French learners’ problem with /h/: Absent, when it should be, present when it shouldn’t

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In this paper, we provide an extensive comparison of the production patterns of /h/-initial words by French learners of German to the productions of native speakers (10 beginners (BEG), 10 advanced learners (ADV) and 10 German native speakers (NAT)). Furthermore, we provide data of the production of vowel-initial German words. The problem of French speakers producing /h/ is well known, and stereotypically, French speakers are assumed to delete initial /h/ when speaking German (e.g., [4] and references therein). We aim at answering the questions to what extent French learners of German show problems to produce the fricative /h/ (in words like Haus, ‘house’), to what extent ADV improve compared to BEG, and whether French speakers succeed /h/ comparable to the native speakers’ productions. Additionally, we investigate to what extent French speakers produce /h/ in vowel-initial words (e.g., aber, ‘but’), which could be produced with a glottal stop in German and where French learners of English have been shown to epenthesize /h/ (e.g., [2,3]). The basis for the analysis is a part of a learner corpus with read speech (short sentences and the short story ‘The three little pigs’ in German, [1]) which were labeled for context, the first segment of the word, and the remaining part of the word).

The results of our analysis indicate that BEG indeed sometimes omit /h/ in /h/-initial words (5.4%, ADV: 1%). However, they more often realize /h/ with a glottal stop or other forms of glottalization instead of /h/ (32.2%, ADV: 5.9%) a strategy NAT refrain from. Not surprisingly, ADV are more successful in producing /h/ more native-like: /h/ is realized as a voiceless glottal fricative when the left context is voiceless, but as a voiced breathy vowel-like segment with a varying degree of frication in a voiced left context. A plausible interpretation of these findings is that native and native-like realizations of /h/ are based on no or a low degree of adduction of the vocal folds whereas early French learners of German seem to produce a high degree of vocal fold adduction. Acoustic measurements show that the increased effort of French learners is also reflected in longer /h/-segments with a different intensity, compared to native renditions (relative to the word starting with /h/).

Furthermore, in the story condition, BEG produce /h/ also more often vowel-initially than ADV, who in turn show this pattern more often than NAT, where it does not occur at all (BEG: 29 times, ADV: 4 times). A possible interpretation of this finding is that French learners interpret the feature laryngeal as a not yet specified gesture at the glottal level, irrespective of frication. Taken together, the results of the corpus study indicate that French speakers show a tendency to hyperarticulate glottal segments more often in German rather than deleting them. Our findings may have important consequences for language teaching (including English as a foreign language), because glottal segments are persistent problem (i.e., also ADV suffer from it) in pronunciation, which should be addressed in teaching to reduce a foreign accent and increase the level of intelligibility.
References


