

National Traits of Timbral Texture in the Symphonism of *Dramatic Frescoes* by Eduardas Balsys. The Quaternity of the Archetypes of Timbral Texture

Abstract. Timbral texture here is regarded as an outcome of an evolved composer's relation with sound, which manifests in autonomous empowerment of this parameter in respect of the ones like harmony, melody, rhythm, or musical form. This new notion opens new adequate ways to research orchestral compositions by Eduardas Balsys while putting an emphasis on the timbral priorities that integrate his nationalist musical style. In order to achieve this goal we develop an analytic methodology based on archetypal expressions of timbral textures (parenthetically observed in Lithuanian folk songs *sutartinės*). We focus on the quaternity of archetypes (antiphonic, responsoric, heterophonic and bourdon), the origins of which can be traced in archaic music (e.g. Lithuanian *sutartinės*). Throughout the history, these archetypes have gained different forms and metamorphosed into the deep subsystem of the modern orchestra. The main conclusion that we reached during this analysis of *Dramatic Frescoes* is that timbral priorities audiated by Balsys allowed the composer to reach an integral nationalist identity of all musical elements.

Keywords: timbre, timbral texture, archetype, antiphonic, responsoric, heterophonic, bourdon, orchestra, principle of music composing, *sutartinės*, 20th century music, nationalist style.

Introduction

One of the key traits of the 20th century music is the shift of attention from traditional parameters, such as harmony, theme, or musical form towards qualitative aspects, such as timbre. We address to this phenomenon as a shift, or an evolutionary step in composer's relation with the sound (see Janeliauskas 2018). Facing this phenomenon becomes the main inspiration to write the paper on the given subject. In our opinion, discussing the music of the prominent Lithuanian composer Eduardas Balsys and Lithuanianess of his works in general, should center on the aspect of timbre, as he is famous as a gifted master and teacher of orchestration. The author of this paper was lucky to study orchestration with Balsys¹. One of the most intriguing memories I have from these studies is that whenever you played a motif, or even a single clangour on a piano, Balsys could immediately tell exactly what instruments in the orchestra should play it. This personal experience allows us to assume that Balsys audiated sounds primarily from a timbral perspective. It is a logical assumption that this inner sensitivity to timbre furthermore associated various other sound structures that were adequate to his mindset.

We believe that Balsys' compositional practice exponentially exceeded the arrangement-based theory of orchestration of that time, as the latter was oriented towards the primal compositional levers – melody, harmony, theme, musical form, etc. The main value of this research lies in the need to investigate the distinctive points of Balsys' nationalist musical style from the perspective of timbral audiation, which arguably was one of the main staples of his audiation. Our point of view gives us an incentive to think that the secret to Balsys' nationalism lies in his orchestral, i.e. timbral, mindset. It is worth noting that nationalism is not reducible to a mere process of orchestral (timbral) decorating, it encompasses all sounding material that activates archetypal patterns of timbral expression, which carries the unfolding of national (in this case Lithuanian) traits. In the pursuit of our goal, we found a need to create an elaborate methodology, which encompasses the notion of timbral texture, its archetypes (antiphonic, responsoric, heterophonic and bourdon) and constituents of historic evolution, as well as transformations of these archetypes in orchestral works of the 20th century. This methodology enables us to at least partially substantiate the notion of compositional autonomy of timbre.

The main object of this research is *Dramatic Frescoes* (a monocyclic double *concerto* for violin *solo*, piano and symphony orchestra), which arguably is the one of the highest artistic value among all Balsys' compositions. In our quest to identify the types of timbral texture, we employ Lithuanian folk songs *sutartinės* as a partial research object. In addition, orchestral music of the 20th century is taken into account in order to see the *Dramatic Frescoes* in the context of Balsys' contemporaries.

¹ Judging from personal intensive communication with Eduardas Balsys that coincided with the last decade of his life (1973–1984).

The novelty and topicality of this research lies in a rather limited number of thorough researches of Balsys' creative works (see Narbutienė 2001), as well in a unique approach of ours. Perhaps the most significant research on our subject is made by Algirdas Ambrazas (2001). In his paper *Eduardo Balsio muzikos tautinis savitumas* [National Traits of Eduardas Balsys' Music] the musicologist stresses that "Balsys paid huge attention to national distinction of his music during all his creative live. He employed folk melodies very extensively and diversely..." (Ambrazas 2001: 184) Ambrazas notices, that thematic material of Balsys' original works of various genres is heavily concentrated with folklore. He indicates that the composer unraveled the most valuable and the most typical (in a sense of national identity) traits of Lithuanian folk melodies with the utmost subtlety (Ibid.). Furthermore, Ambrazas states that Balsys was interpreting folk material in a rather brave manner, depending on self-set creative goals; he was doing it do to his temperamental and passionate nature (Idem: 185).

Accurate remarks made by Ambrazas help us understand that Balsys' orientation towards ethnic music, alongside the prioritization of timbre, was a significant factor to his audiation. In his analysis of *Dramatic Frescoes* Ambrazas states that despite using a serial compositional method, which is outwardly distant to the diatonic nature of Lithuanian folk melodies, Balsys (who used mainly serial techniques in his latest creative period – *R. J.*), managed to preserve not only a unique national identity, but also some perceptible ties with certain elements of folklore (Idem: 194). This last insight lays a groundwork for our research.

We will present the contents of this paper in a following order: at the beginning, we will discuss the definition of timbral texture (1); shortly after, we will identify of the quaternion of the archetypes of timbral texture (2); then we will perform theoretical and historical analysis of each archetype (2.1–2.7; 3) and lastly, we will analyze the *Dramatic Frescoes* by Balsys (4) and present our concluding remarks.

1. Definition of the timbral texture

At the beginning of our research, it is necessary to define its central piece – timbral texture. At the first glance, this notion seems to be a mere partial aspect of a much broader and more inclusive term – texture. This is a widely used and discussed aspect of music, however its use and meaning in Russian musicology is what draws our particular attention. It is often used to describe a primal, immediate sensation of music, which does not yet extend to any of relation-based levels music cognition, such as logic of harmony, construction of the form, compositional plan or teleological solution (Kholopova 1979). This induces us to think of texture not only as a formal aspect of composition, but also as an abstract reflection, or (using a film terminology) a long-shot scene of composer's audiation, which communicates with the listener on a very low level of cognition.

This is a rather abstract and philosophical approach, however, in our belief it exactly what we need in order to discuss timbre in sense of audiation or music cognition. According to the infamous definition by Acoustical Society of America timbre is "that attribute of auditory sensation which enables a listener to judge that two non-identical sounds, similarly presented and having the same loudness and pitch, are dissimilar" (ANSI 1994). This definition perfectly describes what timbre is not, rather than what it actually is, thus helping us realize how abstract our sensation of this attribute can be when it comes to music cognition. In this research, we focus on composer's relation with the sound, when audiation of timbre becomes the main priority. One could say it is the composer's natural tendency to lean towards abstract aspects of musical material, which are best represented in timbral dimension. In this sense, we address the term "timbral texture" as a manifestation of autonomy of timbre in composer's audiation, which materializes as a principle of composing. It is expressed by timbral articulations of textural elements that form a timbre-oriented teleology.

2. The quaternion of archetypes of timbral texture: theoretical-historical manifestation

Constants and variables of music evolution is an inexhaustible source of questions. Metaphorically speaking, these are *ordinarium* and *proprium* of composing. We shall begin this chapter addressing these, continue with the reasoning of the quaternion of the archetypes, based on Lithuanian *sutartinės*.

2.1. Constant and variable constituents of evolution of composing

In his famous book *New Musical Resources*, Henry Cowell (1969) notices that musical language is constantly getting more complicated in the course of history. He alleges that this phenomenon is analogous to an ever-narrowing set of intervals in the overtone spectrum. According to him, unison (and octave) is

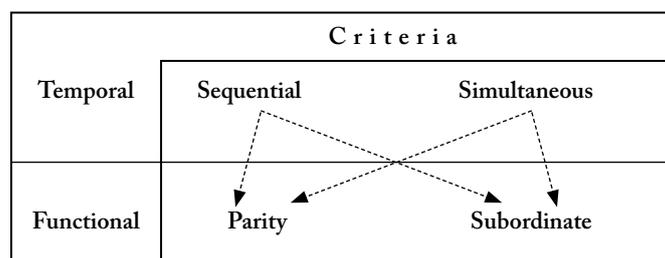
characteristic to ancient Greek and medieval monodies, while in High and Late Middle ages the musical language gets enriched with fifths and fourths. Thirds start dominating in Renaissance and it gets more and more complicated until Debussy and domination of the interval of second (and for the sake of more obvious evidences, we can extend it even further to The New Viennese school or even Spectral music, as the original of Cowell’s text was published all the way back in 1930). Therefore, even microchromatic music seems to be a natural step of evolution of musical language².

