

# Phonological Knowledge Trumps Salient Local Regularity in 2-year-olds' Word Learning

Carolyn Quam and Daniel Swingley



## Have 2-year-olds learned that pitch cannot contrast words in English?

### MOTIVATION

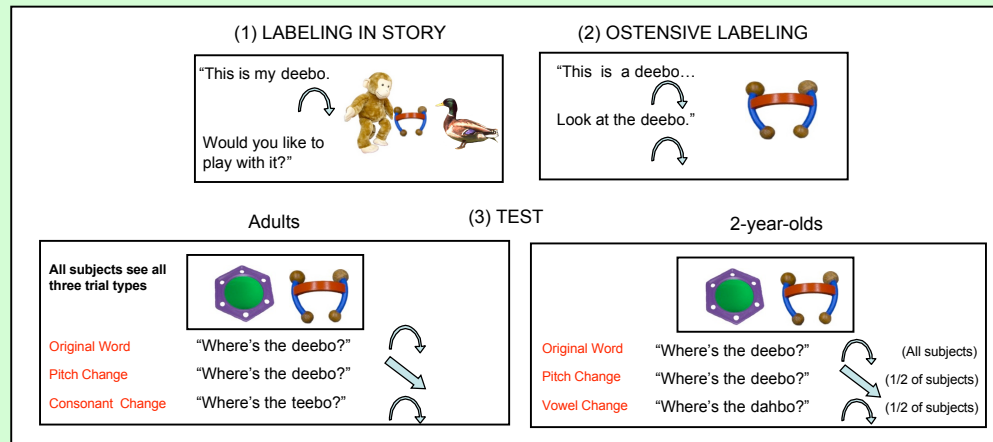
Pitch in English conveys important information like speaker affect and the question versus statement distinction. But pitch alone cannot differentiate words in English.

Can 2-year-olds successfully disregard highly perceptible pitch regularity in a word-learning task, in accordance with English phonology?

### PARTICIPANTS

18 Adults  
29 30-month-olds

### METHOD



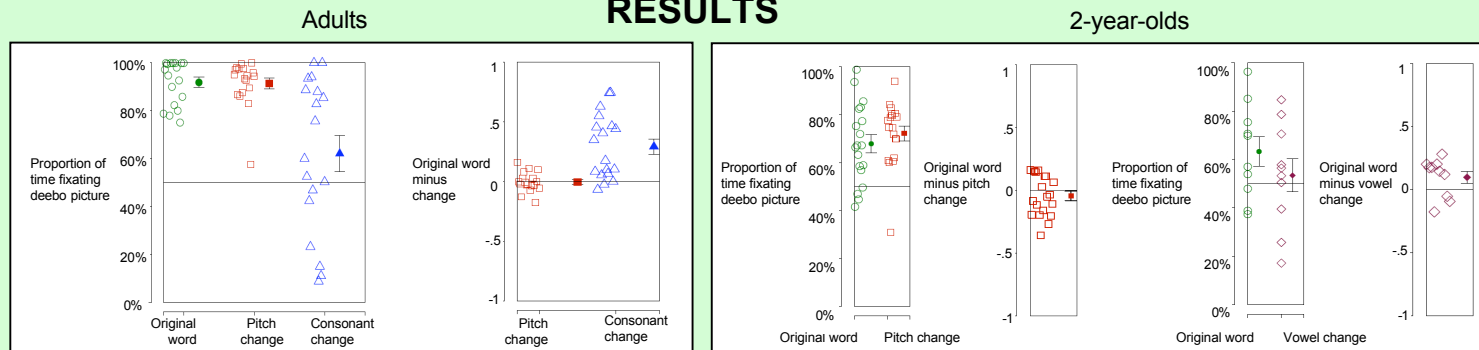
### PREDICTIONS

Adults will treat pitch as irrelevant to word learning and recognition.

Adults will treat a segmental change as relevant, but subjects' responses may vary.

We can compare children's responses to adults' to determine whether they interpret the two changes in an adult-like way.

### RESULTS



### FUNDING

NSF Graduate Research Fellowship and NSF Integrative Graduate Education and Research Traineeship grants to C.Q.

NIH grant R01-HD-049681 to D.S.

### CONCLUSIONS

Adults and 30-month-olds applied native phonology to a word-learning task. Even though the nature of the teaching made pitch a potentially relevant feature of the word, children and adults did not treat a pitch change as relevant to word recognition. In contrast, they treated segmental changes as relevant. Individual subjects differed in their interpretations of the segmental changes, some showing a potential mutual exclusivity response (Markman, 1989), others not responding to the change.

Future directions: Investigating the developmental trajectory of pitch interpretation in word learning and recognition. Demonstrating that young children know how pitch is used in English, e.g., for expressing emotions and as a cue to lexical stress.

### CONTACT

Carolyn Quam  
cquam@psych.upenn.edu