

TYPES OF SYLLABLE TONEME IN THE ZIEMERI VARIANT OF
HIGH LATVIAN DIALECT

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ABSTRACT

The research permits to confirm the supposition concerning the functioning of two types of syllable toneme in the Eastern variants of the High Latvian dialect. The answer to the disputable question on the place of glottalization in the monophthongs and diphthongs with a broken (acute) syllable toneme is searched for.

INTRODUCTION

At present the amount of experimental phonetic research in the field of Latvia dialects leaves much to be desired. We have attempted to investigate a variant (sub-dialect) of a very peculiar and only partly explored High Latvian dialect called Augšzemnieku. The sub-dialect under consideration is still widely used basically in everyday life. The Ziemeri sub-dialect may be heard in the north-eastern part of Latvia adjacent to the border of the Estonian SSR. However, the Estonian language has not affected the Ziemeri sub-dialect to any notable extent. The variant in question belongs to the eastern group of High Latvian dialect. A distinctive feature of these sub-dialects is the mo-

nophthongization of the common Latvian diphthong *ie* (> *i*) and *uo* (> *u*), e.g. *sīva* < *sieva* 'wife'; *ūla* < *uola* 'egg'.

Two types of syllable tonemes function in the Ziemeri sub-dialect, namely, the so-called falling (\searrow) and broken (glottalized; \wedge), e.g. *rēit* 'to swallow' and *rēit* 'tomorrow'. The level syllable toneme (\sim) occurring in the Latvian standard language is substituted by the falling syllable toneme in the Ziemeri sub-dialect, e.g. *laīme* 'happiness', *māte* 'mother', *saūle* 'sun', in the Ziemeri sub-dialect are pronounced as *lāima*, *mūotē* or *mūota*, *sāula*. The two types of the syllable toneme were likewise distinguished by us in the sub-dialects used in the areas adjacent to that of the Ziemeri sub-dialect, namely, the sub-dialects of Alūksne, Jaunlaicene, Jaunroze, Karva and Veclaiene. To differentiate and identify a variety of syllable toneme, we investigated the fundamental pitch, intensity and the spectrum dynamics of vowels (vocalic centre of syllable).

So in the Ziemeri sub-dialect two types of syllable pitch are most strikingly correlated according to the dynamics (characteristic motion) and direction of the fundamental pitch in vowels. They are as follows:

1) the syllable pitch specified by a rather narrow range and level changes in the fundamental pitch, and also a falling, rising, or rising-falling direc-

tion of tone.

In the Latvian standard language, in which the falling, drawling and broken syllable toneme is contrasted, the falling toneme is more distinctly realized (with a falling direction of the fundamental pitch). Be it otherwise, it would coincide both, with a broken and drawling syllable toneme. In the system of two types of syllable toneme, functioning in the Ziemeri sub-dialect, it is essential that the falling syllable toneme should not coincide with the broken syllable toneme. Therefore, the falling syllable toneme is subject to greater variations - obtaining the characteristics similar to the drawling syllable toneme of the standard language;

2) a very distinct syllable toneme specified by a wide range and a c u t e changes in the fundamental pitch, and, likewise, a snift falling tone.

There are cases when the direction of the tone is sniftly falling in the first half of the vowel, but rising - in the second half of it without reaching the maximum frequency.

The second type of the syllable toneme is specified by a decrease in the regularity of vocal-chords vibrations, the so-called glottalization, pointed also out by A.Ābele, A.Laua, I.Lehiste, M.Neilande, M.Vecozola, and others. The design of the irregular vibrations of this kind bears resemblance to the broken toneme (the so-called stod) of the Danish.

Until all the variants of the High Latvian dialect are not examined experimentally, it is disputable in which part of the vowel with a broken syllable toneme, in Latvian sub-dialects, the loss of regular vibrations occurs, or where there is a complete discontinuation (break) of voice.

