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Aspects of Octatonicism in the Music of Eduard Oja

Oktatoniškumo vaidmuo Eduardo Ojos muzikoje

Abstract

In music-theoretical discussions on early 20th century modernism, special attention has been paid to the role of non-diatonic scales, and to the octatonic scale in particular. That discourse, however, tends to concentrate on analytical examples drawn from the oeuvre of a limited number of iconic composers (Debussy, Scriabin, Stravinsky, Bartók, etc.). To get a fuller picture of the octatonic practices in that period, the output of many other noteworthy (but internationally lesser-known) composers has to be taken into account. In the music of the Estonian composer Eduard Oja (1905–1950), octatonicism is of particular importance. Octatonicism is used in several of his chamber works written during the first half of the 1930s. Among them, the first piece *Lento, con moto* from the piano cycle *Silent Moods* (*Vaikivad meeleolud*) holds a special place. It is noteworthy for being based on seventh chords of one octatonic collection. In analysing *Lento, con moto*, I will introduce a special type of notation (minimized voice-leading graphs), combined with other neo-Riemannian methods (voice-leading zones).

Keywords: Eduard Oja, Estonian music, early 20th century modernism, octatonicism, neo-Riemannian theory, voice-leading zones, minimized voice-leading graphs.

Anotacija

XX a. pradžios muzikos modernizmui skirtose teorinėse diskusijose ypatingas dėmesys kreipiamas į nediatoninių dermių svarbą ir ypač į oktatonines dermes. Tačiau šiose diskusijose dažniausiai analizuojami pavyzdžiai iš kelių visuotinai pripažintų modernizmo kompozitorių (Claude'o Debussy, Aleksandro Skriabino, Igorio Stravinskio, Bélos Bartóko ir kitų) kūrybos. Norint susidaryti įvairialypiškesnį oktatoninių dermių taikymo vaizdą to meto muzikoje, būtina į diskusijų lauką įtraukti ir kitų iškilių, nors galbūt mažiau tarptautiniu mastu žinomų, kompozitorių kūrybą. Oktatoniškumo vaidmuo ypač svarbus estų kompozitoriaus Eduardo Ojos (1905–1950) muzikoje. Oktatoninės dermės taip pat naudojamos keliuose jo kameriniuose kūrinuose, sukurtuose XX a. 4 dešimtmečio pradžioje. Tarp jų išsiskiria pirmoji pjesė *Lento, con moto* iš ciklo fortepijonui „Tylios nuotaikos“ (*Vaikivad meeleolud*). Atkreiptinas dėmesys į tai, kad harmoninę jos medžiagą grindžia oktatoninio garsaeilio septakordai. Analizuodamas *Lento, con moto*, pasitelkiau specifinę notaciją (supaprastintas balsavados schemas), derinamą su kitais neorymaniškosios analizės metodais (pvz., balsavados zonų išskyrimu).

Reikšminiai žodžiai: balsavados zonos, supaprastintos balsavados schemas.

Introduction

In the great majority of instances, music-theoretical research is concerned with works that have already been accepted as an integral part of the historical canon and are well represented in concert programmes. The choice of works for analysis thus tends to reflect (and implicitly vindicate) the present historical canon, rather than encourage the audience to reconsider it. This, however, certainly is not the case with the music of Eduard Oja¹ (1905–1950). In Estonian music history, the composer, choral conductor and music critic Eduard Oja holds a secure, yet somewhat controversial position. Although now acknowledged as one of the most remarkable composers of his generation, the greater part of his output has not enjoyed much popularity among musicologists. During Oja's lifetime, only a limited number of his major works found their way into concert halls, and even most of those failed, despite occasional critical acclaim, to attract wider attention. Interest in his music was revived only in the 1980s.

One of the most important parts of Oja's legacy is his chamber music composed in the first half of the 1930s, including the piano cycle *Silent Moods* (*Vaikivad meeleolud*), a suite entitled *The Trilogy of Time* (*Ajatriloogia*) for cello and piano, and the *Piano Quintet*.² All these works feature a specific scale known as the octatonic – a term introduced by Arthur Berger (1963: 20) for a scale in which whole tones alternate with semitones. Traits of octatonicism could already be found in Franz Liszt and Nikolay Rimsky-Korsakov. In the early 20th century, octatonicism played an increasingly important role in the music of Maurice Ravel, Claude Debussy, Alexander Scriabin, Igor Stravinsky and Béla Bartók. In an Estonian context, however, it could still be considered as a strikingly novel feature in the 1930s.³

In the first part of the article, I will summarize some of the aspect of octatonicism from a neo-Riemannian perspective. In the second part, I will present an analysis of Oja's *Lento, con moto*, the first piece from the piano cycle *Silent Moods*, and introduce a special method of notation (minimized voice-leading graphs) suitable for analysing music based entirely on one octatonic collection.

