

Evidence from agrammatism for a non-uniform Left Periphery in German

Ellen Brandner (Konstanz) & Martina Penke (Gent)

The paper discusses some new aspects of the well known subject/object asymmetry in the comprehension of wh-questions by Broca's aphasics. The main focus is on the additional difference between simple wh-words (*who*, *what* etc) and complex wh-expressions of the type *which-N*, as reported for German in Neuhaus & Penke (2008). The findings from a study show that there is hierarchy in comprehension that looks as follows:

wh-subjects > which-subjects > who-objects > which-objects

The main claim to be defended is that the movement process of simple wh-words differs essentially from that of complex XPs - a finding that has also been detected in unimpaired speech - and this may provide us with new insights about the properties of the Vorfeld. The accounts provided so far are unsatisfactory. Accounts in terms of Pesetsky's D-linking, requiring a more complex set-building operation are obsolete in a picture based comprehension task because the 'sets' are visually present in both cases. While it seems clear that the internal 'complexity' of *which*-phrases is in some sense responsible for this asymmetry, the exact reason why this should be so is not yet understood - especially in light of the common assumption that in both cases it is an XP that targets the specifier of the clausal projection, headed by the (re-merged) finite verb. Recently, it has been suggested by Bayer & Brandner (2008) on the basis of South German dialect data, that simple wh-pronouns behave differently from *which*-phrases in that only the latter allow a doubly filled Comp (i.e. insertion of the complementizer *dass* after the wh-phrase). B & B account for this difference by suggesting that simple wh-phrases are ambiguous in their phrase structural status, i.e. they are head and XP at the same time. Due to this ambiguous status wh-pronouns can move to the left periphery of the embedded clause via head-movement, i.e. they re-merge at the highest clausal projection and project the C-level. As a head they occupy the C-position in the embedded clause, preventing the insertion of the complementizer. Transferring this to root clauses, simple wh-pronouns move in a head-like way to the left periphery, executing the most simple operation, i.e. (re-)merge. This structure allows the correct interpretation if the ϕ -features of the moved element match those of the finite verb, i.e. subjects. If they don't, comprehension is less successful or fails completely - as it is the case with object questions. This factor accounts for the subject-object asymmetries. Turning to *which*-phrases, movement of an XP requires a (local) look-ahead in order to provide a specifier position. Assuming that this operation is not available to aphasics, we predict that moved *which*-phrases are not integrated into the clausal structure, (presumably they are in an adjoined position) and thus cannot serve as the input for an interpretation that is based on the syntactic structure. This in turn prohibits the correct assignment/computation of the thematic relations. That subject *which*-phrases nevertheless can be interpreted to a certain extent by aphasics can be accounted for by the well-known strategy that aphasics tend to assign the subject (i.e. AGENT-role) to all left-peripheral NPs. In sum, since head-movement in the sense of re-merge is identical to the basic Merge operation, it poses less problems for aphasics than XP-movement. In sum, we suggest that the hierarchy in availability of the different types of wh-expressions is the consequence of a complex interaction of various factors: (i) the type of movement which has consequences for the projection of the clausal structure and (ii) the role of ϕ -features and their positioning within the clause for the correct interpretation. The discussion of the consequences of the suggested analysis for expletives and pronouns in the Vorfeld in declarative clauses will finish the paper.

References:

- Bayer, J & E. Brandner 2008. On Wh-head-movement and the Doubly filled Comp Filter. *Proceedings of WCCFL 26*. p. 87-95. Cascadilla Press.
- Neuhaus, E. & M. Penke 2008. "Production and comprehension of wh-questions in German Broca's aphasia". *Journal of Neurolinguistics*.