

Estonian language and the rhythm of chorale tunes

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1. Introduction

The purpose of this article and its interdisciplinary nature

The purpose of this article is to analyse, using the example of three chorales, the compatibility of Estonian language rhythm with the rhythm of the hymn tunes and to propose solutions for episodes as well as whole hymns where the language rhythm deviates from the rhythm of the hymn tune. The terms “hymn” and “chorale” as well as “hymn singing” and “chorale singing” are used in this article synonymously. The study questions are: (1) how to measure the compatibility of Estonian language rhythm and the rhythm of a hymn tune; (2) whether there is a difference in the deviation of language rhythm and melodic rhythm between chorales that are notated using equal rhythmical values (isometric chorales) and chorales with a more versatile rhythm (rhythmic chorales); (3) what causes deviations between the rhythm of the language and that of the melody; (4) what can be done to eliminate these deviations in favour of the language rhythm. In this article I seek practical solutions that might provide the preconditions for the successful popularization of Estonian hymn singing. The purpose is not so much to “fix” one or two chorales, but rather to propose a working method for a language rhythm-critical revision of the whole Estonian chorale repertoire. This interdisciplinary applied science hymnological study goes beyond a theoretical humanities-based discourse (musicology, linguistics and theology) as it includes my experience as a practising ecclesiastical singer, and therefore qualifies as artistic research.

Regarding some of the terminology used

In the context of this study there are three terms that deserve special attention: “rhythmic chorale”, “rhythmicising of chorales”, and “isometric chorale”. An “isometric chorale” is notated mainly with equal note values (Example 2), whereas a rhythmic chorale is notated using several note values (Example 3). We need to consider separately “rhythmicising of chorales” as a process and “rhythmic chorale” as a result because of an ontological problem. The starting point of a process of rhythmicising is always an isometric chorale. The result of the process of rhythmicising however, may be either (1) a new rhythmical score in written form or (2) the auditory rhythmisation from an isometric chorale score of a so-called rhythmic performance. The ontology of these results is fundamentally different.

Another term that inevitably needs explanation is “language music” (*keelemuusika*). This newly instituted hymnological term has to be defined through prosody. The three parameters of prosody are: duration, loudness, and pitch. Language music becomes apparent through observing one, two or three prosodic parameters and implementing them into music. The Estonian hymn repertoire consists mainly of Estonian language settings of hymn tunes originating from different foreign language music spheres. As the melodic contour already exists, the third parameter (pitch) becomes irrelevant and we can scrutinise only the first and second parameters (duration and loudness).

Specification of the genres of ecclesiastical song

In the specification of the genres of ecclesiastical song I rely on the Letters of St Paul to the Colossians and to the Ephesians. I intend to demonstrate how the taxonomy “psalms, hymns, and spiritual songs” (Col 3:16, Eph 5:18–20) becomes logically and hierarchically evident in the practice of Estonian ecclesiastical song. The hierarchy in the taxonomy of genres is important in terms of the transmission of some of the techniques of psalmody (with prose text) to the process of improving Estonian hymnody (with text in strophic verses). Through this hierarchical sequence the connection between the taxonomy in the Letters of St Paul and this study becomes relevant.

The word and music in ecclesiastical singing

In Christian discourse the text of a song is not only a narrative that consists of the syllables, idioms, and sentences, but reflects a divinely inspired doctrine that is the Word of God and therefore has a

fundamentally special status. This status transfers more or less also to selected non-Biblical texts, including the texts of hymns. In addition there is also the mystical understanding of “the Word became flesh” (John 1:14) or the God-man Jesus of Nazareth. It is rationally very complicated to make a connection between the Scriptural text as the Word and the God-man Jesus, who is the Word that became flesh. However, one cannot deny a strong cognitive connection between them. According to my understanding there is a subjugation of music to the Word in ecclesiastical chant at least in two symbiotically involved dimensions – theological and prosodic.

The difference between German and Estonian languages

Vernacular hymn singing spread to Estonia from Germany. Music historian and renowned scholar of hymnology Toomas Siitan has discussed the identity of Estonian ecclesiastical song and asked the most penetrating question in modern Estonian hymnology: “Are we talking about Estonian ecclesiastical song or ecclesiastical song in Estonia?” (Siitan 2001: 38). Siitan has also stated that “Ecclesiastical song in the Estonian language is entirely borrowed. We are so used to this fact that we have almost given up the search for original idiomatic thinking that is essential to the Estonian language” (Siitan 2020: 8).