1. Octatonicism from a neo-Riemannian viewpoint

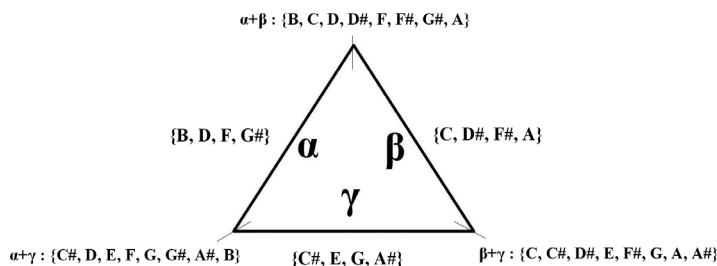
Its foundations laid in the 1980s by a group of American scholars, neo-Riemannian theory can be regarded today as one of the most important branches of music analysis. As indicated by its name, it grows from certain ideas expressed by the influential German theorist Hugo Riemann in the late 19th and the early 20th centuries. The methods of harmonic analysis he described have been incorporated into a flexible theoretical framework strongly influenced by the new analytical approaches of the 20th century, such as pitch-class set theory. In neo-Riemannian theory, chord relations are described in terms of transformations – procedures of deriving one chord from another. All possible relations of triads can be described using the operations of Riemann, but neo-Riemannian theorists have proposed additional operations for describing the relationship between seventh chords (Childs 1998; Bass 2011). In neo-Riemannian theory, voice-leading parsimony is one of the central terms, its definition depending on the chord types in question. Generally speaking, it means that chords have as many common tones as possible, and one chord can be derived from another by minimally shifting the remaining tones.

Neo-Riemannian theorists have combined Riemann's analytical procedures with new aspects not mentioned in his writings, an emphasis on non-diatonic (hexatonic, octatonic) scales, in connection with the above-mentioned voice-leading concerns, being particularly notable. The special structural features of the hexatonic and octatonic scales allow for connecting major/minor triads and seventh chords with minimal voice leading. In an hexatonic context, it is possible to construct chains or 'hexatonic cycles' (Cohn 2012: 211) of major and minor triads where "each is adjacent to those two triads to which it relates by single semitonal displacement" ($\{C, E, G\}$, $\{C, Eb, G\}$, $\{Ab, C, Eb\}$, $\{G\#, B, D\#\}$, $\{E, G\#, B\}$, $\{E, G, B\}$, $\{C, E, G\}$, etc.). Likewise, the octatonic scale allows for minimal voice-leading cycles consisting of diminished, half-diminished, minor, and dominant seventh chords. Although certain questions concerning octatonicism had already been theoretically addressed in the latter half of the 19th century, the most influential early treatise mentioning

octatonicism and the other "modes of limited transposition" was authored by Olivier Messiaen in 1944. More recently, the evolution of octatonicism, especially in connection with Rimsky-Korsakov and early Stravinsky, has been covered by several scholars, including Richard Taruskin (1985 and 2011). Other composers whose music has been analysed in view of the octatonic include Debussy (Forte 1991), Ravel (Baur 1999), and Scriabin (Cheong 1996).

Richard Cohn (2012: 212), drawing on the analytical tradition of Arthur Berger (1963: 20), defines the octatonic scale (collection) as "the union of two distinct diminished seventh chords" (for example, octatonic collection $\{C, D, Eb, F, F\#, Ab, A, B\}$ consists of the tones of diminished seventh chords $\{C, Eb, F\#, A\}$ and $\{B, D, F, Ab\}$). In the present article, to facilitate comparing the pitch content of the three octatonic collections, they will be denoted as a sum of two distinct diminished seventh chords. In Scheme 1, the sides of a triangle are marked with letters α , β , and γ . Each side of the triangle represents one transposition of the diminished seventh chord: α stands for $\{B, D, F, G\#\}$, β for $\{C, D\#, F\#, A\}$, and γ for $\{C\#, E, G, A\#\}$. Accordingly, the transpositions of the octatonic scale can be denoted as follows: $\alpha+\beta$ stands for $\{B, C, D, D\#, F, F\#, G\#, A\}$, $\beta+\gamma$ for $\{C, C\#, D\#, E, F\#, G, A, A\#\}$, and $\alpha+\gamma$ for $\{C\#, D, E, F, G, G\#, A\#, B\}$. Denoting the transpositions of the octatonic as a sum of two diminished seventh chords may have certain advantages over the other various practices (I, II, III; A, B, C, etc.) because it intuitively reflects the relationship between the transpositions of the octatonic scale in terms of common tetrachords. As demonstrated in Scheme 1, every transposition of the octatonic has one diminished seventh chord in common with another transposition. For example, octatonic collection $\alpha+\beta$ has diminished seventh chords α in common with $\alpha+\gamma$. For any two diminished seventh chords that produce an octatonic collection, I will use the term "constituent chords".

