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Teleological Transformations of Timbral Texture in the Orchestral Music of the 20th Century

Abstract. In this paper, we examine teleological transformations of timbral texture, which occur when tonal priority rivals, or is being at least partly replaced, by the timbral one. We examine this phenomenon through analyses of compositions by Stravinsky, Honegger, Bartók, and Britten. The main finding of this paper is that teleological transformations are inseparable from the process of dynamization of the archetypes of timbral texture (antiphonal, responsorial, heterophonic and bourdon, see Janeliauskas 2019).

Keywords: teleological transformation, dynamization of timbral texture, antiphonal differentiation, responsorial exchange, heterophonic timbral alterations, bourdon, register peculiarities.

Introduction

Teleological topicality of timbral texture emerges when the potencies of centralization of tonal major/minor system begin to fade in favor of modern compositional techniques, such as symmetric modes, dodecaphony, sonorism, aleatory, etc. These and other similar compositional techniques are inseparable from the actualization of the timbral aspect of musical texture. For instance, the inertia of successive pitches could be broken down by unexpected changes of timbre or register, employing pedal drones, polytonal combinations, sonoristic techniques, etc.

As the traction to the tonal center fades, a teleological imbalance of composition, which activates dynamization of other musical parameters (especially timbre and rhythm[1]), emerges. During this conjunction, timbral texture often undergoes teleological transformations. The process, which began in the framework of major-minor, essentially transforms due to the timbral elaboration of its components. This is especially evident in the orchestral music of the late 19th and early 20th centuries. Here, the timbre shifts from a role of a supporting element that helps interpret tonal relationships, to a leading agent of composition's teleology. This emergent dominant role is named a teleological transformation of timbral texture[2]. Therefore, highlighting the teleological transformation of the timbre would be the primary goal of this work.

The hypothesis of this work is centered on the dynamization processes of the archetypes of timbral texture (Janeliauskas 2019), which, in our belief, helped to establish a new way of audiation that transformed the composer's relation with the sound itself (from pitch-centered to timbre-centered)[3]. It seems that this transformational teleological shift happens in the circumstance of Neotonality. One could hypothesize that the more evident the tonal decentralization is, the more active the dynamization and autonomization of timbral texture are.

The term "decentralization" here is used to describe the situation of tonality after the common-practice period. Various theoretical research covers many different types and traits of Neotonality, which essentially indicates different levels and states of decentralization[4]. Musicological observations on Neotonality (decentralization) are highly relevant to this research, as they provide a great source of symptoms of possible independent teleological designs.

Our research revolves around orchestral compositions by Stravinsky, Honegger, Bartók, and Britten, which (as we will see) serve as excellent examples of the dynamization of the archetypes of timbral texture (antiphonal, responsorial, heterophonic and bourdon). We thoroughly discussed the notion of timbral texture and manifestations of its archetypes in our previous publication (Janeliauskas 2019); therefore, this paper is a direct continuation of the aforementioned work[5].

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1 Actualization of rhythmic processes is discussed (Janeliauskas 2017).

2 The notion of timbral texture here is equated to a principle of composing (Janeliauskas 2019).

3 More on the composer's relationship with sound (aka compositional relation) (Janeliauskas 2018).

4 The author's views regarding the problems of tonality (including neotonality) are thoroughly discussed (Janeliauskas 2002).

5 This article was originally intended to be an integral part of my previously published paper *National Traits of Timbral Texture in the Symphonism of "Dramatic Frescoes" by Eduardas Balsys. The Quaternion of the Archetypes of Timbral Texture* (Janeliauskas 2019). However, due to editorial peciuliarities, as we strive to perfect the terminology, a few linguistic changes were made. As a result, the names of the archetypes were slightly altered: *antiphonic* archetype, discussed in the previous publication, is now called *antiphonal*, as well as *responsoric* is now refered to as *responsorial*. As this text was written as a part of the same research, I think it would be wise for these two publications to share the same list of references, even though some authors may not be directly mentioned in this paper.

Since teleological aspects of timbral texture are the central object of this research, which is not a standard musicological topic, we will employ versatile methodological means, such as logic analysis, comparative analysis, identification, systematization, and typologization.

Teleological dynamization of timbral texture archetypes

Archetypes came into existence in closed societal environments and thus tend to carry the potencies of eternal repetitiveness, uniformity, tradition, and permanence. The new constituents of 20th-century music, on the other hand, bring the opposite kind of values; the orchestral (timbral) texture is often transformed by employing the means of dynamics, namely by increasing, decreasing, or sustaining the intensity and/or density of musical material. The "genome" of each archetype affects this novel teleological flow differently. Therefore, we will discuss the most noteworthy iterations of these archetypic manifestations.

Dynamization of the antiphonal archetype

We can tier the means of antiphonal timbral dynamization systematically, starting from the simplest and moving towards more advanced forms of it. The simplest methods of organizing the teleology of timbral texture are:

1. Timbral groups that are "trading blows" in an antiphonal manner are being summed into a tutti.
2. An antiphonal response of a timbral texture is being applied to a phrase of continuous development, instead of a repeated one.
3. Antiphonal timbral alternation is interspersed with a group of contrasting timbre.