One may ask, what happens after we reach the intervals so narrow, that we are no longer able to discern them? Just like tapping a rhythm faster and faster, eventually reaching the speed of 16000 beats per second (16Hz), breaks our perceptual threshold and rhythm turns into pitch, indiscernibly small intervals tend to consolidate into a single abstract sound, which can be best characterized by its quality rather than pitch. This is where Cowell’s “spectral scheme of evolution” reaches the domain of timbre and we step into truly new musical resources.

It is also noteworthy, that it takes a different approach for a composer to prioritize timbre over pitches. In our previous researches, we addressed it as a compositional relation (see Janeliauskas 2018). Perception of timbre differs from perception of pitch in both psychophysiological and musical (teleological) aspects. This different relation with the sound suggests that there might be more “genetic” roots to timbral prioritization in parallel with “spectral scheme of evolution”. Audiation of timbre might be a relatively new phenomenon in Western music; however, the significance of timbre, as a key attribute of sound, has ancient roots in human society, that could allegedly be traced all the way back to the stone age. The aim of this chapter is to unravel the constituents of continuous timbral evolution of Western music in a form of archetypes of timbral texture.

2.2. Regarding the criteria of the archetypes

Having in mind how allegedly syncretic the activities of a Stone Age man were, it is natural to think that timbre had a crucial role. Not only because the phenomena of timbre itself is comparable with “acoustic syncretism”³, but also due to the fact that timbral attributes (roughness, brightness, etc.) came in aid of being aware of surroundings and general survival. It is worth noting, that timbre possesses strong structural archetypes, which are formed by the lifestyle of prehistorical people and the attributes they used, such as horn, drum, bow (string). These attributes, in a form of timbre-related archetypes, extend to the modern day and are reflected in many areas. For instance, formation of modern symphony orchestra (wind, brass, percussion, strings). The goal of this research is to determine archetypical uses, or principles that govern the use of timbre, which are typical to syncretic society. For this purpose, we will employ two pairs of criteria. The first pair is based on temporal indicators, denoting the use of different timbres in a sequence or at the same time. We will call them “sequential” and “simultaneous” respectively. The other pair is based on identifying the function of the timbre. We separate them into categories of “parity” and “subordinate”. Both pairs of criteria enables us to unravel the archetypes of timbral texture. We propose the following scheme (Scheme 1) of operation:



Scheme 1

² This is also reflected in other theoretical works, for instance, *Expliquer l’harmonie* by Jacques Chailley (1967). Yuri Kholopov also forms his idea of “overtone-driven music history” by absorbing ideas of intonational (monary) (see Janeliauskas 2002) modes by Asafyev, as well as ideas of parallelisms between overtones end history of musical styles by Cowell and Chailley (see Kholopov 1982: 52–104).

³ Primordial nature of overtone series.

Here we can describe four archetypes according to their characterizing criteria:

1. Sequential-parity, which we will address as “antiphonic”.
2. Sequential-subordinate that will be called “responsoric”.
3. Simultaneous-parity, which will be named “heterophonic”.
4. Simultaneous-subordinate, which we associate with the term of “bourdon”.

This quaternion seems to be in a syncretic connection with the lifestyle and actions of early societies. Let us imagine a hunt of large cattle, where distant hunting parties coordinate their actions via antiphonic signals, or a ritual, where the members of a tribe repeat after their leader in a responsoric manner. Next time the tribe members could communicate heterophonally, while singing in parities (*Schwebungsdiaphonie*⁴, *sutartinės*, etc.). Subordinations of movement and halt (as well as anticipation) are also very characteristic to this picture (hence the term “bourdon” is being employed). We would like to stress that all these archetypes are not strict schemata, but rather a methodology, which enables us to research peculiarities of polyphony from the syncretic era.

2.3. Archetypic manifestations in polyphonic music and their timbral potencies

Here we will shortly present Lithuanian *sutartinės*, which will be used as a grounding, as well as, means of illustrating the subject of our research. First, we will stress a few points that led us to this decision:

1. *Sutartinės* is a phenomenon of ethnic music that is of a key relevance to each Lithuanian composer who seeks to exploit his/her ethnic (National) roots⁵. This is a direct link to the oeuvre of Balsys.
2. As our research shows, *sutartinės* is a phenomenon of syncretic polyphony, which foreshadows the evolution of timbral-orchestral texture in an archetypic way.
3. There are around 2000 extant examples of *sutartinės*, which makes it one of the largest blocks of early polyphony in the world. This makes them a very object of scholarly and creative aspirations.
4. *Sutartinės* is a relatively thoroughly researched subject (Slaviūnas (1969, 1972), Paliulis (1959), Račiūnaitė (2000, 2008)). Ethnomusicologist Daiva Račiūnaitė is among the first scholars to research *sutartinės* as a continental phenomenon. According to her, we would greatly benefit from researches conducted by ethnomusicologists of different nationalities, as it would significantly contribute to the researches of early polyphony on the international scope (Račiūnaitė 2000: 189). She argues, that national peculiarities of *sutartinės* unfolds in many forms of folk group singing (i.e. it encompasses all aforementioned forms of polyphony – bourdon, ostinato, canon, organum, heterophony) that were distinctly different in folk music of other ethnic groups (Ibid.).

Račiūnaitė emphasizes a few key points, that we also find significant to our understanding of the characteristics of timbral texture archetypes. Primarily, it is the diaphony within an interval of a second and peculiarities of its performance. “Despite the different number of performers and various means of performance, there are always two voices sounding simultaneously” (Idem: 12). “The melodies of each voice intertwist in the musical material”, “the outermost notes of each melody penetrates the musical material, thus weaving colourful timbral patterns” (Idem: 13). According to many researchers, early dissonant (based around the interval of second) polyphony should sound similarly to the clangour of the bells, thus marking harsh and forced coalescence, as well as clashing of singers’ voices (Idem: 180). Vocal *sutartinės* are performed exclusively by women. Račiūnaitė also analyses peculiarities of vocal and instrumental types of polyphony and their interactions (Idem: 186–188), which is very important for our research.

These insights by Račiūnaitė will come to aid when thoroughly examining each archetype of timbral texture in the upcoming chapters⁶.

⁴ *Schwebungsdiaphonie* see: Ambrasevičius (2016).

⁵ Even though *sutartinės* originate from one ethnographic region of a modern-day Lithuania and predate any kind of concept of national self-consciousness by at least a millennium, they are often depicted as a symbol of Lithuanian musical tradition, and are deeply engraved into the collective mindset of modern Lithuanian society as the essence of Lithuanianess in music.

⁶ In the course of our research, we will use these abbreviations to indicate the source of *sutartinės*:

SP – Paliulis Stasys (1959), *Lietuvių instrumentinė muzika*, Vilnius.

ZS – Славюнас Зенонас (1972), *Сутартинес*, Ленинград.

DR – Daiva Račiūnaitė-Vyčiniene (2000), *Sutartinų atlikimo tradicijos*, Vilnius.

2.4. Antiphonic archetype of timbral texture

Antiphonic archetype of timbral texture could be characterized as follows: a sequential textural “response” that is realized by vocal or instrumental ensembles or choruses⁷. Timbral texture of these “responses” might differ in a line-up of performers or in quality (not excluding a spatial factor). In a prehistoric phase, timbral texture was syncretically merged with nature of activities. For instance, two numerous swarms using alternating shouts, chants, or sonorous noises, in order to hunt down a prey. In another situation, a ritual dance might have also been performed using antiphonic elements. As the activities evolved, the line-up of the “performers” had been reduced (for instance, smaller groups of herb gatherers). Fast forward to the first steps of Western culture – the antique period, where antiphonic singing of two soloists prevail (Riemann 1967: 42). The quality of timbral texture changes, as the nature of this archetypic process of alternation undergoes a reduction. A thick sonoristic quality of texture slowly purifies itself into a diaphonic of two neighbouring tones (for the sake of simplicity, we will refer to it as a “diaphony of seconds”, even though, it is more related to a basic sensation of dissonance, which predates the concept of tuned intervals).

The main purpose of this process of alternation is to control the space/area (hunting, gathering). Qualitative changes of the sound object informs the singers about the state of their associates, for instance, the changes in distance. Moving away from the sound source alters its perception. Spatial awareness helps coordinating group movements, be it a hunt, or a dance. Changes of spatial location create a premise for sound quality-based antiphonic oppositions, which pave way for timbre, as an alternative qualitative aspect, to be operated in a similar way. This principle of operation well reflects the archetypic image of dichotomy: near/far, bright/dark, feminine/masculine, etc.

In order to describe the antiphonic texture, it is important to describe not only what is performed, but also how it is performed. We will illustrate this with an example of Lithuanian *sutartinė*, which is called *keturinė* (“foursome”) (Fig. 1). It is performed by pairs of women singers with instrumental interventions.

