

Similarity-based interference and linguistic dependencies in first and second language processing.

A considerable amount of research has examined how first (L1) and second (L2) language users process different types of non-adjacent linguistic dependencies during real-time language comprehension. In (1), for example, successful comprehension relies on the reader to interpret ‘the book’ as the direct object of ‘read’, even though these constituents are non-adjacent. Research in this vein has been influential in informing debate surrounding the nature of potential differences between L1 and L2 processing (e.g. Clahsen & Felser, 2006, 2018; Cunnings, 2017; Hopp, 2018). Furthermore, in research on L1 sentence processing, linguistic dependencies have informed debate about the working memory mechanisms that subserve language comprehension (Lewis et al., 2006; Vasishth et al., 2019). The role that working memory may play in explaining outcomes in L2 acquisition and processing has also garnered considerable interest (e.g. Juffs & Harrington, 2011; Wen et al., 2015).

(1) John liked the book that the boy with the magazine recently read in the library.

In this talk, I focus on a conceptualisation of working memory during L1 and L2 processing that focuses on how information is encoded and retrieved during comprehension (see Cunnings, 2017). I will discuss how this model predicts similarity-based interference to be a key determinant of successful comprehension (Van Dyke & Johns, 2012). That is, successful comprehension should be dependent on the similarity between items in a sentence. In (1), for example, this would predict that ‘the magazine’, by virtue of it being ‘readable’, may interfere in a reader’s ability to correctly resolve the dependency at ‘read’. I will present a series of recent studies that have examined how similarity-based interference influences L1 and L2 sentence processing. I will also touch upon how this approach to working memory during sentence processing parallels advances in theoretical linguistics, such as the concept of relativised minimality proposed by Rizzi (1990, 2018), and discuss how this approach can help bring together insights from psycholinguistics, linguistic theory, and L2 acquisition and processing.