The more advanced and complex methods are:

4. Multiplexing the antiphonal alternations by employing an element that is later expanded and becomes a catalyst for reaching the climax.
5. An already multiplexed antiphonal alternation enriched with a bourdon of a separate timbre and group.

The most complex cases are the matchings of two different antiphonal systems, such as:

6. Juxtapositions of massive orchestral antiphons and chamber or solo antiphons, etc.

Here we would like to present *Jeux des cités rivales* from Stravinsky's *Le Sacre du printemps* as a perfect example of antiphonal archetype manifestations. There are two cornerstone antiphonal oppositions in this composition—two types of timbral textures:

A. Massive orchestral texture,
B. Transparent chamber texture.

The former is based on alternations between tutti and different orchestral groups (Fig. 1, 1a). The latter, on the other hand, operates on alternations between different "ensembles", which could be called "timbral canons" (Fig. 2). What is more, orchestral (A) and chamber (B) timbral textures swap places.

In the process of articulating the formal aspect of the composition, the significance of the third timbral texture (C) shows through. It is a rhythmic *ostinato*, which, inter alia, plays a big role in creating the ritual/magical qualities of the composition (Fig. 3). This composition has a twofold implementation of this *ostinato* element. In the phase of exposition, it functions as an element interrupting the alternation of antiphonal texture A. A pair of timpani together with the low brass start at the beginning and then make two interruptions during changes between the orchestral groups (Reh. marks 57–59). During the phase of development, this *ostinato* element gains the attributes of a continuous bourdon (low strings and woodwinds) and therefore stabilizes a dense (multiplexed) alternation of orchestral antiphons (Reh. marks 62–63).

It is worth noting that at the end of both sections of interactions between antiphon A and element C the "chamber" antiphon B makes its appearance. The first appearance of antiphon B happens at the end of the expositional phase, with an additional interruption of the tutti by antiphon A (Reh. marks 60–61). The second appearance happens at the end of the development phase (Reh. mark 64).

Summing up the means that were used to articulate the timbral texture in an antiphonal manner within the composition, we observe that each phase has its distinct characteristics:

1. In the expositional phase, the antiphonal processes tend to be discrete.
2. In the development phase, the antiphonal processes are more continuous.

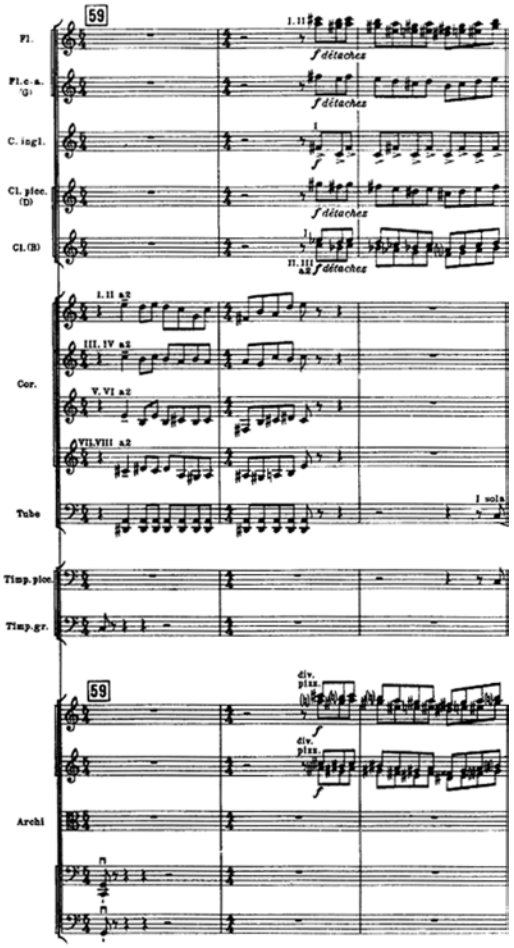


Figure 1

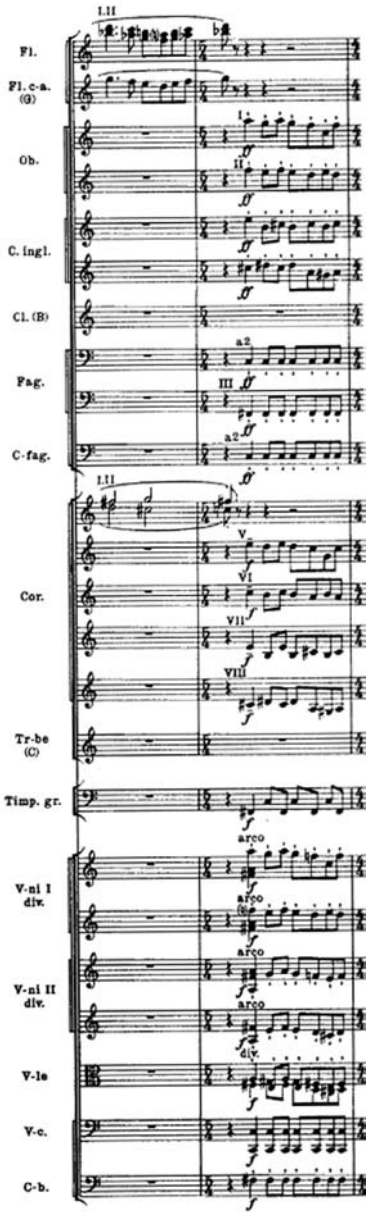
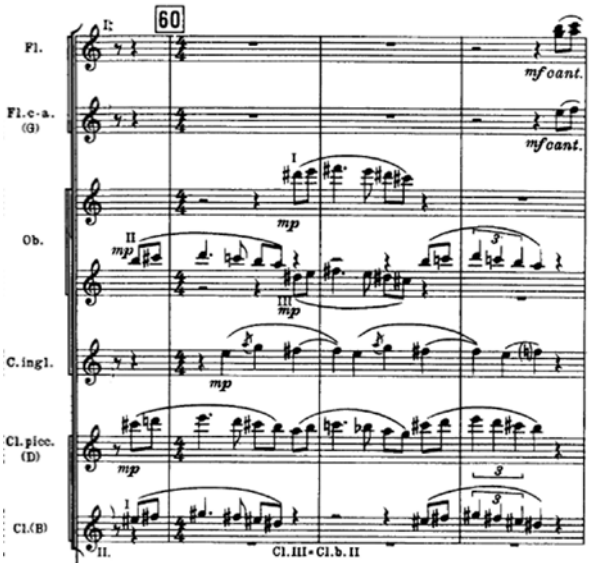