All the dominant and half-diminished seventh chords of an octatonic collection can be derived from one of its constituent (diminished seventh) chords by displacing one pitch by a semitone. That feature of the octatonic has been studied by Benjamin Boretz. According to him, the

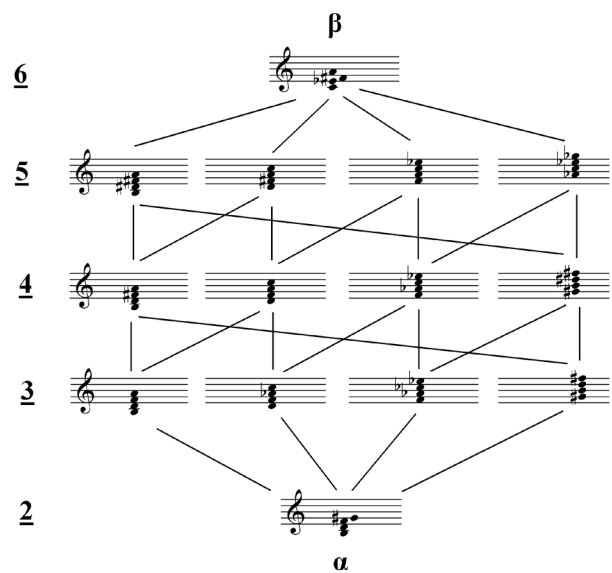


Scheme 1. Diminished seventh chords α, β , and γ as constituents of octatonic collections $\alpha+\beta$, $\beta+\gamma$, and $\alpha+\gamma$

relationship between any two chords (or pitch-class sets) can be described by relating them to a third set called the referential set. For example, in interpreting the relationship between half-diminished seventh chord $\{G\#, B, D, F\# \}$ and dominant seventh chord $\{E, G\#, B, D\}$, the diminished seventh chord $\{G\#, B, D, F\}$ functions as a referential set. Both chords can be derived from it by replacing one pitch with a note a semitone higher or lower: that half-diminished seventh chord can be derived by replacing F with $F\#$, and that dominant seventh chord can be produced by replacing F with E (Boretz 1972: 161-163). The term 'Boretz region' (Cohn 2012: 152-153) is used for a group of four dominant and four half-diminished seventh chords which can be derived from a diminished seventh chord in the way described above: by replacing its one pitch with a note a semitone lower (for dominant seventh chords), or by replacing its one pitch with a note a semitone higher (for half-diminished seventh chords). If diminished seventh chord $\{B, D, F, G\#\}$ is chosen as the referential set, then all the four dominant seventh chords derived from it ($\{Bb, D, F, Ab\}$, $\{Db, F, Ab, Cb\}$, $\{E, G\#, B, D\}$, and $\{G, B, D, F\}$) produce the octatonic collection $\alpha+\gamma$, and all the half-diminished seventh chords derived from it ($\{D, F, Ab, C\}$, $\{F, Ab, Cb, Eb\}$, $\{G\#, B, D, F\# \}$, and $\{B, D, F, A\}$) produce the octatonic collection $\alpha+\beta$.

Various graphic models have been designed to describe the relationship between seventh chords (Douthett and Steinbach 1998: 256; Cohn 2012: 157-158). However, considering that in some of Oja's works (*Lento, con moto* from *Silent Moods*) the tones of only one transposition of the octatonic are used, I will introduce a model for describing seventh chords of one octatonic collection. In Scheme 2, seventh chords of the octatonic collection $\alpha+\beta$ are arranged in five rows and marked with underlined numbers from 2 to 6. The constituent chord α is displayed in the lowermost row 2 and β in the uppermost row 6. All the four half-diminished, minor and dominant seventh chords that can be produced in that octatonic collection are displayed in rows 3, 4, and 5, respectively. Chords that can be derived from each other by displacing its one pitch by a semitone are connected with lines. For example, all the four half-diminished seventh chords of the octatonic collection $\alpha+\beta$ can be derived from the constituent chord α by replacing its one pitch with a note a semitone higher. With minimal voice leading, two different minor seventh chord can be derived from any of the half-diminished or dominant seventh chords.

