Phonetic correlates of accent authenticity in voice disguise

Sara Neuhauser and Adrian P. Simpson
Institut für Germanistische Sprachwissenschaft, Universität Jena, Germany
{sara.neuhauser|adrian.simpson}@uni-jena.de

In an earlier experiment (Neuhauser & Simpson, 2007) 22 native German speakers were asked to judge whether the foreign accent stimulus they heard was being produced by a non-native speaker of German (authentic) or by a native German speaker imitating a foreign accent (non-authentic). Results showed that native speakers of German varied widely in their ability to produce a foreign accent judged by listeners to be authentic, but also, more surprisingly, that there was wide variation in the ability of listeners to successfully identify the genuine non-native speaker. In other words, perhaps paradoxically, some of non-native German speakers produced a foreign-accented German less convincingly than native German speakers.

In this paper we attempt to uncover possible phonetic correlates of accent authenticity by examining four groups of three speakers which arise from the results of the listening experiment: (a) the most authentic sounding native German speakers; (b) the least authentic sounding native German speakers; (c) the most authentic sounding non-native German speakers; (d) the least authentic sounding non-native German speakers.

We identified places in the stimulus sentence (Die verstärkten Sicherheitsvorkehrungen der Banken könnten Räuber abgeschreckt haben.) used in the listening experiment which could be expected to exhibit typical interference features from non-native German speakers, e.g. realisation of final /-\v/_, realisation of /hl/, postvocalic /\v/, junctural glottalisation.

The non-native as well as the native German speakers judged to be least authentic produced foreign accents containing phonetic and phonological features typical of German and atypical of expected stereotypes, e.g. a native French speaker successfully producing glottal friction at the beginning of and [m] rather than [\v\n] at the end of the word haben was likely to be judged non-authentic. By contrast, a native German speaker imitating a French accent was considered authentic if /\v\n/ is consistently produced as [\v\n] and /hl/ is omitted or realised as a glottal stop. It was also found that the non-native German speakers did not seem to be more consistent in the production of different features than did the native German imitators.

The findings of this preliminary analysis, which is at present being extended to a much larger corpus, suggest that differentiating a true foreign accent from an imitation is an extremely complex task, and requires a careful analysis of those features which even competent L2 speakers are likely to get wrong when speaking German. The claim that imitators will be characterised by easily recognised errors and inconsistencies (Künzel, 1987; Blum, 1990; Storey, 1996) underestimates both the competence of the imitator as well as the good L2 learner.

References