

Word accents in the Närpes dialect: Is there really only one accent?

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Abstract

Accent patterns in Närpes, Ostrobothnia are investigated in this paper. It is a commonly held assumption that the acute/grave distinction is not manifested in most Finland-Swedish dialects and that the acute accent is generalized. The native informants in this study also share this assumption. However, informal listening has suggested that this may not be the case. Recordings of two native older men and two native younger men were analyzed in terms of F0 contours. The results suggest that the tonal pattern in words, which receive acute accent in Standard Swedish, differ from that in words which receive grave accent in a systematic way. This difference resembles that found in Standard Swedish accent distinction, in particular the Uppland dialects. It is suggested that a weakening of the acoustic correlates of the accent distinction has led to the loss of the phonological distinction but without a complete loss of the patterns that were once used distinctively.

1 Introduction

The main purpose of this study is to examine the realisation of accent patterns of words in the Närpes dialect that have the grave accent in Standard Swedish.

The traditionally held view that the Finnish language has influenced not only the vocabulary but also the prosody of the Finland-Swedish dialects is not uncontroversial. The alleged influence from Finnish has served to explain why many of the Finland-Swedish dialects exhibit only a single accent system, instead of the Swedish two-way accent system with both acute and grave accent (Ahlbäck, 1940). However, also other Nordic dialects, e.g., parts of Västmanland, Uppland, Denmark and Iceland, exhibit the single accent system. According to Ahlbäck the closest relatives of the Finland-Swedish dialects are to be found in Uppland, Södertörn, Västerbotten and parts of Västmanland and Dalarna.

There is some evidence that contradicts the traditional belief that the dialects in Ostrobothnia do not make use of the grave accent or at least exhibit tonal patterns which may be heard as grave accents. Dahlstedt (1953) reported that he heard the grave accent in both monosyllables, bisyllables and compounds in Oravais, Ostrobothnia. He claims to have found evidence for 'acoustic acute' and 'acoustic grave' accents, 'acoustic' in the sense that the distinction between the two accent types is not phonological but may be emphatic. And Freudenthal (1878) reports that "Der Tonfall oder der musikalische Accent in der Närpesmundart..., nähert sich dem in Schweden herrschenden dadurch, dass ein tiefer Ton (gravis)..., auch in ihnen gewöhnlich vorkommt, woher man von diesen Mundarten bei uns zu sagen pflegt, dass sie einen 'schwedischen Accent' haben". These reports as well as informal listening call for further examinations of the accent patterns

used in Ostrobothnia and an attempt to approach a resolution of the long standing controversy is made in this paper.

The two word accents in Standard Swedish are mainly realized by different F0 movements in relation to the syllabic stress. Traditionally the grave accents' phonetic correlate has been thought of as a two-peaked F0-contour, the first peak marking primary stress and the second marking secondary stress (Engstrand, 1995). Bruce (1977) suggests that acute and grave accents in all Scandinavian dialects that have the distinction may have in common that the onset of the F0 curve relative to the stressed syllable occurs earlier for acute than for grave accent: acute words having a fall of F0 on the consonant preceding the stressed syllable. If the word is in a focal position, F0 will rise immediately after the fall in both acute and grave accent, the rise starting in the stressed vowel in the acute word but after the stressed vowel in the grave word. Depending on the number of pitch peaks and their locations, five accent types were proposed by Gårding (Bruce & Gårding, 1978). These can be divided into three subgroups of which the one lacking the grave accent is common in the East Swedish dialects spoken in Finland.

2 Method

2.1 Speech material

The speech material was embedded in carrier phrases, where the target word was placed at the end of the phrase. The target words were 'dollar' (dollar), which has the acute accent in Standard Swedish and 'kronor' (crowns) and 'D-mark' (D-mark) which both have the grave accent. The informants were shown cards with currency symbols and were then asked questions, e.g. 'Står det tio kronor?' (Does it say ten crowns?) and responded depending on the symbol on the shown card, e.g. 'Nej, det står tio dollar' (No, it says ten dollars). In this way, focal and non-focal variants of the test words could be elicited.

The recordings were carried out in the informants' homes by the Swedia 2000 project in the summer of 1999. For the purpose of this study, four native male speakers' speech was analysed (two older men, age 57 and 60, and two younger men, age 23 and 24).

F0-curves were produced for all utterances. In order to facilitate comparison between tokens and speakers, all curves were time-normalized to the time scale of the utterances whose segment duration most closely resembled the average of all tokens of a given type (dollar, D-mark, kronor). Average duration for the three target words are shown in Table 1. Time normalisation was performed at the segment level, i.e. the time scale of a given utterance was adjusted, segment by segment, by linear interpolation of the values between segment markers to the time scale of the chosen standard utterance. Time, label, and F0 information was then transferred to a statistics package (SPSS) for further analysis.

