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Does melodic accent shape the melody contour in Estonian folk songs?

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ABSTRACT

This paper tests the effect of Thomassen's (1982) model of melodic accent in unaccompanied isochronous monophonic folk song style regilaul. *According to Thomassen, the value of melodic accent depends on the shape of melody contour.* Regilaul *songs are ancient Estonian folk songs that differ from Western folk song tradition. It was supposed that the singers' perception of melodically accented points has shaped melody contours in oral tradition, Melodic accents were probably used to accentuate lexical stresses. Lexical stress on the word's initial syllable is of central importance as a carrier of phonological information in Estonian.*

The coincidence of melodic accents with lexical stresses was examined for two types of verses: ordinary verses that have lexical stresses on metrically strong positions, and broken verses that have (one or more) lexical stress(es) on metrically weak position(s). It was assumed that lexical stresses, metric stresses and melodic accents are well synchronized in ordinary verses, but singers vary the melody contour in broken verses to increase melodic accent on metrically weak position(s) carrying lexically stress(ed) syllables.

The value of melodic accents at lexically stressed syllables was computed for both types of verses in 27 typical melody contours from one South-Estonian district. It was concluded that in the melody contour of old Estonian folk songs melodic accents are synchronized with lexical stresses. This logical result also indicates that Thomassen's model of melodic accents works quite well on Estonian old folk song regilaul.

Keywords

melodic accent, regilaul, melody variation

INTRODUCTION

Musical accent may be defined as an increased prominence, noticeability or salience ascribed to a given event. For the purposes of this work we define some musical accents discussed below: **melodic accent, lexical stress accent, metric accent**. Of the various types of accents proposed by music theorists, one of the most contentious has been the so-called "**melodic accent**". David Huron and Matthew Royal (1996) have tested eight main conception of melodic accent on three contrasting samples of music: Western folk music, isochronous passages of Western art music and ametric passages of Gregorian chant. They presumed that there can be the synchronization of phenomenal accent with metric position, and examined the coincidence of proposed melodic accents with points in the metric hierarchy. The results of all three studies were most consistent

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with a perceptual model of melodic accent developed by Joseph **Thomassen** (1982). In general, the model assigns more stress to contour pivot tones. Although the correlation with Thomassen's model of melodic accent was significant, the effect magnitude was relatively small and emerged most clearly in unaccompanied isochronous solo passages.

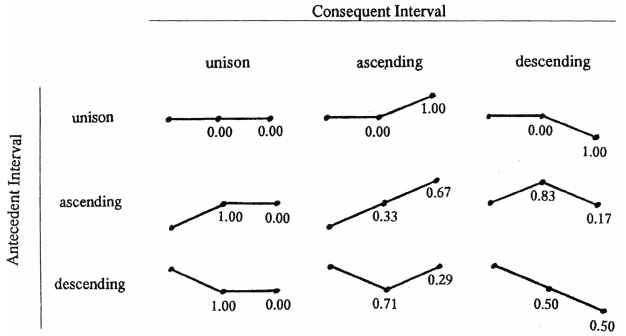

Figure 1. The figure, published by Huron, Royal (1996: 494), schematically represents the basic accent configuration in Thomassen's model of melodic accent. This algorithm uses a moving window containing three pitches. Accent values pertain to the second and third notes of the three-note contours.

Lexical stress accent refers to musical coinciding with word stresses. To facilitate reading, the shorter term **lexical stress** is used below. **Metric accent** is usually a complex phenomenon of different constituents, falling regularly on the same time stop to emphasize it (e.g. Lerdahl, Jackendoff 1996: 17, 18; Benjamin 1984: 358, 359). Time stops that usually get metric accents are called metrically strong positions.

WHY SHOULD MELODIC ACCENT SHAPE A MELODY CONTOUR?

