COMMENTARIES


In his article, *Parsing and working memory in bilingual sentence processing*, Cunnings invites us to consider the hypothesis that important differences in how L1 and L2 populations process sentences stem from differences in how these speakers store and retrieve linguistic encodings in memory during the course of sentence comprehension (Cunnings, 2016). Specifically, he proposes that L2 speakers are more susceptible to similarity-based retrieval interference than their L1 counterparts, and L2 speakers weight discourse cues more heavily than syntactic cues when resolving open linguistic dependencies via memory retrieval. I find these to be interesting hypotheses that merit further investigation, especially in light of the prominence that these issues currently enjoy in L1 processing research. Nonetheless, I sound a note of caution: these claims go quite a bit beyond what is currently known, either theoretically or empirically. This makes support for these claims weak at present, but happily, this state of affairs offers clear directions for future research.

Consider the claim that discourse cues are weighted more highly than syntactic cues for memory retrieval operations in L2 processing. One of Cunnings’ arguments for this view rests on results concerning the processing of reflexive anaphors. Cunnings observes that L1 speakers are largely – although perhaps not categorically – constrained by Principle A when selecting an antecedent for a reflexive anaphor. However, results from Felser, Sato & Bertenshaw (2009), and Felser & Cunnings (2012), indicate that L2 readers more readily violate Principle A when processing a reflexive in the presence of a syntactically inappropriate, morphosyntactically matched referent. Moreover, in the designs tested, the interfering referent is made salient in the local discourse. As Cunnings notes, these interference effects are what expected if L2 speakers weight discourse cues more highly than syntactic cues, thereby considering syntactically inappropriate antecedents that match the discourse-oriented cues (viz. topic) associated with the reflexive.

I contend that these data don’t yet provide strong support for this position for a number of reasons. First, the observed data is expected if L2 speakers are simply unable to implement syntactic locality, forcing them to choose a referent from recently processed subject antecedents. The existing data therefore provide no diagnostic evidence that non-local antecedents interfere with reflexive processing because of their discourse prominence, as opposed to their status as syntactic subjects. Second, the status of any discourse constraints associated with English reflexives remains up for debate. Classic Binding Theory (Chomsky, 1981) holds that there are no such discourse constraints for reflexives, although reflexives do show sensitivity to certain discourse parameters in at least some syntactic environments (e.g. Pollard & Sag, 1992). In light of this, I argue we cannot too quickly assume that the discourse-level constraints on other types of pronominals (such as a topic bias) are also associated with co-argument reflexives. Presumably, it is the linguistic constraints on reflexives that provide actionable memory retrieval cues for the processor, and reflexives may be different from other pronominals in the types of discourse cues they are sensitive to (Kaiser, Runner, Sussman & Tanenhaus, 2009). Last, to the extent that general discourse prominence does influence reflexive processing, it is not clear that it does so in early antecedent selection as predicted on Cunnings’ retrieval model. Indeed, there is some evidence against this view; Sturt (2003) showed that syntactic constraints apply early in reflexive processing, while discourse constraints have a delayed effect (but see Kaiser et al., 2009 for data that challenge this view).

For all these reasons, I argue the reflexive processing provide no ‘smoking gun’ that directly supports claims about greater weighting of discourse-level cues for L2 speakers. To support the claim that L2 speakers rely more heavily on discourse cues at retrieval, more diagnostic experimental studies are required, de-confounding syntactic status (subject) and discourse role (topic) to evaluate the specific contribution of discourse-level cues in reflexive processing (and anaphoric processing more generally).

In the interest of concreteness, I have focused on the conclusions licensed by the reflexive data, and Cunnings’ claim about weighting given to discourse cues by L2 speakers. However, I believe that similar concerns apply to Cunnings’ broader claim about the role of retrieval...
interference in L2 processing: although the data he cites may be plausibly described in terms of increased retrieval interference for L2 speakers, it fails to yield strong evidence for this view. This is perhaps unsurprising, as many of the studies reviewed were not expressly designed to test the role of retrieval interference in L2 populations. This gap weakens support for these claims at present, but provides a clear direction for further research. More generally, studies that explicitly evaluate the severity of retrieval interference in L2 populations, such as follow-ups to Van Dyke & Lewis (2003) or Van Dyke & McElree (2006) with L2 speakers, are needed to provide a sharper, more diagnostic test of the interesting hypotheses that Cunnings advances.

References