

UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

The effect of expertise on auditory categorization: a domain-specific or domain-general mechanism?

Permalink

<https://escholarship.org/uc/item/2p43g4b9>

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 40(0)

Authors

Freggens, Marjorie

Pitt, Mark

Publication Date

2018

The effect of expertise on auditory categorization: a domain-specific or domain-general mechanism?

Marjorie Freggens

Ohio State University, Columbus, Ohio, United States

Mark Pitt

Ohio State University, Columbus, Ohio, United States

Abstract

Are the perceptual and cognitive changes associated with expertise due to improvements in domain-general abilities or changes to domain-specific representations? Elmer et al. (2014) measured how controls, language experts, and musicians categorized perceptually ambiguous sounds (blends of speech and music) and concluded domain-general changes underlie expertise. Acoustic and perceptual analyses of their stimuli suggested their stimulus creation methodology might have distorted the results. An experiment replicated and extended their findings with revised stimuli. Results suggest that expertise leads instead to domain-specific changes in representational weighting or selective attention.