19th century that its full implementation is attested in variation with the conservative pronoun nós (we), which has an exclusive ending  $\langle -mos \rangle$ . With respect to voce (you), Lopes (2003) claims that its variation with tu (you) in letters, very sporadic in the 19th century, enters the system slowly in the 20th century. A side effect of this pronominalization is attested in the mixture of oblique and possessive pronouns of second and third persons in letters and plays written from the 1930s on. Today, voce (in variation with tu) and a gente are preferred not only for definite reference but for generic reference as well, in which case the former may or may not include the speaker and the addressee, the latter must include the speaker.

Such changes have been the most significant trigger for the "impoverishment" of BP's paradigm. Differently from the variable use of  $\langle -s \rangle$  and  $\langle -m \rangle$ , related to a phonological process (apocope) and constrained by social factors, there is no variation in the use of the unmarked verb form with the new pronouns derived from DPs. The consequence was the loss of the *functional richness* of the inflectional paradigm, in Roberts's (1993b) terms. For Galves (1993), this reduction entails the loss of the semantic feature in the category *person*. Associated with the feature *number*, the paradigm was reduced to four possible combinations:

<sup>&</sup>lt;sup>7</sup>For some reason to be investigated, the most popular authors of this type of "light" plays written in Rio de Janeiro made a choice in favor of *você*. The city population has not abandoned the use of *tu* but it was more restricted to the suburban areas, with a number of new textile industries, where people born in the city were concentrated.

 $<sup>^8</sup>$ This is real evidence of the grammaticalization of  $voc\hat{e}$ ; the loss of courtesy, originally distinguishing  $voc\hat{e}$ , is kept in European Portuguese, which maintains the complementary distribution between tu, for family and close friends, and  $voc\hat{e}$ , usually null, for other social relations. Explicit  $voc\hat{e}$  coming from a stranger is not well accepted by older Portuguese. See Lopes & Brocardo (2016) with respect to current grammaticalization processes in BP.

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(3) +person / -plural > -o
+person / +plural > -mos
-person / +plural > -m
-person / -plural > -∅
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Such an *impoverished* or *weakened* paradigm would certainly affect the identification of an empty category.

The empirical evidence of the late implementation of the two new pronouns does not sustain the claim that it could actually be the case that the set of pronouns changed as a consequence of the changes in the inflectional paradigm. The cases of apocope shown in the chart above were certainly a consequence of contact. However, additional evidence that African slaves and their descendants did not reduce the verbal paradigm drastically comes from important written documents produced by Africans, who learned Portuguese as a second language in the State of Bahia. Such documents, written in the 19th century – along the decades of 1830 and 1840 - consist of 53 Acts of the Sociedade Protetora dos Desvalidos (Protecting Society of the Helpless), a fraternity founded by Africans to protect one another, who kept minutes (memoranda) of their regular meetings, written by five members. Almeida & Carneiro (2009) analysed the expression of pronominal subjects and their results show the preference for null subjects with rates of 68% for 1sg, 89% 1pl, 89% for 3sg, and 93% for 3pl. The paradigm used in the memoranda includes the pronoun nós for 1PL reference, with the canonical inflection (-mos). The cases of non-agreement are restricted to the apocope of 3PL inflection (-m). This discursive tradition does not favour the use of second person. All the constraints pointed out as favoring null subjects, such as co-reference and non-animate antecedents, are confirmed. The only oscillation attested in the data is related to individual performances – only one of the five authors shows a low rate of null subjects (33%); the other four exhibit overall rates above 77%.

The analyses of spoken Portuguese acquired by African descendants are not different from those obtained by Brazilians. Lucchesi's (2009) analysis of the expression of subjects based on the vernacular speech of four isolated rural Afro-Brazilian communities in the state of Bahia, with different historical and socioeconomic backgrounds, shows the same rates attested by Duarte (1995) for contemporary Portuguese spoken in the city of Rio de Janeiro.

Returning to the results in Figure 17.3, Duarte shows that the course of change is different with respect to first and second person on one hand and to third person on the other. In the last quarter of the 20th century null first and second person subjects reach a mean of 20%. Third person, thanks to the interaction of [+human] and [-human/-animate] referents, exhibits a slow descending curve

(see Cyrino et al. 2000). Such results would be confirmed by Duarte's (1995) analysis of spoken variety of Rio de Janeiro. Referential pronominal subjects in root clauses are preferentially overt (Duarte 1995). Second person singular, which triggered and led the change, reveals 10% of null subjects, usually pragmatically identified (4a); first person singular null subjects reach 25%, particularly when preceded by a functional category, such as a NegP, and AspP (4b):

#### (4) Brazilian Portuguese

- a.  $\emptyset_{2sG}$  sabe o que é pinho de riga? know what is pine of riga 'Do you know what riga pine is?'
- b. Ø<sub>IsG</sub> não gosto de boxe.
   not like of boxing
   'I don't like boxing'

Third person subjects, as mentioned, are constrained by animacy and structural patterns. In root clauses Duarte (1995) attested 36% of null subjects, usually identified by an antecedent bearing the same function in the adjacent clause or by an antecedent with discursive prominence (cf. Barbosa et al. 2005; Kato & Duarte 2014b):

#### (5) Brazilian Portuguese

- a.  $\text{Ela}_{i}$  gosta de cozinhar.  $\emptyset_{3\text{SG}_{i}}$  Aprende com as amigas. she likes of to.cook. learns with the friends. 'She likes to cook. She learns with her friends'
- b. [O meu irmão] $_i$ ?  $\emptyset_{3SG_i}$  Mudou pros Estados Unidos. the my brother? moved to the United States. 'My brother? He's moved to the United States'

In embedded clauses, co-reference still plays an important role (Modesto 2000; Figueiredo Silva 2000; Duarte & Soares da Silva 2016, a.o.), with a regular distribution between overt and null subjects. Duarte's (1995) data show 32% of null subjects in this control pattern with [+human] and 44% with [-animate] referents:

<sup>&</sup>lt;sup>9</sup>In short answers we can have an apparent NS with third person, but we analyse this sort of structure as resulting from the fronting/focalization of the inflected verb eventually accompanied by its adjuncts, followed by the remnant movement of the TP (cf. Kato 2016).

