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Quaternion of the Oppositional Rhythmic Archetypes, Based on the Examples of Lithuanian Folk and Contemporary Music

Abstract. Musical archetypes are approached here as concentrated communicative models to be tested by long lasting musical tradition as well as capable to assure the vitality of musical art. Early manifestations of rhythmic archetypes are found in Lithuanian ethnomusic. These archetypes could be characterized as communicating by oppositions. The quaternion of rhythmic archetypes is proposed in this paper: 1) diminutive, 2) rotational, 3) grouping and 4) proportioning. Each of the mentioned archetypes is acting in different way – by operating tempo, accents, meter or proportions. Oppositional rhythmic archetypes in modified forms manifest in contemporary music, and so they remain relevant for the search of national recognisability as well as the ground for the performance-oriented approach.

Keywords: archetype, opposition, quaternion, rhythmic value, accent, metrical rhythm, rhythmic pattern, formation, diminution, augmentation, rotation, grouping, proportioning, ethnomusic, contemporary music.

Introduction

The significance of musical archetypes seems to be related with communicative structures, proven by long-lasting musical tradition as well as assuring the vitality of musical art. In this course, archetypes should be discussed in more detail. In Jung's theory, archetypes are considered as universal, archaic patterns and images that derive from the collective unconscious (Feist, J., Feist, G. J. 2009). They are inherited potentials which are actualized when they enter the consciousness as images or manifest in the behaviour of interaction with the outside world (Stevens 2006). From the etymological perspective, the first part of this concept – *arche-* (from Greek *arkhē* "first, origin")[1] – appeals to somewhat archaic, mythological, ritualistic, while the second part – *-type* (from Greek *túpos* "sort, type, model, pattern")[2] – denotes structural attribution.

In this paper, the concept of archetype is further explored on the base of the Lithuanian ethnic heritage, particularly referring to traditional monodic songs as well as polyphonic ones called *sutartinės*. For this reason, archetype is disclosed not only as a generic term, but serves as an attribute of the national identity and contributes to the search for Lithuanianness. There is a variety of musical archetypes, and they interact with all the composing parameters such as melody, harmony, timbre, and so on. Yet rhythm plays an exceptional role in this process. It is not accidentally that the theories of musical origin claim: in the beginning there was rhythm (Riemann 1967: 803). The communicative potential of rhythm is familiar up to our days – tempo, accents, meter, proportions, just a few to be mentioned. The particular sort of archetypical manifestation is communication based on oppositions, as formed by rhythmic values, accents, meter or proportions. The concept of opposition is closely linked to the mythical mindset, inclined to divide things into groups and create a bipolar image of a world (Gimbutienė 1994: 110). Thus it could be speculated that the archetype of rhythm can only be oppositional as it is a product of the mythical consciousness.

As this discourse develops around the issues of archetype and rhythm, a question could accordingly be brought up – whether oppositional archetypes of rhythm remain relevant in the new fields of music such as aleatorics, sonorism, drone, spectralism, microtonality, serialism, minimalism and others. The goal of this paper is to answer (at least in part) this controversial question. The reached solution may possibly be related to the choice conducted by personal virtue. Aspiring for the national identity and communicability in music, the particular objects are chosen for the adequate research of rhythm. First of all, Lithuanian ethnomusic is in the centre of this study, embedded its origins to the times of Stone Age (Славюнас 1972: 7). In general, archaic polyphonic vocal-instrumental songs, as *sutartinės*, could be characterized by their syncretic nature. They apparently correlate with Lithuanian monodic folk songs (Čiurlionytė 1999: 113), which also get into the scope of this research. Furthermore, actualization of rhythmic archetypes in the 20th century is based on the examples of the oeuvre of Sergei Prokofiev, Charles Ives, Igor Stravinsky and Béla Bartók.

The method of this research could be referred to the concept of quaternion (lot. *quaternio*). The latter is related with the early human efforts to systematize the primeval chaos. In this process of systematization different images or models are invoked such as the number, square, cross, primal elements, mandala, etc. Those early systematizing methods are captured by science of the present day.

