Words and Rules Revisited: Separating the Syntagmatic and the Paradigmatic in Morphology

Abstract:
Pinker’s influential presentation of the distinction between the combinatoric units of language (the “words”) and the mechanisms that organize the units into linguistic constituents (the “rules”) rested on a strong, but ultimately incorrect, theory about the connection between a speaker’s internalized grammar and his/her use of language: the regular syntagmatic combination of units leaves no lasting impact on the brain, while repetition of a unit strengthens or alters its representation in memory. The psycholinguistic and neurolinguistic literature of the past 30 years has demonstrated that syntagmatic combination, no matter how “regular,” does leave a trace of some sort in the brain such that frequency effects of various sorts are characteristic of brain and behavioral evidence both for atomic items (morphemes) and for combination of items. Nevertheless, linguistic theory does distinguish between atomic units, which “compete” for positions in syntax along the “paradigmatic” dimension of language, and combination of units, which are organized according to the “rules” of syntax. MEG experiments from my lab explore the differences in the neural bases of syntagmatic and paradigmatic frequency effects with the ultimate goal of using neural measures to help answer difficult linguistic questions. For example, work in Distributed Morphology has argued for the universal separation of the roots of lexical items from the lexical category information. Is the relationship between the root and the category-determining feature syntagmatic (involving the syntactic combination of root and a category morpheme) or paradigmatic (involving a category feature associated with the root, but not combined with the root via the syntax)? Can we exploit the same general types of experiments that demonstrate that past tense in English is always computed as a syntactic combination of units to show that lexical categories also involve a syntactic relation between a root and a category morpheme?