The figure shows a musical score for a Lithuanian *sutartinė* (foursome) titled *Keturinė*. It consists of four staves, labeled I, II, III, and IV. Staves I and II are vocal lines, while III and IV are instrumental parts. The lyrics are in Lithuanian and describe a hunt scene. The lyrics for the first system are: "Ai - nam, se - se, ly - gan lau - kan, u - liā - ja le - li - ja, U - liāj le - li - ja, u - liāj le - li - ja." The lyrics for the second system are: "Ai - nam, se - se, ly - gan lau - kan, u - liā - ja le - li - ja, U - liāj le - li - ja, u - liāj le - li - ja." The lyrics for the third system are: "ly - gan lau - kan ru - gū pieu - lie u - liā - ja le - li - ja, U - liāj le - li - ja, u - liāj le - li - ja." The score includes various musical notations such as notes, rests, and bar lines.

Figure 1. *Keturinė sutartinė* (“foursome”) (ZS 70)

Alternating pairs of singers perform a typical diaphony, which contains a perceptible vibration of dissonant intervals (seconds) that emphasize the qualitative (timbral) domain. Each phrase starts in a unison and this is a very important factor for creating a perception of vibration. Alternations between seconds and a unison create a stuttering dissonance and a perception of acoustic friction, which possesses a notable directionality (“signaling”) towards an opposing pair. Hereby, this friction of seconds simulates the recognizability (in spatial sense) and memorability of the texture. Short melismatic elements of sixteenth notes in the first voice (I) help enhancing the friction of triads. Antiphonic polarity of pairs is also enriched by intervening “responses” of wind instruments. In turn, the performers can spontaneously improvise and produce various dynamic intensities of antiphonic phrases. This can also make a peculiar influence on a texture of alternating groups. On the other hand, antiphonic “responses”, while repeating the same formula of *sutartinė* may be altered by different numbers of performers (pairs, groups, swarms).

⁷ Antiphony – a term for music in which an ensemble is divided into distinct groups, used in opposition, often spatial, and using contrasts of volume, pitch, timbre, etc. (Huglo, Halmo 2001).

2.5. Responsoric archetype of timbral texture

Responsoric archetype can be characterized by subordinate reciprocations between different qualities⁸. Subordination of qualities accumulates reciprocations between pure and fused, or individual and textural (for instance, *solo* and *tutti*) timbres. Subordination of such qualities corresponds with ritual meanings and functions. Mythological meaning of the soloist – a mage, clairvoyant, intermediary between the seen and the unseen – is translated into the role of collector⁹ in *sutartinės*. It seems that because of this circumstance subordinate functions are first and foremost bound with the act of collecting the text and refrain (or a response of archaic refrain¹⁰).

In order to explain the timbral texture that derives from the responsoric archetype, we have to employ two types of criteria – objects and functions. Our objects are different timbres, while functions are their relations with the text. In order to describe the object, we need to differentiate *solo* timbre from a fused one (*solo* timbre versus diaphony of a pair), while description of the function relies on differentiation between text and refrain (Scheme 2):

	Timbre	Function
A	Solo	Text
	Diaphony of a pair	Refrain
B	Diaphony of a pair	Text
	Solo	Refrain

Scheme 2

In the first case scenario (A) the refrain and the diaphony of the pair is subordinated by the leading *solo* timbre (Fig. 2). Here the pair of singers (II III) that performs the refrain in a unison is functionally depended to the soloist, who is leading the progression of text. An opposite situation is in the second case (B) (Fig. 2a). Here the soloist, who performs the refrain, is subordinated by the pair, which is leading the progression of the diaphony. In this case, the *solo* timbre seems to be very individualized (in sense of not being a part of the diaphonic structure). We can see that from the use of soundwords (“kakariekū”¹¹) and from an apparent contrast that is achieved when this refrain enters after a fairly unexceptional diaphonic texture. This contrast is further accumulated by the purity of *solo* timbre, as it is set to oppose a thick dissonant “fabric” of seconds. Therefore, the intervals of second, performed by the pair of singers, undoubtedly stimulate the sensation of timbral opposition.

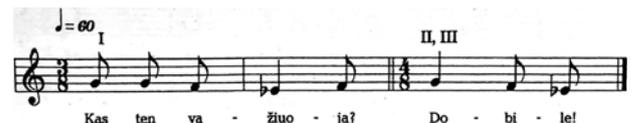


Figure 2

Figure 2a

⁸ Response in Christian liturgies the short text spoken or sung by the congregation or choir in reply to the Versicle (Hiley, Le Huray 2001).

⁹ A collector (lith. *rinkėja*) is the name given to the singer who sings the main lyric or begins a *sutartinė*. She collects or creates the lyric of the song (Vyčiniene 2008: 8).

¹⁰ Archaic refrain (lith. *garsažodžiai*) is a form of words in Lithuanian language the meaning of which, these days are indecipherable. These refrains, devoid of any semantic meaning, generally consist of interjected onomatopoeic sounds that are especially important to the rhythm of the *sutartinės* (e.g. *čiūto, rūto, titity, tataiō, dūmo, tūto*) (Račiūnaitė-Vyčiniene 2015: 18).

¹¹ *Kakariekū* – onomatopoeic word imitating a song of a rooster.

2.6. Heterophonic archetype of timbral texture

We encounter the heterophonic¹² archetype when repetitions of a diaphony are synchronized with timbral alterations (variations of voices, when two voices substitute each other in order to introduce qualitative changes in musical material). This often creates models of timbral alteration that are (from a technical standpoint) similar to canonic techniques. In the following scheme, we illustrate the successions of *rinkinys* (R) and *pritarinys* (P)¹³ in a typical setting of *sutartinė*, where I, II, and III denote different singers (voices) (Scheme 3):

I	R	P	-	R	P	-
II	-	R	P	-	R	P
III	-	-	R	P	-	

Scheme 3

Heterophonic model of timbral texture can be characterized by cyclic, rotational structures that are determined by the number of performers¹⁴. In our next example (Fig. 3), we can see rotations of three voices (I–II, II–III, III–I). This circle of timbral alterations closes along with the third cycle, as the first voice (I) returns with a different lyric. New verse of the lyrics re-initiates the circle and timbral alterations repeat until the lyrics come to an end.

Cyclic rotations can be densified by rotations of refrains, or timbral alterations that at the first glance reminds us of hoquet (Fig. 3a). In this “threesome-in-four”¹⁵, the fourth voice is added only to the timbral alterations of *pritarinys* (Fig. 3a, bars 2, 6, 10). This creates a densified, cycle of rotations, or a “smaller circle”.

Figure 3

Figure 3a

¹² Heterophony, in music, texture resulting from simultaneous performances of melodic variants of the same tune <...> (see “Heterophony” in *Encyclopedia Britannica* 2017).

¹³ “In *sutartinės* it is not just different melodies that are interwoven, but two different sets of lyrics sung simultaneously are interlaced. The *sutartinės* melody sung in refrain is called *pritarinys*, derived from the word *pritari*, meaning ‘to assent’, and is often trilled, harmonized, beat and so forth. The main lyrics is called *rinkinys*, which derives from the verb *rinkti*, ‘to collect, or put together’, in other words, to create lyrics” (Vyčinienė 2008: 7).

¹⁴ *Sutartinės* are often named by the number of performers – *dvejinė* (twosome), *trejinė* (threesome), *keturinė* (foursome), etc.

¹⁵ Lith. *trejinė keturiose* (see previous footnote).

of the timbral texture – the fifth voice (*untyta*). This voice accentuates the highest and the lowest positions of the scale (D4 and C5). Both pitches form qualitative (timbral) relations that helps creating repeated phrases (4 bars each) of varied rhythms. We can notice that the beginnings of each four-bar phrase creates a sort of “reinterpretation” of perception and audiation of *sutartinė*’s diatonic spectrum – sometimes from the bottom to the top (harmonic model), other times – from top to bottom (subharmonic model).

On the surface, this model of *sutartinė*s drastically differs from later (traditional) medieval iterations of bourdon, however, it reflects a very similar primal image, which is encoded in the architectonics of harmonic spectrum. This image is also related to many ancient “magic” symbols and meanings that predate the concept of bourdon by thousands of years. One of those symbols is the “World tree”, whose branches reach the skies and whose roots connect the human or earthly world with an underworld or subterranean realm (Annus & Sarv 2015: 289–290).

Pronounced domination of the fundamental beneath glittering textures, which maintain a consistent pattern of proportionally diminishing value, metaphorically reflects the prototype of spectrum.

3. Evolutionary aspects of timbral texture

In this chapter, we will retrospectively discuss each archetype’s evolution in order to portray the historical contexts of the transformations that happened in the orchestral music of the 20th century.

