

SUMMARIA

Introduction

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The South-Estonian dialects differ from Standard Estonian more than any other Estonian dialect. Their remarkable linguistic peculiarity has contributed to the development of regional standards, e.g. the Standard Tartu language in the 16th–19th centuries and the contemporary Võru and Setu languages. The book focuses on the phonetic study of South-Estonian prosodic peculiarities and specific sounds.

The South-Estonian dialects reveal remarkable differences. They are first divided into north-western and south-eastern dialects. The north-western dialects include the Mulgi dialect in the western part of South Estonian and the Tartu dialect in the north. By now Standard Estonian has levelled the north-western dialects to a considerable degree. The south-eastern dialects can be divided into the Võru and Setu dialects. The south-eastern dialects are located more peripherally with regard to the Estonian centres and have largely retained their original structure. Nowadays they form the basic area of South Estonian. For this reason we have selected the south-eastern dialects for this study. The focus is on Võru and Setu because of their archaic features.

The first articles of the book are based on the doctoral theses by Merike Parve (2003) and Pire Teras (2003). The analysis of South-Estonian prosodic peculiarities by Merike Parve focuses on the description of the essence of three phonological quantities in Setu. Pire Teras deals with the South-Estonian vowel system by analysing the raising of long mid vowels in Võru which is not manifested in Standard Estonian.

The next four articles provide a survey of the major specific features of South-Estonian consonants. The focus is on the analysis of durational relations. The study is based on the recorded speech of Sute and Loosi villagers of eastern Võru, where they read specially constructed texts. Sulev Iva studies the glottal stop that in the Finnic languages is most extensively represented in South Estonian. Mari-

Liis Kalvik analyses the duration of the sibilant and the dental stop and characterizes the word-final lengthening of sibilants and stops. Pärtel Lippus describes the essential feature of the South-Estonian affricate in comparison with consonant clusters. Laivi Org explains consonantal palatalization in Võru.

Quantity in Setu

Merike Parve

The degrees of word quantity appear in Setu similarly to Standard Estonian. Among South Estonian dialects the stronger quantitative pronunciation of Q2 specific to the Tartu dialect has been occasionally detected outside its territory. The varying quantitative pronunciation of some words has been detected in the Võru dialect area, eastern and southern Setu, Vastseliina, southern Rõuge and Hargla.

The average duration ratio of S1/S2 in Setu is 1.50 in Q2 words (the syllable boundary in consonant-peaked words was determined according to standard short consonant length) and 3.08 in Q3 words. These duration ratios are higher than those of laboratory speech of Standard Estonian. However, the difference compared to the values of spontaneous speech is negligible. Generally the higher S1/S2 is specific to spontaneous speech. Thus, one can conclude that rare quantitative variations exert no influence on Setu pronunciation. The Setu pronunciation is generally comparable to Standard Estonian.

The studies of F0 showed that the peak is located more anteriorly in the vowel-peaked words than in the consonant-peaked ones. Summing the data of both studies, the average peak location is at 54% of V1 in Q2 words and 36% in Q3 words. In spontaneous speech, the differences between vowel- and consonant-peaked words are smaller compared to the laboratory speech. No significant shifts were detected in the quantitative pronunciation of Q2 and Q3 words of Setu compared to Standard Estonian.

The quality of Võru mid vowels

Pire Teras

Raising of vowels is one of the principles of vowel shifts. It can cause a chain shift or merger of vowels. In addition to cases of full merger, near mergers have been described where speakers make a slight difference in the quality of two vowels but listeners do not perceive it any more.

The present study observes the raising of mid vowels in Võru, a South Estonian dialect. First, the quality of mid, raised mid, and high vowels is analysed acoustically. After that the results of a perception test that contained the vowels are presented. The acoustic analysis is based on the text read by seven speakers. Twenty-one persons participated in the perception test.

The acoustic analysis showed that raised mid vowels are acoustically close to high vowels although they remain a little lower. The extent of raising of two primary mid vowels is greater than that of two secondary mid vowels. On the psycho-acoustic scale, the distances between the F1 values of raised mid vowels and those of high vowels are small, but the distances between the F1 values of raised mid vowels and those of mid vowels can sometimes exceed 1 Bark. Minimal pairs containing raised mid vowels and high vowels used as stimuli in the perception test appeared to be difficult to identify without a context. The recognition was mainly occasional (on average 61 per cent of the stimuli were recognised).

Due to raising Võru mid vowels alternate with raised mid vowels that differ acoustically a little from high vowels but are not distinguishable by listeners any longer. This situation is similar to near-mergers.

Võru glottal stop

Sulev Iva

The glottal stop (ʔ, in the Võru spelling system *q*) is a special feature of Võru. The glottal stop occurs in Võru as a word-final consonant phoneme. For example, *q* is often the only plural marker of the nominative case: the singular *kala* 'fish', the plural *kalaq* [*kalaʔ*] 'fish'.

