

## **Coping with accent variation during early word learning**

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Most of the time, recognizing words feels effortless. However, successful word recognition involves a complex balance of specificity and flexibility. Many words are highly similar. Therefore, in order to avoid confusion, the lexical processing system must attend to a high degree of detail. At the same time, pronunciations of a given word vary considerably within and across speakers, due to such factors as gender, affect, and dialectal background. Therefore, the recognition process must also be flexible enough to cope with this variability. These issues are all the more complex for young word learners who are in the initial stages of building a lexicon.

This talk will explore these two sides of the word recognition process in young word learners. Recent studies have demonstrated that young word learners are, in many cases, highly sensitive to the phonetic properties of words. For example, mispronunciations of both vowels and consonants disrupt toddlers' processing (Swingley & Aslin, 2002; Mani & Plunkett, 2007; White & Morgan, 2008). Although this type of sensitivity is necessary for the acquisition of new words, it may prevent toddlers from recognizing familiar words that are produced by speakers whose accents differ from their own. In combination with a bias to assume that novel wordforms apply to novel referents (Markman, 1990), an over-reliance on a precise match with stored representations could lead to recognition failures, potentially slowing lexical development.

Indeed, some work suggests that toddlers cannot recognize familiar words produced in an unfamiliar accent (Best et al., 2009; Mulak et al., 2013). However, they can overcome this difficulty under certain conditions. In particular, toddlers are successful when they have had prior exposure to the accent: for example, when they are shown that accented pronunciations map onto familiar referents (White & Aslin, 2011) or are given the opportunity to work out the mappings between stored words and accented pronunciations (Van Heugten & Johnson, in press). This learning appears to be both general and specific. Learning is general in that it does not simply involve memorization of particular words, but extends to words never before heard in that accent. Learning is specific in that exposure to accented pronunciations does not appear to cause greater tolerance for variability in general; toddlers later recognize words only in the particular accent to which they are exposed, but not when they undergo other shifts in pronunciation. These findings suggest that toddlers, like adults, are able to adapt to systematic variability in the pronunciations of words across accents.