#### (6) Brazilian Portuguese

- a. mas  $ele_i$  sentiu [ que  $\emptyset_{3sG_i}$  era o único novo ali, but  $he_i$  felt that was the only young there, recém-casado ...] newly-married
  - 'But he felt he was the only young guy there, newly married....'
- b. [Esse filme]<sub>i</sub> emocionou muita gente quando (ele)<sub>i</sub> ficou pronto
   That film<sub>i</sub> touched many people when he was ready
   'That film touched many people when it was shown'

A null subject in a subordinate clause without co-reference with the subject of the main clause is still attested if the verb of the main clause has an epistemic verb. In such contexts, which have the antecedent in an A'-position, overt subjects are also far more frequent: (Moreira da Silva 1983; Figueiredo Silva 1996; 2000, a.o.):

(7) Brazilian Portuguese

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[ O armazém ]<sub>i</sub> (...) quer dizer, <u>acho</u> [ que \emptyset_{3sG_i} já é the grocery-store I mean think.1sg that already is extinto ] né? extinct, see? 'The grocery store... I think it's now extinct'
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One significant difference between French and Brazilian Portuguese noted by Duarte (1995) was the fact that, although the two Romance languages have lost null referential subjects, French also lost the null expletive with the development of the expletives *ce* and *il* while BP retained it:

- (8) a. French
  Il fait froid.
  it is cold
- (9) a. Middle French (apud Roberts 1993b: 151)
  Il i avoit bien .xxiiij.M. archiers a piet
  there were about 24.000 archers marching
  - b. Brazilian Portuguese  $\emptyset_{\text{EXPL}}$  havia bem uns 24.000 arqueiros a pé was about 24.000 archers marching

With the loss of the generic clitic *se*, BP shows a NS in generic constructions, <sup>10</sup> while French has the indefinite pronoun *on*.

#### (10) a. French

On ne voit plus de rémouleurs.

#### b. Brazilian Portuguese

Ø Não vê mais amolador-de-faca.

'One doesn't see knife sharpeners any more.'

However, in both languages, these constructions have nominative pronouns as variants, largely preferred in BP:

#### (11) a. French

Vous / On ne voyez plus de rémouleurs. Nous ne voyons plus de rémouleurs.

#### b. Brazilian Portuguese

Você / A gente não vê mais amolador-de-faca

'You / we don't see knife sharpeners anymore.'

There are even contexts, as illustrated in (12), where a null generic is ungrammatical in BP:

#### (12) Brazilian Portuguese

Quando a gente /  $\operatorname{voc\hat{e}}$  /  $\operatorname{^*\!\!\!\!/}_{GEN}$  é menor, a gente /  $\operatorname{voc\hat{e}}$  não dá when the people you are little, the people you not give muito valor a essas coisas.

much value to these things

'When we /you are young, we / you do not value such things'

Summarizing, our empirical analysis reveals that null referential subjects are much less frequent than overt pronominals. Furthermore, the null generic subject is not the most productive strategy to represent this type of indeterminate subject; in addition, recent research does not show any sign of increasing use of it among younger generations (see Marins et al. 2017). This might support the hypothesis that null subjects in BP could be residual cases still reflecting the replaced null subject system, as far as referential (definite and indeterminate – either arbitrary or generic) uses are concerned. We will return to this matter in the following section.

<sup>&</sup>lt;sup>10</sup>Since the arbitrary clitic *se* is also extinct in speech, BP also exhibits a null arbitrary subject (Rodrigues 2004), at very modest rates, attested in variation with the use of a third person plural verb with a null or an overt pronoun *eles* (they).

# 3 Core grammar and I-language

The theory of UG tries to account for the acquisition of *core* grammars through parameter setting in a context of poverty of stimulus (Chomsky 1986), which can be understood partly as data containing competing forms due to different values of the same parameter coexisting in the input that children receive. This is exactly the situation that a child faces when there is a recent change or a change in progress as shown by the well-studied case of the null subject (NS) in Brazilian Portuguese (BP).

As we saw above, in the I-language of most literate Brazilian adults, a range of referential NSs are possible, competing with the innovative pronominal subjects. It is the case of the optionality of NSs and pronouns in complement clauses as in example (13):

#### (13) Brazilian Portuguese

O Pedr**o**<sub>i</sub> disse que (**ele**<sub>i</sub>) fala bem espanhol. the Peter said that he speaks well Spanish 'Peter said that he speaks Spanish well.'

Assuming, with Kato (2011),<sup>11</sup> that *core* grammars do not admit morphological "doublets", and that children have only the innovative variant, we will see that pre-school children do not have pronouns competing with referential null subjects as in the above context. Kato borrows data from Magalhães (2003), who argues that referential NSs in BP are learned in school, where old forms are provided through instruction.

Table 17.2:	Pronominal	and	null	subjects	in	complement	clauses
(adapted fro	om Magalhães	s 2003	3)	•		-	

	Pre-school	3rd/4th grades	7th/8th grades
Pronominal subjects	97.89%	78.0%	50.38%
Null subjects	2.11%	22.0%	49.62%

When the child masters complex clauses in pre-school, the NS is still almost nonexistent in his/her oral production of complement clauses. NSs start to increase very quickly in their written performance, achieving the status of an equal variant of the overt pronoun at the end of 8th grade.<sup>12</sup>

<sup>&</sup>lt;sup>11</sup>See also Dresher's (1999, a.o.) theory according to which children do not reset parameters.

<sup>&</sup>lt;sup>12</sup>Kato et al. (2009) arrive at a similar conclusion with regard to null objects, but in the opposite direction. Children have only null objects in their core grammar, and acquire the lost third person clitic at school.

Several studies try to analyse the nature of the NS in such constructions, where optionality is found in the adult's E-language, but what we are actually studying is a variant learned at school, and one may ask whether these NSs are an object of UG. We will return to this problem in the following sections.

