

Probabilistic cue weighting in native and loanword perception

Ellen Broselow, Stony Brook University, with Jiwon Hwang, Stony Brook University, and Hyunah Baek, Ajou University

One intriguing aspect of loan phonology involves what has been called *divergent repair/split repair/ranking reversal* (Broselow 2004, Kenstowicz 2005, Smith 2006, Peperkamp et al. 2008, Kang 2011), in which an illegal structure is repaired differently in native and borrowed forms. Analyses of divergent repair have frequently assigned the adaptation pattern to the perception grammar and the native repair to the production grammar (e.g., Peperkamp et al. 2008, Boersma & Hamann 2009, Daland et al. 2019). Such analyses raise the question of why listeners converge on one of several possible perceptual repairs—that is, which acoustic cues are privileged in the perception grammar, and whether this cue weighting is universal or language-specific. We present evidence from one case of divergent repair that listeners' adaptation patterns are consistent with their perceptions of native language forms containing ambiguous stimuli; while the perception grammar does not categorically favor one specific mapping from acoustic to phonological form, it does assign higher probability to the mapping that represents the most common loan adaptation.