The analysis of spectrum dynamics of the vowels in the Ziemeri sub-dialect

proves the weakening, or even fading of formants, in the case of the broken syllable toneme, e.i. an a c u t e change in the dynamic design can be observed. In the sub-dialect under consideration, acute changes of the spectrum design are observed in the transition part of a diphthong. Sometimes the fading of formants is somewhat delayed, e.i. it occurs at the beginning of the second element. After the break some spectrograms all the three constituent parts of the formant are distinctive enough. In the monophthongs with a broken syllable toneme, of the Ziemeri sub-dialect, irregular vibrations or a complete disappearance (break) of voice occurs at about the end of a third part, or in the middle of the syllabic element.

When investigating syllable toneme by auditive methods, Latvian philologist A. Breidaks expressed a view that in many variants of the High Latvian dialect, the disappearance, or acute changes in voice occur in the first (prolonged) element of a diphthong or a diphthongal combination having a broken syllable toneme /1/. A. Breidaks refers also to the research made by A.Ābele and M.Lepika /2/, who had analysed by auditive method the texts of the Jaunlaicene, Jaunroze and Veclaicene sub-dialects, which are adjacent to that of Ziemeri. Yet in another contribution /3/ concerned with the Alūksne sub-dialect, which is also adjacent to its Ziemeri counterpart, on the basis of the experimental data obtained by kymographic analysis, A.Ābele states that acute changes occur in the final part of a diphthong. In the course of the experimental investigation of the other three variants of the High Latvian dialect, I.Martinsone observed acute changes in the middle or the second element of a diphthong uttered with a broken syllable toneme /4/. Summing up the statements mentioned above, we may conclude that the experimental research of the

vocalism used in different variants of the High Latvian dialect proves the occurrence of acute changes, or disappearance of voice, in the case of the broken syllable toneme, in the transition part, or the beginning of the second element of a diphthong. The fact is contradicted by auditory perception and, therefore, must be subjected to a careful experimental test. Experimental research of uninvestigated variants of the High Latvian dialect is left for the future.

In the spectra of the vowels with a falling syllable toneme, a distinct relevant feature - acute changes - are absent. The changes in the dynamic design of the spectra are l e v e l.

These occurrences testify to the fact that, in the Ziemeri sub-dialect, the broken syllable toneme is a marked element of opposition with regard to the unmarked toneme of the first type. This kind of toneme corresponds to the conventional term used for the broken syllable toneme. The first type of toneme is conventionally called falling, it would be more precise, from a phonological view point, to call the first type - unbroken or level.

According to dynamics and intensity direction in the vowels of the Ziemeri sub-dialect, two types of syllable pitch can be contrasted:

1) the syllable toneme specified by l e v e l changes in intensity and also by a rising-falling direction of intensity;

2) the syllable toneme specified by a c u t e changes in intensity, and, also, by an acute falling or rising-falling direction of intensity. In some cases intensity may have a quick fall in the first half and a rise in the second half of a vowel without ascending to a maximum intensity of the first half of a vowel.

We may conclude that in both types of syllable toneme a rising-falling intensi-

ty occurs, consequently, intensity direction (as well as the direction of the fundamental pitch) is of no significance in the differentiation of the types of syllable toneme in the Ziemeri sub-dialect. Both types are contrasted to each other by the presence or absence of a specific prosodic distinctive feature - an a c u t e or l e v e l characteristics of intensity changes (as well as the fundamental pitch changes).

Depending on the syllable toneme in the Ziemeri sub-dialect, long monophthongs differ as to their duration: long monophthongs with a falling syllable toneme (M_f) exceed long monophthongs with a broken syllable toneme (M_b) in their duration. An average correlation is: $M_f : M_b : M = 1,7 : 1,2 : 1$ (M - short monophthongs).

In the sub-dialect the duration of diphthongs is close to that of long monophthongs.