Figure 1a



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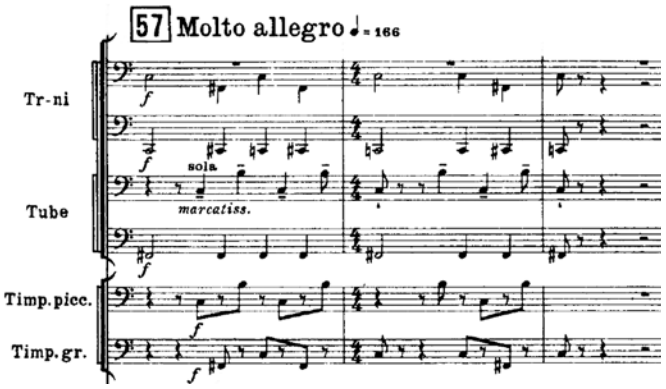


Figure 3

Jeux des cités rivales from Stravinsky's *Le Sacre du printemps*

The discrete nature of this type of teleology becomes evident when observing these key moments:

1. Antiphons A and B become acoustically separate thanks to their interruptions into each other's flow (Reh. mark 60).
2. Element C articulates the alternation periods of antiphon A in the manner of a falling progression (2 alternations–1 alternation).
3. Interruption of antiphon A by a "timbral canon" separates its periods and prevents them from being summed up (Reh. marks 57–60). On the other hand, the interruption of antiphon B by tutti separates its "canon" from its expansion (Reh. marks 60–61).

In turn, teleological continuity relies on these aspects:

1. There are no interruptions between antiphons A (Reh. marks 62–63) and B (Reh. marks 64–65) and each of them reaches their climactic points. This allows developing a certain degree of similarity between orchestral (A) and chamber (B) qualities of these antiphons.
2. Element C is being recomposed into a continuous flow, which acts as a unifying bourdon.

Dynamization of responsorial archetype

Responsorial archetype introduces several systematic tools to the articulations of timbral texture:

1) dissolution of orchestral tutti into separate timbral groups;
2) assembling *solo* timbres into a fused timbre;
3) simultaneously layering *solo* and fused timbres;
4) interchangeability of timbral layers (*solo* and fused);
5) dynamic articulations of separate layers using antiphonal alternation (fused timbres) and hoquetus (*soli*).

We chose the first part of Honneger's Symphony No. 5 to illustrate these tools. We believe that this composition mirrors the techniques of the organum of the Gothic period (parallel voice leading, use of horizontal melismas, hoquetus, bourdon counterpoint, etc.).

The responsorial approach to the teleology of timbral textures focuses on the timbral polarity between expositional and development phases. The expositional phase of this composition can be characterized by successive alternations between *solo* and fused timbres (Fig. 4, 5), in contrast to the phase of development, which features simultaneous manifestations (Fig. 6, 7).

The composition begins with the tutti of fused timbre. Triads in the parallel movement are the main feature of this texture. It is set up in two layers—high and low—that are moving in separate directions; this creates a timbral pseudo-counterpoint (Fig. 4).

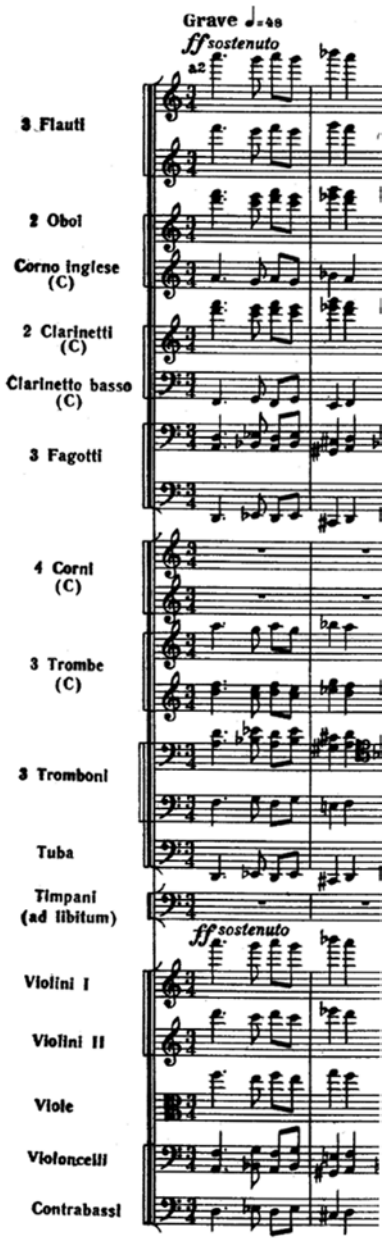
The synchronous fused timbre tutti is rapidly reduced into separate orchestral groups. At first, the brass section is omitted, followed by a solo episode of the brass section and ending with a pronounced episode of strings (Reh. mark 2). It is noteworthy, that all these "reduced" episodes also feature elements of the aforementioned timbral counterpoint.

