

Syntactic production is not independent of inhibitory control: evidence from agreement attraction errors in a referential communication task

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Speakers can produce grammatical sentences fluently and with relatively few errors. These characteristics make the highly-practiced task of speaking a viable candidate for an automatic process, i.e., one independent of cognitive control. However, recent studies have suggested that some aspects of production, such as lexical retrieval and tailoring speech to an addressee, may depend on the speaker's inhibitory control abilities. Less clear is the dependence of syntactic operations on inhibitory control processes. Using both a direct manipulation of inhibitory control demands and an analysis of individual differences, we show that one of the most common syntactic operations, producing the correct subject-verb agreement, requires inhibitory control when a singular subject noun competes with a plural local noun as in "The *snake* next to the purple *elephant*s is green." This finding calls for the integration of inhibitory control mechanisms into models of agreement production, and more generally into theories of syntactic production.