One of the most important special features of the Estonian language is that it is a durational language: the duration of a phoneme may determine the meaning of a word. From a musical viewpoint the relation of the word accent and the prolongation of the accented syllable is most important. In German, the accentuation and prolongation of a syllable are largely linked (Marasek 1997; Dogil and Williams 1999; Rapp 1994; Jessen *et al* 1995; also Jessen 1993; Dahmen and Weth 2018: 20). In other words the main principle is that a syllable that is accentuated is also prolonged. In Estonian there is no such regularity – an unaccented syllable can also be perceived as the longest syllable in the word.

The problem

The core problem from the position of Estonian hymn singing is based on the prosodic differences between German (an Indo-German or Indo-European language) and Estonian (a Uralic language). If we agree with the proposition that language influences the rhythm of a chorale tune we find ourselves in an awkward situation: we have hymn tunes that originate from one language music and texts that are from another language sphere. Whilst singing we cognitively understand this contradiction, especially if the musical rhythm forces us to deviate an Estonian word so that the meaning of the word changes. The question that arises is whether and how it would be possible to measure methodically the appropriateness of Estonian language rhythm for a chorale tune rhythm that originates from German language rhythm.

An overview of earlier treatments

There are no specific studies about the rhythm of the Estonian language and the rhythm of melody in the context of Estonian hymn singing. However, a temporal structure analysis has been carried out with Estonian runic song. Jaan Ross and Ilse Lehiste came to the conclusion that in a performance of a Karjala Lament there is one basic note value of 450 milliseconds (ms) (Ross and Lehiste 2001: 125–126). Additionally, Jaan Ross has demonstrated that in Estonian swing song recordings there are two basic note values of 300–350 ms and 800–850 ms (Ross 1989: 68).

In the context of runic song the connection between text and melody has been researched by Taive Särg, who concluded that “the perception of audible stress in runic song depends on the structure of the melody as well as on the individual manner of singing of the performer” (Särg 2005: 203). “Analysis of the melodic variation demonstrates the impact of the verse structure, including the duration of a syllable (and its related quantity degree [in Estonian *välde*]) on the lengthening of a verse and on changes in the melodic contour.” (Särg 2005: 206). The work of Taive Särg is also very important because it highlights the field of prosodic tension between the German and Estonian languages. The earliest Estonian linguists erroneously believed, following the example of German prosody, that stress on a syllable automatically means lengthening. Only in 1853 did Eduard Ahrens clarify the separation of accent and prolongation. (Särg 2005: 225–226).

This kind of field of tension is also apparent in the musical thinking of Veljo Tormis. Example 1 shows clearly how the isometric version of the tune *Vaikne kena kohakene* (an Estonian folk tune) is better suited to the text than a “German language music-specific” composition by Ferdinand Mühlhausen. Tormis labels the latter as “German slosh” (Tormis, Lippus 2008: 54–55) because the rhythm of the melody badly distorts the quantity degrees of the Estonian words.

Although the problem of singing in Estonian has not been treated in the context of ecclesiastical singing, there are two thorough texts by Tuudur Vettik (Vettik 1939) and Richard Ritsing (Ritsing 1938). Both authors were highly esteemed choir conductors as well as composers. They approach the topic from a practical point of view and give instructions to choir conductors as to how to implement text-related qualities in choral performance.

2. Material and method

The Material

For this article I use three chorales: (1) *Oh nuta oma häda*,¹ (2) *Võta nüüd Issandat*² and (3) *Jumal, mu süda igatseb Sind*.³ (1) The first chorale is ideal for analysis as it is included in the hymnal of the Estonian Evangelical Lutheran Church (KLPR 75) as well as in the experimental edition number 2 of the Hymnal Commission of the EELC (LKPV 3). This hymn is especially attractive for analysis because of its very interesting secular origin. (2) The second chorale (KLPR 306) was chosen to demonstrate how an isometric hymn tune is nearly perfectly consistent with the rhythm of the Estonian text. (3) The third chorale (KLPR 318) can be classified as a rhythmic chorale. This hymn is very popular in the EELC. I investigate the deviations of the rhythm of the text and that of the melody in this chorale and look for solutions to improve the singing of this popular hymn in terms of language rhythm, which I call “language-rhythm-wise singing”.

The method

For this research I devised a method that allows the statistical measurement of the compatibility of the rhythm of a hymn tune and the rhythm of the Estonian text. To implement the method I compare the rhythm of the words that have two or more syllables to the rhythm of a chorale tune. One-syllable words are not included in the analysis because in the case of an isolated word we need at least two syllables to evaluate the durational proportion of the syllables.