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[1]   Liddell, Henry George & Scott, Robert. A Greek-English Lexicon, http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text: 1999.04.0057.

[2]   Ibid.

To illustrate this notion only a few of overall multiplicity are to be mentioned:
- 4 major archetypes (Jung);
- 4 types of temperament;
- Semiotic square (Greimas);
- 4 categories of number (Лосев);
- 4 basic forces of subatomic particles;
- 4 blood types;
- 4 types of brain signals (Rosenboom); etc.[3]

In systematization of rhythmic archetypes, the methodology of quaternion is complemented by principles of analogy, logical analysis, comparativism. Besides the introduction and final conclusions, the paper includes the following chapters:

1. Quaternions' representation in music theories.
2. Theoretical insights into archetypical rhythmic communication.
3. Quaternion of oppositional rhythmic archetypes.

1. Quaternions' representation in music theories

One of the most archaic manifestations of quaternion could be identified in Lithuanian polyphonic songs *sutartinės*. The friction between two opposing bichords of thirds may be expressed by the formula $(2 \times 2)^1$ that represents two poles each containing two tones distanced by the interval of third. This primal quaternion is extended by antiphonic periods, and may be expressed as $(2 \times 2)^2$. Further on, shifting between strophes of text occurs, $(2 \times 2)^3$ accordingly, so continuing up to the culmination – ecstasy, i.e. $(2 \times 2)^n$. Thus ostinatic ritual sounding gains binary progression based on quaternion $(2 \times 2)^{1,2,3\ldots n}$ (Janeliauskas 2002: 144).

We can find other manifestations of the quaternion principle throughout the history of Western music. As for instance, the antique theory of composing widely used tetrachords, i.e. sequences based on four tones. While joining two tetrachords by common tone (joined system), each of them may be permutated for four times. Those permutations conditioned the harmonic changes, for example: Dorian – Phrygian – Lydian – Dorian. Finally, the four sequential tetrachords, joined or detached, embraced the whole diapason of the so-called perfect system (Герцман 1986: 29–69).

In Medieval multi-voiced music, there were only four perfect intervals (*perfectum*) – as unison, octave, fifth and fourth. Contrary to them, there were four imperfect intervals (*imperfectum*) – third, sixth, second and seventh.

Mensural rhythmic of *Ars nova* is also systematized by quaternions. Mensuration of rhythmic value contains four levels: 1) *maximodus*, 2) *modus*, 3) *tempus*, 4) *prolatio* (Евдокимова 1983: 99). In addition, Phillip de Vitry proposed quadruple mensuration of *semibreve*. The quaternion of *prolatio* is denoted as follows: a) *perfecta prolatio major*; b) *perfecta prolatio minor*; c) *imperfecta prolatio major*; d) *imperfecta prolatio minor* (idem: 122).

Renaissance polyphony is usually realized as four-voiced texture, which originated from the four major elements by Zarlin. According to him, while composing "for this particular number of voices, they are treated as natural, analogically to four elements, since every complex corpus is constituted of them; likewise any perfect music is made of this particular number of voices" (Ambrazas 1980: 26).

In the tonal era of music, quaternions may be identified in different aspects – in harmony, rhythm, texture, timbre, form, etc. Some of them have to be mentioned. In modern times, four-voiced choral texture becomes a generally consolidated norm. In the period of baroque, a suite of four movements is established, characterized by quaternion of different tempo: *allemande* (slow), *courante* (fast), *sarabande* (very slow), and *gigue* (very fast). In the tonal period of classicism and romanticism, cadences were articulated in each four bars. The four-movement cycle of sonata is one more instance of prevailing quaternion.

Theorists and composers of the 20th century also mention different manifestations of the quaternion principle. Valentina N. Kholopova reveals the quaternion of rhythmic types. In her opinion, the criterion of rhythmic quality is metre, as it determines rhythmic motion. Depending on how strictly regularity is respected, also regarding the quality of accentuation, two pairs of rhythmic criteria are indicated: regularity – irregularity, accentuation – non-accentuation. These pairs of criteria determine four basic types of rhythm: 1) regular accentuation, 2) irregular accentuation, 3) regular counting of time, 4) irregular counting of time (Холопова 1971: 76–77).