The conclusion is that the only type of null subject licensed in BP *core* grammar are the non-referential NSs, namely the null expletive and the generic subjects without the clitic *se*, as they are attested during language acquisition.

#### (14) Brazilian Portuguese

- a. Simôes (2000)
  - $\emptyset_{\text{EXPL}}$  Tem dois aviões aqui. there-are two planes here.
- b. Magalhães (2007)
  - $\emptyset_{GEN}$  pode chupar o dedo? can suck the finger

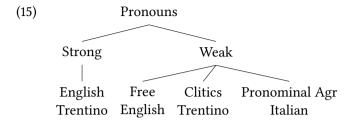
As for the E-language exhibited by the literate adult, it will be shown that the non-referential null subjects are the same as those of the Brazilian child, but the null referential ones are in variation with the overt pronominal ones.

# 4 Comparing the NS in BP with different types of languages

### 4.1 BP vs. EP, a consistent NS language

Cardinaletti & Starke (1994) distinguish three types of pronouns: strong, weak and clitic. Following Kato (1999) we will make an initial split between strong and weak forms, and will assume that weak pronominals can be one of three types: i) free pronouns, like in English, ii) clitics as in Trentino, a Northern Italian dialect or iii) agreement affixes, or pronominal Agr as in Italian and EP (cf. Fig 2). The weak pronominals are Agreement affixes in the so-called consistent *prodrop* languages. All languages, on the other hand, have strong pronouns, which exhibit a "default" case (Kato 2000; Schütze 2001).<sup>13</sup>

<sup>&</sup>lt;sup>13</sup>Moreover, strong pronouns are always deictic, or referential, while weak pronouns can be deictic or referentially dependent. Strong pronouns are always [+human] while weak pronouns can be [+human] or [-human].



Salvi's (1997) conclusions on what happened in the beginning of Romance seem to partially support what is being proposed here. Studying the changes from Latin to Old Romance and from Old Romance to French and the Northern Italian dialects, he concludes that: (a) Latin had only one form of nominative pronouns, which, he assumes, were used as strong or weak pronouns, (b) in Old Romance pronominal anaphora was not obligatory since subject clitics did not exist; (c) in French and in some Italian dialects zero anaphora (NS) ceases to exist when subject clitics appear (see also Roberts 1993b).

For Kato (1999),<sup>14</sup> pronominal Agr, understood as the grammaticalization/incorporation of personal pronouns in verbal Inflection, is claimed to be in crosslinguistic complementary distribution with weak pronouns and subject clitics. Thus, the loss of one implies the introduction of the other type of weak pronouns.<sup>15</sup>

In BP the great innovation was the introduction of an English-like paradigm of weak pronouns partially homophonous with the strong ones (Nunes 1990; Kato 1999) in place of the old pronominal Agr system.<sup>16</sup>

(16)	strong	weak	strong	weak	
	EU (I)	[eu/ô]	NÓS (we)	[nós]	
	VOCÊ (you)	[cê	VOCÊS (you)	[cêis]	
	ELE (he)	[ele/ei]	ELES (they)	[eles/eis]	

Pronominal Agr is syntactically defined by Kato (1999) as a D-category that appears in the numeration as an independent item from the verb, being first merged as an external argument of  $\nu$ , with interpretable  $\varphi$ -features. There is no Spec

<sup>&</sup>lt;sup>14</sup>See also similar views in Barbosa (1995); Alexiadou & Anagnostopoulou (1998); Ordóñez & Treviño (1999).

<sup>&</sup>lt;sup>15</sup>Studying the loss of NSs in Dominican Spanish and BP, Camacho (2016: 28) proposes, in line with Kato (1999), that the change has to do with "modification in the lexical entries for inflection", namely the introduction of weak pronouns.

<sup>&</sup>lt;sup>16</sup>In written language the new paradigm is represented as homophonous to the strong pronouns. <sup>17</sup>Kato's (1999) analysis above eliminated *pro*, and its problems in a Minimalist frame: (a) the position of processors to be a problem. (b) its presence in the numeration is eliminated and

position of *pro* ceases to be a problem, (b) its presence in the numeration is eliminated and (c) it will give a coherent explanation on why there is free inversion since it will be moving a maximal projection. Brazilian Portuguese, on the other hand, cannot move T', the reason why it lost free inversion.

of T/INFL projected, as the pronominal agreement satisfies the EPP morphologically. In BP with Agr no longer pronominal, free weak pronouns are introduced, and Spec of T/INFL has to be projected. In EP, on the other hand, pronominal Agr remained and, therefore, no weak free pronouns were created.

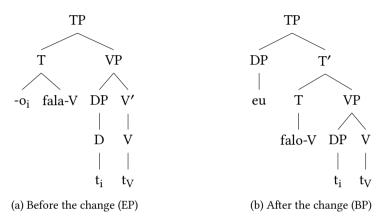


Figure 17.4: Pronominal Agr and weak pronouns

Strong pronouns are in a higher projection than weak pronouns. This higher projection can be  $\Sigma P$ , as in Martins (1994), or the SubjP in Cardinaletti (2004). When the pronoun is overt in NSLs, it always has an emphatic or contrastive interpretation. If a non-NS language has an overt pronoun, the sentence exhibits subject doubling, as in BP (cf. the examples in (17), apud Kato 2012). But in either case, strong pronouns have a "default" case and are always referential and [+animate] (Kato 1999, Schütze 2001).

(17) a. European Portuguese VOCÊ, come-Ø pizza. you eat pizza
b. Brazilian Portuguese VOCÊ, cê come pizza YOU you eat pizza 'YOU, you eat pizza.'

Taking into consideration that the referential NS of the literate Brazilian adult has been acquired through schooling, we can bring some interesting results from Barbosa et al.'s study as to what extent instruction recovers the "avoid pronoun principle", which seems to rule the speakers of a consistent NSL. Figure 17.6 shows null subjects in spoken EP and BP.

