

Thesis: Grammar Competition Explored in Two Case Studies: NS Stage and Old English

Abstract: Grammar competition theory postulates that variation in a speaker is the result of different grammars competing against each other. This study performs an analysis of two case studies of empirical observations attributed to possible grammar competition – subject drop in English-speaking children and variation observed in Old English.

Children in an English-speaking environment drop subjects early on during acquisition. Orfitelli and Hyams (2012) find that young English-speaking children mistakenly interpret imperative null subject utterances as declaratives. They suggested that this misinterpretation can be attributed to performance factors, which leads to grammar competition and subsequently subject drop in English children. We introduce a novel computational parameter to quantify this developmental misinterpretation and fold the parameter into two sets of simulations to model the acquisition of English grammar. The results from the simulations lend support to Orfitelli and Hyams’ proposal. More generally, this work presents a framework for future computational modeling of grammatical acquisition in conjunction with other critical factors that shape a child’s course of language acquisition.

Corpus linguistics has two major research approaches: ‘corpus-based’ and ‘corpus-driven’. Corpus-based studies involve an exploration of the corpus guided by predefined hypotheses or intuition. On the contrary, a corpus-driven study makes minimal assumptions and forms an analysis after an unbiased exploration of the corpus, which uncovers patterns not considered under the microscopic focus of a hypothesis-driven search. The second part of the thesis revisits the observed variation in Old English. This variation has been attributed to competing grammars in various corpus-based studies. This thesis presents a corpus-driven search of York Helsinki Parsed Corpus of Old English Prose, with the aim of investigating a grammar competition account. Using a corpus-driven search method and adopting a broader set of assumptions that drives the analysis that ensues, we are able to document and reanalyze an exhaustive list of word-order patterns, subsequently enriching/challenging previous findings.

The contributions in this work add substantially to our understanding of language variation and grammar competition in two distinct and disparate use cases. More importantly, this work borrows from work done in the computational field and constructs robust methodologies that could guide future research in this highly interdisciplinary field of research.

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