Antiphonic archetype originates from Gregorian chant, namely from singing of Psalmodies. It is important to mention, that choirs that antiphonally sing different verses of a psalm, are being summed into a joint choir during the antiphon. A similar practice establishes itself in various periods of music history, by renewing timbres of texture of antiphonic music. This is rather easy to observe in, for instance, antiphonic *a cappella* choral music from Renaissance. However, in modern times, we often face new forms that are much more complicated. In orchestral music, we deal with instrumental equivalents of choirs that are often represented by the instrumental sections (strings, woodwinds, brass, and percussion). Throughout the course of history, these sections have undergone numerous adjustments and additions, which led to an ever more timbrally refined orchestral *tutti*.

In our belief, Antiphonic archetype of timbral texture genetically accumulates such subject-matters of Western music, as canon and imitation.

Origins of the **Responsoric** archetype can also be traced back to the middle ages. Timbral exchanges of responsories (which are extremely important in our research) are beautifully illustrated by the scheme of Gregorian Alleluia (Hanning 2000: 41).

Alternating between the soloist and the choir, as well as their simultaneous singing, is a deeply rooted primeval image that stems through the ages of music history. We can find it in compositional principles of perfect consonance of the Gothic era, which enabled the *solo* verses to be based on more individualized timbral textures of organums and descant (*duplum, triplum, quadruplum*). This tradition is carried to the isomelism of Renaissance, where polyphony takes over both *solo versus* and choral response.

Polyphonic practice of *responsorium* receives a dramatic timbral enrichment in Baroque, during the rise of instrumental *concerto*. In the famous *Concerto grosso* genre, response is manifested by timbre of *tutti* strings, while *versus* is being reiterated a group of soloists (*concertino*). Principles of *concerto* slowly penetrated other orchestral genres, e.g. soloists and *solo* episodes became an integral part of many symphonies, as well as certain instrumental combinations become key structural elements of symphonic compositions of various genres. Influences of the Responsoric archetype can also be observed in contrasting juxtapositions of homophonic and polyphonic textures, e.g. prelude and fugue.

Manifestations of the **Heterophonic** archetype in Western music started to emerge along with the development of dimension of rhythm in the medieval paraphonia. Establishment of modal rhythms not only enables the composer to control elongated melismas, but also to insert rests into a melodic flow of different voices. These intermissions thin out the vertical dimension and creates a premise for timbral audiation of musical texture. Depending on how the rests are being distributed, the voices of the paraphonia develop heterophonic relations. In turn, while sounding together, these voices influence timbral attributes and (from a timbral stand point) intensities of perfect and imperfect consonances (this is evident in the works of Perotinus).

A similar practice can be observed in textural assemblies of isorhythmic motets, where a newer *prolatio* system is employed (for example, the works of Philippe de Vitry). Vocal and instrumental voices here are

being coordinated by different isoperiodic structures, which enables new iterations of heterophony in the timbral texture. Precise mensural manipulations of silence in such contrapuntal techniques, as hoquet, are the epitome of this.

Cantus firmus technique, segmented via all timbrally smoothed *a cappella* choral voices, marks a new stage of Renaissance heterophony, which we would like to call “tenoric heterophony”. Systemic instability of the line-up (for example, in the works of Johannes Ockeghem), heralds future textures of “strict” imitations, with entrances, “ceases” of voices and *strettas*, etc. (Palestrina). Similar formations originates form archetypical models of heterophonic timbral alterations.

In the age of tonal music, the archetypical image of rotational timbral alterations thrives in orchestral music. Their condensed form unfolds in phases of development (both, sonata and variation-type). It is characteristic for the instabilities of orchestral vertical structures to employ alternating sets of harmonies. This enables heterophonic segregation of orchestral voices (e.g. orchestral works by Mozart). In the meantime, we can observe distinctive textures that help facilitate timbral alterations in *fugato* and *stretta* episodes (Beethoven).

One can supposedly trace the earliest preconditions for heterophonic nature of modern orchestral music back to variability of line-ups in orchestral music of Baroque era. It is only logical to assume that these were the key elements that stipulated the nurturing of heterophonic audiation of timbral texture. Unstable rotational and hoquet-like models that derive from the same archetypical images, mimetically positions itself in pointillistic textures of the 20th century (Webern’s *Musikalisches Opfer*), or assumes the shape of *Klangfarbenmelodie* (Schoenberg).

Archetypical images of **bourdon** archetype of timbral texture, appears in a variety of different shapes. It is especially noticeable when one of the voices is being realized in a melismatic manner (melismatic organum). Modal rhythms here (on the basis of tenor) enabled virtually infinite melismatic developments. Therefore, a natural need of interruptive (“silent”) bourdons emerged. The alternativity of a sounding and of a “silent” bourdon is partially solved by fusing the tenor voice with a timbre of the paraphonia. In the style of *Ars nova*, the (often instrumental) tenor layer, based on long rhythmic values (maxi modus), forms subordinate relations with the layer of “motetic” voices, which move in prolational durations. This practice of dual-layered bourdon continues in textures of *cantus planus*, where composers operate panconsonant timbres of *a cappella* choir.

Iterations of bourdon archetype reaches a new stage of evolution alongside with the establishment of *basso continuo*. Spectral allusion of tonality exalts the lowest timbral registers to the ranks of bourdon. In later periods (for example, in the works by Beethoven), bourdon serves as a pedal, or a *preictus*, used for centralization of musical form. On the other hand, excessive use of colorizing bourdon can lead to an opposite effect – decentralization of the form, which is the case in many works by Wagner, Bruckner and other late romantic composers. In the orchestral works of early and mid-20th century (Debussy, Messiaen), bourdon often manifests as timbral textures of modal spectrum. This tradition is carried further in the works by specialist composers.

4. National traits of timbral texture in the symphonism of *Dramatic Frescoes* by Eduardas Balsys

Unraveling national traits of timbral texture would mean to decipher the vestiges of archetypes in an individual style of a composer. National traits are arguably the closest ones to the cultural roots and sources of ethnic music. We examined the basics of ethnic timbral texture in Lithuanian *sutartinės* in previous chapters. Therefore, we can more thoroughly investigate manifestations of national traits in the timbral texture of modern orchestral music.

The object of our research is one of the most prominent Lithuanian symphonic compositions of the 20th century – *Dramatic Frescoes* for violin, piano, and orchestra by Eduardas Balsys. The symphonism of this composition seemingly adapts the compositional principles of timbral texture and monocyclic form. There are a few compositional incentives that are particularly important for our research:

- a) National recognizability of timbral texture, which derives from organic absorption of Lithuanian ethnic music;
- b) Systemic substantiation of monocyclic thematicism with sources of ethnic music;
- c) Recognizability of archetypes and their quaternion in the composer’s individual style;
- d) Liaison between thematic material and timbral texture in the process of teleologization of processuality of the composition, as well as proportions of musical form and architectonics.

The phenomenon of timbral texture, as we already observed, is tightly connected with various different aspects of composition. In our research of Balsys’s monocycle, we will also on the aspect of musical form. The parallels between texture and form will undoubtedly be of service to a more comprehensive analysis and inferences.

From a formal point of view, the *Dramatic Frescoes* is a symphonic-concert monocycle based on teleological patterns of sonata. Five parts (frescoes), connected in *attacca*, are lead up by a rich (from a textural point of view) Introduction and summarized by an extensive Epilogue (Scheme 4):

Part	Int.	I	II	III	IV	V	Epil.
Reh.		15	17	38	48	54	64

Scheme 4

We will use the following abbreviations in our schemes and the body of the text:

TT	– timbral texture	Con.	– connection
aTT	– antiphonic timbral texture	Pre.	– preictus
rTT	– responsoric timbral texture	Seq.	– sequentia
hTT	– heterophonic timbral texture	T	– talea
bTT	– bourdon timbral texture	CLMX	– climax
Reh.	– rehearsal mark	DCLN	– decline
FF	– function of form (phase)	M.th. [el]	– main theme [element]
Exp.	– exposition	O.th. [el]	– opposing theme [element]
Dev.	– development	Lam. [el]	– fragment of Lamentation [element]
RCP	– recapitulation	LTRh	– leitrythm
Cod.	– coda	LTTh	– leittheme
Epil.	– epilogue	NS	– new series
Int.	– introduction	TC	– tonal center
Int.b.	– introductory bars		

Due to the absence of bar numbers in the score, we will refer to the indicated rehearsal marks instead. Where a more precise indication will be needed, we will denote bars after a certain rehearsal marks in a following format: Reh. 4: 10. This would indicate a bar number 10 after rehearsal mark 4. The very beginning of the piece, where rehearsal marks are absent, for the sake of cohesion will be referred to, as rehearsal mark 0.

During the course of this analysis, we will stick to the assumption that compositional principles of timbral texture (antiphonic, responsoric, heterophonic and bourdon) are constant, timeless reflections of the archetype. In the meantime, realizations of timbral textures and the profile of sound are stylistic attributes style.

4.1. Monocycle as a process of timbral texture (TT)

In this subchapter, we will investigate the manifestations of TT archetypes of each section of the monocycle and peculiarities of their teleological patterns in the individual style of Balsys.