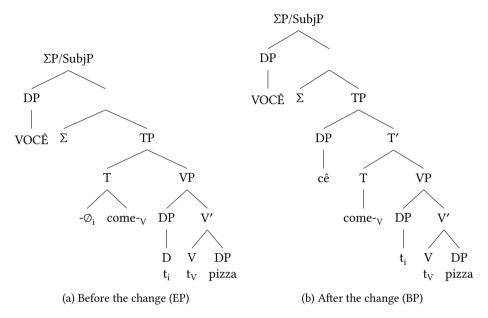


Figure 17.5: Position of strong pronouns

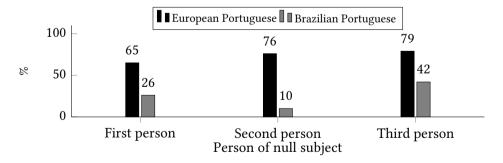


Figure 17.6: Null subjects in spoken European and Brazilian Portuguese (adapted from Barbosa et al. 2005, Figure 3, apud Duarte 2004)

Despite the fact that schools in Brazil try to provide the students with the old NS grammar, Brazilians produce a much higher proportion of overt pronouns than Portuguese speakers, following the same hierarchy (see examples (4-7) in §2.2). As we mentioned in §2.2, this has been related to (a) the neutralization of tu and  $voc\hat{e}$  (second PS) for second person reference, (b) the replacement of voces (second PP), and (c) the introduction of a gente in competition with nocesis modesis mo

As for qualitative distinctions Barbosa et al. (2005: 19, BDK) listed the following observations:

- (a) A significant difference between the two varieties is in the fact that overt pronouns in EP are almost invariably [+animate], which shows that they are generally strong pronouns, while in BP they can be [+animate] or [-animate], indicating that they can be strong or weak.
  - (18) a. European Portuguese
    Os miúdos vão pra escola e ela vai pro escritório the children go to.the school and she goes to.the office 'The children go to school and she goes to the office.'
    - b. Brazilian Portuguese Eu acho que um trabalho $_{i}$ , ele $_{i}$  teria que começar por I think that a task it should-have to start from aí. there.
      - 'I think that a task should have to start from here.'
- (b) The control relation between the antecedent and the null subject is the most favourable context for NSs in both varieties, even though BP prefers overt subjects; in EP, on the other hand, a null subject is categorical, as in (19), the exceptional cases having to do with emphatic/contrastive strong ones.

<sup>&</sup>lt;sup>18</sup>Most regions of the country that keep the pronoun *tu* combine it, in colloquial speech, with the same unmarked third person verb form used with *você* (*tu/você fala* – you speak). Evidence for the neutralization of both pronouns is in the fact that they are used without any distinction as regards courtesy, contrary to what happens in Portugal.

- (19) European Portuguese Ela $_i$  disse logo que  $\emptyset_i$  tava em férias e que  $\emptyset_i$  morava ali she said soon that was on vacation and that lived there ao pé do liceu. near of the liceum 'She soon said that she was on vacation and that she lived there near the school'
- (c) The real variation domain of null and expressed subjects in both varieties is where no control relation obtains. It seems to be correlated with a functional factor, namely topic maintenance, which favours the NS, vs. topic shift, favouring overt pronouns (cf. also De Oliveira 2000 and Marins 2009 with respect to Italian). However, a consistent NSL will prefer a null subject even in anaphoric contexts.

#### (20) European Portuguese

- a. Quando eu estava a trabalhar com ele<sub>i</sub> Ø<sub>i</sub> nunca me when I was at work with he never me.cL queria ver na cozinha wanted to.see in.the kitchen 'When I was at work with him, he never wanted to see me in the kitchen.'
- b. Parece que numa ida d[ela]<sub>i</sub> à Inglaterra, ela<sub>i</sub> fez com seems that in.a trip of.her to.the England, she made with que a rainha pedisse nossos produtos. that the queen ordered our products 'It seems that in one of her trips to England she made the queen order our products.'

To account for the finding that BP still licenses NSs, as opposed to a language like English, we have had two lines of explanation:

- (a) they result from the fact that we have a change in progress, with two grammars in competition (Duarte 1993; 1995; Kato 2000), the NSs being residual occurrences of the same NS of the old grammar;
- (b) the NS in BP is not a pronominal Agr, but (b1) a variable bound by a quantifier (Negrão & Müller 1996); (b2) a variable or an anaphor (Figueiredo

Silva 2000); (b3) a variable bound by a Topic, the subject in BP being in A'-position (Modesto 2000); (b4) the trace of A-movement (Ferreira 2004; Rodrigues 2004; Martins & Nunes 2010).

However, according to the data in Barbosa et al. (2005) and in Kato (2009), the theories in (b) do not explain the optionality in real data, namely the presence of overt pronouns, where the NS would be the only option.

#### (21) Brazilian Portuguese

a. Negrão & Müller (1996)

Nenhuma criança acha  $\ \ \,$ que  $\ \ \,$  $\ \ \,$  $\ \ \,$  $\ \ \,$ ela  $\ \ \,$ é burra. no child thinks that she is stupid

b. Barbosa et al. (2005)

Ninguém no Brasil $_i$  acha que  $ele_i$  é prejudicado pelo nobody in Brazil thinks that he is impaired by-the governo. government

#### (22) Brazilian Portuguese

a. Figueiredo Silva (2000)

A Maria achou um carro que  ${}^*\mathcal{O}_i$  tem grana pra comprar. the Maria found a car that has money to buy.'

b. Kato (2009)

A Maria<sub>i</sub> achou o carro que  $\emptyset_i$  queria. the Maria found a car that wanted 'Mary found a car that she wanted.'

#### (23) Brazilian Portuguese

a. Modesto (2000)

Paulo convinced the Pedro that had to go home 'Paulo convinced Peter that had to go home 'Paulo convinced Peter that he had to go home.'

b. Kato (2009)

O Paulo $_1$  convenceu **o** Pedro $_2$  que  $\emptyset_{1/2}$  devia estudar mais. the Paulo convinced the Peter that should study more 'Paul convinced peter that he should study more.'