In everyday Estonian speech many words seem to have syllables of equal duration. However, if we pronounce words with a strong inner intention, especially whilst singing, there is always one syllable that is longer than the other(s). **The core of my method is to identify the syllable that is perceived to have the longest duration.** Why do I talk about “the syllable that is perceived to have the longest duration” and not about “the longest syllable”? In linguistics (phonology) there is a thorough classification of the durations of phonemes. I do not evaluate syllables on phonological grounds – **my treatment is purely singing-specific.** As a result, in this study I do not identify the quantity degrees and connect them with the rhythm of a hymn tune. For practical reasons the procedure adopted is very simple – **the longest syllable in the word is the syllable that can be extended so that the word will neither be distorted nor its meaning changed.** In words with more than two syllables it might seem that there is more than one competitor for the longest syllable. It is true that in music you can always prolong the last syllable of a word with more than two syllables without considerably distorting the word. To follow my method it is crucial to find **the one syllable** that is the longest in the word. **In words with more than two syllables – according to my method – it can never be the last syllable.** I then determine the number of deviating episodes. The higher the percentage of deviation, the more the rhythm of the chorale tune is in contradiction with the rhythm of the text.

¹ Tune *O Sacred Head now Wounded*, original tune Hans Leo Hassler *Mein Gmüth ist mir verwirret*; text *Weep o Christians (Bewein o Christenmensch)*.

² Tune and text *Praise to the Lord (Lobe den Herren)*, attributed to Joachim Neander.

³ Tune and text *Nearer, still nearer, close to my heart*, Leila Naylor Morris.

3. Analysis

The deviations in the isometric version of *Oh nuta oma häda* are shown as shaded in Example 2. The results in Table 1 reveal that the deviation is 14%. This percentage is highest in the second verse (18%) and lowest in the fourth verse (6%). The deviations in the rhythmic version of *Oh nuta oma häda* are also shaded in Example 3. The results are presented in Table 3 and show a deviation of 44%.

The analysis of the hymn *Võta nüüd Issandat* shows that the deviation in this chorale is zero. I have added this hymn to my research to show how an isometric chorale can be compatible with the rhythm of an Estonian text.

The chorale *Jumal, mu süda igatseb Sind* can be treated as a rhythmic chorale. Example 5 shows a considerable deviation of 57%, which means that in the whole hymn there are more rhythmically distorted words than words concordant with the rhythm of the melody. In the first verse the deviation reaches two thirds of all words (67%).

4. Discussion

Chorale *Oh nuta oma häda* – comparison of isometric and rhythmic versions

To get an interpretational view I sang this chorale with various rhythmic blueprints.⁴ Musically, a rigorously isometric version with breaths at the end of every line was not able to compete with a rhythmic version. The latter was indeed much more vivid and musically interesting. However, this “musical success” came at the price of distorted Estonian language. Then I tried to sing from the isometric score but using rhythmic performance, in other words I tried to sing according to the rhythm of the text as much as possible. **This kind of singing aspiration can be called narrative or story-telling chorale singing.** My experience demonstrated that rhythmic performance from an isometric score is no less vivid than performance from a rhythmic chorale score. Thanks to the more vigorous tempo there is no need for breaths in the middle of a line (see Example 2), and it is quite enough to breathe at the end of a line. The speech-like tempo helped considerably to bring out the correct language rhythm, and as a result the narrative of the text was more natural and more easily perceived.

A statistical view shows that the deviation between the rhythm of the Estonian language and that of the melody was more than three times higher in the rhythmic chorale score than in the isometric chorale score: in the former the deviation was 44% and in the latter 14%. There can be no doubt that the isometric version is more compatible with the rhythm of the Estonian language than the rhythmic version. Therefore I continue the journey towards language-rhythm-wise hymn singing with the isometric version.

Chorale *Oh nuta oma häda* – a journey towards language-rhythm-wise hymn singing

To increase the rhythmical compatibility of melody and text I analysed every episode of deviation and proposed an alternative rhythm or an alternative wording. To achieve this I had to make only slight changes (see the result in Example 9). For some further fine tuning in language-rhythm-wise singing I used a non-metrical method of melodic writing as was practised during the Middle Ages (see Example 10).

When I started work with this chorale I did not dare to expect such a good result. As a singer I began to understand this chorale from a totally new point of view and perceived the story of the chorale in a fresh and far more comprehensive way. It is noteworthy that the material did not essentially change that much.

Chorale *Võta nüüd Issandat*

This hymn is notated as an isometric chorale. According to the method there is no deviation in this chorale. The 3/4 metre brisk tempo gives this chorale an enthusiastic and vigorous attitude and favours language-rhythm-wise rhythmic performance.

4 It is possible to hear these different versions on the 10th video lecture of the “School of Ecclesiastical Song”, Jõks 2021a (36’42” onwards).

Chorale *Jumal mu süda, igatseb Sind*

In this chorale the deviation percentage is the highest among the three chorales of this study (57% overall, and in the first verse as high as 67%). The prosodic rhythm of the text and the rhythm of the melody are essentially in conflict. In the first verse (see Example 5) all the deviations are due to the frequently occurring rhythmic combination long-short. To solve this problem I replaced this combination at each occurrence with a short-long combination (see the result in Example 13) with the result that the deviation decreased from 57% to 11% (see Table 9). To decrease the deviation further we would have to consider changing the wording. However, if we recall that this is a very popular hymn in the EELC, this would be inadvisable.

