Babies know words, even when they are mispronounced: A meta-analytic view

Katie Von Holzen¹ & Christina Bergmann²

- 1. Université Paris Rene Descartes, Laboratoire de Psychologie de la Perception CNRS, France
 - 2. LSCP, Département d'Etudes Cognitives, ENS, EHESS, CNRS, PSL Research University

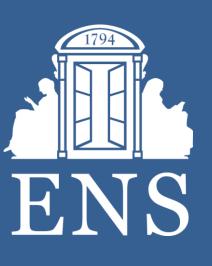






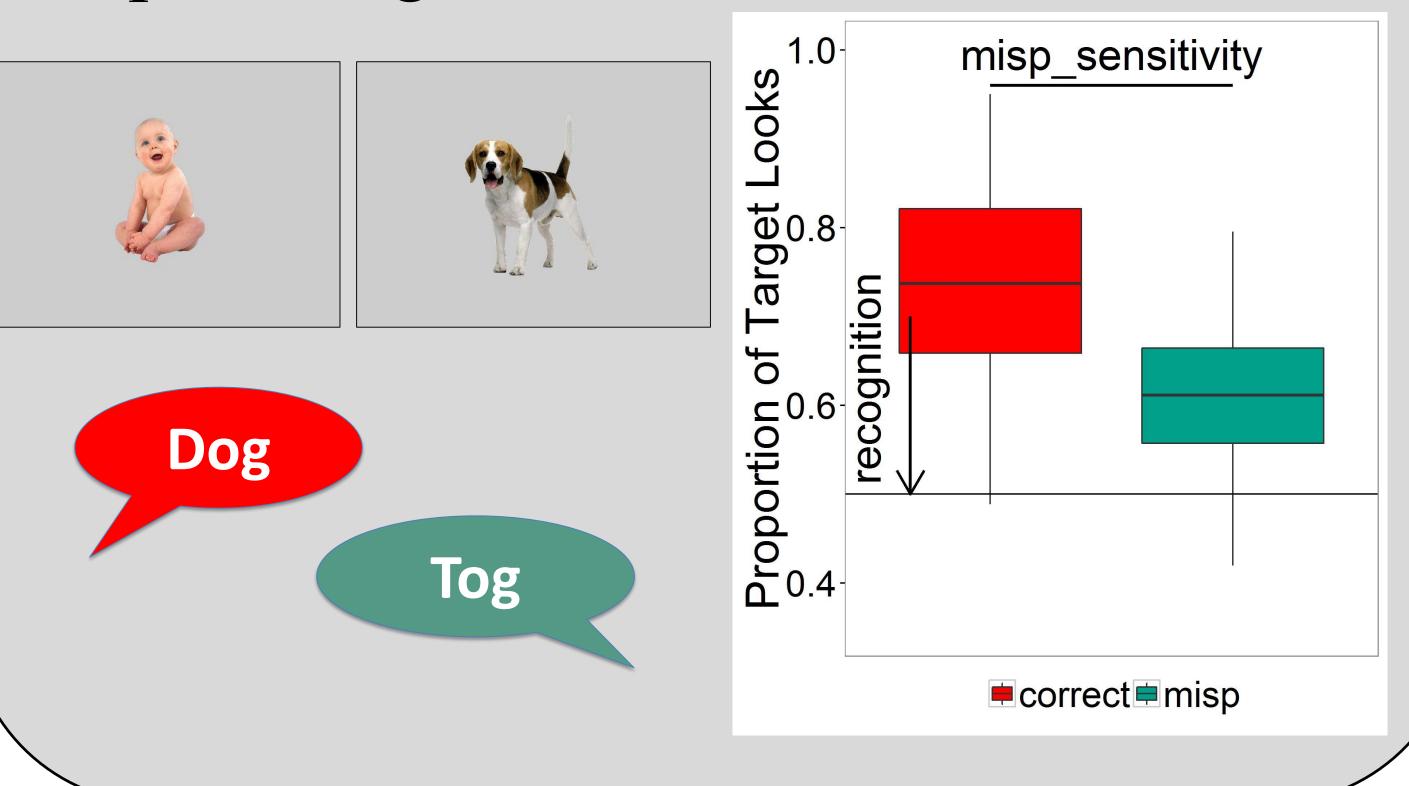


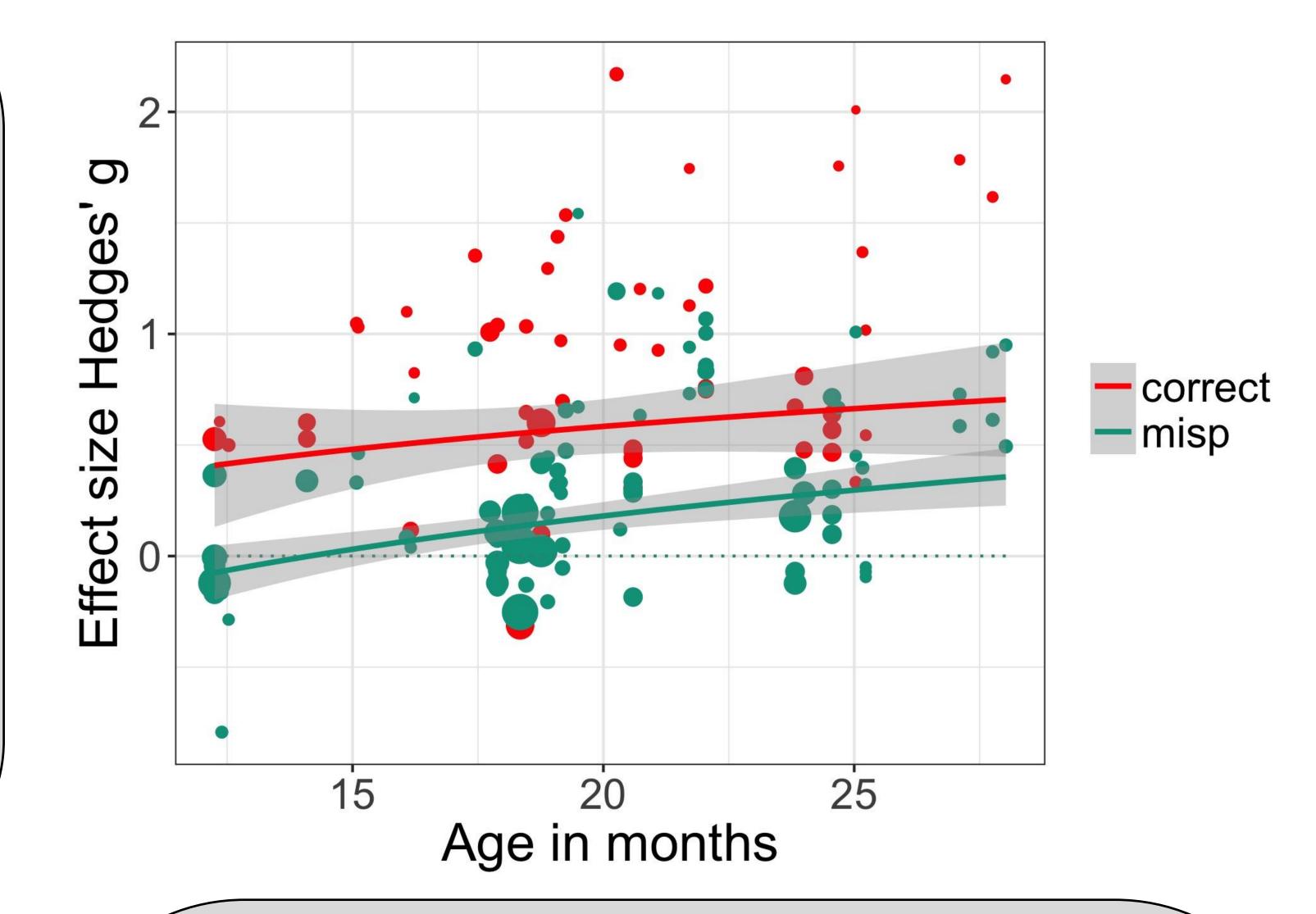




Mispronunciation Sensitivity

Infants' sensitivity to changes in the phonological form of familiar words





Research Question

How does mispronunciation sensitivity change as infants develop?

- 1) More sensitive with development¹
- 2) Less sensitive with development²
- 3) Sensitivity does not change with development

Participants	Stimuli	Procedure	Results
Age in days	# features	# trials	DV type
Sample size	Change	Distractor	vocabulary
(n)	position	familiarity	
Native	Consonant vs.	Distractor	misp
Language	vowel	overlap	sensitivity

Correct

Recognition: g = 0.88, SE = 0.12, p < .001No interaction with age

Mispronunciation

Recognition: g = 0.34, SE = 0.07, p < .001

Age: g = 0.04, SE = 0.01, p = .001

Correct vs. Mispronunciation

Sensitivity: g = .47, SE = 04, p < .0001No interaction with age

- As infants age, more target looking in mispronounced trials (Theory 2)
- Sensitivity to mispronunciations stays consistent as infants age (Theory 3)

Database Information

- 25 papers (mostly journal articles)
- 190 unique experimental conditions
- 1001 infants
- 12 to 28 months

References

- 1. Werker, J. F., & Curtin, S. (2005). PRIMIR: A Developmental Framework of Infant Speech Processing. Language Learning and Development, 1(2), 197–234
- 2. Best, C. T. (1994). The emergence of native-language phonological influences in infants: A perceptual assimilation model. Haskins Laboratories Status Report on Speech Research

What's in your File Drawer?

- Do you have a mispronunciation study that is unpublished?
- Contact us and add it to the meta-analysis!

MetaLab

