An argument from Brazilian Portuguese for a syntactically projected implicit argument

In this talk, we discuss se constructions in Brazilian Portuguese (BP), such as passive se (Pass\textsubscript{se}) in (1a) and impersonal se (Imp\textsubscript{se}) in (1b), constructions progressively being lost in the language. We argue that they provide novel empirical support from inalienably possessed body parts for distinguishing the syntactic activity of an implicit agent from its projection in the syntax. While BP se constructions show very similar patterns to Spanish and Italian se constructions, as documented in the literature (see Mendikoetxea 2012, D’Alessandro 2007 a.o.), they differ in a way that can be understood as the interaction of the proposed projected implicit argument and BP’s status a partial null subject language.

(1) a. Comeram-se os bolos. b. Aqui se fala de si (mesmo)
The cake ate.pl-se Here Imp\textsubscript{se} speaks of self (same)
“The cake was eaten.” “Here one speaks about oneself.”

More specifically, we argue that in (1a) and (1b) there is a projected implicit argument, a D-pro, as evidence by a comparison with the periphrastic passives, where we argue that there is no projected implicit argument. We tie the projected D-pro in Pass\textsubscript{se} and Imp\textsubscript{se} to an available inalienable possession interpretation of a body part DP, to the ungrammaticality of by-phrases and rigid VS order, in contrast to the lack of a projected argument in periphrastic passives, where no inalienable possession interpretation is available, by-phrases are allowed and VS orders are disfavored. These two groups of constructions share some properties, licensing of agent-oriented adverbials and control into rationale clauses, which we argue to follow from the presence of the [+Ag] feature in Voice, following Alexiadou et al. (2006).

**Inalienably possessed body parts:** BP, like other Romance languages, has a construction, as in (2), where the subject is interpreted as the possessor of the body part. (see Gueron 1983 a.o.).

(2) a. O estudante levantou a mão. b. Sofia tem as pernas longas.
The student raised the hand Sofia has the legs long
“The student raised his/her hand.” “Sofia has long legs.”

Moreover, observe that with a certain class of verbs, an example of which is in (2a) the body part is set in motion via internal biological mechanisms (Authier 1992), when the possessor and the body part are coarguments. In contrast, when they are not co-arguments, as in (3) below, or when they are coarguments of a verb like ter “have”, as in (2b), no such motion interpretation is available.

(3) a. Me beijou a mão. b. O médico deu uma faixa para ele para a perna.
Me kissed the hand. The doctor gave a bandage to him to the leg.
“It beaks my hand.” “The doctor gave him a bandage for his leg.”

Only the closest c-commanding DP can be the possessor, as in (4), indicated by coindexation.

(4) João disse que Maria, havia fechado os olhos. b. O irmão de João, fechou os olhos.
João says that Maria closed the eyes. the brother of João closed the eyes.
“João says that Maria had closed the eyes.” “João’s brother closes his eyes.”

Importantly, as Gueron (1983) observed for French, in BP, pragmatics is not enough to license an inalienable possession interpretation. Consider a context for (5), where a daughter asks his father why she can run so fast. Taking his daughter as interlocutor, (5a) is felicitous in this context, while (5b) is not.

(5) a. Você tem as pernas longas. b. As pernas são longas
you have the legs long the legs are long
“You have long legs.” “The legs are long.”

In (5a) the legs can be interpreted as inalienably possessed, because there is a syntactically present possessor, namely você “you”. In contrast, in (5b), the legs cannot be interpreted as inalienably possessed, because there is no syntactically present possessor. Pragmatics is not enough.

**The novel observation:** In both Pass\textsubscript{se} (6a) and Imp\textsubscript{se} (6b) constructions, an inalienable possession interpretation of a body part is available, where the body part moves via internal biological mechanisms.

