

# The impact of emerging knowledge of linguistic structure on word learning

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**Abstract:** According to the syntactic bootstrapping hypothesis, language learners use structural cues in the linguistic context to infer the meaning of novel words. Many studies support this hypothesis by showing that structure knowledge facilitates learning new words in a familiar language, but few have investigated the concurrent acquisition of word meaning and syntactic structure in a new language. In an artificial language learning experiment, we studied the interaction between learning word meaning and sentence structure. Dutch participants (N=120) observed a series of animated scenes, each with an accompanying three-word sentence, and were subsequently tested on their linguistic knowledge. Our results showed no bootstrapping effect at the early stages of learning. However, learners who acquired the underlying structure in the later stages performed significantly better on both word and sentence-level tests. Moreover, participants learning an SVO or SOV language performed significantly better than participants learning a VSO or unstructured language.