Scheme 2 presents an easy model for exploring "routes" from one diminished seventh chord to another in which minimal voice-leading is used exclusively. In an octatonic context, it is possible to construct 16 different chains of five chords which apply to the following conditions: each chain is initiated by diminished seventh chord α and ends with diminished seventh chord β (in the case of the octatonic collection $\alpha+\beta$ in Scheme 2). Every chord can be derived



Scheme 2. Diminished (2 and 6), half-diminished (3), minor (4), and dominant seventh chords (5) in the octatonic collection $\alpha+\beta$

from its preceding chord by replacing one of its pitches with a note a semitone higher. Thus, one of the 16 chains featuring minimal voice-leading is $\{B, D, F, G\#\}$, $\{B, D, F, A\}$, $\{B, D, F\# , A\}$, $\{B, D\#, F\#, A\}$, $\{C, D\#, F\#, A\}$.

In Scheme 2, underlined numbers (2, 3, 4, 5, 6) stand for the voice-leading zones of the respective chords. Richard Cohn (2012: 102–104) has used voice-leading zones mainly in describing the (hexatonic) relationship between major and minor triads. According to him, the voice-leading zone is "a collection of chords whose pitch classes sum to a constant value" (Cohn 2012: 213). In the present article, however, I will apply voice-leading zones in describing seventh chords in an octatonic context. The voice-leading zone ($0\dots11$) of a chord is the sum of its pitch classes, modulo 12. The practice of numbering all the notes of the twelve-note chromatic space originates in pitch-class set theory epitomized by Allen Forte. Integers 0, 1, 2, ..., 11 are applied to all the twelve tones C, C#, D, ..., B of the chromatic space. For example, the diminished seventh chord ($\{B, D, F, Ab\} = \{11, 2, 5, 8\}$) belongs to the voice-leading zone 2 by virtue of $11+2+5+8=26=2_{\text{modulo } 12}$. In analysing octatonic music, voice-leading zone numbers are informative for two reasons. Firstly, they facilitate grouping seventh chords of the same type produced in one octatonic collection. All the four seventh chords (either half-diminished, minor, or dominant seventh chords) of one octatonic collection also belong to one and the same voice-leading zone (They are each other's transpositions by $3n$ semitones. If $3n$ semitones are added to every pitch of a seventh chord, the sum of its pitches remains constant: $4 \times 3n = 12n = 0_{\text{modulo } 12}$). Secondly, they are useful in describing the process of deriving one chords from another because voice-leading distance can be modelled by subtracting voice-leading zone values

modulo 12 and taking the absolute value (Cohn 2012: 103). The voice-leading distance of the minor seventh chord {B, D, F#, A} and the diminished seventh chord {B, D, F, Ab} is 2 by virtue of $|4-2|=|2-4|=2$. The procedure of deriving the former from the latter involves replacing two pitches with notes a semitone higher (F→F# and Ab→A). However, voice-leading zone numbers can be misleading in some cases because they reflect the sum of the ascending and descending movements, rather than the number of the pitches involved in the transformation. For instance, the voice-leading distance of half-diminished seventh chord {B, D, F, A} and dominant seventh chord {Ab, C, Eb, Gb} is $|5-3|=|3-5|=2$, like in the previous case. This time, however, the seventh chords have no common pitches because deriving the latter involves three ascending semitones (B→C, D→Eb, and F→Gb) and a descending semitone (Ab→A). Therefore, in describing the voice-leading distance of chords, it is important to pay due attention to the number of replaced pitches.

In the octatonic scale, there are six different complementary pairs of seventh chords which have no common pitches, or in other words, the combined pitches of which produce a complete octatonic collection. Each of the first two complementary pairs consists of minor seventh chords related by a tritone: {B, D, F#, A} and {F, Ab, C, Eb}; {D, F, A, C} and {G#, B, D#, F#} in the octatonic collection $\alpha+\beta$. Each of the remaining four complementary pairs consists of a half-diminished and a dominant seventh chord: {B, D, F, A} and {Ab, C, Eb, Gb}; {D, F, Ab, C} and {B, D#, F#, A}; {F, Ab, Cb, Eb} and {D, F#, A, C}; {G#, B, D, F#} and {F, A, C, Eb}.

2. An analytical perspective: *Lento, con moto* from *Silent Moods*

Eduard Oja's works for solo piano are few in number, but demonstrate some of the paramount aspects of his style. The piano cycle *Silent Moods*, composed around 1930, was among the handful of works that Oja managed to publish during his lifetime and it can be considered as a calling card of Estonian piano music. There also exists a version for string orchestra written presumably in 1934. The cycle consists of three pieces (*Lento, con moto*, *Lento assai*, and *Andante*). *Lento, con moto* (Example 1) turned a completely new page in Estonian musical modernism for its use of octatonicism. The introduction of non-diatonic scales was one of the hallmarks of early 20th century modernism. However, in Estonian music of the 1930s, pieces based entirely on a non-diatonic scale were still unprecedented. In terms of pitch organisation, *Lento, con moto* is noteworthy for three reasons:

1. It is based on one octatonic collection ($\alpha+\beta$: {B, C, D, D#, F, F#, G#, A}) throughout and contains no other tones. Works based so strictly on octatonicism are relatively rare, although some examples can be found in the oeuvre

of Scriabin (*Prelude* Op. 74/3, *Allegro drammatico*). However, Oja's octatonic practice in *Lento, con moto* differs considerably from that typically exhibited in the music of the early 20th century modernists.