Estonian folk song studies have proved that the temporal structure of *regilaul* is influenced by the prosodic structure of Estonian language. An important constituent of Estonian temporal structure is prosodic foot, having metric foot as its equivalent in *regilaul*. (Leino 1994; Ross, Lehiste 2001). It is supposed that the prosodic structure of Estonian language has also influenced the melodic structure of *regilaul*. We presume that there does exist the correspondence between word-stress-group (=metric foot) and melodic-accent-group (=melodic foot) in regular song lines.

In this paper we test the presumption that **melodic accent has had an effect on shaping typical melody contours** in Estonian old folk song *regilaul*. Furthermore, it is supposed that in traditional way of singing, singers synchronize melodic accents with lexical stresses.

This presumption is based on three basic propositions. 1) Thomassen's model of melodic accent was emerged most clearly in unaccompanied isochronous solo passages. As Estonian old folk song *regilaul* is unaccompanied isochronous monophonic folk song style, melodic accent can have influence on melodic movement there. 2) Folk singers tend to vary the melody contour in performing Estonian *regilaul*. Most melody variations are caused by metrically varied verses, called *broken verse*. But since there are no formulated regularities, the singers shape new melody contours in the course of variation. 3) In Estonian language lexical stress on the word's initial syllable is of central importance as a carrier of phonological information, e.g. it indicates word boundaries. Right impression of word prosody and intelligibility was also important in *regilaul*, because the text was usually the primary aspect, and the music followed mainly the build-up of the lyrics.

The analyses will concentrate on association between melodic accent and lexical stress. It will be tested, whether there does exist some synchronization of melodic accents with lexical stresses in *regilaul* song. Two questions regarding the role of melodic accent in shaping melody contours are asked. (1) Do lexical stresses located on metrically strong positions in ordinary verses coincide with melodic accents? Is melodic accent one of the constituents of metric accent? Coincidence of melodic accents with points in metric hierarchy is examined here. (2) Do lexical stresses located on metrically different (strong or weak) positions in so-called *broken verses* still coincide with melodic accents? Is the melody line varied by folk singers in cases when there emerges (for them) a discernible contradiction between musical/metric accent and lexical stress? To answer this question, the value of melodic accents at lexically stressed syllables is computed for ordinary verses and broken verses.

ESTONIAN FOLK SONG *REGILAUL*

By its musical and metric characteristic, Estonian song *regilaul* can be considered a Non-Western folk song (or at least as atypical Western folk song).

Regilaul is Estonian old folk song style, belonging to the ancient Balto-Finnic *runo* song (or runic song; Finnish *runo* 'poem' < 'singer, seer') tradition. Runo song is defined by its poetic structure as a folk song, where the main features are parallelism, alliterative rhymes, specific metre and certain traditional subjects and formulas (see: Leino 1994: 57–58). Presumably, runo song tradition has emerged 2–2,5 000 years ago and it was carried on by oral tradition up to the 19th century, in some outlying districts up to now. The traditional way of singing was a continuous process with turns for a leader and the chorus: one person sings a verse, the others join at the last syllables and repeat the verse, then a leader sings again, etc. (Figure 2).

The native term for Estonian local runo song tradition is *regilaul* (Low German or High German *re(i)g, rei(e)* 'song, round dance' + Estonian *laul* 'song'). Subtle differences between Estonian *regilaul* and Finnish-Karelian *runo* song are mainly due to the fact that Estonian language has un-

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dergone more changes than Finnish or Karelian during the past millennium. (About *regilaul*: Lippus 1995; Ross, Lehiste 2001; Särg 2005).

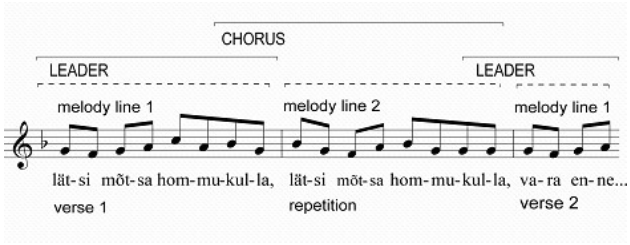

Figure 2. The basic structure of *regilaul* song: a verse is sung by the leader and repeated by chorus, usually joining on last syllable of the verse.

