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Processing Filler-Gap Dependencies in Second Language French: Computational Complexity and Lexical Access

A basic question motivating research on second language (L2) sentence processing is whether adult L2 learners can make use of the same sources of information that native speakers employ to compute structural representations of the input in real time. The nonnativelike behavior of L2 learners on certain experimental tasks has been interpreted by some researchers as evidence for a fundamental difference between native and L2 processing: L2 learners are unable to compute complex syntactic representations in real time and instead must rely on nonstructural, meaning-based information. Impaired grammatical knowledge in a L2 plays a central role in capturing these processing limitations. However, arguments for nonstructural sentence processing fail to give serious consideration to the possible effects of increased computational load created by testing methodology, target structure, and underroutinized L2 lexical access on the results of studies that investigate sentence processing in a L2.

This dissertation explores the possible role of these factors in L2 sentence processing through three experiments designed to test for evidence for structural representations among beginning to advanced L2 learners and NSs of French. A first experiment considered the role of testing methodology by presenting the same stimulus in both a reading task and a listening task. A second experiment compared participants' responses with cognate and noncognate vocabulary in two targets structures—namely, indirect object clefts and relative clauses. A third experiment sought to confirm that the evidence for structural processing was due to the presence of traces of moved expressions, by probing for evidence that intermediate traces due to cyclic movement were included the representations computed during sentence processing. The results suggest that the nonsyntactic factors examined here play a role in the computations sustaining sentence processing in a L2 and that these factors may have masked evidence for structural processing in previous studies.