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[3]   The subject is more discussed in Janeliauskas (2003: 129–136).

Besides that, the criteria of analogical quaternion is applied to the systematization of texture. According to Kholopova, the functional development of textural voices is determined by a pair of particular phenomena: constancy and inconstancy of voice disposition, as well as the stability and variability of functions referred to voices.

A few more quaternions related to the serial principle of composing (Schoenberg) are worth mentioning. Each dodecaphonic series has four forms: *primus* (P), *retroversus* (R), *inversus* (I), *retroversus-inversus* (RI). When the first note of R is the last note of P, and the first note of RI is the last note of I then this composition of four forms is called quaternion (Коуотек 1976: 128). Besides that, each form of a series (P, R, I or RI) with all possible transpositions constitute the whole of 48 rows, collected in the so-called "magical square" (ibid.). Anton Webern applies dodecaphonic principle to construct a "magical square" made up of triads (P, R, I, RI).

After comparing different musicological quaternions, we can notice, that classification according to quaternion principle is applied to various aspects of compositional structure and sonic material. The principle of quaternion is usually invoked as a crossing marking of a telescope, which helps to elementarily classify and comprehend any phenomena acting in a chaotic multitude (Jung 1999: 253).

However, the mentioned musicological quaternions lack those fundamental features of classification, which highly developed sciences imply. Namely, they lack meaningful relations between different quaternions, opposition between components, and also purification of hierarchical aspects.

2. Theoretical insights into archetypical rhythmic communication

In order to comprehend the potential of archetypical rhythmic communication more deeply, we should recall the quaternion of psychological functions proposed by Jung (idem.: 127).
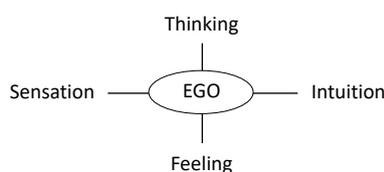
Jung asserted that all functions should act in harmony for the proper activity of the conscious. Psychological functions and communicative potencies of the conscious, probably, are similarly corresponding to each other as recipient and transmitter. The application of the analogy method seems to be reasonable in this case. Different phenomena of rhythm are accordingly sensed, comprehended, emotionally experienced or anticipated. Here, an analogical scheme of psychic functions corresponding to rhythm is proposed:
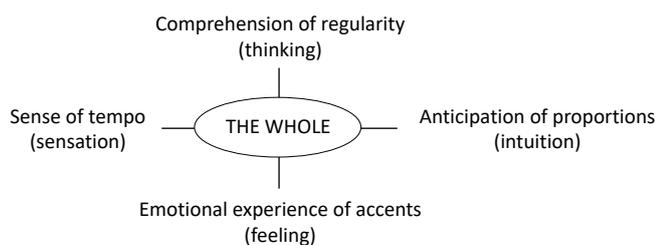
In this proposed model two axes are also at our disposal: tempo and proportions on the one hand, and regularity and accentuation on the other. The phenomena of the first pair communicate by relations (rhythmic values or proportional segments). These relations in one case are sensed by aural perception, in the other they are intuitively anticipated, foreseen. Another pair of phenomena manifests itself more as substantial (meter, accents). Those are rationally comprehended or emotionally experienced. The mentioned phenomena (based on relations or substantial) simultaneously inform the conscious of the recipient about rhythm as a certain whole. However, it does not necessarily happen all the time.

There is abundance of instances in modern music, where the vitality of rhythm is not the main focus of interest of the composer. In those cases the communication of rhythm is nearly suspended, bringing other musical factors to the fore (such as timbre, texture, serial constructions, and so on). Those suspensions of rhythmic communicability are called very differently: metronomically counted time, indeterminate musical time, serial concept of time, continuum, moment, intuitive space, conceptual field, etc. These manifestations evince the devaluation of the rhythmic communicative potential, which can hardly be accepted as an absolute constant.

