Developing word representations in the lexicon: evidence from perception and production

Paula Fikkert

Much of child language production research has focused on how children learn words and create a lexicon. One aspect of this concerns the sound structure of children’s early words and how they are stored in the lexicon. Much of infant speech perception research has focused on how children find words in continuous speech (word segmentation) and how much detail they perceive and store in the sound representations of words.

One of the most puzzling facts in acquisition is that in many respects patterns in language production and perception show similarities. For example, in word segmentation studies it has been shown that unstressed initial syllables are typically ignored at the early stages of word segmentation. By the end of the first year, however, infants are able to segment various types of words, including words starting with unstressed syllables, like *banana*. Similarly, child language production data typically show that unstressed syllables are not realised and children often produce words like *banana* as *nana*. This is still happening in the third year of life. Interestingly, there is a considerable gap in time between the two phenomena:

This raises questions on (a) the nature of the representations in the mental lexicon mediating between perception and production and (b) the nature of development.

Over the past years we have investigated perception and production patterns regarding place of articulation, where a similar gap has been suggested in the literature. Typically, infants are claimed to have mastered the sound inventory of their mother tongue before their first birthday. Yet the evidence for this in production lags behind considerably. We provide an overview of several production and perception studies regarding the acquisition of Place of Articulation features of words in the lexicon of Dutch children. In this talk I present several pieces to the acquisition puzzle, which will provide insights into how the sound structure of words is represented in the lexicon.

Paula Fikkert is professor first language acquisition and phonology at Radboud University Nijmegen, and lecturer at the University of Oxford and leading the first language acquisition group of the Centre for Language Studies. She is a principle investigator of the Donders Institute.

After her PhD at Leiden University, she had several postdoc projects at the University of Konstanz, before moving to the Radboud University as a research fellow of the Royal Dutch Science Foundation.
Paula Fikkert’s research programme involves language change, both in the course of history, but in particular in the course of first language acquisition. Her overarching aim is the investigation of mental representations of the sounds of language.