ACOUSTICS2008/1721 English /r/-/l/ pronunciation training for Japanese speakers

Kota Hattori and Paul Iverson

University College London, Department of Phonetics and Linguistics, 4, Stephenson Way, NW1 2HE London, UK

Previous studies have demonstrated that perceptual training improves both perception and production by adult second-language (L2) learners. The present study examined whether production training likewise improves both perception and production. Japanese speakers underwent ten sessions of production training for English /r/ and /l/. The training combined three methods: (1) subjects received audio-visual examples and pronunciation instructions for /r/ and /l/; (2) they produced mono syllables (i.e., /ra/ and /la/) and minimal-pair words, with online feedback about their formant frequencies using a real-time spectrogram as well as pronunciation feedback from an instructor; and (3) they made recordings of minimal-pair words and compared them to "enhanced" versions of these recordings (i.e., signal-processed versions with the correct F3 frequencies and transition durations). All participants completed a battery of pre/post training tests (i.e., English /r/-/l/ identification, discrimination, perceptual mapping of best exemplars, and production). The preliminary results indicate that this training approach improves production; the results will be further discussed in terms of its effect on perception and the underlying representation of these categories.