In the introductory part of *Dramatic Frescoes*, we can find an entire quaternion of TT archetypes, implemented in sequential and simultaneous manners (Scheme 5):

TT	aTT	bTT	hTT		rTT →	(attacca)
Reh.	0	1	2	3	4:10	5
FF	Int.b.	Pre.	LTTh.		Con.	

Scheme 5

Introductory bars begin with sonoristic elements of percussion, led by a high tom-tom. Through a repetitive process, these elements mutate into a leitrythm (4xTom-toms), which forms an ostinato of bTT. One can argue that this leitrythm is an opposition to elements of lamentation, which, as we will shortly discuss, plays a significant role in teleology of further sections of the composition. In the background of bTT we hear a step-by-step formation of a “serial spectrum” – a vertical formation of a 12-tone chord, which produces a very “spectralist quality” harmony. It ceases with the LTRh of timpani.

Leittheme is based on a pitch series and led by a trumpet and is accompanied by piano in a heterophonic *quasi cantenza* manner (Reh. 2). Both parts bring strong adherences with ethnic music. LTTh is based on a harmonic structure ($B\flat-E-G-B$), which closely resembles the harmony of *Untytė* – one of the most famous Lithuanian *sutartinės*. The piano part consists of dissonant chords that are set in parallel motion, which evokes an image of diaphony.

In further stages of hTT (Reh. 3) we can see an accumulation of traits from previous textures, namely antiphonic-harmonic (piano accompanies the *pizzicatti* of Cellos Double basses) and bourdon elements (sustained $C\sharp$ in violas). At the end of hTT we can hear a reminiscence of LTTh in the oboes, which creates an allusion to an antiphone of recapitulative type. On the other hand, the timbre of oboe provokes a responsoric relation of introduction to the following first “Fresco”.

The first “Fresco” is a structural opposition to the introductory part. We can see it in the formation of the quaternion of timbral textures (Scheme 6):

TT	bTT		hTT	rTT	aTT	hTT	bTT	hTT
Reh.	5	6	7	8	11	14	15	16
FF	M.th.	O.th.	Dev. I		Dev. II		O.th.	M.th. (LTTh.)

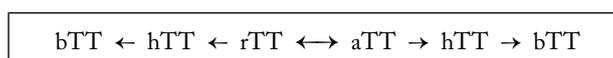
Scheme 6

Sequentially descending, ostinato-based figuration of triplets in the piano part, which reminds us of *sutartinės* due to periodically sounding seconds, creates a foundation of the bTT (Reh. 5–6). Thematic material (M.th. (Lam.el), O.th.), played by *solo* violin, functions as a melismatic aspect of bourdon texture. Each element of thematic material reiterates Lithuanian ethnic material. Ethnic origins become especially evident, when we look at vertical renditions of both serial M.th. ($B-F-E-C-G\sharp\dots$) and non-serial O.th. ($A\flat-C-F-E-B-B\flat$). Elements of lamentation serve as a middle ground between these two polarized themes. It is a thematic formation based on surrounding a single repetitive pitch with neighbouring seconds, which is very close to melodic figurations of lamentations in Lithuanian folk music.

Contrary to the exposition (M.th., O.th.), where both themes comprise a homogenous texture (bTT), the phase of development manifests different types of textures: hTT and rTT in the first development phase (Dev. I), and aTT together with hTT in the second development phase (Dev. II). Dev. I heterophonically gathers timbral-thematic formations that are connected with the main pitch series (Fig. 5).

Teleologically densified hTT is led to a climactic *tutti*, which coincides with a beginning of a following rTT. Separation of *solī* and *tutti* timbres in the latter is further intensified by contrast of thematic figurations: *tutti* elements prefer wider intervals, while *solī* elements are set in harmonic seconds (violin and piano). Ascending exchanges between *tutti* and *solī* are repeated for three times, until they reach a new climax.

The beginning of Dev. II marks a distinction between two main segments of the first “Fresco” that oppose each other from a standpoint of teleology of timbral textures. Here the TT succession order reverses, which alludes to a concentric structure (Scheme 6a):



Scheme 6a

In Dev. II we can see exchanges of ostinato between the piano and low strings with bassoons (O.th. [el]), together with intermediary part of *solo* violin (Lam. [el]). After a couple of exchanges a climax is reached, where canonic formations of M.th. and O.th. prevail.



Figure 5



Figure 6

The end of the first “Fresco” corresponds to the exposition in a fashion of reflection symmetry. This principle also governs the succession of timbral textures, however, instead of completing a perfect symmetry and ending the composition with bTT, the composer chooses to end it in hTT and make a more tight connection with the phase of development.

In the second “Fresco”, we can see polar TT archetypes that correspond with the main sections of the composition (A and B). These two sections are framed by a *preictus*-type introduction in the beginning (Int.b.) and an extensive *codetta* (Cod.) (Scheme 7):

TT	(bTT)	bTT	rTT	(bTT)
Reh.	17	19	25	36
FF	Int.b.	A	B	Cod.

Scheme 7

bTT of this “Fresco” is of a very processual nature. Therefore, the function of this timbral texture shifts during the course of the composition (Scheme 8):

TT	bTT	→	
Reh.	19	20: 2–23	24
FF	Exp.	Seq.	Pre.

Scheme 8

Section A is notable for an ostinatic formation, which reminds us of a gothic *iso-talea* formula. Therefore, in a manner of *talea* formula (T1, Reh. 19: 1–7), string timbres produce a repetition of a single pitch (F). This kind of repetition might remind us of a medieval tenor. In turn, *solo* instruments express the spectral (melismatic) function. In the third repetition of the tenor (T3), bTT is intensified (Fig. 6): a “springing”

thematic passage appears in *solo* violin, clarinets densify harmonic spectrum, etc. In the sequential phase (Reh. 20: 2–23), each new *talea* (T4–T6) is transposed up by a second, for instance, *F–D–D#*, *G–E–F*, etc., all the way until the preictal phase, which starts on a note *C*. Dynamism of this process is further enriched by a constant increase of intensity of the spectral function that manifests in a form of substantial depository of timbral articulation techniques (passages, repetitions, tremolo, frullato, etc. performed by different instruments).

In a preictal phase, bTT undergoes a massive dynamization. Now the “tenor voice” is harmonically enriched here. It ascends in chromatic steps, until it reaches a leading tone (B). The piano part here becomes of an utmost importance, as it carries recapitulative elements in an ascending ostinatic whole-tone sequentia. At the end of the passage, we can hear harmonic formations of horns, together with double stops from *solo* violin. This climax leads us to the next section.

In section B, we encounter a teleological process of rTT, which is based on exchanges of subordinate members. In order to maintain the connection with medieval polyphony, we will refer to them as *Versus* and *Responso* (V-R). We choose to use these terms, as the composer possesses a rather unique mental approach to timbral texture – each time he composes new subordinate constructions, which are organically connected with the total teleological process of an entire compositional project.

Let us depict the phases of V-R exchanges of section B in a scheme (Scheme 9):

V-R	I	II	III	IV	V	VI	VII	VIII	IX
Reh.	25	26: 2	26: 12	27: 8	29: 10	31: 13	33	34	34: 9
FF	Exp.			Pre.			CLMX		

Scheme 9

Each phase (expositional, preictal and climactic) contains three V-R exchanges. It is noteworthy, that each phase excels in individual tendencies of archetypical rTT dynamization. Expositional phase excels in discernibility and memorability of V-R timbres, led by thematicism characteristic to this “Fresco”, such as LTRh. in snare drum part, or LTTh. in horns (Reh. 25). Primal textural formation is being modified timbrally and thematically with each V-R exchange. It is done primarily through thematic hints (M.th. [el], Lam. [el], pitch sequences, etc.). This process of dynamization is carried further to preictal and climactic phases.

V-R exchanges in preictal phase (V-R: IV–VI) are notable for their integrity with the violin *solo* part, which is based on continuous development and constantly increasing intensity. *Versus* part here gains attributes of spectral function (Fig. 7). Here the expression of snare drum’s LTRh. is strengthened by accents of brass. *Responso*, on the other hand, is based on main theme, which is performed by a *tutti*-like instrumental group (strings and woodwinds), while *solo* violin seems to incorporate contrasting thematic elements (here LTth. and RCP [el] are separated by LTRh. of snare drum).

V-R exchanges in culminating phase (V-R VII–IX) are connected by a continuous ostinato passage of piano. It begins at V-R VII and brings us all the way to the climax in V-R IX, where it hands the ostinato part to the snare drum. At the same time, we can hear other *solo* instruments – violin, piano, and a LTTh. by trumpet. This forms a group of four *solo* instruments, which is accompanied by an intensive *tutti* by strings and woodwinds.

