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The Development of a Generative Lexicon: Evidence from Instrument Verbs

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Abstract

Many words have multiple yet predictably related meanings. For example, in English and in other languages, the same root morphemes can be used flexibly, to label an action and the instrument used to perform the action (e.g., we hammer with a hammer and mix with a mixer). Previous findings indicate that four- and five-year-olds have formed abstract generalizations about these patterns and use them to infer new word meanings, such that they expect a word that has labeled an action to also label its instrument. But how do these generalizations develop? Across five experiments with a large sample of English-speaking children, we show that in the third year of life, children begin to generalize words between actions and instruments: e.g., they expect that if an action involving an instrument and patient has been called pabbing, then a pab (or a pabber) will refer to the instrument. Additionally, we find that children of the same age also spontaneously extend words between actions and instruments: e.g., if an action has been called pabbing, children indicate that the instrument cannot be a neefoo, presumably because they think it should instead be called a pab or a pabber. Critically, we show that these results do not depend on whether the new word labels an event for which children know a word (e.g., hammering) or instead labels a novel event involving a novel instrument. These findings suggest that by age three, children's knowledge of lexical flexibility is generative and abstract, and may not be constructed through item-specific learning.