Working with the raising phenomenon in BP, Martins & Nunes (2005) show that standard raising, very rare in spoken BP, gave rise to a structure such as (24a), initially treated by the authors as a case of hyper-raising, explained by the possibility of an optional defective T in the embedded clause, incapable of checking the features of a raised subject. However, the optionality of a null or overt pronoun from the embedded clause led Martins & Nunes (2010) to propose that what raises to SpecTP of the main clause is a dislocated topic inside the embedded clause, and both the raised constituent and the subject of the embedded clause can check the features properly. According to Martins & Nunes, in view of the input of literate speakers, children can acquire, much later along with standard raising, the structure in (24b), another possibility in European Portuguese, which exhibits a dislocated topic, and the problem of case checking no longer applies:

#### (24) Brazilian Portuguese

- a. [CP] [Os vizinhos  $]_i$  parecem [QIP] que [IP] [IP] (eles)[IP] compraram um the neighbors seem. 3PL that they bought. 3PL a carro [IP] car
- b. [TopP] [ Os vizinhos  $]_i$   $[CP_{EXPL}]$  parece [ que (eles) $_i$  compraram um the neighbors seem.3sg that they bought a carro ]].

'The neighbours seem to have bought a car.'

As in Martins & Nunes (2010) and Kato (2011), the hypothesis that we will be considering is that the Brazilian child has set the NSP to its negative value, and that the referential NSs in BP adult data result from the imperfect learning of a "second grammar".

# 4.2 BP vs. Japanese, a radical NS language

A radical null subject (NS) language has been defined as one without rich agreement, like, for instance, Chinese and Japanese, also referred to as *discourse configurational* (DC) languages (É. Kiss 1995; Miyagawa 2010) or Topic-prominent languages (Li & Thompson 1976). Three reasons lead Brazilian linguists to hypothesize that BP is changing towards a DC type of language: <sup>20</sup> (a) BP lost rich

<sup>&</sup>lt;sup>19</sup>The first author of the paper is a speaker of Japanese as L1, and of BP as L2, but more fluent in the latter.

<sup>&</sup>lt;sup>20</sup>See the first proposals in Pontes (1987) and Kato (1989). Actually they propose that BP is a Topic and Subject prominent language in Li & Thompson's (1976) terminology. More recently, see Negrão & Viotti (2000); Modesto (2008) with a similar view.

agreement, (b) like other DC type of language, BP not only has NSs, but also null objects and bare nouns, and (c) like other DC types of language, BP does not dispose of lexical expletives, in accordance with Li & Thompson's (1976) assumption for Topic prominent languages.<sup>21</sup>

With existential sentences, what we have in Japanese, instead of the expletive, is the morpheme -ga marking the subject. For the locative raised ones, we have -wa, the topic marker. A sentence with -ga is interpreted as a thetic, or a presentational, sentence, while a sentence with -wa is interpreted as a categorical (or predicational) one.  $^{22}$ 

#### (25) Brazilian Portuguese

- a. Ø Tem dois cachorros no quintal.
   has two dogs in.the yard
- b. (N)o quintal tem dois cachorros.in.the yard has two dogs'There are two dogs in the yard.'

#### (26) Japanese

- a. Inu-ga nihiki niwa-ni iru. dog-nom two yard-loc aru
- b. Niwa-ni-wa inu-ga nihiki iru. yard-loc-top dog-nom two are

Weather constructions in BP have (a) the verb denoting the climatic event with a null expletive as the subject (cf. (27a)), or (b) like Japanese, the subject denoting the event with a general verb of motion *cair* 'fall' as in (27b). The third possibility is locative raising to the subject position (27c). Moreover, in this case the sentence is categorical and the subject triggers agreement in BP, but not in Japanese.

#### (27) Brazilian Portuguese

a. Ø Está nevando desde ontem nesta cidade.
 is snowing since yesterday in this city
 'It is snowing since yesterday in this city.'

<sup>&</sup>lt;sup>21</sup>Kato & Duarte (2014a) proposed the movement of an internal constituent to SpecTP in BP, instead of the direct merging of the null expletive (cf. Chomsky 2004). But, in later work, Kato & Duarte (2014b) show that the two resulting constructions co-exist, one in categorical constructions and the other in the thetic one.

<sup>&</sup>lt;sup>22</sup>See Kuroda (1972) for this terminology. Existential sentences are typical thetic sentences. In BP the subject is a null expletive when it is a thetic sentence, but if the locative raises to subject position it is a categorical sentence like sentences with *-wa* in Japanese.

- b. A neve cai desde ontem nesta cidade.
   the snow falls since yesterday in this city
   'The snow has been falling since yesterday in this city'
- c. As cidades nessa região nevam muito. the cities in.this region rain.3PL a lot 'In the cities in this region it rains a lot.'

#### (28) Japanese

- a. Yuki-ga kinoo-kara fute-iru.
   snow-nom yesterday-since raining-is
   'The snow falls since yesterday.'
- b. Kono-hen-no matchi-wa yoku yuki-ga furu . this region city—top well snow-nom fall 'The cities in this region snow a lot.'

But besides the existential and the weather verb sentences, BP has another NS similar to Japanese, namely the null generic and arbitrary sentences.

#### (29) Brazilian Portuguese

- a. Ø conserta sapato.repairs shoes
- b. Ø kutsu-o nao-shimasu. shoes-ACC repair-do
   'One repairs shoes.'

In order to analyse the NS of generic and arbitrary sentences, Kato (2000) made use of PRO for finite contexts, adapting Huang's (1989) idea of *generalized control theory*. We can support this view as, with the deterioration of inflection, finite sentences tend to behave as infinitive or gerundive clauses. Kato also assumes that PRO is the strong null third person pronoun and we are assuming with Tomioka (2003) that the weak pronoun in Japanese is a null noun. We would have the following representation in BP for a non-referential generic sentence with the NS. The nominal  $[NP \varnothing]$  in (30) would correspond to the English nominal *one*, or the French *on*.

# (30) [ $PRO_i$ [ $[_{NP} \emptyset]_i$ conserta sapato ]]

Just like with existentials, we can have raising of a locative, both in BP and Japanese, with the same categorical reading

- (31) a. Brazilian Portuguese Aqui conserta sapato.
  - b. JapaneseKoko-de-wa kutsu-o nao-su.'Here one repairs shoes.'