The differentiation of the syllable toneme types in the Ziemeri sub-dialect is based on the spectrum, fundamental pitch, intensity and duration of vowels. Each of these parameters plays a certain role in differentiating toneme. For example, the acute changes in the fundamental pitch and intensity, the decline in the timbre of monophthongs (reflected by the lowering of formants in a spectrum) and the reduced duration may signal the presence of a broken syllable toneme. Yet not a single parameter functions as the only, basic and reliable indicator. The spectrum, fundamental pitch, intensity and duration seem to compensate each other. It is credible that in certain phrases or intonation patterns the decisive role is played by one or the other of these distinctive features (for instance, it may be considered by preliminary observations that in interrogative phrases pitch, to a certain extent is deprived of its ability to differentiate syllable tonemes).

The syllable tonemes of monophthongal or diphthongal syllables, in fact, do not bear distinction among them - their distinctive features fully coincide. Judging by auditory perception, the distinctive features of the same kind are present in diphthongal clusters, which were not investigated by us.

We may conclude that both types of syllable toneme are contrasted to each other by the presence or absence of the specific prosodial feature - a c u t e or l e v e l changes in the fundamental pitch, intensity and spectrum. See also some illustrations (Fig. 1, 2, 3, 4) of the fundamental pitch and intensity of vowels with the both types of syllable toneme.

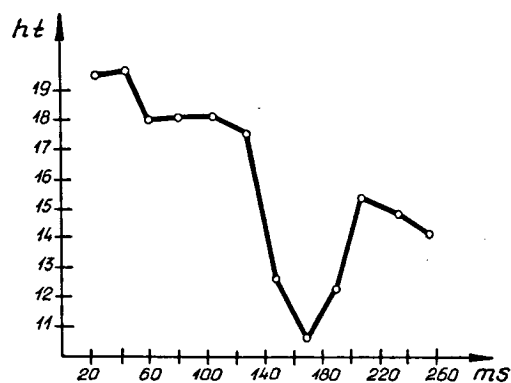


Fig. 1. Diphthong ie in the word spiera

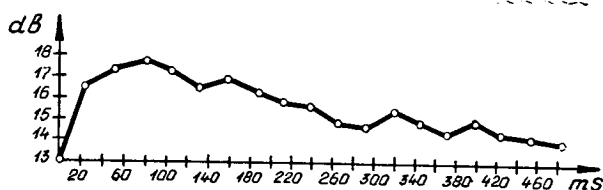


Fig. 2. Monophthong i in the word pira

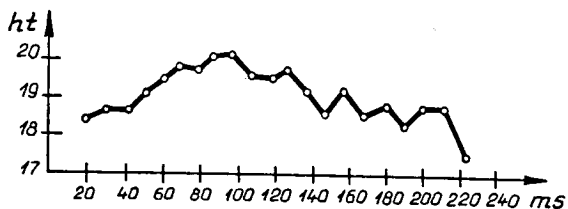


Fig. 3. Diphthong uo in the word kuosu

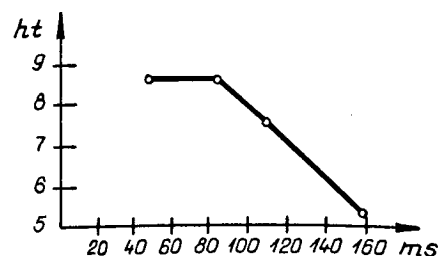


Fig. 4. Monophthong a in the word astu

We consider that, from the phonological view point, it would be more apt to call the two types of syllable toneme - a c u t e (or broken) and l e v e l (e.i. unbroken).

REFERENCES

1. A. Breidaks. Latgalisko izlokšņu prosodijas jautājumi. // Grām.: Veltījums akadēmiķim Jānim Endzelīnam 1873.-1973., Rīga: Zinātne, 1972, 89.-108.lpp.
2. A. Ābele un M. Lepika. Par Apukalna izlokšnēm. // Filologu biedrības raksti, 1928, VIII, 19.-49.lpp.
3. A. Ābele. Alūksnes izlokšnes intonācijas. // Filologu biedrības raksti, 1930, X, 80-91.lpp.
4. J. Martinsone. Vārkavas, Pildas un Zvirgzdines pagasta intonācijas. // Filologu biedrības raksti, 1934, XIV, 143.-165.lpp.