While implementing the projection of some particular artistic tasks, the revival of expressive, forceful communication, assertion for performance situation, recognisability as well as turning attention to archetypes seems as an inevitable demand. It should be noted that the archetypical communicability of rhythm is not limited to psychological functions of the consciousness. It is rather a natural given than communication itself as well as it is rather potential than kinetics. Thus the essential feature of archetypical rhythmic communicability is the formation of communication by opposition.

Oppositions in various archetypes of rhythm are manifested in different ways, as follows: by the diminution or augmentation of rhythmic values, by rotating the strong and weak accents, by grouping even and odd meters, by proportioning macro and micro structures.

3. Quaternion of oppositional rhythmic archetypes

With respect to communicative potentials and nature of rhythm, four oppositional archetypes comprising the systemic quaternion are discerned:

1. Oppositional archetype of diminution/augmentation of rhythmic values.
2. Oppositional archetype of rotating the rhythmic accents.
3. Oppositional archetype of grouping the metrical rhythm.
4. Oppositional archetype of proportioning the rhythmic segments.

Let's discuss each of the oppositional archetypes in more detail.

3.1. Oppositional archetype of diminution/augmentation of rhythmic values

This archetype validates all that is related to the sensation of rhythmic pace, rate (density) and tempo. That is realized by shortening or lengthening the rhythmic values. The intense diminution of a long rhythmic value results in the sensation of increasing rate or acceleration. Such a process is usually opposed by the augmentation of rhythmic values, which causes the effect of deceleration, rarefying, and extensive release. The comprehension of the opposition of diminution and augmentation is reinforced by steady repetition of the selected rhythmic values. The oppositions of rhythmic values in Lithuanian monodic and polyphonic folk songs (*sutartinės*) manifest in elementary partitional structures. In Scheme I, we can notice the most common manifestations of rhythmic diminution and augmentation. The half note value is successively being shortened to eighth notes, while the latter, on the contrary, are oppositionally being augmented. The oppositions of rhythmic values, in the broadest sense, determine the sensation of tempo[4]. Firstly, it accelerates (→), later on – decelerates (←).

Scheme I

In Lithuanian monodic folk songs, we can find ingenious instances of this particular archetype. In Ex. 1 we see consistently diminishing openings of repetitive motifs, while keeping their constant core. Here, two initial crotchets are diminished to four eighth notes at the end of the melody, while the core of the motif, only slightly varied (♩♪♪♩ or ♩.), remains almost stable. In the next instance, the endings of motifs are diminished (Ex. 2). The crotchet, closing the initial motif, is further diminished in the followings measures (♪♪♪ and ♪♫). Meanwhile, the opening of four eighth notes is maintained stable through all the measures (mm. 1–3). The melody is closed by opposing augmentation (m. 4).

Example 1 (JČ 1)

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4   The concept of tempo here is treated differently from the traditional understanding.

Example 2 (JČ 46)

Oppositional diminutions may interchange, likewise in antiphons (Ex. 3). Here, the first motif (m. 1) is opposed by diminution (mm. 2–3), and further (m. 4 to mm. 5–6).

Example 3 (JČ 6)

Original rhythmic diminutions/augmentations are noticed in Lithuanian polyphonic songs *sutartinės*. The process of diminution/augmentation in *sutartinės* may be induced by consistently shortening or lengthening the rhythmic values in particular measures (Ex. 4). In the example, the notes of the first voice are consistently diminished to short values (mm. 1–3), while in the second voice the constant ostinato of crotchets is maintained. In the next instance (Ex. 5), opposition is formed in the contrary way. The rhythmic values of the second voice are augmented from eighth notes to crotchets. Meanwhile, the first voice maintains ostinato of the crotchets in a slightly varied way. It is interesting that both examples of *sutartinės* recombine the diminutions of motifs as well as maintain the stable core.