An interesting question follows: would it be possible to provide a language-rhythm-wise version without changing the text at all? What if we forget the melody completely and look at the text as a poem? By doing so we realize that in the first verse of this poem there is a distinct division into groups of three (see Illustration 3). This means that the deviations in this hymn might simply be the result of the fact that the text is in 3/4 metre whilst the tune is in 4/4 metre. When I applied the text to the melody in triple metre the result was astounding: there are only three episodes of deviation (see Example 14). As there were only three deviations I supplied rhythmic variations in these episodes. I also presented the material in a non-metric blueprint. For the final result see Example 15.

Singing this hymn from a new score in which there is a full compatibility of the rhythm of the text and that of the melody, the experience was very interesting, not to say eye-opening. To my great surprise the triple metre helped to “forget” the former rhythmical and metrical blueprint very quickly. “Going into the text” happened very naturally and, dare I say, even seductively. The textual and musical narrative had a totally new quality of “flow” and the story of the hymn as an entity obtained a clearer and more comprehensive shape.

5. Conclusions

The analysis demonstrated beyond any doubt that in the rhythmic versions of chorales there is much more deviation between the rhythm of the melody and the rhythm of the text than in isometric chorales. The difference in the deviation was more than triple in the case of the rhythmic versions. Therefore the isometric chorale is more easily adjusted to the rhythm of the Estonian language. It is possible to sing a chorale from an isometric score and use a rhythmic performance that is based on the language rhythm and uses speech-like tempo. This kind of performance was labelled as narrative or story-telling hymn singing and its vigour as well as its attractiveness was at least on the same level as that of the rhythmic chorale. It was possible to adjust deviations by changing the rhythm and the wording. The corrections, however, were not extensive. As a result of these adjustments in the performance of the chorales *Oh nuta oma vaeva* and *Jumal, mu süda igatseb Sind* the textual and musical narrative became markedly smoother and more language-wise. Thus it is suggested that this approach can be used to correct other Estonian chorales. The most radical change was adjusting the metre of the chorale *Jumal, mu süda igatseb sind* by replacing 4/4 metre with 3/4 metre. With this adjustment it was possible to keep the text unchanged and there was a need for only three rhythmic variations in verses one and two.

After the extraordinary experience of singing the chorale *Jumal, mu süda* (originally in 4/4 metre) in triple metre and realizing that an isometric triple metre *Võta nüüd Issandat* is fully compatible with the rhythm of the Estonian text, it is possibly to suppose that the use of triple metre may considerably help to improve language-rhythm-wise singing in Estonian. The suitability of triple metre may be due to the fact that this metre allows a sensitive and very flexible word stress and the flowing application of rhythmic combinations of short-long and long-short with the necessary interpolation of isometric sequences. These sequences can easily be sung according to the language rhythm. The procedure undertaken with the chorale *Jumal, mu süda* may be defined as the de-rhythmicizing of a chorale, in as much as a rhythmic chorale was changed to a predominantly isometric chorale.

The work that was undertaken with the chorales *Oh nuta oma vaeva* and *Jumal, mu süda* is time consuming and involves considerable effort. However, I believe that Estonian hymns deserve such effort. This study has shown vividly that there are many solutions for more vigorous and attractive hymn

singing, all of which are kinder to the Estonian language than forcing the melodies of German songs on to an Estonian text.

It is therefore preferable to use an isometric chorale score and achieve a rhythmically more versatile result by applying a rhythmic performance that is based on the rhythm of the text. There is, however, a "serious problem" that emerges with rhythmic performance, as this kind of singing allows the narrative of the text to be heard more clearly so that any shortcomings in the poetry itself will become considerably more irritating.

For me personally there was one especially important conclusion that can be drawn from this study. It concerns two genres of the trichotomy of ecclesiastical song in the Letters of St Paul. The hypothesis that the first genre of ecclesiastical song (psalms) as "the elder brother" might have something unique to contribute to the better performance and deeper understanding of the second genre (hymn singing) was in my opinion confirmed. The application of the methods of prose text ecclesiastical song to the hymns opened a completely new vista on the chorales. This can be characterised by the flow and completeness of the textual and musical narrative, which makes the perception of the chorale story considerably smoother and more natural.

Tabula gratulatoria

Mari Tarvas, Ave Teesalu, Mart Humal, Mart Siimer, Tauno Teder, Pärtel Lippus, Anu Kõlar, Jaan Ross, Anu Schaper, the School of Sacred Chant, the students of hymnology in EAMT.