2. Unlike the great majority of early 20th century modernists, Oja uses only chord types (mainly seventh chords) found in 19th century music. This, however, is not true of all his octatonic works. In the harmonic language of *The Trilogy of Time* for cello and piano and the *Piano Quintet*, more complex chord structures dominate (Humal 1984: 29-31).

3. In *Lento, con moto*, seventh chords are arranged according to a special pattern characterized by regularly alternating voice-leading zones.

In analysing *Lento, con moto*, I have introduced a special type of notation (minimized voice-leading graph) that demonstrates the voice-leading properties of the octatonic scale (Scheme 3). At the heart of minimized voice-leading graphs lies the idea that an octatonic piece can be arranged into four voices, and in each voice only semitonal movement of two pitches occurs. This method is thus concerned with a special type of counterpoint possible only in an octatonic context. Unlike (Schenkerian) methods of contrapuntal analysis for essentially tonal music, minimized voice-leading graphs do not address questions concerning contrapuntal (tonal) hierarchy. The point of departure for minimized voice-leading graphs is the idea that all the seventh chords

VAIKIVAD MEELEOLUD

Silent Moods

I

Eduard Oja

The musical score for 'Lento, con moto' is presented in a piano arrangement. It begins with a tempo marking of 'Lento, con moto espressivo' and a dynamic of 'pp'. The score is written in 3/4 time and features a key signature of one flat. The notation includes treble and bass clefs, a key signature of one flat, and a tempo marking of 'Lento, con moto espressivo'. Dynamics range from 'pp' to 'ppp', and articulations include 'cresc.', 'mf', 'f', and 'morendo'.

Example 1. *Lento, con moto* from Eduard Oja's *Silent Moods*

Bars 1 2 3 4 5 6 7 8

A¹ *pp* *f* *p*

Voice-leading zones 4 3 4 3 4 3 4 3 4 3

Number of tones displaced by a semitone 1 1 3 3 1 3 1 1 1 3

9 10 11 12 13 14 15 16

A² *f*

4 3 3 3 4 3 4 3 4 3

1 2 2 3 1 1 3 1 1 3

17 18 19 20 21 22

B

4 3 4 3 4 3

3 3 3 3 1

Scheme 3. Minimized voice-leading graph for *Lento, con moto*

of an octatonic collection can be derived from one of its constituent (diminished seventh) chords by replacing a number (1, 2, or 3) of its pitches with pitches of the other constituent chord. One constituent chord “lends” some of its pitches to the other in order to produce any of the half-diminished, minor or dominant seventh chords of the respective octatonic collection.

Lento, con moto is in A¹ A² B form (bars 1-8, 9-16, and 17-22, respectively), A² being a slightly varied repetition of A¹ transposed by 3 semitones, and B functions as a coda. In Scheme 3, sections A¹ and A² are aligned to demonstrate their similarity. The piece is arranged in four voices according to the principle described above: there are only pitches G# and A in the soprano voice, D and Eb in the alto, B and C in the tenor, and F and F# in the bass. All doublings have been omitted. In minimized voice-leading graphs, the exact arrangement of voices is a matter of agreement. In choosing the position for the voices in Scheme 3, I have taken the registral arrangement of the first chord of the piece as a reference point. Sustained tones (e.g. F in bars 1-5 and G# in bars 9-13) are marked with dashed lines. Parentheses mark a voice in which both its tones are temporarily absent. For example, parentheses are displayed in the bass in bar 6 due to the lack of F or F#. Four-part minimized voice-leading graphs, combined with the method of voice-leading zones, are insightful only in music

based mainly on seventh chords. In order to be comparable in terms of voice-leading zones, chords have to contain a similar number of pitches. However, to incorporate the occasional triads into the general system of seventh chords and to facilitate comparing their pitch content, the tone preceding the parentheses can be taken into account as an implicit fourth pitch. Thus, in applying a voice-leading zone number, I read the chord in bar 6 as {F, G#, B, D#} (thus belonging to voice-leading zone 3), rather than {G#, B, D#}.