Presentation of pure or solo timbres features a variety of formations that perform specific functions (Fig. 5). Here we are going to discuss these functions that help the individualization of timbres, making them recognizable and memorable.

1. A theme played by the bass clarinet helps to establish its timbral character (Fig. 5). We find a similar situation later (Reh. mark 4), only featuring an English horn.
2. The function of bourdon counterpoint is very favorable for individualizing the timbre of horns, which is later being transformed into strings (Reh. mark 3–4).
3. Hoquet of gestural motives emphasizes the timbral alterations between bassoons and cellos (Fig. 5).
4. Heterophonically doubling horizontal elements with different timbres also helps individualize the timbres, e.g. Trombone III *con sord.* together with double bass *pizz.* (Fig. 5), and the first clarinet with bass clarinet shortly after.

In the next episode (Reh. marks 5–8) individualization of different timbres is further intensified and expanded upon. This is achieved by:

5. Ostinato (Double bass and tuba, later substituted by cello *pizz.*) and quaver figurations (Reh. marks 5–7).
6. Triadic fanfares of a distinct "dotted" rhythm (horns and trombones afterward) (Reh. marks 6–7).
7. Development of theme's motifs by adding more and more timbres (from timbral alternations between Clarinet I and English horn, all the way to full heterophony between woodwinds and strings) (Reh. mark 7).



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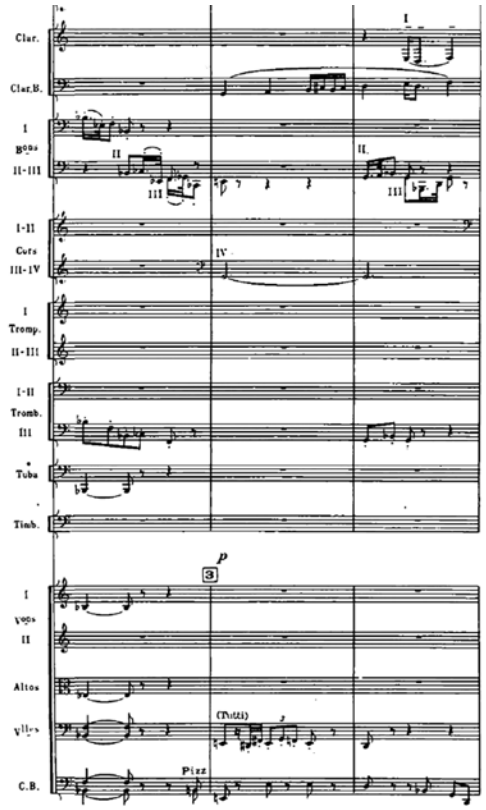
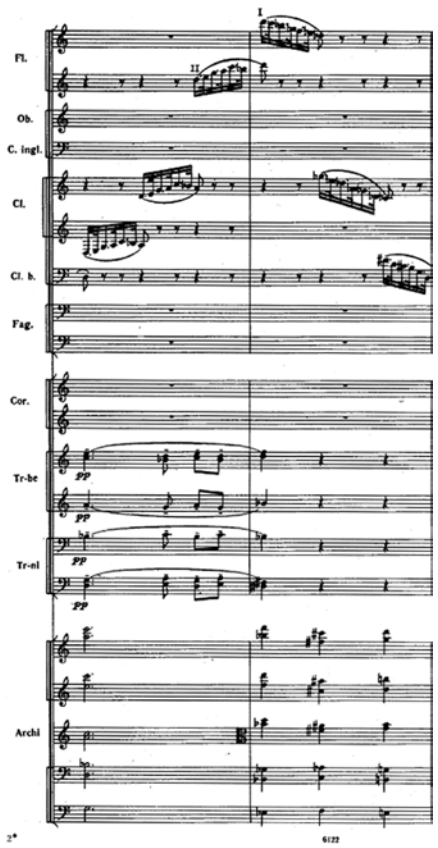


