

Linguistic and cognitive predictors of noncanonical sentence comprehension in adolescent German learners of English

In this talk, I will present a project that aimed at investigating the linguistic and cognitive contributions to the processing and acquisition of complex syntax in an early foreign language. In two visual world eye-tracking experiments, we tested the online and offline comprehension of WH-questions and relative clauses in a group of 141 low-intermediate L1 German adolescent learners of English as a foreign language. Moreover, we assessed the language learning history and language use, L1 German and L2 English proficiency, cognitive control, and cognitive capacity in all participants.

I will present two studies that we conducted based on this data set. Study 1 looked at the influence of cognitive and linguistic predictors on the reanalysis of object relative clauses in the L2 English. The results showed a strong subject preference for L2 relative clauses. Learners' L2 proficiency and their processing of an easier syntactic structure in the L2, object questions, predicted reanalysis for object relatives in eye movements, reaction times, and comprehension accuracy. In contrast, there was no evidence that cognitive control or working memory systematically affected the processing of object relatives. This suggests that the specific linguistic (processing) experience of learners in the L2 affects their syntax comprehension. The second study looked at how participants employed heuristic processing strategies while comprehending WH-questions in German and English. The results showed that while an agent-first strategy was dominant in the L2 English, particularly in early measures, processing in the L1 German was more strongly influenced by an animacy-based strategy. This suggests that heuristics differentially affect syntax comprehension, depending on learners' linguistic experience.

Taken together, these results suggest that L2 proficiency and experience with processing the L2 are the predominant determinants in L2 syntax comprehension, while L1-specific experience and processing strategies as well as differences in cognitive variables are comparatively less important.