

Continuity in Speech Perception: Moving Away from Tasks that Assume Categorical Perception

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Research on speech categorization often relies on tasks that ask participants to identify stimuli from a continuum between two unambiguous endpoints (e.g., **b**each vs. **p**each). These tasks have clear face validity; they ask listeners to explicitly state what categorical percept they hear from the stimulus. However, they also force listeners to map their responses onto a set of (usually two) discrete response options. In this talk, I decompose the assumptions behind this task, and identify major theoretical limitations to the conclusions we can draw from such forced-choice approaches to speech categorization. Instead, I argue for tasks that include a continuous response space, and describe why these are more insightful about speech processes. I then present data from a series of such tasks, which show complex development of speech categorization throughout childhood, as well as influences of language experience and context.

Bio

Keith Baxelbaum (né Apfelbaum) is a research scientist at the University of Iowa in Bob McMurray's lab. He earned his Ph.D. from Iowa in 2013, and has worked in academic and non-academic research roles ever since. His research focuses on the learning and development of speech and word recognition abilities, especially during the school-age years. His approach emphasizes a multi-method approach to trace the complex web of interacting factors that drive these developments.