This parallel behaviour between agreement and a Discourse feature can be explained in terms of Holmberg & Nikanne (2002), for whom Topic and Focus are formal features, equivalent to  $\phi$ -features. Miyagawa's (2010) implements this idea in an interesting way to derive agreement languages vs. discourse configurational languages. In his analysis, discourse features forces movement in the same fashion as does agreement. In the spirit of Chomsky's (2007; 2008) proposal of merging  $\phi$ -features in C, with their subsequent percolation to  $T^{23}$ , Miyagawa's proposal is to merge the discourse-features ( $\delta$ -features) in C as an alternative to the  $\phi$ -features, which would also trigger movement. He admits, moreover, that there are also mixed types of languages, such as Turkish, which can percolate both types of features.

We may say that BP is this mixed kind of language as raising is triggered if the DP is a topic, but, at the same time, T inherits agreement features, as can be seen in (27c).

# 4.3 BP: A PNS language?

This section brings some support to Biberauer's comment, presented at the beginning of this chapter, namely to the fact that this group seems to include several sub-types of languages.

According to Holmberg & Nikanne's (2002) well-known article on Finnish, this language has the following properties related to the subject position: (a) it has a rich agreement system; (b) but, contrary to consistent NSLs, the NS is *optional* (even though extremely rare in speech) with first and second persons (36a,b) while third person subjects, animate or inanimate, must be *overt* in matrix clauses (32c), with null subjects allowed only in embedded clauses under the requirement that they be bound by the closest controller (see similar examples for BP in (6) and (7) in §2.2); (c) expletives can be optional with weather-verbs and extraposed sentences (32d); (d) but are obligatory with existential type of predicates (32e),

<sup>&</sup>lt;sup>23</sup>Miyagawa uses φ-probes, instead of φ-features.

<sup>&</sup>lt;sup>24</sup>Naves et al. (2013) provide the first attempt to analyse BP using Miyagawa's theory. Though it is similar in approach, the purpose of the present analysis is to compare Japanese and BP using the same theoretical frame.

and (e) it is a topic prominent language in the sense that the EPP can be satisfied only by referential categories, such as temporal adverbials and locatives or even DPs, apparently to avoid V1 (32e), (33a,b).

#### (32) Finnish

- a. (Minä) ol-i-n väsynyt.

  I be-pst-1sg tired
- b. (Sinä) ol-i-t väsynyt. thou be-pst-2sg tired
- c. Hän ol-i väsynyt. he / she be-pst.3sg tired
- d. Nyt (se) taas sataa. now it again rains
- e. Sitä leikkii lapsia kadulla.

  EXPL play children in.street

  'There are children playing in the yard.'

#### (33) Finnish

- a. Tämän kirjan on kirjoittanut Graham Greene. this book has written Graham Greene
- b. Tanään leikkii lapsia kadulla. today play children in.street

Holmberg et al. (2009) and Holmberg & Sheehan (2010) account for the data above assuming that (a) the NSs in PNS languages are full pronouns, deleted at PF, and (b) that the non-referential cases can be explained as the lack of a D-feature in T.

Moreover, according to the authors, subjects and non-subject topics occupy the same position in Finnish: SpecFP. In generic sentences the expletive *sitä*, which is not nominative, also occupies SpecFP.

#### (34) Finnish

Sitä väsyy nykyään helpommin kuin ennen. EXPL gets-tired nowadays easier than before 'One gets tired these days easier than before.'

<sup>&</sup>lt;sup>25</sup>The authors who propose this PNS type of language follow Perlmutter's (1971) old thesis of NSs as deleted pronouns. See also Roberts (2010) with an analysis of NSs along the same lines.

<sup>&</sup>lt;sup>26</sup>A different analysis is provided by Barbosa (2013), who follows Tomioka (2003). The NS in discourse pro-drop languages for the author is a null NP anaphora.

Holmberg (2005) later includes generic subjects in the list where the subject can be null:

(35) Finnish

Täällä ei saa polttaa

here not may smoke

'One can't smoke here.'

As was shown in §4.1, the weakened BP agreement morphemes have developed into a system of weak free pronouns, but without developing a lexical expletive. This is the opposite of Finnish, with its rich pronominal agreement paradigm, but which, surprisingly, displays a lexical expletive, a property of [–NS] languages, except that it is not nominative. The creation of weak pronouns in BP, like in French, also explains why BP null generic subjects occur in variation with overt weak pronouns, which may include either the speaker, *a gente* 'the people' (= 'we folks') or the speaker, *você* 'you', both with third person agreement. Although the null generic subject in BP (35a) shares characteristics of the Japanese null noun, in the latter, the generic, or indefinite, subject cannot be encoded by weak pronouns as in (36b,c). The same seems to be the case in Finnish, as according to Holmberg (2005: 540): "..., in partial null-subject languages generic pronouns can, and must, be null".

#### (36) Brazilian Portuguese

- a. Ø Pode comer a pizza agora. can eat the pizza now
- b. **Você** pode comer a pizza agora you can eat the pizza now
- c. A gente pode comer a pizza agora. we-folks can eat the pizza now 'One can eat the pizza now.'

As for referential NSs, BP differs significantly from Finnish in that BP null second person is almost completely absent, restricted to questions, whose subject is pragmatically identified. First person null subjects are also on the way to obsolescence, in matrix and in embedded clauses. Third person subjects, as illustrated in §2.2, are allowed but not frequent either in matrix or in embedded clauses, obeying the same requirement of an accessible prominent antecedent (see Kato & Duarte 2014a,b).

§4.2 revealed, additionally, that BP is a sort of discourse configurational language. There is a difference, however, between topic sentences in Finnish and topic ones in BP. In the latter the topic–subjects are in A-position, triggering agreement, while in the former, it is proposed to be located in SpecFP.

