

## THE PROCESSING OF SUBJECTS IN CLAUSES WITH UNACCUSATIVE VERBS IN BRAZILIAN PORTUGUESE

Ricardo Augusto de Souza (UFMG)  
Sueli Maria Coelho (UFMG)  
Alexandre Alves Santos (UFMG)  
Telma Almeida Nascimento (UFMG)

This paper reports a study about an apparent case of optionality in Brazilian Portuguese syntax. Such optionality affects the placement of syntactic subjects of monoargumental unaccusative verbs. In Brazilian Portuguese these verbs allow for either pre-verbal or post-verbal subjects, as attested by the two examples below, for which there does not seem to be clearly syntactic, semantic or pragmatic motivations for selection of either the pre-verbal or post-verbal position of subjects of the unaccusative verb instantiated in both sentences:

- (1) Enquanto Pedro e João falavam ao povo, chegaram os sacerdotes...  
While Peter and John talked to the people, arrived the priests...  
*While Peter and John talked to the people, the priests arrived...*
- (2) Ele estava sozinho no local quando os policiais chegaram.  
*He was alone at the spot when the policemen arrived.*

Sorace (2005) proposes a distinction between “hard” and “soft” syntactic constraints, arguing that the former lead to categorical linguistic judgments, whereas the latter lead to gradient judgments. Therefore, soft syntactic constraints are the locus of optionality in grammars. The author suggests that hard constraints reflect strictly structural properties of language, and soft constraints may be regarded as resulting from interface configurations or interactions between the grammar and processing mechanisms and restrictions.

In this study, we explored whether there are differences in processing cost for each of the two subject positions that could indicate a preference for one of them. In light of the view that Brazilian Portuguese is gradually acquiring characteristics of a non-pro-drop language (Kato & Duarte, 2014), we hypothesized that pre-verbal subjects would be preferred. Our investigation was based on an experiment for which we employed a type of self-paced reading task that allows for very precise localization of processing events that trigger higher costs: the maze task (Foster, Guerrera & Elliot, 2009). In the maze task, participants are required to decide between two lexical items as they move along screens to read sentences on a word-by-word basis. Our materials contained manipulations of both subject position and of animacy of subject referents.

Contrary to our initial expectation, our results provide evidence that post-verbal syntactic subjects in sentences with unaccusative verbs systematically yield less processing cost for speakers of Brazilian Portuguese. We further observed that animate subjects systematically yield less processing cost, irrespective of position. We interpret such results as indicating that the preferred position for subjects of unaccusative verbs in Brazilian Portuguese may be a case of a soft constraint currently in operation for subject placement in this language, and we argue that the underlying mechanism may be supported by an interaction of processing efficiency and early integration of semantic information.

## References:

FORSTER, K. I., GUERRERA, C. & ELLIOT, L. The maze task: Measuring forced incremental sentence processing time. *Behavioral Research Methods*, Vol. 41, no. 1, 2009. pp. 163-171

KATO, M. A. & DUARTE, M. E. L. Restrições na distribuição de sujeitos nulos no Português Brasileiro. *Revista de Estudos Linguísticos Veredas*, Vol. 18, no. 1, 2014. ([http://www.ufjf.br/revistaveredas/files/2014/07/01-Kato\\_Duarte2.pdf](http://www.ufjf.br/revistaveredas/files/2014/07/01-Kato_Duarte2.pdf))

SORACE, A. Selective optionality in language development. In.: CORNIPS, L.; CORRIGAN, K. P. *Syntax and variation: Reconciling the biological and the social*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 2005.