The image shows a page of a musical score for a symphony. It features multiple staves for different instruments. From top to bottom, the staves are labeled: Fl. I, Fl. pic., Ob., Cl. B, Fag., Tr. bc, Tr. no, Tuba, T. tom, V. no Solo, Piano, V. ni I, V. ni II, V. le, V. c., and C. b. The score includes various musical notations such as notes, rests, and dynamic markings. A rehearsal mark '24' is visible at the top. The text 'con sord.' appears above the Trumpet and Trombone staves. The score is written in a key signature with one flat and a common time signature.

Figure 7

Thanks to the TT of the third “Fresco”, one of the most important dramaturgical twists of an entire composition is able to take place. Exchanges between sequential and simultaneous TT archetypes happen twice, which creates a projection to the grand *finale* of the composition – the fifth “Fresco” (Scheme 10):

TT	rTT		bTT	aTT	bTT
Reh.	38	39	41	45	46–47
FF	Int.b.	Dev.	Pre.	CLMX	DCLN

Scheme 10

A characteristic trait of TT in this “Fresco” is the factor of teleological syncretism, which in many cases blurs the lines between different archetypes. We would like to attribute this approach of TT development to the individuality of composer’s style.

In the introductory bars, we can see an “aggressive” motif of the brass (*Versus*), which enters on top the tremulous snare drum background. It is followed by a “decisive” piano part (*Responso*). Responsoric exchanges continue until brass instruments “run out” of thematic motifs. Here a new pitch series (NS) is introduced, which is used to compose the thematic material of the “Fresco”. *Di Marcia* motifs in the piano part (*Responso*) are sequentially ascending until the timbre of snare drum is taken over by the strings, which prepares the phase of development.

The development phase expands the *Versus* in timbral and thematic sense. It is now comprised of two layers – woodwind (polyphonic) and soloists (homophonic). In the former, a counterpoint of main theme elements (M.th. [el]) is introduced alongside the NS theme (flutes and oboes). While in the latter one, the *solo* violin performs the main theme (M.th.), which is accompanied by a sequentia piano and accents of the strings (an “echo” of the snare drum). During the development of the soloists’ layer, the strings play the main theme. This simultaneous connection between strings and soloists fulfills a role of *Responso*, as the NS theme is no longer present. After repeating the V-R, we reach a preictal phase.

The function of bTT in the preictal phase is being fulfilled by figurations in the piano part, accompanied by sharp accents of the strings. Dynamic profile of growth here is organized on the basis of NS theme, while expanding the multitude of timbral voices (trombones + woodwinds + trumpets, etc.). The climatic phase is based on an antiphonic exchange between the brass (M.th.) and a group of strings and woodwinds (Lam. [el]). In addition, a NS theme (trombones and tuba) is squeezed in during the exchange. It appears in turns with a *sequentia* of piano. The main climax of the third “Fresco” is reached by repeating the antiphonic period and developing it into a loud *tutti* episode of an entire orchestra (*fff*). Tension declines after a snare drum tremolo leads to a hit of tam-tam (*ff*). Here the phase of decline (DCLN) begins. In this phase, the active ostinatic textures of piano are substituted by long sustained tones of strings. These tones serve as a background for a comeback of *solo* violin (with heterophonic reciprocations of celesta), which brings back the M.th. and LTTh. This situation should be considered as a distinctive sign of a dual phase teleology of the third “Fresco”, where a contrast of bourdon texture is formed between an “active” and “sustained” type of ostinatos (piano and strings, respectively).

The most special aspect of the fourth “Fresco” is that thematically contrasting sections are based on a single and integral bTT archetype (Scheme 11):

TT	bTT $\xrightarrow{\hspace{10em}}$			
Reh.	48	49	52	53
FF	Int.b.	A (M.th.)	B (LTTh.)	Cod.

Scheme 11

A principle of an integral bTT archetype in different sections (A and B) is realized by contrasting sound profiles and contrasting themes. It is set as an opposition to the second “Fresco”. Thematic diversity between the sections corresponds with the spectral function of TT. Therefore, in section A, the *solo* violin plays formations that are close to the M.th., while in the section B, trumpets “improvise” in melodic formations of LTTh. Both phases are accompanied by a repetitive ostinatic figuration of piano (♩ ♩ ♩). This rhythmic ostinato

Figure 8 shows a musical score for a section of an orchestra. The staves include Trombones (Tr-be), Trumpets (Tr-ni), Tuba (Tuba), Timpani (Timp), Piano (Piano), and Strings (Archi). The score features various dynamics such as *mf p*, *con sord.*, and *frull.*. The strings are marked with *div. sul Pontic.* and *sul Pontic.*. The Piano part shows a complex rhythmic pattern.

Figure 8

Figure 8a shows a musical score for a section of an orchestra. The staves include Flutes (Fl. I, Fl. II), Oboe (Ob.), Clarinet (2 Cl.), Bassoon (Fag.), Cor Anglais (Cor.), Trumpets (Tr-ni), Tuba (Tuba), Timpani (Timp), Cymbals (Cel.), and Strings (Archi). The score features various dynamics such as *mf p*, *con sord.*, and *frull.*. The strings are marked with *div. sul Pontic.* and *sul Pontic.*. The Piano part shows a complex rhythmic pattern.

Figure 8a

slowly intensifies by densifying the pulse, introducing chromatic steps and melodic leaps, etc. A climactic breakthrough of TT occurs just before reaching the coda. Here the piano performs a passage of dissonant vertical structures (Reh. 52: 7), which serves as a reminiscence to the heterophonic cadenza of the first “Fresco” (Reh. 2).

Dynamization process of bTT is rather unsettled. In the section A, we can see a very active spectral function of *solo* violin, which is directed towards a following presentation of a brassy timbre of the trumpet. In turn, the main climax of this “Fresco” is projected towards the end of section B. It is exactly when ostinatic function of piano becomes the most active. This system of “overlapping” dynamic functions of bourdon texture (ostinatic and spectral) is accompanied by heterophonic backings of orchestral voices. For instance, the sustained notes of violin *solo* are reciprocated by the eventh cords of strings, or by flashing triplets of brass.

Extensive *coda* of the fourth “Fresco” essentially brings back the bTT process to the beginning of the movement. We are once again introduced with an ostinato of dotted rhythmic figures (just like in the introductory bars), that were so characteristic to the climax of section B. This closes the teleological process and creates a circular form.

In the fifth “Fresco”, we can see a bifaceted realization of sequential and simultaneous archetypes of timbral texture (Scheme 12):

TT I	bTT	hTT	bTT	bTT	bTT	bTT	bTT	bTT	hTT	
TT II		rTT (Soli)	rTT (Tutti)	rTT (Soli)	rTT (Tutti)		rTT (Soli)	aTT (Tutti 1)	aTT (Tutti 2)	
Reh.	54	55	56	58	59	60	61	63	64	65
FF	Exp.	Dev.	RCPT I	Epiz.	RCPT II	Cod. 1	Epiz.	Cod. 2	Turning point	Epil.

Scheme 12

In this scheme we can see a bifaceted (dual layered) plan of TT development. The first layer represents textures of simultaneous type – bTT and hTT. The second layer represents sequential type of textures – rTT (*solī-tutti*) and aTT (*Tutti 1, Tutti 2*).

One of the key formal aspects of this “Fresco” is the correlation between brevity and extension of segments. This peculiarity is heavily tied with succession patterns of TT. Brevity is a characteristic trait of the main segments of the form, which manifest simultaneous TT (the first layer). On the other hand, sequential textures (the second layer) creates larger, more expansive segments. This creates a peculiar “formal responsorium” between the segments of both layers. Antiphonic response after the last rTT (Reh. 63) helps emphasizing the duality of this bifaceted system. Here the ecstatic harmonic *Tutti 1* is reciprocated by a harsh, serial *Tutti 2*. Antiphonic reciprocation of timbres coincides with a teleological turning point of an entire composition and becomes a key signifier of *Dramatic Frescoes*. Antiphonic responses are illustrated in Fig. 8, 8a.

Here we have to go back and talk about the expositional stage of this “Fresco”, which is set, as an opposition to the climactic episode of aTT (*Tutti 1* and *Tutti 2*). The key of exposition’s bTT is the ostinato of timpani, which is based on LTRh. material. This ostinato reaches a shape of orchestral *tutti* in the middle of the “Fresco” (Cod. 1 and Cod. 2), while at the very end of the composition (Epil.), it transforms into a pointillistic hoquet-like breakdown. Expositional segment facilitates even more embryos of future processual development. Enriched with *glissandi*, LTRh. of timpani creates links to a sonoristic texture of Cod. 2. These textures has ties with different episodes throughout the entire composition, originating all the way back in the introduction of *Dramatic Frescoes*. On the other hand, the LTRh. of timpani serves as a background for the rest of the orchestra, which starts antiphonic exchanges of short vertical motifs, followed by an adequate response by the piano. This helps to encode a micro-framework of upcoming timbral textures, albeit in a reverse order (aTT → rTT at the beginning, and rTT → aTT during the later phases).

