Frequency Affects Object Relative Clause Processing: 
Some Evidence in Favor of Usage-based Accounts

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Abstract
The processing difficulty of nested grammatical structure has been explained by different psycholinguistic theories. Here I provide corpus and behavioral evidence in favor of usage-based models, focusing on the case of object relative clauses in Spanish as a first language. A corpus analysis of spoken Spanish reveals that, as in English, the overwhelming majority of object relative clauses are pronominal. Spanish allows flexibility of order of surface constituents within the clause. The corpus data revealed significant asymmetries in the frequency of order of surface constituents in pronominal and non-pronominal object relative clauses. Two off-line rating tasks and one self-paced reading task were next conducted, showing that complexity judgments and reading processing data mirrored the fine-grained distributional patterns revealed by the corpus analysis. I conclude that frequent object relative clauses may become easier to process as a consequence of use and repetition, and I discuss the implications of these findings for usage-based models of language representation and access.

Keywords: nested structure, usage-based approaches, corpus analysis, object relative clauses, Spanish L1, self-paced reading, complexity judgments, L1 processing