In Scheme 3, voice-leading zone numbers are provided below each chord. As we can see, only two different voice-leading zones occur in *Lento, con moto*: 4 and 3. In other words, it is based only on minor seventh chords and half-diminished seventh chords, and, what is more interesting, these chord types alternate regularly throughout the piece. Voice-leading zone 4 chords sound in the odd-numbered bars, and, in case of two chords in a bar (as in 3, 4, 11, and 12), on the downbeat. Chords of voice-leading zone 3 occur in even-numbered bars or on the upbeat. However, there are some exceptions to that rule. Bar 11 deviates from this pattern because it features two adjacent half-diminished seventh chords. On the downbeat, a minor seventh chord {F, Ab, C, Eb} would be expected by analogy with bar 3, but a half-diminished seventh chord {F, Ab, Cb Eb} appears instead. Thus, voice-leading zone 4 is replaced with 3 (circled)

in Scheme 3). Another exception can be found in bar 13. In this case, however, the pattern of alternating voice-leading zones has been preserved: the expected minor seventh chord {Ab, Cb, Eb, Gb} has been replaced with another chord of zone $\underline{4}$: {F, Ab, C, Eb}.

Given that *Lento, con moto* features regularly alternating voice-leading zones $\underline{4}$ and $\underline{3}$, the maximal number of different seventh chords in the piece could be 4+4 (Scheme 2). However, Eduard Oja did not use all the hypothetically available options. Of the four minor seventh chords ($\underline{4}$) available in the octatonic collection $\alpha+\beta$, only {D, F, A, C} and {F, Ab, C, Eb} occur. In regard to half-diminished seventh chords ($\underline{3}$), Oja realized all the available options. Although he deployed chord types extremely economically, the intensity of harmonic progressions varies considerably. The notion of harmonic intensity can be used to compare harmonic progressions in terms of common tones: progressions of chords having less common tones (complementary chords) are more “intense” than those having more common tones (parsimonious voice-leading). The most intense progressions involve seventh chords that have no common tones and produce a complete octatonic collection when combined. As noted previously, these relations occur only in pairs consisting of two minor seventh chords, or in pairs consisting of a half-diminished and a dominant seventh chord. As seventh chords of voice-leading zones $\underline{4}$ and $\underline{3}$ (minor and half-diminished seventh chords) alternate regularly throughout the piece, maximally intense progressions are absent in *Lento, con moto*.

Theoretically, there are 16 different ways to pair $\underline{4}$ chords with $\underline{3}$ chords: in 8 pairs, the chords have three common tones, and one tone is displaced by a semitone (e.g. {D, F, A, C} and {B, D, F, A} in bars 1-2). In another 8 pairs, however, the chords have only one common tone, and three tones are displaced by a semitone (e.g. {D, F, A, C} and {F, Ab, Cb, Eb} in bar 3). Below voice-leading zone numbers in Scheme 3, I have displayed the number of voices displaced by a semitone (mainly 1 or 3, except for bars 10-11, where 2 occurs due to adjacent $\underline{3}$ chords). It is noteworthy that in sections A¹ and A², adjacent instances of three displaced tones occur rarely (only in bars 3-4). In the coda-like section B (with the preceding bar 16 included), however, three tones are displaced five times in a row. Thus, there is a considerable increase in harmonic intensity in the final bars of the piece, which helps to enhance the sense of conclusion.

In *Lento, con moto*, considerations of pitch organization are eloquently linked with other musical parameters, such as dynamics, register, and texture. At first glance, the piece appears to pose no considerable challenge in terms of piano technique. In this regard, the piano cycle *Silent Moods* is clearly exceptional in Oja’s output, as his songs and especially the *Piano Quintet* feature highly elaborated piano parts comparable to those of Rachmaninov or Scriabin. Therefore, it is obvious that the highly refined ‘minimalistic’

piano textures are motivated by a programmatic pursuit of conveying certain mental conditions ranging from meditation and restraint to anguish. *Lento, con moto* is rich in subtle dynamic nuances that call for careful consideration. Section A¹ begins pianissimo, and from bar 4 onwards, an ascending upper-voice is accompanied by a gradual increase in dynamics that leads to forte in bar 7 (Example 1). Section A² follows a similar pattern, with an analogous culmination in bar 15. However, the culmination is more emphasized this time, since that bar defines the registral extremes of the piece (in the bass voice, D is doubled an octave lower). It is telling how the major triad {B, D#, F#} in bar 7 relates to the minor seventh chord {D, F, A, C} in bar 1, and, analogously, {D, F#, A} in bar 15 to {F, Ab, C, Eb} in bar 9. If combined, the pitches of {B, D#, F#} and {D, F, A, C} produce a seven-tone subset of the octatonic collection $\alpha+\beta$. This means that bars 7 and 15 present the “furthestmost” points of sections A¹ and A² not only in terms of dynamics and register but also in terms of pitch content.