The main structural constituents of *regilaul* song are a verse and a melody passages called melody line, corresponding to a verse. Usually the whole melody consists only of one (or two different) melody line(s), which is (are) continuously repeated in the song. Usually there are a lot of verses, – and they can also be improvised, – but only a few different melodies in *regilaul* song tradition.

There is basically one-to-one correspondence between syllables of the language and notes of the melody in a song line. The "ideal" metre of *regilaul* is trochaic tetrameter with some special rules, connected with Estonian quantity relations: the peculiarity of Estonian languade is that quantity is not necessarylt the constituent of lexical stress. Metre of *regilaul* counts both with lexical stress and syllable length.

There are two types of song lines in *regilaul*. 1) Song lines, based on metrically regular, unambiguously trochaic verses (*ordinary verses*) having lexical stress and metric stress on metrically strong positions. 2) Song lines, based on different types of verses (*problematic verses*), including *broken verses*[1]. The term *broken verse* indicates a verse where the metric regularity is achieved only by the use of syllable length – placing short lexically stressed syllables on metrically weak positions and lexically unstressed syllables on strong positions. In those cases lexically stressed short syllable deprived of metric stress "loses" some prominence. The term *broken verse* originally refers to words, that are a bit destroyed because of they are divided between two neighboring stress units, e.g. *ta-lu / tü-tä-/re tu-/le-ve*. (Figure 3).

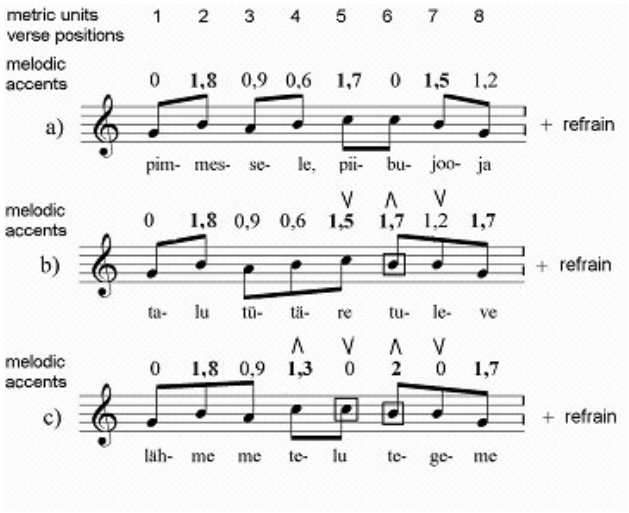

Figure 3. Melody variations in broken verses changing the values of melodic accents. Beams are connected according to word (~syllable group) stresses. Changes in melody notes are surrounded; arrows indicate important changes in melodic accents. a) Ordinary line sung with the main form of melody. b) Melody variation in verse with structure 2+3+3. c) Melody variation in verse with structure 3+2+3.

The traditional singing of broken verses is a challenge for folk singers, because they should not to exaggerate with "breaking". This may cause bad impression of wrong, dysfunctional accentuation, if word loses its prosodic characterization completely. Often folk singers vary melodies in such cases. Analyzing recorded verses and melody lines we can find out, which means the folk singer uses to harmonize the nature of song lyrics with the melody.

From researcher's viewpoint, every recorded song verse can be treated as an experiment, the realization of a mental "model" of a song line, witnessing how the singer perceives and adjusts verse structure and melodic structure.

