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Do Toddlers Rely On a Process-of-Elimination or a Novelty Bias in Ambiguous Word Learning Contexts?

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Abstract

Mechanisms underlying children's attempts to solve referential ambiguity have been described as a process-of-elimination or a novelty bias. We measured 2.5-year-old children's pointing and eye movements during referent selection in ostensive and non-ostensive naming contexts. Compared to familiar targets, for novel targets, looking proportions were lower and children took longer to point; and looked significantly more at competitors before focusing on targets, indicating more time spent considering competitors. Ostensive naming also predicted better delayed retention, but retention dropped significantly in the non-ostensive condition. Greater novel target looking during referent selection predicted better immediate retention for the ostensive condition, but better delayed retention for the non-ostensive condition. Thus, in contexts with minimal encoding support, a focus on novel targets strengthens word-object associations over time. For toddlers, referent selection is best explained as both a process-of-elimination and a novelty bias; and the latter supports encoding which facilitates long-term retention of novel words.

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