An argument from Brazilian Portuguese for a syntactically projected implicit argument

Jonathan E. MacDonald\textsuperscript{1}, Janayna Carvalho\textsuperscript{2} & Matthew Maddox\textsuperscript{1}

\textsuperscript{1}University of Illinois at Urbana-Champaign, \textsuperscript{2}University of São Paulo

1. Introduction

The empirical focus of this paper is on the Brazilian Portuguese (BP) passive \textit{se} (Pass\textsubscript{se}) and impersonal \textit{se} (Imp\textsubscript{se}) constructions in (1a) and (1b), respectively, constructions that are disappearing from the language.

(1) a. Comeram-se os bolos. b. Aqui se fala de si.  
\quad eat-Pass\textsubscript{se} the cakes  Here Imp\textsubscript{se} speaks of self  
\quad “The cakes were eaten.”  “Here one speaks about oneself.”

By applying diagnostics for the \textit{projection} of an implicit argument from MacDonald (to appear) to these constructions in BP and contrasting their properties with those of the periphrastic passive, we argue that Voice in Pass\textsubscript{se} and Imp\textsubscript{se} projects a non-referential implicit external argument \textit{pro}, while it does not in the periphrastic passive, as in (2).

(2) a. Pass\textsubscript{se} and Imp\textsubscript{se} \quad [\text{VoiceP} \textit{pro} \text{Voice}\textsubscript{se} [\text{VP} V \text{DP}]]  
b. Periphrastic Passive \quad [\text{VoiceP} \text{Voice} [\text{VP} V \text{DP}]]

The main source of evidence for this contrast comes from an inalienable possession interpretation of a body part available in the Pass\textsubscript{se} and Imp\textsubscript{se} constructions, but not in the periphrastic passive. Based on the conclusion that there is a projected implicit argument in Spec, Voice in Pass\textsubscript{se} and Imp\textsubscript{se} constructions, we explore consequences for other parts of BP grammar. We also briefly touch upon BP's status as a partial null subject language in contrast to Spanish, a consistent null subject language which also has these \textit{se} constructions. These \textit{se} constructions in BP, we suggest, are a residue of an early BP grammar when it still was a consistent null subject language.

This paper is structured as follows: in section 2, we review diagnostics from the literature for implicit agentive arguments. We will see that Pass\textsubscript{se}, Imp\textsubscript{se}, and the

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periphrastic passive constructions all pattern the same. They differ, however, in the availability of interpreting body parts as inalienably possessed. In section 3, we discuss how body parts interpreted as inalienably possessed serve as a diagnostic for the projection of an implicit argument. In section 4, we discuss two consequences of the presence of pro in these se constructions: the licensing of reflexives and by-phrases. In section 5, we discuss how null subjects in BP, because it is a partial null subject language, are licensed under conditions distinct from null subjects in consistent null subject languages. Moreover, as we show, pro in these se constructions is not subject to these distinct licensing conditions. Section 6 discusses a word order restriction found in these BP se constructions that is not found in the se constructions in consistent null subject languages. We suggest that this is a result of differences in the properties in T in partial vs. consistent null subject languages. In section 7, we briefly recap the paper.

2. Syntactically active implicit arguments vs. syntactically projected arguments

Control into rationale phrases and the licensing of agent-oriented adverbs have been taken as diagnostics for the presence of an implicit agent. The periphrastic passive, Pass\textsubscript{se} and Imp\textsubscript{se} constructions license these phrases, as in (3a), (3b) and (3c) respectively.

\begin{enumerate}
\item a. A porta foi aberta para arejar o cômodo/ the door was opened to air out the room/ intencionalmente intentionally.
\begin{quote}
“The door was opened to air out the room/intentionally.”
\end{quote}
\item b. Leem-se os livros para aprender/voluntariamente. read-Pass\textsubscript{se} the books to learn/voluntarily.
\begin{quote}
“The books were read to learn/voluntarily.”
\end{quote}
\item c. Chamou-se os bombeiros para apagar o called-Imp\textsubscript{se} the firemen to put away the incêndio/ deliberadamente fire/deliberately.
\begin{quote}
“They called the firemen to put out the fire/deliberately.”
\end{quote}
\end{enumerate}

Bhatt & Pancheva (2006) note that while these tests point to a syntactically active agent, they do not entail that said agent is syntactically projected. Consequently, there is evidence for an implicit agent in each of these constructions, although it is not clear whether or not it is projected.