Example 4 (SP 140)

Example 5 (SP 173)

Diminution may appear in separate segments between the voices of *sutartinė* (Ex. 6). In the first voice, the diminution of eighth notes, unexpectedly, is opposing half rhythmic values, whereas the second voice, in a complimentary way, extends the missing links of the consistent process (Ex. 6a). These medium linking elements of the second voice (2 and 3) variably maintain the ostinato pulse of the *sutartinė*, which balances the opposing contrasts of the first voice (1 and 4). Diminution, which provokes the contra-rhythm, presupposes the demand of ostinatic pedal to maintain the pulse (Ex. 7). Contra-rhythm is formed by diminution of the crotchets to eighth notes between different voices (the first and the second). Sounding simultaneously, these voices, within limits of a motif, create a continuous, complimentary texture of eighth notes. The ostinato of crotchets in the third voice ensures the sensation of pulse as well as realizes the idea of the initial motif in the vertical axis of sounding.

Example 6 (ZS 4, *keturinė*)

Example 6a

Example 7 (SP 45)

Diminutional archetype is also actualized in contemporary music. In the excerpt of Sergei Prokofiev's *Sonata* No. 9 (Ex. 8) the diminution of three different velocities (half notes, crotchets and eighth notes) opposes the augmentation of full values. Besides that, the oppositional impression is reinforced by easily recognizable homophonic texture. The lower layers of this texture evoke the sensation of pulse in contrast to slowly fluctuating rhythmic values in the melody.

Example 8. Sergei Prokofiev. Sonata No. 9, Mov. 4, mm. 124–127

The analysis of the first archetype shows that the oppositions of acceleration and deceleration are usually accompanied by ostinatic pulse, while repeating one of the elements of diminutional process, for example, medium (Ex. 4–6); slow, varied by interchanging the motifs (Ex. 1, 3); and even the fastest (Ex. 2, 8).

3.2. Oppositional archetype of rotating the rhythmic accents

The emotional experience of the play of rhythmic accents is the essential trait of this archetype. Oppositions are created by rotating the particular figures or re-accentuating the weak metrical beats (Scheme II). We can notice how the accents are repositioned to the ending of the rotating figure, and on the contrary – to the beginning of the rotating figure (rotation: 1–2–3, 2–3–1, 3–2–1). The reposition of accents to the beginning or ending of a figure indicates the oppositions of accents in horizontal sequences. As for the vertical axis, oppositions are formed by re-accentuating the weak beats of a measure.

Scheme II

Different instances of accentual oppositions are observed in Lithuanian ethnomusic. Accents are opposed by polarizing different voices of *sutartinės* as well as rotating motivic figures (Ex. 9). Accents, while moving to the ending of a rotated motif, interchange between different voices: the first (**3**–1–2), the second (2–**3**–1), the first (1–2–**3**). Within each measure, the weak metrical beats are re-accentuated. More precisely, in different voices metrical accents are constantly opposed by figural accents of the weak beats. The oppositions of rhythmic accents can consistently be revealed by employing the reverse sequence of rhythmic figures. In the first voice of Ex. 10, the accents of weak beats or figural accents are focused, while the second voice moving in retrograde direction is opposed by accents of strong metrical beats.

Example 9 (ZS 75, *trejinė*)

Example 10 (ZS 5, *keturinė*)

In Lithuanian monodic songs, iambic motifs often are opposed to choree, and vice versa. Such accentual oppositions segment monodic phrases. The accents may be polarized at the beginnings of phrases (Ex. 11*)*. In this example, the beginnings of the initial motifs (m. 1, m. 3) are characterized by metric accents of choree nature, while the beginning of the second phrase is re-accentuated in iambic nature. Accentual oppositions may be distributed in a different manner. In Ex. 12, the second measures of phrases, moving towards the end, are opposing by their choree and iambic nature (m. 2, m. 5).