3 Results

F0 and timing data are shown in Figure 1, where *a* and *b* show mean curves for three speakers (Younger Man 1, Older Man 1, Older Man 2), *c* for four speakers (Younger man 1, Younger Man 2, Older Man 1, Older Man 2). Figure 1 *d* shows mean curves for all of the target words as produced by all speakers. There were eight or ten utterances in total per target word. The timing of the acute and grave accent contours are clearly separated in a way that the acute F0 fall occurs later than the grave F0 fall. The compound and the grave non-compound word follow almost identical contours and both have an earlier fall of F0 than the acute word. The F0 fall of the acute word starts 25% from the V1-C2 boundary, whereas the fall of the grave word starts 65% from the V1-C2 boundary.

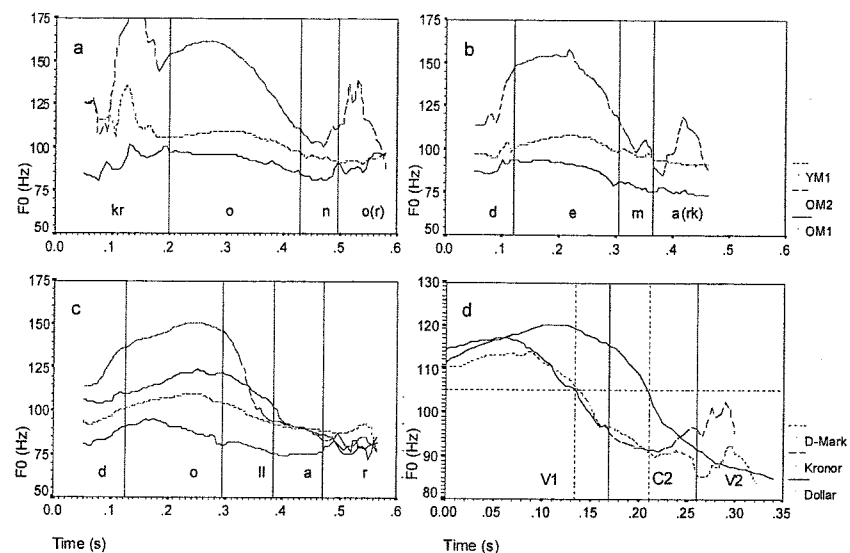


Figure 1. Mean F0 and timing data for the acute and grave words as produced by the speakers (D-Mark, 8 utterances; Dollar 10 utterances; Kronor 8 utterances). See text for further explanation.

Table 1. Durational means and standard deviations (sec.) for all tokens.

segments	kronor			dollar			D-mark		
	mean	SD	N	mean	SD	N	mean	SD	N
C1	0,126	0,014	8	0,071	0,021	10	0,073	0,023	8
V1	0,222	0,029	8	0,170	0,049	10	0,188	0,033	8
C2	0,091	0,017	8	0,100	0,025	10	0,095	0,033	8
V2	0,085	0,023	8	0,084	0,011	10	0,122	0,013	8
C3	0,086	0,040	8	0,110	0,025	10	0,237	0,037	8
total	0,609	0,056	8	0,535	0,063	10	0,715	0,088	8

Numerical mean values and standard deviations of the segment durations for all tokens are given in Table 1. Note that C1 and C3 are represented in Table 1 but not in Figure 1. This is due to the fact that in most tokens C1 and C3 is voiceless or devoiced and thus lack F0.

4 Discussion

In the results presented above, only the fall in the first syllable has been considered. The reason for this is the fact that F0 data for the second syllable are missing or are unreliable

due to the weak or absent voicing during these segments. It thus seems that the accent realisations only have one peak, with the grave peak occurring earlier in the word than the acute peak. This pattern sharply deviates from other Swedish dialects with a one-peaked grave accent. In most such dialects, the acute peak occurs earlier than the grave peak (Bruce, Gårding, 1978). In many of the tokens, however, there seems to be a rising contour in the second syllable in grave words. If one assumes that there is a tendency for a second peak in these words, then the contours are very similar to those found in the Uppland dialects to which the Ostrobothnian ones are assumed to be related. The Uppland dialects are typically known to display a two-peaked grave accent contour (Meyer, 1937). If one hypothesizes that the Ostrobothnian dialects at one time had an accent system similar to the ones found in Uppland, but that over time the second rise in grave accent in focal position has been lost, this may have led to a perceptual weakening of the accent distinction and eventually to its loss as a phonological contrast. The result would be precisely the patterns that we find in the Närpes dialect today. More data is needed, however, to test this hypothesis conclusively.

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