The periphrastic passive, however, behaves differently from both the Pass\textsubscript{se} and Imp\textsubscript{se} constructions when it comes to body parts. As observed for Spanish (MacDonald to appear), in BP, an inalienable possession interpretation of the sole overt DP is available in the Pass\textsubscript{se} and Imp\textsubscript{se} constructions, while it is not in the periphrastic passive, as in (4a),(4b) and (4c) respectively.
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(4) a. Das almofadas levantaram-se umas cabeças
From the pillows lifted-Pass its some heads
disheveled.
“Some disheveled heads lifted from their pillows.”

b. Se levanta a mão para fazer uma pergunta
Imp raises the hand to make a question
na sala.
“Normally, one raises one’s hand to ask a question in class.”

c. *A cabeça foi levantada (por João).
the head was lifted (by John).
“The head was lifted (by John).”

This contrast is significant for the underlying syntax of these constructions, since, as we will see in the next section, for a body part to be interpreted as inalienably possessed, there must be a syntactically present possessor that c-commands it.

3. A diagnostic for a projected implicit argument: body parts

Like all Romance languages, BP has constructions in which a body part direct object is interpreted as inalienably possessed by the subject. (see Gueron 2006 a.o.). In (5a) and (5b), the DPs *a mão “the hand” and *as pernas longas “long legs” are interpreted as the student’s and Sofia’s inalienable possessed body parts, respectively.

(5) a. O estudante levantou a mão.
The student raised the hand
“The student raised his/her hand.”

b. Sofia tem as pernas longas.
Sofia has the legs long.
“Sofia has long legs.”

Only a c-commanding DP is interpreted as an inalienable possessor of a body part, as illustrated in (6). Only o irmão is interpreted as the inalienable possessor of os olhos, not João, since only o irmão c-commands os olhos.

(6) O irmão de João fechou os olhos.
the brother of João closed the eyes.
“João’s brother closes his eyes.”

Crucially, as Guéron (2006) observed for French, in BP, pragmatics is not enough to license an inalienable possession interpretation of a body part. Consider a context for (7),
where a daughter asks her father why she can run so fast. Taking his daughter as interlocutor, (7a) is felicitous in this context; (7b) is not.¹

(7) a. Você tem as pernas longas.
   you have the legs long.
   “You have long legs.”

   b. As pernas são longas
   the legs are long.
   “The legs are long.”

Moreover, observe that with a certain class of verbs, an example of which is in (5a), the body part is interpreted as set in motion via normal internal biological mechanisms as a result of an internal impulse from the possessor, but only when the possessor DP and the body part DP are co-arguments (Authier 1992). In contrast, when they are not co-arguments, as in (8) below, or when they are co-arguments of a verb like ter “have,” as in (5b), no such motion interpretation is available.

(8) Me levantou a mão.
   me raised the hand.
   “S/he raised my hand.”

The data from (5) to (8) make clear that a body part can receive an inalienable possession interpretation only when c-commanded by a syntactically present possessor. Also, recall from the previous section that, while Passₚₑ and Impₚₑ and the periphrastic passive all pass diagnostics for an implicit agent, a body part receives an inalienable possession interpretation in Passₚₑ and Impₚₑ constructions, but not in the periphrastic passive. Given that an inalienable possession interpretation of a body part is licensed only when its has a syntactically present possessor, we conclude that in both the Passₚₑ and Impₚₑ constructions, there is a syntactically present implicit argument that serves as the possessor, while this is not the case in the periphrastic passive. Moreover, note that in (4a) and (4b), there is an interpretation of the body part set in motion as a result of normal internal biological mechanisms, suggesting that the implicit projected argument and the body part are co-arguments in (4). We claim that there is a non-referential pro in Spec,Voice in the Passₚₑ and Impₚₑ constructions that serves as the possessor, as in (9a), but not in Spec,Voice in the periphrastic passive, as in (9b).

