LabPhon 14 Satellite Workshop on "Gestural Coordination Within and Between Speakers in First Language Phonological Acquisition"

Language acquisition: The negotiated collision of sensation, action, and the need to be social

Eric Vatikiotis-Bateson

Department of Linguistics and Cognitive Systems Program, University of British Columbia, Canada

Sensation, action, and social interaction are necessary ingredients for acquiring language. Previous research has generally examined these independently or, in the case of social factors, not much at all. Research on infants has focused heavily on children's abilities to detect and identify language or language-like stimuli and, in older infants, to induce associations between these and other stimuli such as objects. Action by infants has received little attention: direct measurement of infant behavior is difficult and infants provide little guidance about what to measure. Finally, experiments have typically been designed to suppress any sort of social interaction. Happily, this situation is changing. While still focused on measuring responses to sensory input, new research now may include action-related somatosensory conditions such as the effect on response of an object in the infant's mouth or may monitor shared gaze when the experimenter is present and other action-based measures to attain more textured interpretations of infant responses to stimuli.

A way to take these promising changes in research focus a step further would be to examine sensation, action, and social interaction together. Perception is arguably distinct from sensation and crucially depends on similar transforms of action and social interaction. That is, the emergence of perception is crucial to developing the motor skills needed for speech production and to developing caricature (imitation) and other social adaptations that give direction and purpose to language acquisition.

Finally, we should rethink the conceptual and temporal boundaries between language acquisition and language change, which is a lifelong process. Adult speech production and perception may not be an appropriate benchmark for assessing language acquisition. Even very young children have intact language that grows rapidly in size and complexity as perception and skilled performance, and awareness of the social utility of language, take precedence over more basic processes of sensation and unskilled action. That the rate of language change is also so high during childhood suggests constraints on language form are localized to successful interaction.