Figure 5



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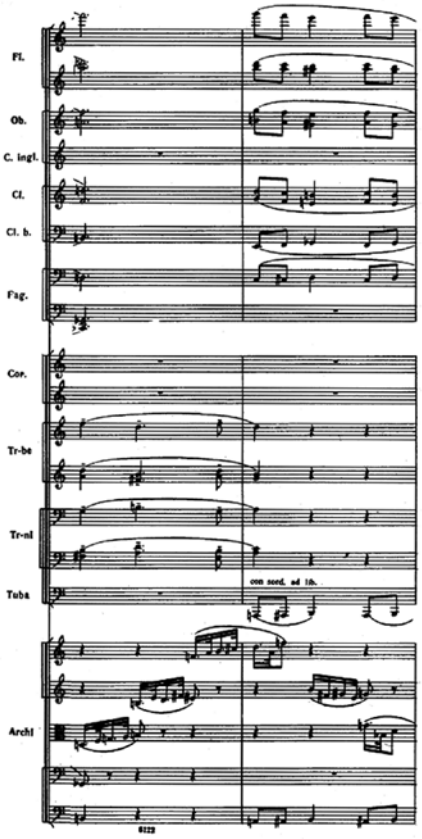


Figure 7

Examples from the first part of Honneger's Symphony No. 5

Thanks to these and similarly functioning timbral textures (the means of timbral individualization), the perception of pure (solo) timbre reaches a certain critical level and starts to be perceived as a mixture of different timbres. At some point, due to the constantly expanding field of solo timbres, the timbral texture mutates into a fused timbre tutti (Reh. mark 7–8).

In contrast to the first variable expositional timbral texture, where we saw a disassembling of tutti and an expansion of the function of *soli*, the opposing development phase features a simultaneous coexistence of solo and fused timbres (Reh. marks 9–11). However, it does not seem like it is a classical sonata-type development, but rather a transformed responsorial texture that has its origins in Gregorian responsory.

The last episode (one may call it a "co-existential") is based on repetitions of simultaneous layers of fused and solo timbres. At the beginning of the episode, the four-bar phrases of the string block are being repeated. A block of horns is added at the end of this segment. At the same time, the layer of woodwinds adds gestural motifs in a fashion of hoquet (Fig. 6). After the fourth cycle of repetitions, a swap occurs between the layers of timbral texture. Now the phrases are relocated to the layer of woodwinds with a similar addition of brass (Fig. 7). The composition ends in an extensive *codetta*, which helps position initial *tutti-soli* elements of timbral texture (Reh. mark 12–13).

Dynamization of heterophonic archetype

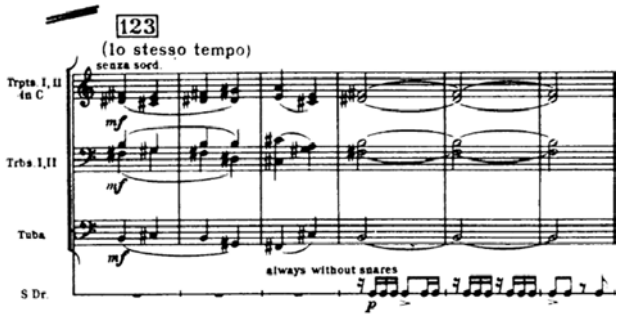
The teleology of the heterophonic archetype is based on the timbral alterations of diaphony. Here we will discuss a few most prominent cases:

1. The nature and variability of diaphony is determined by the timbral peculiarities of the pair.
2. Cycles of timbral alterations maintain a close relationship with the variability of diaphonic repetitions.
3. Differences between the timbral pairs, as well as their extent and progressions, are determined by teleological motives of the timbral texture.
4. Cycle of timbral alteration, based on a parallel diaphony, can be dynamized with a polar counterpoint.
5. Complementary heterophonic texture might be used as an accompanying unit to the timbral diaphony.

We will illustrate these processes of heterophonic teleology with the examples from the "Game of Pairs", the second movement of Bartók's Concerto for Orchestra. The title of this composition, in our belief, should be interpreted as a signifier of heterophonic processes, which materialize as timbral alterations of parallel diaphony. These alterations are set up in deliberately chosen instrumental pairs (2 Bsn., 2 Ob., 2 Cl., 2 Fl., 2 Trp.). Timbral alterations, in this case, do not produce exact repetitions. The profile of changes depends on the technical and acoustic peculiarities of a particular instrumental (timbral) pair. These peculiarities determine the intervallic structure, register, rhythmic and melodic patterns of the diaphony. The intervals of diaphony vary depending on innate features of the "hidden harmony" of a particular timbral pair. For instance, the pair of bassoons show their optimal resonance in a diaphony of sixths, oboes sound their best when set up in thirds, clarinets—in sevenths, flutes—in fifths, and trumpets—in seconds. "Playful" subtleties of heterophony are unfolded by modifying these pair-specific intervals. For instance, putting major sixths or thirds alongside their minor counterparts, or setting an imperfect consonance (the third) alongside the perfect one (the fifth). Wide intervals are heterophonically strengthened by the narrow ones (for instance sevenths and seconds), while vertical intervals are being contrasted with melodic ones (for instance vertical structures based on seconds are being contrasted with melodic leaps).

Timbral and intervallic differences of pairs also correspond with the melodic-rhythmic profile of the diaphony. For instance, technical possibilities allow flutes to create a varying contour of diaphony, expanding its range to a maximum with *virtuoso* passages, trills, *frullato* elements, etc. In the meantime, the pair of trumpets play a very conservative (in a sense of virtuosity and tempo) melodic line. We would like to think that these attributes are primarily determined by the rich timbral quality and acoustic traits of trumpets that favor slower musical motion.

