

Processing Factors in the Study of Island Effects

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Competence-based theories of island effects are abundant in generative grammar, yet the graded nature of many syntactic islands (Ross 1986; Deane 1991; Kluender 1992) has never been properly accounted for. We argue that this is primarily because the processing (performance) factors that interact with the grammar of filler-gap constructions have never been properly controlled in the datasets island theories seek to explain. Processing factors are known to play a significant role in the perception of (un)acceptability (Miller & Chomsky, 1963; Bever 1970; Osterhout, Holcomb, Swinney, 1994) -- an excessive sentence processing load can lead to lower acceptability, as well as slowed reading times, slowed response times, and decreased response accuracy.

We have examined the role of processing factors in a range of CNPC/'Subjacency'/Wh-island and Superiority effects. I will summarize data from self-paced reading-time experiments and controlled acceptability studies that isolate the effects of various factors that have not been properly controlled in generative research. Most notable among these is the informativity of the filler (which-NP vs. who/what). Other factors include the accessibility of referential elements intervening between the filler and the gap, the finiteness of intervening verbs, lexical frequency effects, and various semantic and pragmatic issues that contribute to processing difficulty.

We argue that once these diverse effects are properly isolated, competence grammars have no need for such principles as CNPC, Subjacency, WH-Island Condition, Superiority or the Minimal Link Condition. This 'minimalist' approach truly simplifies grammar, while maximizing the explanatory effect of factors known independently to contribute to processing difficulty, some of which may ultimately be derived from more general considerations of processing architecture (e.g. Gibson 2000) or memory (Hofmeister 2007).