The Brazilian system also allows merging of a non-argument in existentials, instead of the null expletive, usually a demonstrative or the very pronoun  $voc\hat{e}$ , which, besides its definite second person reference, has developed a generic one, to finally appear inserted in an existential or any impersonal sentence. This brings support to Avelar & Galves's (2011) claim that SpecTP in BP is  $\phi$ -independent, or we can say, following Miyagawa (2010), that T in BP can inherit both  $\phi$ -and  $\delta$ -features.

#### (37) Brazilian Portuguese

- a.  $\emptyset_{\text{EXPL}}$  era em torno de mil pessoas. was around a thousand people
- b. Aquilo / isso era em torno de mil pessoas. that was around a thousand people 'It was around a thousand people'

#### (38) Brazilian Portuguese

- a.  $\emptyset_{\mathbf{EXPL}}$  não tem mais comércio no centro da cidade. not have more commerce in the center of the city
- Você não tem mais comércio no centro da cidade you not have more commerce in the center of the city 'There is no commerce downtown anymore'

Summarizing, BP has been included among PNS languages by Holmberg & Sheehan (2010). However, if only its spoken vernacular language is taken into consideration, it becomes clear that its dissimilarities with other PNS languages are greater than its similarities.

# 4.4 BP vs. English, a [-NS] language

We have seen in §2 that the deterioration of verbal pronominal affixes led BP to replace them with free weak pronouns and quasi-homophonous strong ones, but without a "default" case. The examples below show the substantial replacement of NSs with overt pronouns in one century (Duarte 1993; 2012).

#### (39) Brazilian Portuguese

- a. Quando  $\emptyset_{18G}$  te vi pela primeira vez,  $\emptyset_{18G}$  não sabia que  $\emptyset_{28G}$  eras viúva e rica.  $\emptyset_{18G}$  Amei-te por simpatia. (Martins Pena, 1845) 'When (I) saw you for the first time, (I) didn't know that (you) were a widow and rich'
- b. Se **eu** ficasse aqui **eu** ia querer ser a madrinha. (M. Falabella, 1992) 'If I stayed here I would want to be the god-mother.'
- (40) a.  $\emptyset_{2sG}$  Terá o cavalo que  $\emptyset_{2sG}$  deseja. (G. Tojeiro, 1918) (you) will-have the horse that (you) want.
  - b. Você não entende meu coração porque você 'tá sempre olhando pro céu ... (M. Falabella, 1992)
     'You don't understand my heart because you are always looking at-the sky.'

Moreover, BP underwent two changes with regard to generic "se" constructions seen above: first it lost the clitic "se" resulting in the NS; second, as seen above, impersonal se is being preferably replaced by the personal form with *você* or *a gente* (see Figure 17.7).

#### (41) a. cf. Italian

 $\emptyset_{GEN}$  não **se** pode entrar de sapato. not *se* can enter of shoes

b. cf. Japanese

Ø<sub>GEN</sub> não pode entrar de sapato. not can enter of shoes

c. cf. English

Você / a gente não pode entrar de sapato. you the folks not can enter of shoes 'You / We can't get in with your / our shoes on.'

Further evidence that BP has become a [-NS] language is in the fact that subject doubling (or left dislocation) is frequent in daily speech.<sup>27</sup>

#### (42) Brazilian Portuguese

- a. Eu acho que **um trabalho**<sub>i</sub>, **ele**<sub>i</sub> teria que começar por ai. 'I think that a work it would have to start from there.'
- b. ... é porque existe uma filosofia que o preço<sub>i</sub>ele<sub>i</sub> tem uma paridade.
   '(It)'s because (there) exists a belief that the price (it) has a parity.'

<sup>&</sup>lt;sup>27</sup>See Britto (2000), for whom the loss of VS order in BP made thetic sentences exhibit the SV order, and the categorical sentence exhibit a Left Dislocation structure.

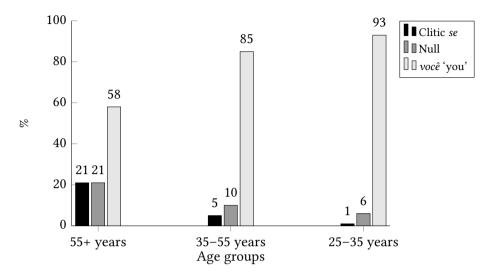


Figure 17.7: Generic subjects in Brazilian Portuguese in three generations

Though doubling is possible in NSLs like Spanish, it is inaudible because the subject is the pronominal agreement. BP, on the other hand, pairs up with English, a non-NS language, with null non-referential subjects, and their doubling is similar.

- (43) a. YO<sub>i</sub>, com-o<sub>i</sub> pizza.
  - b. ME<sub>i</sub>, I eat pizza.
  - c. EU, [ô] como pizza.

Roberts (1993a) shows that, when French became a [-]NS language, it also started having subject doubling. A further subsequent change in French was that the "default" case of its strong pronouns changed from nominative to dative. BP retained the same case of the old strong pronouns.

#### (44) French

- a. Renars respond: Jou, je n'irai.
- b. Et jou je cuit.
- c. Moi, je le cuit.

Another similarity to [-]NS languages is present in complement contexts. When the embedded subject is a pronoun, BP is exactly like English (EN) in anaphoric interpretation. However, its NS is distinct in interpretation from the NS in EP, a prototypical NSL, and similar to the NS in Japanese, a radical type.

- (45) Brazilian Portuguese = English
  - a. [John's<sub>i</sub> father<sub>k</sub>]<sub>i</sub> said that  $he_{i/k/i}$  was stupid.
  - b. [ O pai $_{\rm i}$  do João $_{\rm k}$  ] disse que ele $_{{\rm i/k/i}}$  era estúpido.
- (46) Brazilian Portuguese ≠ European Portuguese, Brazilian Portuguese = Japanese

[ O pai<sub>i</sub> do João<sub>k</sub> ]<sub>i</sub> disse que  $\emptyset_{i/*k/i}$  era estúpido

Recall that (45b) is the form that a pre-school child would produce, while (46) is the one that may be produced by some Brazilians after schooling in formal settings.

#### 4.5 BP vs. Icelandic, a semi [-NS] language

Up to now, we have been considering three types of NSLs: the consistent, like EP, the radical like Japanese, and the partial NSL like Finnish. We also saw a prototypical example of a [-NS] language, namely English.