(9) a. Passₚₑ/Impₚₑ
    [Voiceₚₑ pro Voiceₚₑ [VP V DP]]

   b. Periphrastic Passive
    [Voiceₚₑ Voice [VP V DP]]

4. Two consequences: reflexives and by-phrases

¹ If (7b) is stated to someone in reference to the legs of a table, indicating non-human/inanimate possession, it is perfectly grammatical.
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In this section, we discuss two consequences of the proposal that there is an implicit projected *pro* in the BP Pass\textsubscript{se} and Imp\textsubscript{se} constructions. Concretely, following Landau (2010), who distinguishes strong implicit arguments from weak implicit arguments, *pro* in these constructions patterns with strong implicit arguments. This conclusion also allows us to explain the ungrammaticality of *by*-phrases in these *se* constructions, following the analysis of implicit arguments from Legate (2014).

According to Landau (2010), one way in which strong implicit arguments differ from weak implicit arguments relates to the presence vs. absence of a D feature: *strong* implicit arguments have a D feature, weak implicit arguments do not. Based on Reuland (2011), one diagnostic for a D feature, he claims, is the ability to bind anaphora. Observe in (10a) that a reflexive can be bound in Imp\textsubscript{se} constructions, suggesting that implicit *pro* has a D feature. As expected, since there is no projected implicit argument in the periphrastic passive, a reflexive cannot be bound, as in (10b).

(10) a. Aqui Imp\textsubscript{se} se fala de si (mesmo).
    Here Imp\textsubscript{se} speaks of self (same)
    “Here one speaks about oneself.”

    b. *O presente foi comprado de si.
    The gift was bought of self.
    Intended: “The gift was bought from himself.”

If we assume that *pro* in these *se* constructions has a D feature, then we are able to explain another contrast between the Pass\textsubscript{se} and Imp\textsubscript{se} constructions and periphrastic passives with respect to the licensing of a *by*-phrase. No *by*-phrase is allowed in the BP *se* constructions, illustrated by Pass\textsubscript{se} in (11a), in contrast to the periphrastic passive, which allows *by*-phrases, illustrated in (11b).

(11) a. Se escreveu esta obra *por* um autor desconhecido
    Se wrote this book *by* an author unknown.
    “This book was written by a completely unknown author.”

    b. Esta obra foi escrita por um autor desconhecido
    This book was written by an author unknown.
    “This book was written by a completely unknown author.”

Legate (2014), who discusses implicit external arguments in a variety of languages, argues that the presence of a D feature on a pronominal in Spec,Voice allows it to saturate the external argument slot, which in turn, she argues, precludes the saturation of that argument slot by a *by*-phrase, on Bruening’s (2013) account of *by*-phrases. If *pro* in Spec,Voice in these *se* constructions has a D feature, then it can saturate the external argument slot, which would preclude the ability of a *by*-phrase to do so. In contrast, there is no *projected* implicit argument in Spec,Voice in the periphrastic passive to saturate the external argument slot, leaving the *by*-phrase free to do so.
5. The licensing of pro - a grammatical residue

It has been observed that BP is a partial null-subject language (pNSL) (Duarte 1995, Kato 1999, Rodrigues 2004, Holmberg 2005, 2010, Nunes 2008, Holmberg et al 2009, among others). Moreover, the null subjects that are found in the language are both more restricted in their distribution than in a consistent null subject language (cNSL) and licensed under distinct conditions (Holmberg et al 2009, Rodrigues 2004 etc.). In this section, we show that the non-referential implicit external argument pro in these BP se constructions is not licensed in the same way as other null subjects in the language. We take this to mean that pro in these constructions is not subject to the same pNSL licensing conditions. This fact raises a question about why the null pro in se constructions is licensed differently than other null subjects. If we take seriously Holmberg's (2005, 2010) approach to partial vs. consistent null subject languages, we suggest, it is possible to treat these BP se constructions as a residue of an earlier grammar of BP when it was a cNSL.

There are two contexts in which a referential null subject is licensed in BP. The first is a matrix clause first person subject, as illustrated in (12).

(12)  pro falei com o João ontem à noite.2
I spoke with the John yesterday at night
"I spoke with John yesterday night."

