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Do Infants Learn Words from Statistics? Evidence from English-Learning Infants Hearing Italian

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Abstract

Infants track transitional probabilities (TPs) relevant to segmenting words in fluent speech, and learn sequences with high TPs (HTPs) as object labels. We tested whether HTPs are better learned because they are represented as candidate words, or because they are easier to encode. If tracking TPs results in identifying candidate words, TPs may have reduced power to confer lexical status when yielding a unit dissimilar to English words. We found that 20-month-old English-learning infants, especially those with larger vocabularies, resist learning HTP Italian words as object labels. This suggests that before infants become highly tuned to their native language, TPs carry a high weight in word learning. However, as infants accumulate more instances of words in their native language, HTPs no longer give sequences word-like status. Altogether, this suggests that tracking TPs allows infants to integrate statistical and language-specific cues as they become more proficient with their native language.