Word-chunk frequencies affect the processing of pronominal object-relative clauses.

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Abstract

We present experimental support for the view that fine-grained statistical information may play a crucial role in the processing of center-embedded linguistic structure. Using both offline and online methods, we show that the processing of pronominal object-relative clauses is influenced by the frequency of co-occurrence of the word combinations (chunks) forming the clause. We use materials that are controlled for capacity-based factors that have been previously shown to influence comprehension of relative clauses. The results suggest that, other factors being equal, the frequency of the word-chunk forming the clause affects processing difficulty. Analyses of the data indicate that the results cannot be explained by differential access to individual lexical items. Following recent constructivist approaches, we argue that frequency of co-occurrence influences the chunking mechanism by which multi-word sequences may become automated into processing units that are easier to access.