## Brazilian and European Portuguese and Holmberg's 2005 typology of Null Subject Languages

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Brazilian and European Portuguese (BP and EP) have been respectively analyzed as canonical examples of partial and consistent pro-drop languages within Holmberg's (2005) influential typological tripartition in consistent, partial, and radical prodrop languages (e.g. Holmberg, Nayudu, Sheehan 2009; Biberauer, Holmberg, Roberts, Sheehan 2010; Holmberg 2010, 2016; Barbosa 2017). In this paper we present some challenges to this characterization. First of all, BP behaves like a consistent prodrop language in participial clauses, allowing a nonlocal "controller" for the null subject (see (1)), whereas EP behaves like a radical prodrop language in (noncontrolled) gerund clauses, allowing null subjects in the absence of  $\phi$ -agreement (see (2)). Besides, EP may also license a "null inclusive generic subject pronoun" in finite clauses (see (3)), a possibility that Holmberg (2005, 2010) takes to be restricted to partial prodrop languages.

- (1) Ninguém esperava muito d[o João]i. Mas [depois de Øi nomeado para o cargo], nobody expected much of-the João but after of appointed.MASC.SG to the position a empresa melhorou consideravelmente. (BP: OK) the company improved considerably 'Nobody expected much of João. But after his being appointed to the position, the company
- considerably improved.'

  (2) a.  $\emptyset_i$  Comendo a sopa toda, a mãe deixa-te<sub>i</sub> comer a mousse de chocolate. (EP:  $\emptyset = tu$ ) eating the soup all the mother lets-you eat the mousse of chocolate

'If you(SG) eat the all soup, Mom will let you(SG) eat the chocolate mousse.'

- b. Ø Usando roupas adequadas, o frio é suportável. (EP) using clothes adequate the cold is bearable 'If one wears proper clothes, the cold is bearable.'
- c.  $\emptyset_{\text{expl}}$  Parecendo que o pior já tinha passado, ela decidiu viajar de férias. (EP) seeming that the worst already had passed she decided travel of vacation 'Once it seemed that the worst was over, she decided to travel on vacation.'
- (3) Meu querido, isto aqui é assim: **deitou, pagou**. (EP; said by a physiotherapist) my dear this here is so laid-down paid

'My dear, this is how it works: once one has lain down, one will have to pay for the session.'
Related to (1) and (2), we find that in environments that block topic drop, null subjects in BP display

different degrees of acceptability depending on the pronoun that is "dropped", and the null subject corresponding to *a gente* 'we' is unacceptable in both BP and EP (see (4)).

- (4) a. [O que  $\emptyset$  quer fazer]?  $(\emptyset = voc\hat{e} \text{ (you(SG))} \rightarrow \text{EP: OK; PB: *)}$  the what want do 'What do you(SG) want to do?'
  - b. [O que  $\emptyset$  tenho a ver com isso]? ( $\emptyset = eu(I) \rightarrow EP: OK; PB: ??$ ) the what have 1SG to see with this 'What do I care? / What do I have to do with it?'
  - c. [Quando  $\emptyset$  vão viajar]?  $(\emptyset = voc \hat{e}s \text{ (you(PL))} \rightarrow \text{EP: OK; PB: ??})$  when go.PL travel 'When will you(PL) be travelling?'
  - d. [Quem  $\emptyset$  devíamos contratar]? ( $\emptyset = n \acute{o} s$  (we)  $\rightarrow$  EP: OK; PB: OK) who should 1PL hire 'Who should we hire?'
  - e. [Quando  $\emptyset$  deve viajar]? ( $\emptyset = ele$  (he) $\rightarrow$  EP: OK; PB:\*;  $\emptyset = a$  gente (we) $\rightarrow$  EP: \*; PB: \*) when should travel 'When {is he / are we} supposed to travel?'

Assuming that null subjects are deleted pronouns (e.g. Perlmutter 1971, Saab 2008, Roberts 2010, Duguine 2013), we propose that deletion is available in languages with a positive setting for (5i) and is licensed under the condition in (5ii), where the relevant features are ordered from more to less salient, as shown in (6).

## (5) Prominent feature valuation condition on pronominal subject ellipsis:

T can license ellipsis of a pronominal subject pro if:

- (i) T is associated with an E-feature (e.g. Merchant 2001)
- (ii) agreement between T and pro involves valuation of the most prominent feature of T

## (6) **Feature prominence**: *person>number>gender >Case*

Both BP and EP display a positive setting for (5i) and their differences arise from the different feature composition of their pronouns and corresponding agreement inflections, shown in Table 1 (excluding EP tu [you(SG)] for comparison purposes), which in turn results from the general weakening of number morphology in BP (independent motivation for the specifications will be provided in the presentation). As Table 1 shows, the acceptability of null subjects in each language is determined by the hierarchy in (6). Hence, the best result is when T is valued in person and the second best result is when T is valued in number; all the remaining cases lead to unacceptable results, as neither person nor number is valued (see (4)). In EP all the pronouns but a gente 'we' are specified for person; hence, only a gente (which is the diachronic outcome of the grammaticalization of the nominal expression 'the people') disallows a corresponding null subject in EP (see (4e)).

Table 1: Feature composition of pronouns in BP and EP and null subject licensing in finite clauses

nominative	pronoun specification		T specification		null subject in	
pronouns			after agreement		finite ca	
	EP	BP	EP	BP	EP	BP
nós	[P/N:1.PL]	[P/N:1]	[ <b>P</b> /N:1.PL]	[P/N:1]	OK	OK
vocês	[P:2; N:PL]	[P; N:PL]	[ <b>P:2</b> ; N:PL]	[P:u; <b>N:PL</b> ]	OK	??
eles	[P:3; G: MASC; N:PL]	[P; G:MASC; N:PL]	[ <b>P:3</b> ; N:PL]	[P:u; <b>N:PL</b> ]	OK	??
elas	[P:3; G:FEM; N:PL]	[P; G:FEM; N:PL]	[ <b>P:3</b> ; N:PL]	[P:u; <b>N:PL</b> ]	OK	??
eu	[P/N:1.SG]	[P/N:SG]	[ <b>P</b> /N:1.SG]	[P/N:SG]	OK	??
você	[P:2; N:SG]	[P; N]	[ <b>P:2</b> ; N:SG]	[P:u; N:u]	OK	*
ele	[P:3; G: MASC; N:SG]	[P; G:MASC; N]	[ <b>P:3</b> ; N:SG]	[P:u; N:u]	OK	*
ela	[P:3; G: FEM; N:SG]	[P; G:FEM; N]	[ <b>P:3</b> ; N:SG]	[P:u; N:u]	OK	*
a gente	[P/N]	[P/N]	[P:u; N:u]	[P:u; N:u]	*	*

As for the unexpected consistent prodrop behavior of BP in participial clauses (cf. (1) above), it should be noted that participial Ts are specified for number and gender. In BP, gender agreement on T is obligatory but not number, which indicates that gender in BP is the most prominent feature for participials in the hierarchy in (6). Once valuation of the most prominent feature of T is ensured, a null subject will be licensed, as shown in (1).

Finally, (noncontrolled, uninflected) gerunds in EP do not have person, number, or gender features. Hence, the availability of null subjects in (2) in EP (and in fact in BP as well) can only result from valuation of T's Case feature, in accordance with (6). Once the most prominent feature of T is valued, definite, indefinite, and expletive null subjects are all allowed (see (2) and (3) above).

The paper ends with a brief consideration of how the proposed analysis can be extended to other so-called partial null subject languages.

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