As has been observed by Rodrigues (2004), matrix first person null referential subjects are not licensed in the presence of wh-movement, as illustrated in (13a) from Rodrigues (2004:83), which is not the case for in Impše in (13b), nor in cNSLs.

(13) a. O que *(eu) fiz? The what I did?  "What have I done?"
    b. Que se faz nessa situação? What Impše does in this situation?  "What is done in this situation?"

Second, a third person null subject can be licensed in an embedded clause. When the matrix subject is referential, as in (14a), the third person embedded null subject is necessarily interpreted co-referentially with the matrix subject. In contrast, with an expletive matrix subject, as in (14b), the third-person null subject of the embedded clause cannot receive a referential interpretation, only a non-referential interpretation. This, of course, is not the case in cNSLs.

(14) a. O Pedro disse que pro_{j}*k conserta sapato. The Pedro says that pro repairs shoe.  "Pedro says that he_{j}*k repairs shoes."
    b. É assim que conserta sapato.

2 Adapted from Rodrigues (2004:81)
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Is like.this that fixes shoe.
“This is the way that shoes are repaired.”

Observe that pro in these se constructions is unaffected by the presence of a referential matrix subject, as in (15a), or an expletive subject, as in (15b).

(15) a. O Pedro disse que se conserta sapato aqui.
The Pedro says that Imp<sub>se</sub> repairs shoe here.
“Pedro says that shoes are repaired here.”

b. É assim que se conserta sapato.
Is like.this that Imp<sub>se</sub> repairs shoe.
“This is the way that shoes are repaired.”

These data show that the pro that occurs in BP se constructions is licensed under conditions distinct from those of matrix first person and embedded third person null subjects - whatever the property of pNSLs that gives rise to the special licensing conditions on null subjects, pro is not subject to them. In this respect, pro in these constructions patterns with null subjects in cNSLs, which also do not show these pNSL restrictions. We suggest here, in fact, that these se constructions, and more concretely, pro in Spec,Voice headed by se, is a residue of an earlier BP grammar when it was a cNSL. Consider why to entertain this possibility.

Holmberg (2005) observes a salient difference between a pNSL like BP and a cNSL like Spanish regarding the availability of a generic interpretation of a third person null subject. A third person null subject is interpreted generically in BP, as in (16a), but not in Spanish, as in (16b).

in.this restaurant eats well
"In this restaurant one eats well."

b. En este restaurante come bien.
In this restaurant eats well.
"S/he eats well in this restaurant."

Holmberg (2005) notes that cNSLs allow a generic interpretation of third person subjects in the presence of special morphology, like se, as in (17).

(17) Se come bien in este restaurante.
Imp<sub>se</sub> eats well in this restaurant.
"One eats well in this restaurant."

Holmberg (2005, 2010) assumes that the principal syntactic difference between cNSLs and pNSLs is the presence vs. absence of a D feature in T (reflecting the traditional idea that somehow Infl is pronominal in null subject languages). Since there is a D in T in cNSLs, the null subject is interpreted as referential. In contrast, in pNSLs,
there is no D feature in T, thus, a non-referential interpretation of a null subject results. The intuition behind the role of se is that it somehow neutralizes the effects of the presence of D in T. If we take Holmberg's (2005, 2010) intuition together with the proposal that in these se constructions, se heads Voice and that there is a null implicit pro, then the syntactic situation we arrive at looks like (18).

\[
\text{(18) } \quad \text{[TP T} \text{D [VoiceP pro Voice} \text{se [VP V]]]}
\]

What this entails is that for neutralization to take place se, or pro, has to establish some relation with T. We suggest that it is pro that must establish the relevant relation with T, to neutralize the D feature. If this is the correct approach, this would entail that on a generic interpretation of a third person subject in BP, like that in (16a), there would be no need for pro, since there would be no D feature present that would require neutralization. This appears to be the case, in as much as a body part cannot be interpreted as inalienably possessed in sentences without se where there is a third person generic interpretation, as illustrated in (19).

\[
\text{(19) } \quad \text{*Na escola levanta a mão sempre que ‘tá com dúvida.}
\]

At school raise the hand always that is with doubt.

‘One raises one’s hand at school whenever s/he has a doubt.

