Richer language experience leads to faster understanding: Language input and processing efficiency in Spanish-learning children

There is a long history of research showing that variation in the quantity and quality of children’s early language experience is associated with lexical development. However, while most children live in social environments where they hear speech from many different sources, previous studies have focused primarily on mother-child interactions, basing their analyses on short samples of child-directed speech. Here, we use an automated speech analysis system to record and analyze the language environments of 18-mo-old infants during a “typical day” in the home, allowing us to capture a more representative picture of children’s experiences with language. We ask whether exposure to different ‘streams of talk’ is related to the development of language processing efficiency and vocabulary in a longitudinal study with Spanish-learning children in the US and Mexico. Three important findings emerged: First, there was substantial variability in the amount of speech in different families: some children heard over 1800 words/hour, while others heard only 100 words/hour. Second, amount of child-directed speech, but not overheard speech, was correlated with children’s vocabulary size. Third, amount of child-directed speech was also correlated with speed and accuracy in language processing. I will discuss how studying variability in early language environments is essential to understanding language development and processing.