In the analysed Vastseliina sub-dialect of East Võru the glottal stop always has the same quantity regardless of the word structure. It corresponds to the quantity of word-final long stops. However, unlike the other stops, and similarly to the word-final *h*, the glottal stop does not have either a clearly distinct extra long or short equivalent. It means that the Võru glottal stop does not have quantity oppositions.

The glottal stop becomes distinguishable from its closest neighbouring sounds *k* and *h* by the relation to the duration of the preceding extra long vowel. Unlike *k* and *h* the average duration of the glottal stop and the vowel are almost the same. At the same time *q* is about one third shorter than *k* and *h*.

The average duration of the explosion of *q* and *k* is nearly the same, but it seems, that in the case of *q* post-explosion aspiration is much less.

The fundamental frequency of the words with the glottal stop is very flat, without a pitch peak or significant decline. Words with final *k* and *h* show a greater decline of fundamental frequency.

The pronunciation of the glottal stop depends on word length, quantity, and position in the sentence. In the middle of a sentence before a consonant-initial word the glottal stop is not usually pronounced but is assimilated to the preceding consonant and forms a secondary geminate on the border of the words.

Võru sibilant and dental stop

Mari-Liis Kalvik

In Võru, like elsewhere as in South Estonian, the word-final sibilant *s* (often developed from historical cluster **ks*) and the dental plosive *d/t* are traditionally pronounced more strongly than in Standard Estonian. The present paper presents the results and analysis of the acoustic measurements of intervocalic and word-final Võru *s* and *d/t*. The source material of the study consists of 59 words taken from a text read by six speakers. The results are compared to the data about the measurements of Standard Estonian *s* and *d/t*.

The results show that both consonants in the intervocalic position are shorter than in the word-final position. The most important factor influencing the duration of word-final consonants is the word's posi-

tion in the sentence: sentence-final (pause-preceding) sounds are always longer than the sentence-medial ones. Sentence-medial word-final sibilants tend to be durationally a little longer if they occur before a voiced sound. The sibilants were divided into the following groups: there are originally short and long sibilants and sibilants that developed from the historical cluster **ks*. Originally short and long sibilants differ in duration, the others have the duration of medium length, between short and long. The duration ratios of short, long, and **ks*-sibilants are 1 : 1.2 : 1.9 (in the sentence-medial position) and 1 : 1.2 : 1.6 (in the sentence-final position). Dental stops were also divided into three groups: there are stops with short, long, and medium-length duration (the duration ratios being 1 : 1.4 : 2.2). In comparison to the data about Standard Estonian, it is interesting that the Võru short word-final *d* is pronounced with a longer duration. The findings show that sibilants and dental stops act similarly in the word-final position. Both consonants are divided into three durationally different groups; medium-length consonants seem to be closer to the short duration than to the long duration.

Võru affricates

Pärtel Lippus

Affricates are sounds that exhibit a combination of stop closure and frication at the same place of articulation. Whether the combination of a stop and a fricative is considered to be an affricate (i.e. a single sound) or a sound sequence depends both on morphology and phonology. The duration of an affricate corresponds more to the duration of a single sound than to the duration of a sound sequence.

In Võru there is an alveolar affricate /ts/. 64 affricates were hidden in the text read by six speakers. Acoustic analysis showed that in Võru affricates can be on the border of the first and the second syllable in words with all three quantities. In Q1 words the duration of affricates is longer than the duration of single stops or fricatives, but it is shorter than the sum of the duration of a sequence of stop and fricative. The duration of affricates is closer to the duration of single and geminate consonants than to the duration of consonant clusters.

There is no significant difference in the duration of weak and strong affricates between unstressed syllables. Palatalization has no effect on the duration of affricates.

Palatalization in Vastseliina

Laivi Org

Different researchers have the opinion that in Võru palatalization should occur mainly at the end of a consonant and in the transition to the following vowel. However, palatalization can also occur at the beginning of a consonant (Keem 1973, Toomse 1998, Sepp 1987, Laugaste 1956 etc.).

The aim of the present article is to describe the essence of Võru, or more specifically, Vastseliina palatalization on the basis of acoustic parameters. It is the first acoustic description of Võru palatalization. The formant values of 52 words were measured in the speech of six speakers. Measurements were made in the middle of vowels, in transitions to and from the consonant and in the case of the plosives, in the end of the burst. Thus, the present study discusses palatalization only on the basis of the acoustics of transitions to and from a consonant. Some essential shared features with the system of Estonian palatalization were found although one would expect to find more common features with the Russian palatalization system. Consonant-initial palatalization was found in 33 out of 41 measured words. Palatalization occurred both in the transition from a front vowel to a consonant and also in the transition from a back vowel to a consonant. Twenty-one measured words revealed consonant-ending transitions, if a consonant was succeeded by a front vowel. In bilateral transitions palatalization appeared only in those cases when a consonant was preceded and succeeded by a front vowel. Palatalization was found to be more frequent in the speech of older speakers than in the speech of younger speakers.