So, if it is the case that the se in these constructions introduces a null pro in order to neutralize the effects of D in T, then, it appears that these se constructions reflect an earlier grammar when BP was a cNSL, in as much as pro is licensed in Spec,Voice by se, under conditions that do not directly relate to BP being a pNSL. A related, yet, independent question arises, moreover. In these se constructions in BP, does T bear a D feature as well? If it did, we would expect these constructions to pattern wholly with cNSLs. If not, these se constructions should still show patterns of pNSLs. In the next section, we claim that T in these constructions is the T of a partial null subject language, based on certain word order restrictions in the BP Pass\text{se} construction.

6. A word order restriction

MacDonald (to appear) argues that in Spanish Pass\text{se} and Imp\text{se} constructions, there is an implicit projected argument, based on the inalienable possession diagnostic. In this respect, Spanish Pass\text{se} and Imp\text{se} constructions and BP Pass\text{se} and Imp\text{se} constructions are the same. There is one salient difference, however, between Spanish Pass\text{se} and BP Pass\text{se} with respect to word order. While in Spanish, the sole overt DP in Pass\text{se} may be post or preverbal, as in (20), in BP, the sole overt DP can only be postverbal, as in (21).

\[
\text{(20) } \quad \begin{align*}
\text{a. } & \quad \text{Las manzanas } \text{se comieron.} \\
& \quad \text{The apples } \text{Pass}_\text{se} \text{ ate}
\end{align*}
\]

b. \text{Se \text{comieron las manzanas.}}

\text{Pass}_\text{se} \text{ ate the apples}
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(21) a. *As maçãs comeram-se.  b. Comeram-se as maçãs.
    the apples ate-Pass
    “The apples were eaten.”
    ate-Pass

We would like to suggest that this contrast relates to Spanish being a cNSL and BP being a pNSL. Holmberg (2005,2010) has a concrete proposal regarding how cNSLs and pNSLs differ, as discussed above. Nevertheless, it is not clear how the presence vs. absence of a D feature in T can account directly for word order differences. Nevertheless, an account of the different word orders does seem to bear on the properties of T, specifically regarding the EPP. Concretely, we suggest that in BP pro must move to Spec,T to satisfy the EPP. In contrast, in Spanish, pro need not move to Spec,T to satisfy the EPP. This would follow from an account of cNSLs in which V to T movement can satisfy the EPP in T (Alexiadou & Anagnostopoulou 1998). If this is on track, we can explain another contrast between Pass and the periphrastic passive in regards to word order. In the periphrastic passive, the sole overt DP must be fronted, as in (21), while in the Pass the sole overt DP must be post-verbal, as in (21).

(22) a. A porta foi aberta b. ??Foi aberta a porta.
    the door was opened.  Was opened the door
    “The door was opened.”
    “The door was opened.”

We suggest that the word order facts relate to the presence vs. absence of pro in Spec,Voice in Pass and its absence in the periphrastic passive. Specifically, pro moves to Spec,T to satisfy the EPP. Thus, the sole overt DP in Pass has no motivation to move to Spec,T. In contrast, since there is no other DP that can satisfy the EPP in T in the periphrastic passive, the sole overt DP must do so by moving to Spec,T. This illustrates the interaction between a residue of an earlier BP grammar, namely pro in Spec,Voice licensed by se, and the current BP grammar, namely the T of a pNSL.

7. Brief recap

We have argued for the presence of a projected implicit external argument in Spec,Voice in both BP Pass and Imp constructions, but not in Spec,Voice of BP periphrastic passive, which explains at least two other differences between these se constructions and the periphrastic passive: the licensing of reflexives and by-phrase. Finally, we suggested that these se constructions are a residue of an earlier BP grammar when it was a cNSL, which led us to explain word order restrictions in Pass constructions that do not hold in the periphrastic passive.

Jonathan E. MacDonald, Janayna Carvalho, Matthew Maddox
jonmacd@illinois.edu, janaynacarvalho@usp.br, mmaddox2@illinois.edu

3 (22b) is possible in a formal or written register. Note that a more productive strategy for a VS passive equivalent to (22b) is: Foi aberto a porta, in which the participle does not agree with the postverbal DP.
References