MATERIAL

The materials from Karksi parish, South-Estonia, have been recorded in 1960–1975 by the team of Estonian Literary Museum, The Estonian Folklore Archives[2], with the main purpose to preserve Estonian old folk songs. In oral tradition, every act of singing is also recreation of the song according to mental "model". Recordings made in 1960–1970s are from the last singers who belonged to oral *regilaul* singing tradition in this region, and they were able vary melody line while singing. (In opposition, melodies are rather unvariable in folk song revival today, because songs are not recreated, only memorized.) The material consisted of 28 typical melody contours used in local tradition.

[1] Actually, broken verses can be quite regular, if syllables correspond to metric rules (quantity rules, etc.), and are one-by-one assigned to melodic units there. But in reality, broken verses often cause different kinds of irregularity while singing, especially in southern Estonian regions. Therefore, all broken verses are classified as being potentially problematic.

[2] The Arhcives were named The Department of Folklore at that time.

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MELODIC ACCENT IN ORDINARY VERSES

Hypothesis 1.

Hypothesis (1): Lexical stresses located on metrically strong positions in ordinary verses coincide with melodic accents. If melodic accents coincidence with points in metric hierarchy, **the value of melodic accents on metrically strong positions should be higher than that on metrically weak positions.** To find relationships between melodic accents and metrically strong positions (~lexical stresses), the value of melodic accents was computed for all verse positions, and then compared the values of metrically strong and metrically weak positions. The melody movement in songs was analyzed in its most frequent form called *basic form of melody*.

Results

There are 8 positions – 4 metrically strong and 4 metrically weak positions – in every basic form of melody. According to Thomassen's theory, melodic context determining the value of melodic accent is sufficiently developed since the third melody note from beginning. Often *regilaul* singing is running continuously; the end of a melody line is followed by a new beginning, or there is a small respite or some short refrain word(s) after every repetition of melody. Hence, the melodic accents could be quite reliably computed for the last 6 positions, while it is somewhat questionably for the first 2 positions, considering the last melody notes (or refrain notes) as the beginning of a new line.

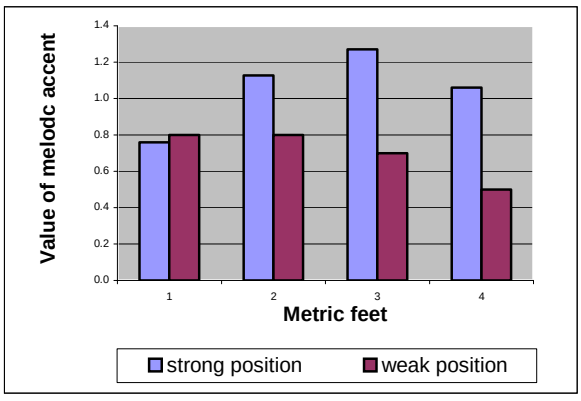

Figure 4. The average values of melodic accents computed for basic form of melodies. In the three metric feet, higher melodic accents occur on strong verse positions that coincide with lexical stresses in ordinary verses.

Figure 4 presents the average values of melodic accent for all verse positions in ordinary verses: the values for metrically strong positions are higher than the average values on weak positions for the last 6 positions. Two initial positions have quite equal melodic accents. This different nature of two initial positions could have several reasons. The first reason was mentioned above: the melodic context is not sufficiently shaped out. The second – it could be that the melodic context in the beginning of a song line is exceptional compared to the rest, because usually there is a rise in melody movement. The third – two first positions are also exceptional from the aspect of lyrics, because at the verse beginnings have several metric freedoms not allowed to in other metric feet (the rules determining the syllable length are not valid; there can be more than two syllables).

Thus we can conclude that basic melodic structure of typical *regilaul* melody in this region is influenced by the prosodic structure of Estonian language, because higher melodic accents occur on positions that coincide with lexical stresses in ordinary verses. This result also proves that the Thomassen's model works quite well on Estonian folk songs.

MELODIC ACCENT IN BROKEN VERSES

Hypothesis 2.