4.2. Monocycle as a whole. Architectonics

Traditionally, the monocyclic architecture (form) is based on monothematicism and a harmonic plan of sonata form. These criteria are the most evident in symphonic poems by late romantic composers, for instance, Liszt, R. Strauss, Scriabin, and others.

The principle of monothematicism provides monocycles with an illusion of unity, as thematic alternatives derive from a single origin. Furthermore, these thematic alternatives often undergo various processes of synthesis and together lead towards a new theme of a different quality. This by no means applies to *Dramatic Frescoes*, where we encounter several different themes and even several different sets of themes. Following the hint, given to us by the programme title of the composition, we can group the themes and motives into two polar sets, which manifest contrasting characters and approaches. Hereby we can assign such elements, as LTTh, LTRh, and NS theme to one group, while such elements, as M.th., O.th., RCP to the other. The former conditionally associates danger and aggression, which gives it a particular role in the musical form. The latter brings associations that are more moderate; one can call them “tolerance”, or “exaltation”. This also implies a specific role of this thematic group in the dramaturgy of the composition. Polarization of thematic groups serves as a constructive disturbance, which prevents certain themes to reach their full developmental potential or achieve a synthesis with themes from another group. This phenomenon could be compared with the mythic dichotomy of good and evil, which, as an archetypical image, is best reflected in binary principle of composing (Janeliauskas 2001). We can see that development of polarly separated themes and thematic relationships (ability to derive one theme from the material of another one) is no longer governed by synthesis, but by combinatorics. It seems that for this reason, thematic “work”, done by the composer, is more related with the principles and possibilities of timbral textures, than with thematic synthesis and dialectics.

Each TT archetype offers particular combinatory possibilities for theme development. For instance, principle of antiphonic timbral texture is adoptive to canonic techniques and rearrangements of timbral voices. In this monocycle, we often encounter canonic arrangements of main thematic material (M.th., O.th., etc.). We also find many contrasting juxtapositions (M.th. and Lam. [el], LTRh. and LTTh., etc.), which are related to the principles of responsoric timbral texture, while simultaneous augmentations and diminutions of form, variational repetitions of timbres, all point towards combinatory principles of heterophony (see Fig. 6). Diverse contrapuntal formations of bourdon ostinatos, *sequentias* and leitrythms is also a noteworthy feature of this monocycle.

Combinatorics of thematic development aside, thematic pluralism is another feature that is very significant for our research, as it opens more possibilities for thematic recognizability and, at the same time, national identity to unfold. During the course of our research, we have observed close ties between this monocycle and ethnic melodic figurations. We would like to stress that despite being based on a series, thematic material of this composition is transfused with structures of ethnic music. We have already discussed the peculiarities of M.th. and LTTh. Now it is time to unravel the hidden potential of ethnic melodic figurations of the “new series” ($F-B-G\sharp-D-F\sharp-C\sharp-C-E-E\flat-G-A-B$). It is particularly interesting that the first and last (edge) triads together produce a sound quality that is close to a complex of *sutartinė*. The same can be said about the second and third (middle) triads.

Harmonic plan – a functional subordination of parts and phases of the form, which is usually attributable to the tonal criteria – here is implemented in a rather peculiar way. In Balsys’s works, the function of harmonic plan is reduce to mere outline for articulating musical form, which is internally governed by peculiarities of ethnic music. Thereby, the main factor for establishing a tonal center becomes the context of the sound, rather than harmonic functions (tonic, dominant, subdominant). The new context of modality covers all 12 functionally emancipated tones and is essentially governed by the teleology of timbral textures. Consequently, the equivalent of tonal center of a “Fresco”, or any other segment, is tied with archetypic images of bourdon, for instance, a rhythmic-melodic ostinato, *sequentia*, sustained tones, etc. Harmonic filling of “tonal center” often concurs with the spectral function of the timbral texture. In a following scheme (Scheme 13), we will present the layout of harmonic play of each “Fresco”, according to these criteria.

TT	Int.	1st Fr.	2nd Fr.		3rd Fr.	4th Fr.	5th Fr.		Epil.
			A	B			Exp.	Turning point	
TC	G	C	F	G	?	C	C	E \flat /E	G

Scheme 13

Manifestations of other archetypes is nonetheless important for this unconventional functional (“tonal”) behaviour. For instance, signs of a diaphony emerge in heterophonic processes of main tones, when a variation of tonal center emerges in neighbouring pitches (usually by an interval of second) alongside the main tone. Even though we mostly marked single tonal centers in a previous scheme, the majority of them experience this heterophonic expansion into neighbouring tones: $C/C\sharp$, C/B (1st “Fresco”), F/E , $G/F\sharp$ (2nd “Fresco”). Some tonal centers expand to the point where they form a heterophonic field, for instance, $C/C\sharp/\dots F\sharp$ in the 5th “Fresco”. Resonant interactions between harmonic (homophonic) and polyphonic textures blur the perception of tonal center and makes it disappear in the 3rd “Fresco”. Occasionally tonal formations can antiphonically reciprocate with sonoristic material (5th “Fresco”, turning point). Lastly, tonal centers may only emerge at the end of sonoristic or pitch-based episodes (Introduction and Epilogue).

Concluding our research of interactions between traditional criteria of monocyclicality and archaic principles of timbral texture, and their influence for the teleological flow of *Dramatic Frescoes* we can summarize that:

- a) The context of timbral textures enables the composer to use the same thematic material that does not experience drastic qualitative changes and remains well recognizable and nationalistically engaged. A sense of renewal in this composition is achieved not by developing the existing thematic material, but by introducing a new pitch series;
- b) Tonality here does not centralize the musical context. In contrary, different tonal centers often reciprocate in a heterophonic setting. This leads to a conclusion that tonal centers are often governed by internal laws of timbral textures.

This leads us to the big question: what is the “centralizing agent” that solidifies the *Dramatic Frescoes* into a monolithic structure, worthy of being named a monocycle?

Our analyses of processuality of timbral textures leads us to a conclusion that binary nature of individualized timbral texture archetypes, which overwhelms all levels of composition, including the seemingly “coincidental” architectonics might be that secret solidifying ingredient. Here we approach the central aspect of our research – ethnic (nationalistic) origins of timbral textures.

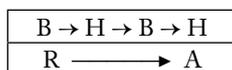
Binary principle of composing is an artefact from the pagan culture, which stems from an archaic dualistic worldview. In Lithuanian *sutartinės*, we find oppositional archetypes that are either simultaneous, or sequential. In our previous researches, concerning rhythm (Janeliauskas 2017), modality (Janeliauskas 2018), and melody (Janeliauskas 2015) of *sutartinės*, we observe an overwhelming presence of binary archetypes in all of these crucial elements of musical material. Thereby we can reasonably assert that binary musical archetypes are one of the most important cornerstones of Lithuanian ethnic musical code. This code can bring us back to the forgotten ancient times and it seems that some composers are able to decipher this code, thanks to their brilliant intuitive abilities (Janeliauskas 2010).

Primary potencies of timbral binarity are encoded by the very archetypes of timbral texture. Simultaneous and sequential timbral textures are obviously oppositional by nature. However, archetypal binary principles is not the only constituent of a nationalist musical opus. Opposition, as an archetypic image, has to be deeply integrated in composer’s mindset, while creating integral ties with his/her individual style. Here one of the main features is the composer’s choice to polarize simultaneous and sequential timbral textures as a parity of equally important elements, for instance:

bTT and rTT (we will mark this polarization scheme as B/R);
 bTT and aTT (B/A);
 rTT and hTT (R/H);
 aTT and hTT (A/H).

These schemes can also function in reverse, for instance, R/B; A/B; etc. Polar “displacements” like these, could be employed sequentially, for instance, R/B/A/B (similarly to what we can see in the third “Fresco”).

Admittedly, functional polarization of timbral textures is not extremely prevalent in *Dramatic Frescoes*. Here timbral textures form paritetic, as well as subordinate relationships. More often, they are repeated in a variational manner: B→H→B→H (the fifth “Fresco”). In turn, variational sequences of timbral textures can be polarized with each other and encompass an entire quaternion of TT archetypes: B→H/R→A (the first “Fresco”). Sometimes two sets of quaternions can oppose each other with their inverse internal setting. For instance, an opposition for the aforementioned B→H/R→A would be A/B→H/R (Introduction). Members of the quaternion can also make up synchronously oppositional sequences of simultaneous and sequential timbral textures, for instance (the fifth “Fresco”):



Another possible iteration binary principle is mixed polarization of timbral textures and thematic material:

B/R (the second “Fresco”) *versus* B (M.th/LTTh.) (the fourth “Fresco”).

