Neurolinguistic Data from Aphasia: Further Problems with Syntactic Frameworks

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This paper (poster) presents a selection of recent hypotheses proposed to account for the patterns of language disorder found in Broca's Aphasia and focuses on the problem with adopting a tenable theoretical framework for them within generative grammar. Possible consequences of the framework problem for syntactic theories alone are also discussed. First, an introductory overview of the approaches building upon the controversial Tree Pruning Hypothesis (Friedmann and Grodzinsky 1997, 2000) is presented, including the feature based approach proposed by Wnzlaff and Clahsen (2004) and the truncation model proposed by Gavarro and Martinez-Ferreiro (2007). Next, the Hierarchy Complexity Hypothesis (Pancheva and Ullmann 2001) is juxtaposed with both the feature based approach and the truncation model, followed by a more detailed commentary on the processing related accounts (such as the HCH) and the previous structural accounts (TPH and derivatives). Additionally, the proposal put forward by Burkhardt et al. (2008) pertaining to slowerthan-normal formation of syntactic structure is also taken into consideration. The data in question is viewed from the perspective of a possible processing deficit directly connected to Working Memory, as proposed by Grodzinky and Santi (2007). The selected proposals are set against a theoretical background of syntactic theories within Minimalism (Chomsky 1998, 1999, 2005) as well as the most recent findings in the Nanosyntax approach (Ramchand 2008, Caha 2009). The main focus is set on investigating the possible relationship between the theory internal propositions and assumptions about processing hierarchies of syntactic items and the documented patterns of agrammatic production and comprehension. Finally, a set of new diagnostic tests related to specific syntactic frameworks is presented, as part of an on-going research.

(word count: 270)

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