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Perception and production of the German 'ich-sound' by French learners before and after phonetic training

The analysis of a French-German phonetic learner corpus revealed that even advanced French learners of German have serious difficulty with the correct pronunciation of the palatal voiceless fricative [ç]. The problem with the so-called 'ich-sound' in German, as it occurs in words such as 'spre<u>ch</u>en' ("to speak"), 'zwanzi<u>g</u>' ("twenty"), '<u>Ch</u>emie' ("chemistry"), comes as a result of the absence of this phoneme in French. Although the functional load of the contrast of /ç/ to its nearest neighbour /ʃ/ is rather low (only few minimal pairs) the 'ich-sound' occurs in the high-frequency word 'ich' ("I") leading to a manifestation of a foreign accent.

To answer the research question "Is it possible to improve the perception *and* the production of /ç/ after a short phonetic training?" 20 French native speakers were divided into an experimental and a control group (a comparable number of beginners, intermediate and advanced learners of German in each group). In the pre-test all subjects had i) to read aloud a set of German sentences containing the 'ich-sound' and ii) to perform a perceptual identification task with minimal pairs (with nonce words). In contrast to the control group the experimental group then received a special training (10 minutes) with explanations on the contexts in which the 'ich-sound' is used, letter-to-sound-rules, minimal pairs for auditory illustrations and audio examples of [ç] in French (e.g. a sentence-final 'ami[ç]') . In the post-test (one week later) the production and perception task of the pre-test was replicated.

It turned out that in the experimental group the error rate in production decreased significantly, whereas perceptually the discrimination of /ç/ against /ʃ/ remained problematic. Although there is room for improvement to test the perceptual awareness, the results of the experiment can be a valuable contribution to the development of methods for feedback in language learning including automatic feedback.