

The psychological and neural reality of syntactic movement

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UG offers an unprecedented linguistic framework to make predictions on the language behaviour of individuals with agrammatic aphasia. These patients have problems with the morphosyntactic aspects of language: they produce simplified sentences and have a clear problem producing free and bound grammatical morphemes. This presentation will focus on the word order problems. It will be shown that sentences with derived word order, that is, word order obtained by overt syntactic movement, are hard to produce for agrammatic speakers, whereas they are significantly better in sentences in which the constituents are in base order. Also, these patients have problems comprehending sentences in which the thematic roles are not in canonical order, such as passives, objects relatives and object clefts. These word order phenomena in sentence production and comprehension have been captured by the *Derived Order Problem Hypothesis (DOP-H)* (Bastiaanse & Van Zonneveld, 2005), that says that every language has a base word order (e.g. SVO for English, SOV for German) and all other word orders are derived by overt movement. Individuals with agrammatic aphasia have problems with these derived word orders.

The presentation will focus on the deficit in sentence production. Data from several languages will be used to argue that derived word order is hard to produce and comprehend for speakers with agrammatic aphasia, thus supporting the DOP-H. It will be demonstrated that this is not just a matter of frequency: some high-frequency syntactic structures are more difficult for agrammatic speakers than low-frequency structures. Also, data from neuro-imaging will be presented, showing that specific areas in the brain are involved in comprehending and producing sentences with derived word order.

Bastiaanse, R. & Zonneveld, R. van (2005) Sentence production with verbs of alternating transitivity in agrammatic Broca's aphasia. *Journal of Neurolinguistics*, 18, 57-66.