How good are they? The dialect performance of Standard Austrian German speakers: The Viennese Monophthongisation

Sylvia Moosmüller & Ewald Enzinger
Acoustics Research Institute, Austrian Academy of Sciences, Vienna, Austria
sylvia.moosmueller@oeaw.ac.at

Introduction
The Viennese monophthongisation was first observed around 1900 among speakers of the lower social classes (Gartner 1900, Luick 1904) and was accomplished around 1950. It affected the diphthongs /aε/ and /aɔ/, which were monophthongised to /æ:/ and /ɒ:/ respectively. It then spread socially towards the middle and upper social classes of Vienna and regionally towards the south and especially towards the west, where it affected the city dialects of Salzburg and even Innsbruck (see Moosmüller 1991, Moosmüller & Scheutz 2013).

The Viennese monophthongisation is to be described as an assimilatory process, whereby one part of the diphthong is assimilated by the other. The inherent long duration of the diphthongs is preserved by compensatory lengthening. As a result of the process of monophthongisation, the vowel inventory of the Viennese dialect is enriched by two new long vowels: /æ:/ and /ɒ:/.

In the current contribution, we ask whether Viennese speakers of Standard Austrian German (SAG) are able to produce the Viennese monophthongisation. This question is of relevance both to speaker profiling as well as to the selection of samples of the relevant population to represent the alternative hypothesis in a forensic-voice-comparison analysis.

Method
20 speakers (age range from 17 to 84 years) of SAG (raised in Vienna, student or academic education, at least one parent from Vienna with academic education) were asked to read one text in the Viennese dialect and one text in Standard Austrian German. Nine speakers of the Viennese dialect served as reference speakers. All /aε/ and /aɔ/ were segmented manually; F1, F2, and F3 were extracted by means of LPC. A 46 ms long gliding Hanning window was applied with an overlap of 95%. Duration was measured as well. The difference between formant onset and offset of the diphthongs as well as the formant slope have been calculated. Two-sample t-tests have been performed with respect to the slope, the difference between onset and offset, and the duration of the segments.

Results
The results indicate that the Viennese speakers of SAG are quite successful in producing the Viennese monophthongisation. However, young speakers (< 30 years) are more successful in the production of the monophthongised diphthongs. One significant difference between the Viennese speakers of SAG and the reference speakers concerns the duration of the monophthongised diphthongs. This result points to a hyper-correction performed by the
Viennese speakers of SAG.

References