

## **Processing of verbal inflection in people with agrammatic aphasia: a Distributed Morphology approach.**

People with agrammatic aphasia present a language disorder caused by a brain injury. There is substantial cross-linguistic evidence that morphosyntax of verbs is impaired in agrammatic aphasia and that not all verb inflections are affected equally, with tense morphology being especially vulnerable (Benedet et al., 1998; Caramazza & Hillis, 1991, among others). The reasons for this dissociation are still under discussion. Our work aims to develop a battery of tests that study the production and comprehension of sentences, manipulating Tense and Agreement, to obtain evidence of this deficit in Argentinian Spanish and discuss the different theoretical explanations within the Distributed Morphology (DM) framework.

The Tree-Pruning Hypothesis (Friedmann & Grodzinsky, 1997), asserts that the problem is due to a pruning of the syntactic tree at the Tense node, but if this were to be the case, Agreement should also be impaired. Following this idea, Gavarró & Martínez-Ferreiro (2007) suggest that Agreement would be spared because the relation would hold between V and a functional category other than T when T is pruned (taking the sentential structure proposed in Cinque, 1999), but they don't explain how this process would take place.

The DM framework (Embick, 2015) could be adequate to account for this particular deficit, since it poses that Agreement morphemes are added to the structures in a postsyntactic affixation operation at the Phonological Form (PF) branch of the grammar, prior to Vocabulary Insertion. If the different morphemes are added in different stages, it could be expected for them to have different patterns of impairment.

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