Qualitative variabilities of diaphony, which are determined by timbre, form successive patterns. Each new pair creates a contrast with the previous one—and therefore—characterizes and differentiates itself. The model of ever-increasing differentiation of timbral pairs reminds us of a constantly accelerating swinging object.



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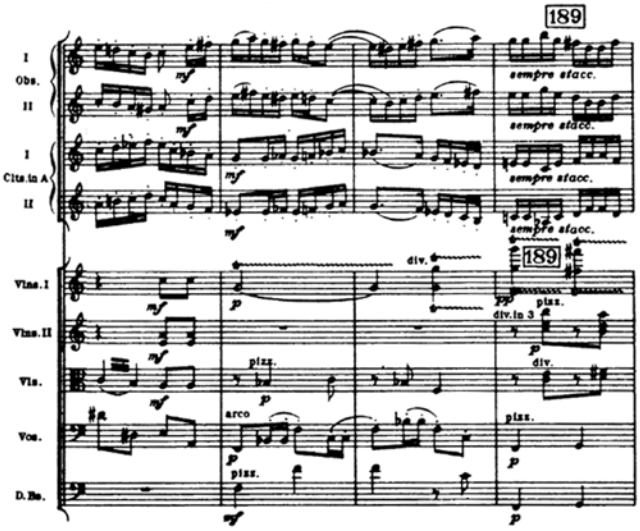

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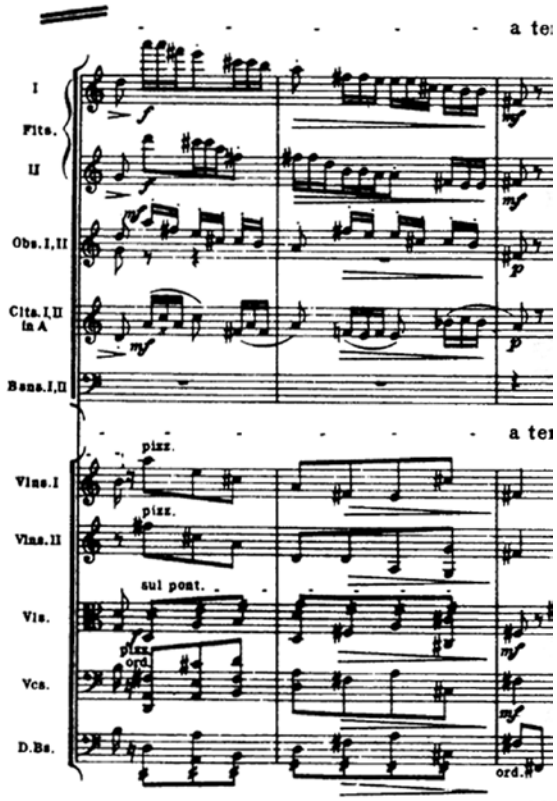

Figure 10

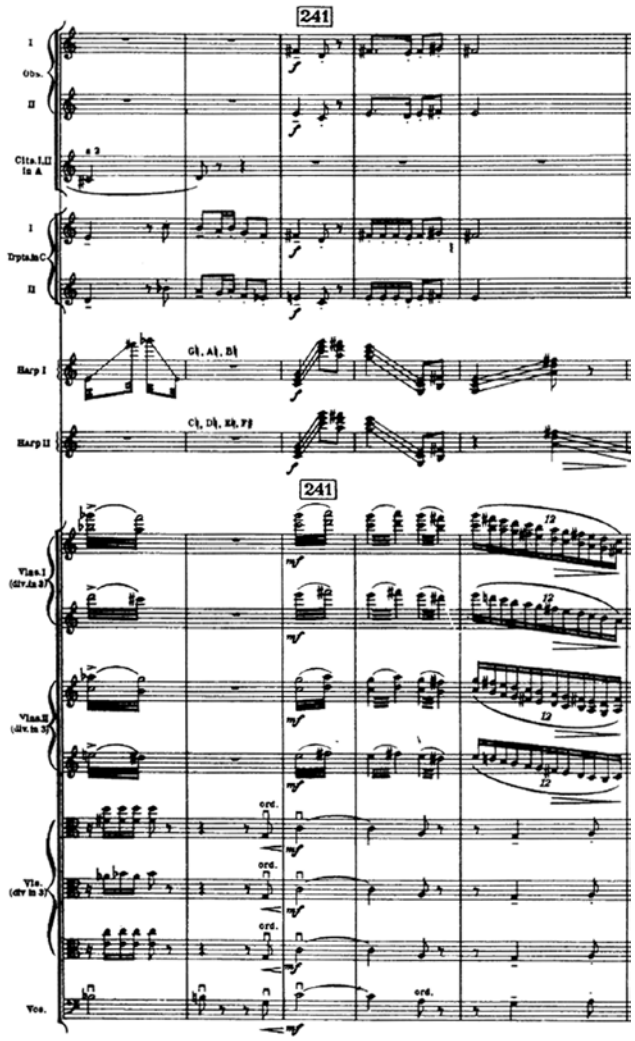

Figure 11

Examples from the *Game of Pairs*, the second movement of Bartók's *Concerto for Orchestra*

