Perceptual equivalence between co-varying cues in the register contrast of Southern Yi Aletheia Cui, IPS

Phonation is the primary phonetic cue for the Southern Yi tense vs. lax register contrast. This study investigates the relationship between phonation and its co-varying vowel quality and f0 cues for the vowels /e/ and /u/. In a phonetic imitation experiment, we tested whether speakers would produce distinct vowel quality and f0 when imitating stimuli where both co-varying cues have been neutralized, and only phonation cues were present. We found that differences in phonation cues led to corresponding production of co-varying vowel quality cues for /e/ but not for /u/ in the imitation speech. This result indicates that vowel quality cues are phonologically encoded in the register contrast for /e/ but not for /u/. Moreover, the absence of phonation effects on f0 in the imitation speech suggests that f0 is not part of the phonological representation for either /e/ or /u/. Overall, our results demonstrate that the link between production and perception is abstract and integrative.