

## **Dynamics of memory retrieval in parsing double relative clauses**

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This study investigates how the parser selectively uses various linguistic information to retrieve target items in memory for dependency resolution, particularly focusing on parallelism effects of grammatical functions, animacy, and case markers in processing relative clauses. While prior research has reliably shown parallelism effects in various domains, their presence in relative clause processing remains less established. I revisit parallelism effects and their interaction with semantic cues (i.e., animacy) and morphosyntactic cues (i.e., case marking) in resolving double relative clauses in Korean, which involve multiple filler-gap dependencies.

In three self-paced reading experiments, the results showed that parallelism effects of both head nouns were crucial in resolving longer dependencies between a higher head noun and its gap. However, these effects were not observed in nested dependencies between a lower head noun and its gap. This finding has implications for understanding parallelism effects in more complex dependency resolutions than previously assumed. The experiments further showed that the immediate parallelism effects of the low head noun were evident only when it shared the same animacy feature with a high head noun, indicating dependency reanalysis depends on animacy cues. Furthermore, we examined whether case marking serves as a predictive cue for upcoming argument structures. Results showed that case marking did not modulate the incremental integrations of multiple dependencies, suggesting it was not used as a morphosyntactic cue to predict the syntactic encoding of upcoming noun phrases at the surface position.