We have now to consider the *semi pro-drop type*, like German, namely languages that were defined as having only null expletives. Biberauer (2010) prefers to call these languages *semi null subject (semi-NS) languages*. The author considers that *semi NSLs* deserve a further division between languages like German and Dutch, which have only true null expletives, and the Icelandic and Yiddish type, which also dispose of the NS with weather verbs (cf. also Huang 2000).

If we consider that referential NSs in Brazilian core grammar are [-NS] and that it disposes of null expletives, we might propose that BP is actually a *semi* [-NS] language, as was defended in Saab (2016), with both *quasi*-argumental (weather verbs) and true expletive NSs.

What we should point out, however, is the fact that in both types of *semi NS* language, the expletive can be overt or null (Biberauer 2010), while in Brazil there are no overt expletives, like in consistent NSLs.

#### (47) Icelandic

- a. Overt expletiveþað rigndi í gaer.it rains on morning
- b. Null expletiveÍ gaer rigndi (\*það).

However, concerning generic null subjects, Icelandic is exactly like BP. According to Sigurðsson & Egerland (2009), this language has null expletives and,

in addition, the following generic types of sentences: (a) *generic*, like generic English *you*; (b) *arbitrary*, like English *they*; and *Specific* often referring to the speaker or a group including the speaker.

#### (48) Icelandic (Sigurðsson & Egerland 2009: 160)

- á. Í þessari fjölskyldu drekkur þú bara ekki áfengi in this family may.3sg you just not alcohol 'In this family, one just does not drink alcohol.'
- b. Peir segja að það rigni á morgun. they.M say.3PL that it rains on morning 'They say it is going to rain tomorrow.'
- c. Menn náðu bófanum um kvöldið. men caught.3PL culprit.the in evening. 'They caught the culprit in the evening.'

BP can have exactly the same type of generic/arbitrary NSs:

#### (49) Brazilian Portuguese

- a. Ali Ø não chega em 30 minutos there not arrives in 30 minutes
- b. Na nossa familia Ø não bebe pinga.
   in our family not drinks brandy
- c. Eles dizem que Ø vai chover amanhã. they say that goes to rain tomorrow
- d.  $\emptyset$  Pegaram o culpado ontem à noite. (they) caught the culprit yesterday evening

What is different with respect to BP is the variation allowed between the NS and the weak pronouns (*você* and *a gente*), a possibility nonexistent in Icelandic.<sup>28</sup>

# (50) Brazilian Portuguese

a. Ali **você** não chega em 30 minutos there you not arrive in 30 minutes

- (i) Essas florestas tropicais chovem muito. 'These rain forests rain.3pl a lot.'
- (ii) Todos os meus aniversários chovem, porque eu faço aniversário em novembro. 'All the my birthdays rain.3pl, because my birthday is in November.', lit. '... I do birthday in November.'

<sup>&</sup>lt;sup>28</sup>As shown before, BP allows personal sentences with climate verbs:

- b. Na nossa familia **a gente** não bebe pinga. in our family we (the folks) not drinks brandy
- c. Eles pegaram o culpado ontem à noite.

It seems, therefore, that *semi NS* languages should be split in three types, the last of which has referential overt pronouns, Null expletives and null generic subjects.

#### 5 Conclusions

After examining several empirical and theoretical works related to syntactic phenomena in Brazilian Portuguese, Roberts (1993a: 411) considered that BP was in fact undergoing a series of deep changes along the past century, which suggested parametric changes in progress. He added that the authors' privileged patrimony was mainly in the rich "raw material" they worked with, combining quantitative evidence and theoretically inspired hypotheses.

The present chapter reports on work done on the NS conducted after Roberts & Kato's (1993) edited volume, and contains a reflection about the nature of the NS phenomenon in BP in light of recent theoretical hypotheses on the NS parameter.

We compared BP with five language types: (a) the consistent [NS] type; (b) the radical [NS] type; (c) the partial [NS] type, (d) the [-NS] type and the semi [-NS] type. The comparison has led to the following summary:

- (a) except for the expletive NS, BP *core* grammar has almost entirely lost any similarities with EP, a consistent NSL;
- (b) (i) generic sentences with NSs are similar to the Japanese NSs ones, but BP generic sentences resort more frequently to personal constructions with *você* and *a gente*; (ii) Japanese raising structures are superficially similar to the BP ones, as in the latter they trigger agreement, whereas in Japanese the subject gets the topic marker *-wa*.
- (c) (i) Finnish is similar to BP written language, in the optionality between referential NS and overt pronouns; (ii) even though Finnish and BP often resort to topicalization, in BP topics are in SpecTP, triggering agreement, while in Finnish they seem to be in SpecFP, an A'-position;
- (d) (i) BP has no lexical expletives or indefinite pronouns like *one* in English;(ii) but, in its referential NSs, BP is exactly like English in production and comprehension: a [-NS] language.

In conclusion, the core grammar of BP is (i) a [-NS] language with regard to referential subjects, and (ii) a [+NS] of the consistent type regarding null expletives; and (iii) a [+NS] of the radical type concerning the null generic subjects. As for the system of the literate adult, it maintains the null expletives and null generic subjects of the core grammar, while, with regard to referential expressions, they are partly pronominal (DP), like in the child core grammar, and [-NS] like English.

#### **Abbreviations**

1	first person	NOM	nominative
2	second person	NSL	null-subject language
3	third person	NSP	null subject parameter
ACC	accusative	OFr	Old French
BP	Brazilian Portuguese	OP	Old Portuguese
CL	clitic	PF	phonetic form
EP	European Portuguese	PL	plural
EPP	extended projection principle	PNS	partially null subject
EXPL	expletive	PST	past
GEN	generic	SG	singular
LOC	locative	TOP	topic
M	masculine	UG	Universal Grammar

# Acknowledgements

This research has the support of the National Council of Research (CNPq).

We thank the editor(s) for the accurate observations and Marcello Marcelino for his careful revision of the first draft of this chapter.

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