

Identifying Pronominal Verbs: Towards Automatic Disambiguation of the Clitic 'se' in Portuguese

Magali Sanches Duran¹

Carolina Evaristo Scarton¹

Sandra Maria Aluísio¹

Carlos Ramisch²

SUBJECT INDETERMINATION
 syntactic semantic
*Falou-**SE** muito nesse assunto*
 Spoke-SE** much about this matter*
One has already spoken a lot about this matter

PASSIVE
 syntactic semantic
*Sugeriram-**SE** muitas alternativas*
 Suggested-SE** many alternatives*
Many alternatives were suggested

REFLEXIVE
 syntactic semantic
*Você deveria olhar-**SE** no espelho*
 You should look-SE** in the mirror*
You should look yourself in the mirror

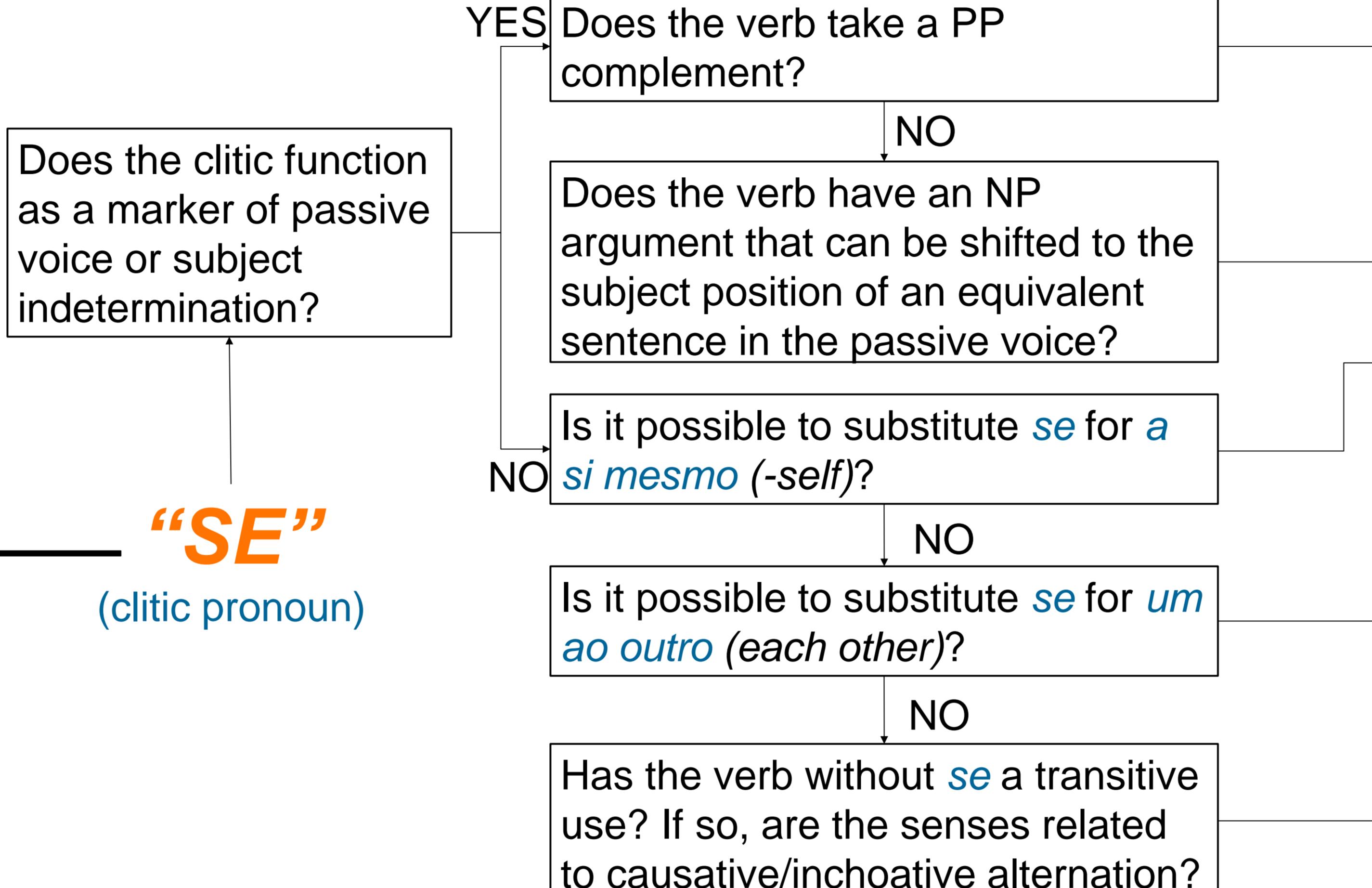
RECIPROCAL
 syntactic semantic
*Eles cumprimentaram-**SE** com um aperto de mão*
 They greeted-SE** with a handshake*
They greeted each other with a handshake

INCHOATIVE
 syntactic semantic
*Esse esporte popularizou-**SE** no Brasil*
 This sport popularED-SE** in Brazil*
This sport became popular in Brazil

CONSTITUTIVE PARTICLE
 syntactic semantic
*Eles queixaram-**SE** de dor no joelho*
 They complained-SE** about knee pain*
They complained about knee pain

Goal

Through a survey of the 6 uses of the clitic pronoun *se* in a Portuguese corpus, we intend to provide a lexicon of pronominal verbs corresponding to the use of *se* as a CONSTITUTIVE PARTICLE



Rules of thumb

- SUBJECT INDETERMINATION → no NP before, PP after the verb
- PASSIVE → no NP before the verb, NP after the verb
- RECIPROCAL → verb in plural inflection
- INCHOATIVE → NP before the verb, often no NP nor PP after the verb
- CONSTITUTIVE PARTICLE → NP before the verb, PP after the verb

Methodology

- Parse with PALAVRAS the PLN-BR-FULL corpus (Brazilian newspapers, 29M words)
- Search with the mwetoolkit for sentences with verbs in third person singular followed by the clitic *se*
- For each verb, test the sentences returned and annotate the possible uses according to the criteria above.

Pronominal Verb - definition

Verb that takes the clitic *se* as part of its lemma. In this case, the clitic *se* is not argumental (has no syntactic function and no semantic role). The *se* of a pronominal verb is called "constitutive particle".

se uses	Unambiguous	Ambiguous	Total
SUBJECT INDETERMINATION	17	6	23
PASSIVE	467	630	1097
REFLEXIVE	25	333	358
RECIPROCAL	0	33	33
INCHOATIVE	190	64	254
CONSTITUTIVE PARTICLE	83	104	187
Total	782	1170	1952

Types of pronominal verbs

- Verbs used exclusively in pronominal form:
abster-se (to abstain)
esvair-se (to go out, to extinguish)
referir-se (to refer or to concern)
- Verbs that coexist with a non-pronominal form:
realizar (to carry out) *realizar-se* (to feel fulfilled)
desculpar (to forgive) *desculpar-se* (to apologize)
Importar (to import) *importar-se* (to care about)
- Verbs that have a pronominal form, but accept clitic drop with no change of meaning :
esquecer and *esquecer-se* (to forget)
lembiar and *lembiar-se* (to remember)
sentar and *sentar-se* (to sit)

Future work

The generated lexicon will be used to guide current SRL annotation. Moreover, we intend to project the lexicon on the corpus and use the annotated data to train a classifier. We would also like to perform a cross-lingual study to build bilingual dictionaries.

1: University of São Paulo (Brazil) 2: Joseph Fourier University (France)

magali.duran@uol.com.br carol.scarton@gmail.com sandra@icmc.usp.br carlosramisch@gmail.com

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