Therefore, we would like to call this teleological pattern a "swinging dynamic". The layer of strings in "Game of Pairs", in our belief, also follows this rule: It heterophonically reciprocates other timbres in an improvisatory manner, based on a model of "hoquet-bourdon" (reminding us of a Gamelan orchestra) and heavily depends on the changes of diaphony. Here Bartók employs a diverse arsenal of string techniques (*pizz., gliss., sul pont., con sord.,* etc.). This enables assigning different timbral qualities of strings to different timbral pairs. For instance, in the episode of bassoons, the strings reciprocate with *pizzicati*, which transforms into a canonic hoquet in the section of oboes. Reciprocation of clarinets is implemented using octave doublings, where high strings play continuous trills and low strings perform rhythmic *staccato* (except the syncopated rhythm of double basses, which helps maintain the pulse of the hoquet). Heterophonically divided strings that employ every available timbral variation, reciprocate flutes, while dissonant diaphony of trumpets is accompanied by a tremulous layer of whole tone scale.

The improvisatory nature of this "hoquet-bourdon" is further enriched by spontaneous and very memorable bursts of melodic figuration:

1) addition of a tritone to the pair of oboes (bars 28–30);
2) unisonic reciprocation supported by a bourdon (bars 41–44, 83–86);
3) interposing parallels of fifths (bars 67–69);
4) a "preface" to the pair of trumpets (bars 87–89);
5) an "invasion" of chords (bars 105–108), etc.

These and similar reciprocations help establish the timbre of strings as heterophonically equal to the timbre of a dominant pair.

Looking at the bigger picture (the form of the composition), we can notice that the heterophonic field of timbral texture is being projected concentrically. For instance, at the collision of the cycle of timbral alterations and its repetition, an episode of timbral opposition is introduced (bars 123–164). It is a dual-unit episode, consisting of harmonic-choral (brass) and sonoric-rhythmic (Snare Drum) elements (Fig. 8). This dual-unit episode can be interpreted as a hidden "reconstruction" of the previous timbral layers (woodwinds, strings). Furthermore, it seems that fragmental positioning of pitchless timbre in the starting and finishing moments of composition (rhythmic elements of Snare Drum) is realizing the archetypal symbolism of a concentric circle. This symbolism is very characteristic of heterophonic timbral texture. It is noteworthy that here, in contrast with the "hoquet-bourdon", no canonic techniques are being used.

A dual-unit timbral formation becomes an axis of a circle. The establishment of an oppositional timbral axis teleologically motivates a recapitulation of a dual-layered timbral texture. It manifests as a heterophonic variation of the exposition phase with an increased number of timbral voices. Here a counterpoint between timbres of diaphony and characteristic elements of instrumental pairs is formed, while the layer of strings continues heterophonic variations of "hoquet-bourdon" (Fig. 9, 10, 11).

Dynamization of bourdon archetype

Systematic manifestations of the bourdon archetype are primarily related to the processes of dynamization of timbral texture. Therefore, it can manifest in the following ways:

1. Timbral alterations of bourdon dominant and/or dominant area.
2. Introduction or withdrawal of alternative bourdon dominant using a spectral passage (pitch sequence or *glissando*).
3. Emendation of the spectral base of bourdon's texture by adding or removing resonant timbres of the low register.
4. Amplification of dissonance of the high part of the spectrum by adding a continuous ostinatic figuration of persistent timbre.

Many of these principles are reflected in "Sunday morning"—the second of Britten's "Four sea interludes". The systematic nature of bourdon portrays itself through continuous interactions between bourdon dominant and dominant areas. Bourdon dominant here is realized by two textural iterations—the vertical and horizontal textures of brass and string instruments respectively.

An opening iteration imitates the clangor of bells on Sunday morning. It does so by vertical clashes of thirds (much like the clashes of thirds in a diaphony of seconds). One can argue that this texture aims to direct the listener to "the divine". This assumption is further reaffirmed by the articulation of the clashes—three phrases, four clashes of thirds each. The last interval is stretched along three bars. This arguably creates

an allusion to The Holy Trinity. The melody in the string section (a unison between violas and cellos) is an alternative timbral iteration of the bourdon. The pillar points of bourdon's melody (the "halt points") form a chain of three thirds up (A–C♯–E–G♯) and down (E–C♯–A–F♯), allegedly symbolizing the trope of "World Tree". The end of this melody (which is itself based on thirds) is summarized by a vertical structure of seventh chords, which moves horizontally in the steps of seconds. Therefore, the two alternate structures of bourdon are united using an interval of third and polarized by an interval of second (vertically for the first time and horizontally for the second time).

Alternative bourdon dominants substitute each other three times. Each substitution brings timbral alterations of thirds. Expositional "clashes" of horns first alter into a mixture of horns and trombones, while later—into trumpets and a mixture of clarinets and oboes (Reh. mark 3, 6). In the meantime, the bourdon dominant of melodic elements, played by violas and cellos, alters into a unison of violins, which later transitions into a canon of previous timbres (Reh. marks 2, 5, 6, bar 14).

In contrast to timbral groups of bourdon dominants, which are very stable, the periphery of texture excels in the variability of timbral material and melodic figurations, which grow into spectral passages (pitch sequences). It is worth mentioning that these passages initiate the exchanges between timbral bourdon dominants. For instance, the falling passage performed by woodwinds and violins leads to a bourdon of string instruments (Fig. 12), while the ascending passage of woodwinds, strings and harp—leads to a bourdon of brass instruments (Fig. 13).

