## Learning that duration can be phonemic: Acquisition of duration-based vowel and consonant phonemic contrasts in Japanese.

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Duration of vowels and consonants in actual speech can vary widely in any language. Yet in some languages, such as Japanese, durations of vowels and consonants are phonemic. Given that infants cannot know a priori whether durations of vowels and consonants are phonemic in their language, it is important to inquire how they learn this. In this talk, we will present data on Japanese acquisition from behavioral experiments with Japanese infants and from corpus analysis of both vowel and consonant duration contrasts in infant-directed speech. We will demonstrate that this is a formidable task for Japanese infants, requiring a different developmental trajectory from that of quality-based phonemic contrasts.