The effect of one's own voice and production skills on word recognition in a second language
Nikola Anna Eger, Eva Reinisch

Institute of Phonetics and Speech Processing, LMU Munich eger@phonetik.uni-muenchen.de

Second language (L2) learners often do not overcome their foreign accent even after long years of training and despite their ability to notice the accent of fellow learners. We asked whether this could be because learners are less aware of their own accent, possibly due to high familiarity with their own acoustic and articulatory speech patterns. The prediction that follows is that learners are better at understanding accented words if they were produced themselves than by other, equally proficient learners. This was tested in two perception experiments.

24 German learners of English were recorded producing a randomized list of difficult minimal word pairs. Based on the produced acoustic differences between the words of each pair, learners were assigned to one of three proficiency groups. Several weeks later, participants returned for a perception task in which they had to listen to the words in isolation and reconstruct the intended word of the minimal pair. They were presented their own as well as others' productions matched in proficiency. The best and worst speakers were also asked to reconstruct the words of the "opposite" proficiency group.

Results showed a self-benefit for all proficiency groups relative to other speakers matched in proficiency. Moreover, all participants showed a perceptual benefit if high-proficient productions were heard, but this effect was stronger for those who were themselves highly proficient. We conclude that L2 production and perception abilities are linked and that adaptation to one's own accent could indeed lead to lower awareness in recognizing one's own errors.