Example 11 (JČ 239)
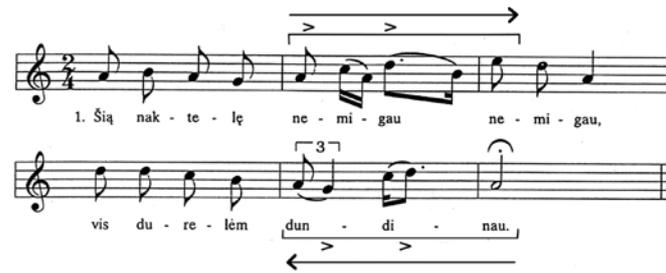
Example 12 (JČ 224)

Interesting interpretations of this archetype are found in contemporary music as well. In the excerpt of Charles Ives' music (Ex. 13), we can notice the repositioning of rhythmic accents to the ending of rotated figure (1–2–3, 2–1–3, 3–2–1). The latter is supplemented by double diminution of the rotation in the right hand.

Example 13. Charles Ives. Sonata No. 1, Mov. 4, mm. 47–51

3.3. Oppositional archetype of grouping the metrical rhythm

The nature of this archetype stipulates the perception of the periodicity of rhythmic groups. There are two main cases of such a grouping. Firstly, one group of metrical rhythm may oppose another, depending on whichever outweigh the perception of regularity. For example, the encounter of two different rhythmic groups (of even or odd nature) is followed by a periodic repetition of one of them (Scheme III: a b b_1 b_1). Secondly, while periodically repeating the first group, its opposition may temporarily be inserted (a a a b a_1). To add to this, the first case of grouping stipulates the persistence of periodicity, its consolidation after the encounter of oppositional metres. Meanwhile, the second case shows the overcoming of periodic inertia by temporarily inserting a metrical opposition.
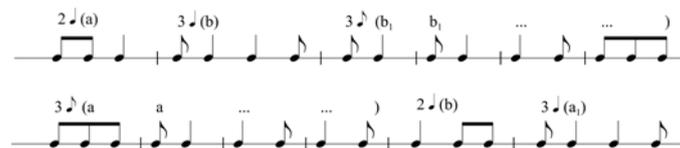
Scheme III

To illustrate the mentioned cases, we will discuss the several examples of Lithuanian folk music. In the first phrase of the Ex. 14 oppositional metrical groups are exposed (a and b: 4 ♪ and 6 ♪). Both groups are tantamount and are repeated. In the second phrase we notice the diminution of the second group (b_1: 3 ♪), which is periodically repeated till the end. This periodicity as well as its consolidation, obviously, is inspired by the encounter of the initial metrical groups. By eliminating the oppositional element (interfered a), the repeated motif (b) acquires the acceleration of impetuousness.

Example 14 (JČ 174)

In a different way, the opposition of periodicity is realized in another monodic song (Ex. 15). In this case, the periodicity for the oppositional metrical groups (a: 4 ♩ and b: 3 ♩) is created by a motif of diminished rhythm (b₁: 3 ♪). The repetition of the latter is interrupted by diminished opposition (a₁: 4 ♪).

Example 15 (JČ 39)

This instance brings us up to a sort of opposition, when after periodically repeated metrical group, a polar metric motif is inserted (Ex. 16). Thus, after repeating the initial group (a: 6 ♪), diminution follows (a₁: 3 ♪) with an interference of oppositional element (b: 5 ♪). The latter is also repeated. Interference of an opposing element causes the interruption or dissolution of the possibly emerging monotony of periodicity, what pre-conditions the renewal and continuation of periodicity. Similarly, the established periodicity (Ex. 17, a: 4 ♪) is interfered by oppositional groups: by a shorter one (b: 3 ♪) and by a longer one (b₁: 5 ♪) afterwards. Similar intersections, again, refresh and reinforce the comprehension of periodicity.

Example 16 (JČ 217)

Example 17 (ZS 177)

The phenomenon of oppositional periodicity is revived by the 20th century composers as well. As for instance, in the excerpt of Igor Stravinsky's *Sonata* (Ex. 18) the ostinatic pattern of sixteenth notes is contrasted regarding the configuration of the passages. Thus in the first two measures the weak beats are accented because of the leaps and, at the same time, opposition is formed to further establishing periodicity of crotchets as well as diminished eighth notes. Hence, we find gradually established periodicity of accented strong beats activated by opposition (interference of accented weak beats).