These and similar architectonic occurrences slowly shape a monocyclic construction of musical form, the most massive segments of which, also seemingly form oppositional relations. For instance, the “edge” parts of the monocycle are distinguished for their oppositional quaternions of timbral textures. The order of the quaternion in the introductory part contradicts the layout of the first “Fresco”, while the final fifth “Fresco” turns this “quarrel” into a synchronous coexistence. These remote relations also affect the third “Fresco” in the middle of the composition. Its quaternion (albeit an incomplete one) is partly oppositional to the layer of simultaneous timbral textures of the fifth “Fresco”: a sequence of contrasting textures (R/B/A/B/) opposes to the layer of simultaneous textures (B→H→B→H). Finally, the even middle “Frescoes” (the 2nd and the 4th) are noted for singular timbral textures from reduced (previous) quaternions, therefore they consist of a minimal number of timbral textures – two and one respectively. Oppositional relations of the members of reduced quaternions is also coherent: B/R *versus* B (M.th/LTTh.). Lastly, looking at the peculiarities of TT polarization of odd (1st, 3rd, 5th) and even (2nd, 4th) “Frescoes”, one can easily grasp the traits of concentric architectonics.

We will conclude our analysis of this monocyclic composition with a scheme, summarizing the process of binary architectonics of timbral textures (Scheme 14).

Intr.	A	B	H	R	/			Polarity
	(seq. / sim. –		sim. / seq.)		→			- +
1st Fr.	B	H	R	A	H	B	H	
	(sim. – sim. /		seq. – seq. /		sim. – sim. – sim.)			+ -
2nd Fr.	B	B	R	B	/			
	(sim. /		seq.)		→			+
3rd Fr.	R	B	A	B	/			
	(seq. / sim. /		seq. / sim.)		→			-
4th Fr.	B	M. th.	LT Th.	/				
	(sim.)		→					•
5th Fr.	B	H	B	H		/		
		Soli Tutti	Soli Tutti	Soli	T1 T2			
	(sim. – sim. –		sim. –		sim.)			○
	seq.		seq.		seq.			

Scheme 14

Inter alia, this scheme illustrates the functioning of quaternions of oppositional polarity: “+” and “-”. At first, they are set into an opposition of “- +” and “+ -” (Introduction and the 1st “Fresco” respectively). It is followed by two sections of reduced internal polarity that form an opposition of a larger scale (the 2nd “Fresco” (+) vs the 3rd “Fresco” (-)). This polarity further transcends into an opposition of timbral textures of minimum and maximum extent (the 4th and the 5th “Frescoes” respectively), which are respectively indicated in our scheme as • and ○.

Concluding remarks

We can complete our research on a summarizing remark that national traits of timbral texture in the symphonism of *Dramatic Frescoes* by Eduardas Balsys are of a twofold nature: they are archetypic, as well as contemporary, due to composer’s personal compositional relation. According to the outcome of our analysis, timbre (or to be more precise – an entire orchestral pallet of timbres) was the main objective of Balsys’s audiation. Priority of timbre is by no means a feature unique to audiation or style of Balsys’s, but rather a global tendency of 20th century music. It seems that composers of different nationalities are connected by an evolutionary turning point in music history, which we can describe as tonal-thematic decentralization. Timbral texture becomes a dominant entity in this newly opened niche. Therefore, following the growth of importance of timbre, a natural need of exploring and researching its origins and archetypal patterns arises.

While constructing the compositional whole, the composers of the 20th century operated the archetypal principles of timbral texture:

- sequential-parity or “antiphonic”;
- sequential-subordinate or “responsoric”;
- simultaneous-parity or “heterophonic”;
- simultaneous-subordinate or “bourdon”.

Each of these archetypes has a characteristic sound profile. However, there are quite a few mutual aspects. Firstly, a systematic teleologization of a said sound profile that we call a transformation of a timbral texture archetype. This notion refers to a change of the role of timbre from a supporting, stimulating factor, which was characteristic to the previous epochs, to a factor that is able to determine the compositional process.

In a process of shaping the compositional whole, a composer might transform a single archetype of choice, or employ an entire quaternion (as did Balsys). In Balsys’s case, the composer not only individualizes and teleologizes the sound profile of the archetypic quaternion, but also polarizes its members on various levels of musical form.

One might say that binary nature of timbral textures is a modern spread of ethnic heritage. It is a manifestation of an archetypical image that comes all the way from *sutartinės*, where binary principles of composing are systematically reflected in all domains: modality, rhythm, melody, and timbral. Moreover, Balsys does not restrict himself to binary principles of composing alone, but also heavily relies on melodic figurations of ethnic music of both monodic and polyphonic origin.

Therefore, the composer, who was led by nationalist aspirations, decentralized the long-established rules of tonality and monothematic cyclicity by introducing an ethnic approach to priority of timbral texture. This monocycle by Balsys represents a unity between two primal origins – masculine and feminine, dramatic and exalted. The significance of *Dramatic Frescoes* to Lithuanian musical culture could be compared to the genius *Unidentified Cycles* by Čiurlionis. The key difference between the two is that Čiurlionis intuitively arranged the movements of his cycles according to the principle of binary tonality, while Balsys based his monocycle on the premise of binary timbral texture.

Translated by Dr. Andrius Maslekovas

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Tautiniai tembrinės faktūros bruožai Eduardo Balsio *Dramatinių freskų* simfonizme. Tembrinės faktūros archetipų kvaternija

Santrauka

Tyrimą galima apibendrinti tokiu teiginiu – tautiniai tembrinės faktūros bruožai Eduardo Balsio *Dramatinių freskų* simfonizme, viena vertus, yra archetipiški, bet tuo pat metu ir šiuolaikiški dėl pakitusio kompozitoriaus santykio su skambesiu. Kompozitoriaus audijavimo prioritetu, kaip rodo kūrinio analizė, buvo tembras, tiksliau tariant, išsisa orkestrinių tembrų paletė. Orientacija į tembrinį prioritetą nėra vien individuali kompozitoriaus skambesio audijavimo ar muzikinio stiliaus ypatybė. Tai greičiau epochinis XX a. komponavimo reiškinys. Skirtingų tautų kompozitorius susieja, rodos, istorinis muzikinės evoliucijos lūžis, kurį glaustai įvardytume kaip tonalinę-teminę decentralizaciją. Šią atsiveriančią teleologinio kompozicijos projekto nišą pamažu užima vadinamoji tembrinė faktūra. Tembro fenomenui aktualizuojantis atsiranda natūrali reikmė tyrinėti šio reiškinio audijavimo ištakas ir nustatyti jo archetipus.

Formuodami kompozicinę visumą, šiuolaikiniai kompozitoriai operuoja archetipiniais tembrinės faktūros principais, pavyzdžiui, pakaitiniu-paritetiniu, arba antifoniniu, kitais atvejais – pakaitiniu-subordinuojamu, arba responsoriniu, taip pat vienalaikiais – vienalaikiu-paritetiniu, vadinamuoju heterofoniniu, ir vienalaikiu-subordinuojamu, arba burdoniniu. Kiekvienas šių archetipų pasižymi individualizuotu skambesio profiliu. Tačiau yra ir bendrų dalykų. Pirmiausia tai sisteminis šio profilio teleologizavimas, vadinamas tembrinės faktūros archetipo transformavimu: turimas omenyje tembrinio parametro vaidmens pokytis iš palydimojo, stimuliuojamojo (tai būdinga ankstesnėms epochoms) į vedamąjį kompozicinio proceso veiksnį. Kompozitorius, formuodamas kūrinio visumą, gali transformuoti vieną kurį nors iš pasirinktų tembrinės faktūros archetipų, taip pat panaudoti visą tembrinės faktūros archetipų kvaterniją (E. Balsys). Formuodamas monociklinę visumą, lietuvių kompozitorius ne tik individualizuoja ir teleologizuoja archetipinės kvaternijos skambesio profilį, bet ir supriešina šios kvaternijos narius binariškai skirtingais atskirų dalių („Freskų“) ir monociklinės visumos lygmenimis.

Tembrinės faktūros binarika, galima sakyti, yra moderni tautinio paveldo sklaida. Binarinius komponavimo principus sistemiškai atspindi lietuvių sutartinės – dermės, ritmo, melodinės horizontalės, taip pat tembrinės faktūros atžvilgiais.

Be to, puoselėdamas tautinį tembrinės faktūros skambesio profilį kompozitorius remiasi etnomuzikos intonaciniais šaltiniais – tiek monodiniais, tiek daugiabalsiais (sekundinė diafonija). Taigi tautinių aspiracijų vedamas kompozitorius natūraliai decentralizavo tonacines ir monotematinės cikliškumo taisykles, įteisino tautišką binarinės tembrinės faktūros architektoniką.

E. Balsio *Dramatinių freskų* monociklas – dviejų organizuojančių pradų (vyriško ir moteriško, dramatinio ir pakilaus) vienvė. Savo reikšme lietuvių nacionalinei muzikos kultūrai šis kūrinys gretintinas su genialiaisiais M. K. Čiurlionio *Neatpažintais ciklais*. Čiurlionis intuityviai sudėstydamas ciklo dalis binarinio tonalumo principu, o Balsys monociklą grindė tembrinės faktūros binarika.