

**Tatjana Z i r n a s k, Rõhk ja kestus mokša keele Kesk-Vadi murdes. Magistritöö, Tartu 2007 (Tartu Ülikool. Eesti ja Üldkeeleteaduse Instituut). 63 pp.**

On 28 June last year Tatjana Zirnask defended her MA thesis "Stress and Quantity in the Middle Vad Dialect of Moksha" at the Institute of Estonian and General Linguistics of the University of Tartu (supervisors Tiit-Rein Viitso and Niina Aasmäe).

Tatjana Zirnask studies stress and, as its correlate, duration in the Middle Vad dialect of Moksha. The Middle Vad dialect is also the author's mother tongue. As a prosodic research it fits in a larger framework, for during the past few years much research has been done at the University of Tartu on the prosody of Finno-Ugric languages (Lehiste 2007; Lehiste, Aasmäe, Meister, Pajusalu, Teras, Viitso 2003; Lehiste, Teras, Help, Lipus, Meister, Pajusalu, Viitso 2005; Lehiste, Teras, Pajusalu, Tuisk 2007; Aasmäe 2006). Research projects have been funded by The Estonian Science Foundation (grant No. 4153, 6983) as well as by Ilse Lehiste, who about ten years ago was also the initiator of the research project concerning the prosody of Finno-Ugric languages, and with whom a close co-operation has developed.

In addition to the introduction and the conclusion, Tatjana Zirnask's MA thesis is composed of three chapters. In the introduction the author sets forth the aim of the work to deal with acoustic

properties of stress in Moksha, concentrating on the duration and duration ratios of vowels. Her work represents the first thorough acoustic-phonetic research on this topic, which therefore makes it important and valuable.

The second chapter contains an overview of classification possibilities of Moksha dialects and Moksha sound system. It includes classifications of Moksha dialects proposed by different authors. Based on these, five dialect groups are presented in the work: central dialect, south-eastern dialect, western dialect (to the south-western subgroup of which belongs also the Middle Vad dialect analysed in the work), transitional dialects and mixed dialects (the appendix 1 contains also a map of Moksha dialects and a list of villages, both compiled by Peeter Päll). In some cases this chapter could have been more detailed. For example when treating the vowel system in subsection 2.2, the author says that some of the researchers consider the central vowel *a* as a phoneme that has two allophones, but it does not become clear from the work what these two allophones are. When dealing with the vowel system the author also pays attention to the differences between dialects, vowel harmony and syllabic structure.

The third chapter gives a very good overview of the history of the study of Moksha prosody. It becomes apparent that previous phonetic research done in the field of prosody has concentrated mainly on questions relating to stress. In connection with this, researchers have looked for reasons why stress sometimes tends to move to non-initial syllables. They see the vowel quality and rhythm as possible causes, but also the influence of foreign languages. In this chapter, the researches that concern stress are divided into three periods. Also it becomes clear from this chapter that there is little experimental-phonetic research done on Moksha prosody. The author has first and foremost emphasised S. Devajev's research (Деваев 1975), in which the duration of vowels in stressed and unstressed syllables is analysed and the importance of duration is brought out as a correlate of stress.

The fourth chapter presents the results of the acoustic-phonetic analysis of the speech of two speakers of Middle Vad dialect of Moksha. The duration and duration ratios of vowels in one- to three-syllable test-words have been analysed thoroughly and from different perspectives: all words together, words with open and closed initial syllable, duration ratios of vowels in words with different sound structure, duration ratios of vowels with same or different quality in stressed and unstressed syllable. The author has said that in her work she has not specifically analysed the influence of consonants on the vowel duration. However, this chapter also deals with the question of whether the closedness of a syllable influences the vowel duration or not. It appears that vowels in open syllables tend to be longer than in closed syllables.