Example 18. Igor Stravinsky. Sonata, Mov. 3, mm. 1–8

3.4. Oppositional archetype of proportioning the rhythmic segments

This archetype embraces what relates to the prediction of rhythmic process, which is realised by oppositionally proportioning the rhythmic segments. Typically, it operates in rhythmic sets of different volumes. These may include motifs and sub-motifs, half-phrases and phrases, sentences and periods. Similar structures may be called differently depending on the articulation and other characteristics. Therefore, there are possible variegated names of oppositions: large and small, major and minor, long and short, and so on. The prediction of the rhythmic process could simply be described as anticipation, intuition or demand of the balance between the oppositional formations.

The most basic and obviously prognostic anticipation is invoked 1) by summing up smaller rhythmic segments to larger ones, or 2) vice versa – by opposing the larger rhythmic segments to smaller ones (Scheme IV, 1 + 1 ≈ 2 or 2 ≈ 1 + 1). Prediction of a balance may manifest in oppositionally set out more complex proportional segments, as follows: 3) by surrounding the mid segment; 4) *polarly* proportioning the equal segments; 5) by employing progressions of rhythmic sets; etc.

Scheme IV

These cases will be illustrated by examples of Lithuanian ethnomusic. In Ex. 19, the integral two-bar segment is divided into sub-motives (3 ♪ + 3 ♪) in the following bars (mm. 3–4). The latter are summed up (5 ♪). Both the first and the second phrases last for the same time (11 ♪). Thus, divided second phrase, in its total volume, proportionally weighs out the first, and thus balances the monodic line. In turn, the final motif (5 ♪), which opposes the two sub-motifs (m. 3) in its varied volume (6 ♪), balances the second phrase. Thus, in different proportional volumes, different cases of balancing are realized, namely, by division (in the extent of a monodic line), and by summing up (of one phrase).

Example 19 (JČ 82)

In Ex. 20, a motif, variably repeated three times, is summed up by two-bar phrase (mm. 4–5). This balance, in addition, is accompanied by gradual augmentation of rhythmic values, at the endings of motifs each time increasing the fourth notes (1, 2, 3 ♩, mm. 2–3, 5).

Example 20 (JČ 70)

The proportional balance may be anticipated in a different way too. In Ex. 21, segments of different volumes are balancing around medium value. Thus, the initial two-bar motif is prolonged by one bar (2 + 1), later it is shortened (2 − 1). A general count of bars is balanced, which equates to a total of three two-bar repetitions. In Ex. 22, the three-bar phrase repeated two times proportionally opposes the second sentence, constituted of three two-bar motifs. The total volume of the second sentence is equivalent to the first, because both sentences are proportional, counterbalance each other and contain the same amount of bars, i.e. 6 bars for each. We see analogous oppositions in *sutartinės*. For example, two-bar and three-bar motifs sound in different voices in ostinato (Ex. 23).

Example 21 (JČ 43)

Example 22 (JČ 63)

Example 23 (ZS 156, *keturinė*)

We also encounter with the multiple progressive summation of rhythmic segments, thus, with the prolonged realization of the anticipated balance (Ex. 24*)*. Opposite motifs are interchanging here, the second one extends its volume each time (a, a₁, a₂, i.e. 1 x 2 ♩, 2 x 2 ♩, 3 x 2 ♩). Every time the anticipation of the balance is delayed. The last three bars variably sum up all the former segments of the monodic line, and finally balance it.

Example 24 (JČ 151)

We find interesting examples of the proportioning the rhythmic segments in the music of the 20th century. In Béla Bartók's piece (Ex. 25), the motif of the left hand is proportionally brought up to a phrase. The progression is formed: 7–8–10 ♪. Later on, the ostinatic formations of eighth notes in the right hand are proposed, which sum up the collisions of seconds before treated as separate (7 in total). The ostinatic formations, by slightly deviating from the scheme, basically repeat the progressive sequence of values: 7–8–(4)–10 ♪. So, we notice an extended, prolonged realization of the anticipated balance as well as the summing accents of the first phrase implemented by the second phrase.

