Merging and Splitting Processes in Mountain Silesian: A Comparison to the Standard German Vowel System

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Abstract

Mountain Silesian is an endangered dialect of the Mid German dialect group. It has been spoken in the Giant Mountains region of the former Prussian province of Silesia until the great ethnic population transfer after World War II. It is still spoken by some elderly refugees that moved to Western Germany in that time and by some people who remained in the Polish counties of Opole and Śląsk. After the end of the Cold War and the fall of the Iron Curtain German – and its regional variants – nowadays are legally established as an "official support language" in municipalities with a German minority of more than 20 % of the inhabitants [Pelka, 2006].

In dialectological descriptions the vowel system of Silesian – as of other Mid German dialects – is characterized by a "loss" of rounded front vowels as compared to Standard German (modern New High German) which occurred in the transition period from Mid to New High German [von Unwerth, 1908: 73-74]. Nevertheless, a deviant realization of these vowels ("*Verdumpfung*") has been reported in the literature [Reiter, 1960: 62].

Since dialectological research did not utilize experimental phonetic methods, the purpose of our present investigation is to undertake a first acoustical analysis of Mountain Silesian monophthongs. Recordings of a male speaker born in 1896 (approximately 65 years old at the time of the recordings) served as data for the analysis. The speaker was a Mountain Silesian dialect poet whose recitations are still available as digitized CD publications [Schenke, 2006]. From these recordings word-stressed monophthongs were segmented and labelled in PRAAT [Boersma & Weenink, 2001] and analyzed for F1, F2 and F3 formant frequencies.

The results are given in FIGURE I as F1/F2-plots, separately for long and short vowels. In order to illustrate a merging of rounded and unrounded high and upper-mid monophthongs, these are labelled phonologically in the sense that the transcription represents the vowels that would be expected in a Standard German pronunciation. Lower-mid and low vowels are transcribed phonetically. In a first inspection of the data the plots show (1) nearly complete acoustic overlaps of underlying high front rounded and underlying unrounded long vowels, (2) a lowering of F1 in underlying upper-mid long vowels that also leads to an overlap with

the high long vowels, (3) the emergence of a long lower-mid back vowel, as well as (4) of two low vowels mainly differing in F1, thus showing a diversification in the system when contrasted to Standard German. For short vowels, (1) high and upper-mid vowels do not overlap or at least not to the same amount. But (2) the emergence of two low vowels is evident in this case, too.

In a second step, a statistical analysis was calculated on high front rounded vs. unrounded vowels. As opposed to the first inspection of the F1/F2-plots it is revealed that both long vowels do not coincide to a complete merger, instead they show highly significant differences in all three formants (Kruskal-Wallis rank-order analysis of variance).

It will be argued for an interpretation of these results in the framework of Labov's (1994) terminology. It is assumed that Mountain Silesian reduces the number of high and upper-mid vowels by "merging" or "near-merging" processes and increases the number of low and lower-mid vowels by "splits", thus restructuring the vowel system in favour of the occurrence of lower vowels.

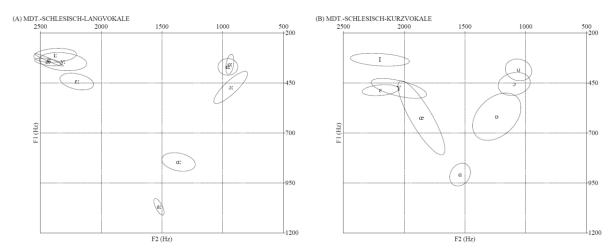


FIGURE I. Silesian vowels (1-σ ellipses): Long (left) and short (right). Explanations see text.

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