

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Age Effects in the Acquisition of Phonological Variation

Permalink

<https://escholarship.org/uc/item/0wm357pp>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 42(0)

Authors

Sneller, Betsy

Newport, Elissa

Publication Date

2020

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

Age Effects in the Acquisition of Phonological Variation

Betsy Sneller

Georgetown University, Washington, District of Columbia, United States

Elissa Newport

Georgetown University, Washington, District of Columbia, United States

Abstract

We report a series of artificial language learning experiments designed to test child and adult learners abilities to acquire three types of phonological variation. Previous work on experimental morphology (Hudson Kam & Newport 2005, 2009; Schuler, Yang & Newport, 2016) has found that young children turn inconsistent input into an invariant rule, while adults reproduce and match variation in their input. Here we investigate whether phonological variation of three different types (deterministic conditioning, unconditioned variation, and probabilistic variation) exhibits a similar age pattern. We find a clear effect of age in grammatically-conditioned variability, with the youngest children showing a strong tendency to regularize to the stem form, adults probability-matching, and intermediate-aged children learning correct conditioning but not matching the input probabilities. These results suggest, in accord with previous findings on morphology, that variation is not readily learned by young children and may instead be acquired as a separate process.