(6a) Das almofadas levantaram-se umas cabeças despenteadas.
From the pillows lifted.pl-se some heads disheveled.
“Some disheveled heads lifted from their pillows.”

b. (Normalmente) se levanta a mão para fazer uma pergunta na sala.
(Normally) se raises the hand to make a question in the classroom.
“Normally, one raises one’s hand to ask a question in class.”
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The availability of the inalienable possession interpretation indicates the syntactic presence of a possessor. Moreover, the motion via internal biological mechanisms indicates that the possessor and body part of arguments of the same predicate. This contrasts with the periphrastic passive, which do not allow an inalienable possession interpretation of the body part, as shown in (7a) and (7b).

(7a) A cabeça foi levantada por João. The head was lifted by John.
    Os pés foram movidos pelos estudantes. The feet were moved by the students.

“..."This book was written by a completely unknown author."”

Non-projected implicit agents: It is widely assumed (see Bhatt & Pancheva 2006 for discussion), that control into purpose clauses and licensing agentive adverbials is a diagnostic of a syntactically active implicit agent, although not necessarily a projected agent. (Bhatt & Pancheva 2006). Observe that in each construction from above, purpose clauses and agent-oriented adverbs are licensed, illustrated in (8a-e).

(8) a. Leem-se os livros para aprender/voluntariamente. [Pass_{se}]

    Read.pl-se the books to learn/voluntarily.
    “The books were read to learn/voluntarily.”

b. Chamou-se os bombeiros para apagar o incêndio/ deliberadamente. [Imp_{se}]

    Called-se the firemen to put.away the fire/deliberately.
    “They called the firemen to put out the fire/deliberately.”

c. A porta foi aberta para arcar o cômodo/ intencionalmente. [Periphrastic passive]

    the door was opened to air.out the room/intentionally
    “The door was opened to air out the room/intentionally.”

Each construction licenses rationale clauses and agent-oriented adverbs, but do not all allow for an inalienable possession interpretation of a body part. These are independent properties. To account for rationale clauses and agent-oriented adverbs, we adopt the proposal by Alexiadou et al. (2006), where Voice (the external argument introducing head associated with accusative case) bears a [+Ag] feature. To account for the inalienable possession interpretation of a body part we claim that there is a projected pro in Spec,Voice. Thus, Voice in Pass_{se} and Imp_{se} is as in (9a), the periphrastic passive is in (9b).

(9) a. [Voice_{pro} Voice_{[+Ag]}] b. [Voice_{pro} Voice_{[+Ag]}]

D-pro: Landau (2010) claims that strong implicit arguments have a D feature. One diagnostic for a D feature, he claims, is the ability to bind anaphora (based on Reuland 2001). As illustrated in (1b) above, a reflexive can be bound in Imp_{se} constructions. Moreover, 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 the external argument slot to be saturated, which in turn, she argues, precludes the saturation of that argument slot by a by-phrase, on Bruening’s (2010) account of by-phrases. As expected, no by-phrase is allowed in the BP se constructions (11a), in contrast to the periphrastic passive (11b).

(11) a. Se escreveu esta obra *por um autor totalmente desconhecido.

    “This book was written by a completely unknown author.”

b. Esta obra foi escrita por um autor totalmente desconhecido.

    “This book was written by an author totally unknown.

Word order: BP is argued to be a partial null-subject language (Holmberg 2005, 2010 a.o.) with a variety of related properties, one being that an EPP feature is in T, leading to S V word orders in contrast to V S word order found in an earlier stage when it was a null subject language (see Nunes 1990, Cyrino 2013 and references therein). The periphrastic passive in (8c) and (11b) illustrate the normal SV word order, in contrast to consistent null subject languages (cf. Simioni 2011). Interestingly, Nunes (1990) observes in Pass_{se} constructions a SV word order is ungrammatical in BP, as in (12), contrasting with (1a) etc. above.

(12) *Os bolos comeram-se.

We claim that projected implicit D-pro in Spec,Voice intervenes between T and the overt DP for EPP checking. In the periphrastic passive, there is no projected pro and there is no constraint on SV orders.