Conclusions

Recently, one of the most widely discussed music-theoretical problems has been the origin of octatonicism. In analysing Stravinsky’s early music, some scholars, including Richard Taruskin, have argued that his octatonicism can be explained by the influence of Rimsky-Korsakov, with whom he studied privately. Taruskin has described how, in the process of studying Stravinsky’s music, he “discovered the scale’s previous history in Russia – something that was never a secret to Russian musicians, who knew it as the tone-semitone scale (*gamma ton-poluton*) or the Rimsky-Korsakov scale (*korsakovskaya gamma*), and also knew of its extensive use in the work of Stravinsky’s teacher and practically all of Rimsky’s pupils” (Taruskin 2011: 168). Rimsky-Korsakov can be rightly regarded as one of the main 19th century champions of that scale. His influence, however, may not be as readily detectable as suggested. Most of the Estonian composers of the generation preceding Oja were trained at the St. Petersburg Conservatoire either by Rimsky-Korsakov himself or by some of his colleagues. Nevertheless, there are only occasional traces of octatonicism in Estonian music in the period preceding *Silent Moods*.⁴ In searching for the possible historical models for *Lento, con moto*, one should pay attention to some composers generally not associated with octatonicism, such as Jean Sibelius, whose music was already well-known in Estonia in those days. Let us consider an excerpt from his *Swan of Tuonela* (Example 2). All the three highlighted half-diminished seventh chords ({B, D, F, A}, {D, F, Ab, C} and {F, Ab, Cb, Eb}) belong to one and the same octatonic collection, which, by the way, coincides with that ($\alpha+\beta$) used in Oja’s piece. Although Sibelius’s music

is essentially diatonic, octatonic implications clearly appear in the realm of half-diminished seventh chords. If one tries to imagine that excerpt without the lush ornamentation performed by the English horn, then it is not impossible to notice certain seeds from which Oja's harmonic idiom may have emerged.

Having produced a number of octatonic works in the first half of the 1930s, Oja somewhat surprisingly never returned to his octatonic style. In his later career, he authored several symphonic works and even an opera, but octatonicism is only passingly featured in them. How was that idiom found and why was it abandoned? – this is one of the greatest mysteries of Oja's oeuvre and, one might say, of modernism in general. What we know for sure, however, is that his music deserves internationally much more attention than it has been granted this far. Only a careful study of Eduard Oja and many other lesser-known 20th century composers can lead to a better understanding of the great variety of octatonic practices.

Example 2. Half-diminished seventh chords (voice-leading zone 3) of the octatonic collection $\alpha + \beta$ in Jean Sibelius's *Swan of Tuonela* (mm. 44–50)

References

- 1 Eduard Oja was born in the same year as the other important Estonian composer: Eduard Tubin, the foremost Estonian symphonist. The biographies of both eloquently reflect the vicissitudes of the time. Eduard Tubin was forced to leave Estonia as a war refugee, and Sweden became his home for the last four decades of his life. Eduard Oja died in 1950, having suffered for many years from severe depression and disenchantment. In the late 1920s and the early 1930s, both Eduard Oja and Eduard Tubin studied with Heino Eller (1887–1970) at the Tartu Higher Music School. In the context of the rather conservative tastes prevalent in Estonian musical life, Heino Eller and his students, known as the Tartu school of composers, were notable for their open-mindedness about the new ideas that had revolutionized Western music in the early 20th century. Eller, Tubin, and Oja were the three composers who epitomized Estonian musical modernism in the 1930s. But what did the word 'modernism' mean to the

concert-going audience? An interesting and maybe somewhat surprising definition of 'modernism' was provided in 1924 by Leonard Neumann, a singer and a man of letters, who sympathized with the endeavours of Eller. According to his generalization, for the concert-going audience, 'modernism' was a pejorative term. It was generally used in speaking disapprovingly of new music that was considered to be difficult, foreign-sounding, unpleasant and not to the taste of the audience. Of course, that attitude certainly was not unique to Estonia, but in a small society swimming against the tide has always been more difficult than in the major European cultural centres. For example, publishing symphonic works was practically impossible in Estonia in the 1920s and 1930s. The Cultural Endowment of Estonia for Music, a state-financed institution for music promotion, published mainly chamber music not exceeding the limit of about ten pages. Four songs, some piano pieces, and one multi-movement work for violin and piano was all that Oja managed to publish. None of his symphonic works were printed during his lifetime, and all of them, except for one, remain unpublished to this day. In 1930, Eduard Oja completed his first orchestral piece, a symphonic poem entitled *The Poem of Beauty (Ilupoem)*. During the preceding decades, only a few Estonian composers had been active in the field of symphonic music, Heino Eller being the most remarkable of them, and the symphonic poem could still be considered here as a novelty genre.

