

Prosodic Phrasing in Three German Standard Varieties

While the investigation of segmental features has been in the centre of phonetic research interested in regional variation for the last century, prosodic features have only recently been addressed in the German speaking area (Auer et al. 2000). However, the German language as a pluricentric language (Clyne 1995; Ammon 1995) requires the comparison and description not only with respect to different dialects but also to different standard varieties (Ulbrich 2004). Differences between the German standard varieties at the prosodic level lack the empirical evidence as only auditory intuitive impressions have been provided (Meyer 1989, Ammon 1995, Panizzolo 1982). The prosodic level of the German standard variety has been described by different frameworks (e.g. Adriaens 1991, Möbius 1993, Féry 1993, Benz Müller et al. 1997), the Swiss and the Austrian varieties of German lack any adequate descriptive framework. Within the field interested in prosodic variation a great deal of research concentrates on aspects of intonation. Phrasing and timing properties are often considered only peripherally. However, this preference seems questionable since relative modifications of fundamental frequency (f_0), overall intensity and spectral intensity are time-dependent. This approach finds support in former investigations of timing which shows less inter- and intra-speaker variation than f_0 -modifications (Keller 1994, Mixdorff 2002a; Zeller-Keller 2002). The present study is part of a larger investigation of prosodic differences between the three German standard varieties in Austria, Switzerland and Germany and deals with their rhythmic features. The results of previous perception tests suggest that there are – among others – differences in phrasing of utterances between Swiss, Austrian and German standard speakers (Ulbrich in pr.).

The underlying assumption is that speakers segment their utterances into portions of similar length. However, the segmentation is not arbitrarily. Different authors have established a hierarchy of these phase boundaries (e.g. Mixdorff 2002b, Siebenhaar in print). This paper presents the results of the auditory and acoustic analysis of a speech corpus containing the recordings of three news broadcasts read by three Swiss, three Austrian and three German male news readers. The prosodic annotation was carried out by Swiss, Austrian and German linguistically trained control listeners. The acoustic analysis was carried out using PRAAT (Boersma). Acoustic measurements of inter- and intra-sentential pauses were taken as well as measurements of phoneme duration in the beginning and at the end of prosodic phrases, sentences and paragraphs. Following the comparison of the group annotation prosodic boundary strength was analysed quantitatively with respect to grammatical conditions such as punctuation and word ordering (grammatical and lexical words).

The results showed (1) differences in the auditory annotation of the material by the three groups of listeners. This leads to the conclusion that the specific language background – in the present study the given country of origin – influences the perception process of spoken utterances. Furthermore the results showed (2) that although number of syllables per prosodic phrase differed significantly between Swiss speakers on the one and German and Austrian speakers on the other hand, the distribution of prosodic boundaries with respect to grammatical conditions did not show significant differences between the three groups of news readers. The quantitative analysis of the acoustic measurements showed (3) significant differences in the phonetic demarcation of prosodic phrase boundaries. Also, number and duration of pauses differed significantly between Swiss, Austrian and German news readers.

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