Example 25. Béla Bartók. *Mikrokosmos,* No. 140, mm. 1–12

Conclusions

The main results of a research are the following:

1. Archetypes constituting quaternion and their communicative possibilities have been explored and identified, such as:

- oppositional archetype of diminution/augmentation of rhythmic values, communicating by the sensation of tempo;
- oppositional archetype of rotating the rhythmic accents, communicating by emotional experience of accents;
- oppositional archetype of grouping the metrical rhythm, communicating by comprehension of regularity;
- oppositional archetype of proportioning the rhythmic segments, communicating by anticipation of proportions.

2. The values of opposing within each of these archetypes have been highlighted:
- diminution and augmentation of rhythmic values;
- re-accentuating of rhythmic elements;
- polarizing the even and odd metres;
- dividing and summarizing the rhythmic segments.

3. The methodology for systematizing the rhythmic archetypes (quaternization) has been created.

4. Musicological literature regarding quaternions has been comprehensively discussed.

5. Theoretical statements were based on the Lithuanian ethnomusic, namely, on archaic polyphonic (*sutartinės*) and monodic songs.

6. Several manifestations of oppositional rhythmic archetypes in the music of the 20th century's national composers have been analysed, such as works by Prokofiev, Ives, Stravinsky, Bartók.

The main conclusion of this research can be formulated as follows: the quaternion of oppositional rhythmic archetypes is an indispensable stimulus for fostering the national recognisability of music nowadays as well as creating an alternative to the evolving global, indifferent modernism.

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Abbreviations

JČ – Čiurlionytė, Jadvyga (1999). *Lietuvių liaudies melodijos* (The Lithuanian Folk Melodies, in Lith.). Vilnius.

SP – Paliulis, Stasys (1959). *Lietuvių liaudies instrumentinė muzika* (Lithuanian Traditional Instrumental Music, in Lith.). Vilnius.

ZS – Славюнас, Зенонас (1972). *Сутартинес*: Многоголосные песни литовского народа. Ленинград.

Opozicinių ritmo archetipų kvaternija remiantis lietuvių etninės ir šiuolaikinės muzikos pavyzdžiais

Santrauka

Opoziciniai ritmo archetipai – saviti muzikos komunikavimo modeliai, patikrinti tradicijos, kaskart atgimstantys ir atsinaujinantys skambesio išraiška. Išskirtinė opozicinių ritmo archetipų savybė – komunikuoti sudarant opozicijas: diminuojant ritmo vertes, rotuojant akcentus, grupuojant metrus ar proporcionuojant ritmo darinius. Pagal tai sudėstoma opozicinių ritmo archetipų kvaternija:

1. Opozicinis ritmo verčių diminavimo archetipas.
2. Opozicinis ritmo akcentų rotavimo archetipas.
3. Opozicinis metrinio ritmo grupavimo archetipas.
4. Opozicinis ritmo darinių proporcionavimo archetipas.

Šios kvaternijos archetipai savo komunikavimo pobūdžiu atliepia recipiento psichines funkcijas (G. Jungas). Tad komunikuojama tempo pojūčiu (1), akcentų išgyvenimu (2), periodiškumo suvokimu (3) bei proporcijų numanymu (4).

Archetipai tiriami remiantis archajiniais lietuvių muzikos pavyzdžiais – sutartinėmis, monodija. Taip pat analizuojama sumodernintа jų raiška šiuolaikinėje muzikoje (S. Prokofjevas, I. Stravinskis, Ch. Ivesas, B. Bartókas).

Pagrindinė tyrimo išvada: opozicinių ritmo archetipų kvaternija turi išliekamąją vertę puoselėjant dabartinės muzikos tautinį atpažįstamumą, komunikabilumą, koncertiškumą ir yra pozityvi atsvara globaliam beveidžiam modernumui.