The hypothesis (2): Lexical stresses located on metrically different (strong or weak) positions in so-called *broken verses* still coincide with melodic accents. Furthermore, melody variations are caused by overcoming contradiction emerging between metric stress and lexical stress, or in other words – to accent melodically a syllable which carries main lexical stress, but is eliminated from a metrically strong position. While singing, the melody line is varied by folk singers only in cases when there emerges (for them) a discernible contradiction between musical/metric accent and lexical stress. If this statement is true **the value of melodic accents for lexically stressed syllables (also on metrically weak positions) should be higher than for lexically unstressed syllables (also on metrically strong positions)** in broken lines. To find relationships between melodic accents and lexical stresses in broken lines, the value of melodic accents was calculated for all verse positions in varied melody lines. Then the values of melodic accents were compared, having on one side positions with lexically stressed syllables and on the other side positions with lexically unstressed syllables.

As all melodies treated above did not offer equally good material for analyzing variations in the whole melody, the analyses were concentrated on some melody types. For those melodies the values of melodic accents for all positions were computed in three types of broken lines. The main types of broken lines verses had structures 2+3+3, 3+2+3 and 3+2+3. Numbers indicate the figure of syllables in a word or stress-group: 3 stands for a 3-syllable word (or group of shorter words), etc.

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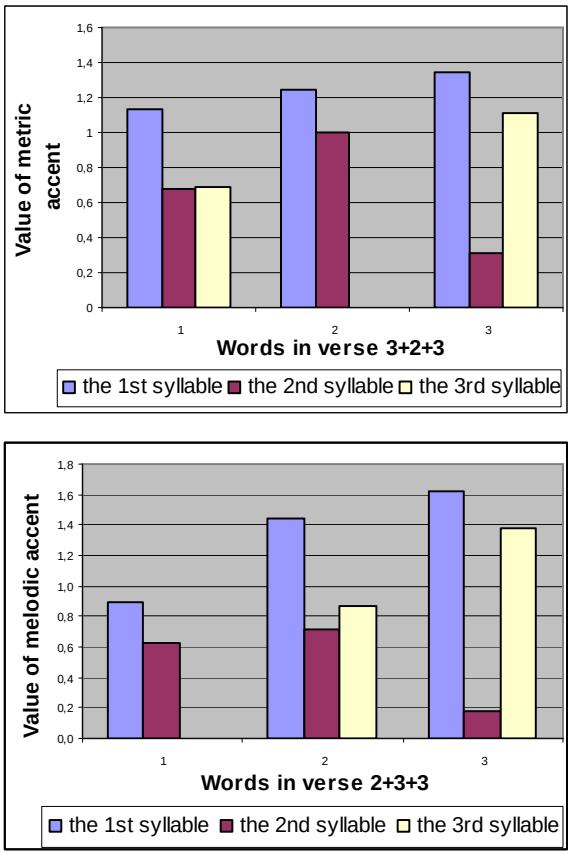

Figure 5. The average values of melodic accents on lexically stressed syllables are higher than on lexically unstressed syllables in broken verses.

Results

The results are presented in figure 5. The values of melodic accent in positions with lexically stressed syllables are higher than those in positions with lexically unstressed syllables in broken verses, included first two positions. E.g. in broken verses of structure 2+3+3 the average melodic accent for positions with lexically stressed syllable is 1,3, for other positions 0,6. Thereby, also the ratio between metrically strong and weak positions has been reversed, compared to regular song lines: average melodic accent for strong positions is 0,8, for weak positions 1,1. Those changes in accentuation pattern reveal that the singers have changed melody contour according to lexical stresses.

CONCLUSIONS

We can conclude that the melodic structure of *regilaul* is influenced by the prosodic structure of Estonian language, because more prominent melodic accents occur in positions, which coincide with lexical stresses in both ordinary verses and broken verses, causing melody variations while singing. This highly logical result persuades us that the Thomassen's model for computing melodic accents works quite well on old Estonian folk song *regilaul*.

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