- 2 They are notable for a compositional technique for which Oja himself used the term 'style of the great gamma' (*suurgamma stiil*). He claimed to be the originator of that compositional principle and even applied for a scholarship to dedicate himself to writing a music-theoretical treatise on it. That plan, however, was not to be carried out.
- 3 Although rare octatonic passages can be found in some of the earlier works of Heino Eller, Eduard Oja was the first Estonian composer to write pieces based entirely on the octatonic.
- 4 Heino Eller, who had studied in St. Petersburg, was certainly knowledgeable of Scriabin, as can be heard in his works written in the 1920s, and he introduced that music to his students. But even if some of Oja's music may show an affinity to Scriabin-esque octatonicism, the harmonic practice in *Lento, con moto* certainly cannot be ascribed to his influence. In that piece, Oja uses only chord types found both in the octatonic and in the diatonic scales, thus uniquely reconciling strict octatonicism with 19th-century practices.

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Santrauka

Estijos muzikos istorijoje kompozitorius, choro dirigentas ir muzikos kritikas Eduardas Oja (1905–1950) užima tvirtą, bet drauge ir kiek kontroversišką poziciją. Nors šiandien jis pripažįstamas vienu ryškiausių savo kartos kompozitorių, didesnė jo kūrybinio palikimo dalis niekada nesulaukė deramo muzikologų dėmesio. Kompozitoriui esant gyvam tik vienas kitas iš jo reikšmingesnių kūrinių buvo atliktas viešuose koncertuose, bet net ir tada dauguma jų liko nepastebėti platesnės auditorijos, nors retsykais ir pasitaikydavo palankių kritikų atsiliepimų. Susidomėjimas jo muzika atgimė tik

XX a. 8 ir 9 dešimtmečiu. Praėjusio amžiaus 3 dešimtmečio pabaigoje–4 dešimtmečio pradžioje Oja studijavo pas Heino Ellerį (1887–1970) Tartu aukštesniojoje muzikos mokykloje. Turint omenyje to meto Estijos muzikiniame gyvenime įsigalėjusį gana konservatyvų skonį, Elleri ir jo mokiniai, vėliau pagarsėję kaip Tartu kompozicijos mokykla, pasižymėjo atvirumu naujoms idėjoms, sukėlusioms revoliucinių permainų XX a. pradžios Vakarų muzikoje.

Oja sukūrė nedaug kūrinių fortepijonui solo, tačiau kaip tik šiuose kūriniuose atsiskleidė svarbiausi jo stiliaus aspektai. Forte-pijoninis ciklas „Tylios nuotaikos“, parašytas apie 1930-uosius, buvo vienas iš nedaugelio Ojos kūrinių, kuriuos kompozitoriui pasisekė išspausdinti per visą savo gyvenimą. Šis ciklas laikytinas estų forte-pijoninės muzikos vizitine kortele. Pirmoji ciklo pjesė, *Lento, con moto*, atvėrė naują puslapį Estijos muzikinio modernizmo raidoje. Visa pjesė pagrįsta vieno oktatoninio garsaeilio tonais, joje nėra jokių kitų garsų. Pamažu muzikos praktikoje pradėtos taikyti nediatoninės dermės buvo vienas iš ankstyvojo XX a. pradžios modernizmo ženklų. Tačiau Estijoje net ir 4 dešimtmetyje kūriniai, sukurti pasitelkiant vien nediatonines dermes, buvo negirdėtas dalykas. Skirtingai nei dauguma XX a. pradžios modernistų, Oja derino griežtą oktatoniskumą su akordų tipais (daugiausia septakordais), labiau būdingais XIX a. muzikai. Negana to, septakordus jis išdėstydavo pagal tam tikrą logiką, grupuodamas juos į periodiškai besikaitaliojančias balsavados zonas. Richardas Cohnas vartojo sąvoką „balsavados zonos“, daugeliu atvejų apibūdinamas (heksatoninius) mažorinių ir minorinių trigarsių santykius. Pasak jo, balsavados zona yra „akordų rinkinys, kurį sudarančių tonų klasių suma visada lieka pastovi“ (Cohn 2012: 213). Šiame straipsnyje pritaikyta balsavados zonų samprata septakordų santykiams oktatoninės dermės kontekste. Analizuodamas *Lento, con moto*, naudoju specifinę notaciją – supaprastintos balsavados schemas. Jos remiasi idėja, kad bet kokią oktatoninį kūrinių įmanoma išdėstyti keturiais balsais taip, kad kiekviename iš jų būtų judama tik pustonio žingsniais.