

The Impact of Speech Complexity on Preschooler Attention, Speaker Preference, and Learning

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Abstract

How do children decide what speech to tune into and learn from? We extend the idea that learners preferentially attend to stimuli at an intermediate level of complexity to the domain of spoken language. Preschoolers (2.5-6.5 years in Exp.1 and 3.5-5.5 years in Exp. 2) watched two speakers alternate narrating pages of a textless picture book, before selecting who they wanted to hear finish the story. We manipulated the complexity of the narrators speech, such that the SIMPLE speaker used earlier-acquired words than the COMPLEX speaker. In Experiment 1, both speakers introduced rare target words that children were later tested on. While children learned an impressive number of them, the inclusion of these rare words may have made both speech streams too complex for children to show a systematic preference for one over the other. In Experiment 2, we narrowed our age range, and amplified the contrast in complexity between the two speech streams. Preliminary results suggest that children discriminated between the two levels of complexity, systematically selecting the simpler speaker to finish the story. These results suggest that preschoolers can track the relative complexity of different linguistic inputs, opening the possibility that they may actively direct their attention toward linguistic input that is more appropriate for them.