When analysing the vowel duration of monosyllabic words (table 2 p. 32), the author says that the durations of vowels *a*, *e* and *i* at phrase-final position are much longer in case of speaker NS than in case of speaker NE. In my opinion the marking of speakers is confused there as this relation is the other way round and actually all the vowels that occur phrase-finally are longer in case of speaker NE

than in case of speaker NS (in sentence-final position the relationship is contrary). The author already earlier referred to the fact that speakers read the sentences with a different rhythm. Considering this, these relations could rather indicate that speaker NS pronounced with a greater stress sentence-final words, but speaker NE phrase-final words.

The analysis of vowel durations and duration ratios in disyllabic words is very thorough and different aspects have been taken into account. However, when for example words with a different sound structure have been analysed in addition to the vowel duration also the duration of consonants closing the syllables could have been presented. For example table 8 p. 35 contains vowel durations and duration ratios of words of CVCCV type (ratio 1.06–1.23), which are much smaller than in case of words with an open initial syllable (ratios 1.21–1.66, table 6, 7 p. 34, 35). Also table 15 p. 39 (*kutne*, *kutce*, ratio 0.85–1.09) and table 18 p. 40 (*kærga*, 0.92–1.11) refer to the same tendency. Maybe the duration ratio would prove to be similar if also the durations of syllable-final consonants were added to the vowel durations (e.g. in the word *jalga* the first syllable = *a+l*).

The analysis chapter also looks at the duration ratios between vowels of same or different quality. It turns out that when both of the syllables contain vowels with the same quality (e.g. *a-a*, *e-e*), the vowel duration of a stressed syllable is always longer than the vowel duration of an unstressed syllable (tables 11–13 p. 37–38). When syllables contain vowels with a different quality, the author has suggested (e.g. when comparing the duration ratios presented in tables 15 and 16 p. 39–40) that there is manifested the influence of the vowel quality and position on vowel durations in words with syllable nuclei *i-u* and *u-e*, making the duration ratios different. However, it is possible to think that also closedness-openness of a syllable has a role to play in these instances. In words *viju*, *vidu* the ratio is greater (1.12–1.32), in words *kutne*, *kutce* the ratio is smaller (0.85–1.09). Such a difference between

duration ratios that results from closedness-openness of an initial syllable is manifested also in previous analyses.

One topic that definitely could be studied further is the vowels reduction of unstressed non-initial syllables in closed syllables and the influence of its extent on the duration ratios. Also greater standard deviation of duration ratios in both of the words with a closed syllable in table 9 (p. 35) could indicate the variability of the extent of reduction (standard deviation of duration ratios in sentence-final words is 0.54–0.74). The other topic that needs to be studied further concerns questions of secondary stress in longer words. What emerges from the analysis of trisyllabic words in course of the work is that the duration

of vowels in the third syllable is longer. It should be studied whether this refers to the word-final lengthening of a vowel or to the secondary stress.

The analysis of vowel duration of the speech of two speakers confirms that vowel duration in the Middle Vad dialect of Moksha can be regarded as an important correlate of stress: the vowels of stressed syllables usually have longer duration than the vowels of unstressed syllables. The questions of Moksha prosody and other possible correlates of stress deserve to be studied further.

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# REFERENCES

- Aasmäe, N. 2006, Stress and Quantity in Erzya, Tartu (Dissertationes philologiae Uralicae Universitatis Tartuensis 6).
- Lehiste, I. 2007, The Finno-Ugric Prosody Project. — LU XLIII, 1–10
- Lehiste, I., Aasmäe, N., Meister, E., Pajusalu, K., Teras, P., Viitso, T.-R. 2003, Erzya Prosody, Helsinki (MSFOu 245).
- Lehiste, I., Teras, P., Help, T., Lippus, P., Meister, E., Pajusalu, K., Viitso, T.-R. 2005, Meadow Mari Prosody, Tallinn (Linguistica Uralica. Supplementary series / Volume 2).
- Lehiste, I., Teras, P., Pajusalu, K., Tuisk, T. 2007, Quantity in Livonian: Preliminary Results. — LU XLIII, 29–44.
- Девяев С. З. 1975, Словесное ударение в мокша-мордовском языке. — CИFU III. Pars I, 481–483.

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