Another aspect that draws our attention is timbral alterations in the peripheral area of the texture. For instance, during the aforementioned clashes of horns, the woodwinds perform a theme, which (due to its hoquet-like rhythmic pulse) reminds us of heterophony. It shifts to the timbre of strings shortly after (Reh. mark 1). Amid this timbral exchange, we find an ascending pitch sequence. Synchronous timbral alteration of horizontal and vertical dimensions is achieved here by repeating the "clashes of thirds" (Fig. 13, Reh. mark 3)

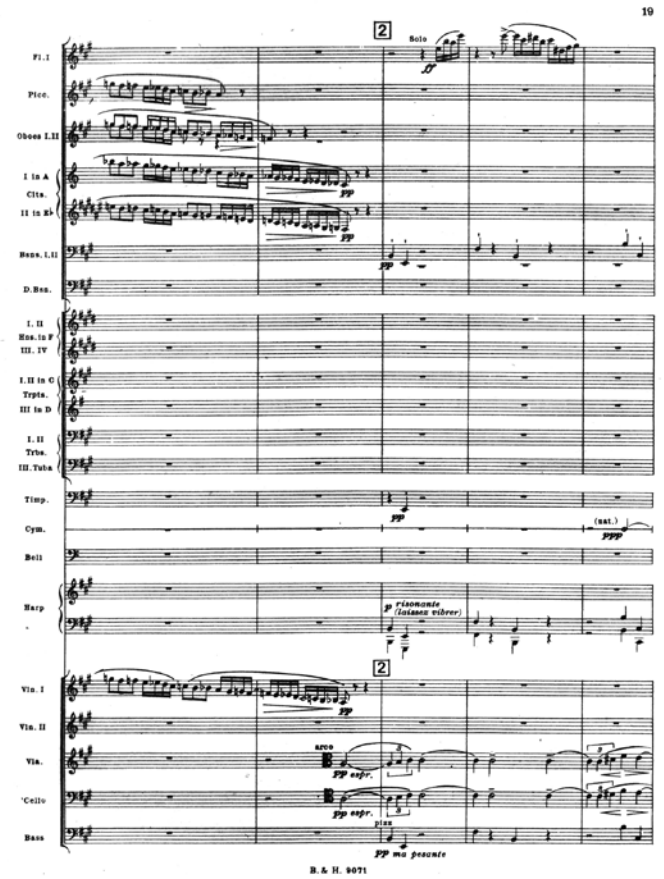

Figure 12

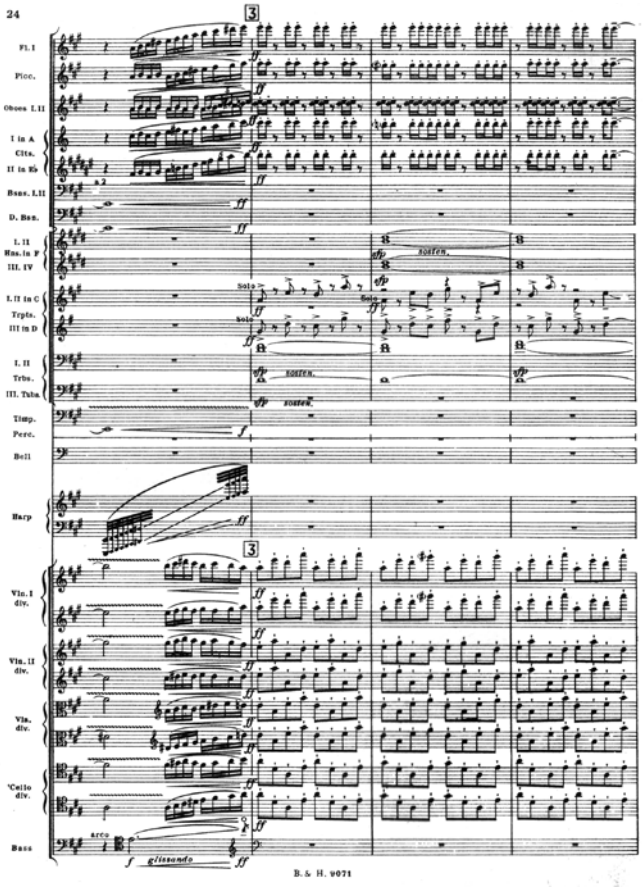

Figure 13

Sunday morning, the second of Britten's *Four sea interludes*

(a hoquet-like theme shifts to the timbre of trumpets and strings, while vertical structures transform into woodwinds). Here we discover two alternative means of timbral teleology that are employed: densifying the motifs of the peripheral area while keeping a stable timbral line-up, or densifying the timbral line-up while keeping a relatively stable proportion of motifs (Reh. marks 1, 2). Therefore, at first, we can see short heterophonic motifs of the woodwind section being densified, while later, a derivative figuration of "hoquet-like" theme is being realized by gathering the timbres of flute, piccolo and clarinet in A on top of a string bourdon (one can make a parallel with an image of "birds of the sky" (Matthew 6: 26–30)).

There are a few more noteworthy elements of timbral texture in this composition:

- Timbral alterations of double bass *pizzicato* bear an uncanny resemblance to the hoquet-like theme (double bass *pizzicato* heterophonically colored by harp, timpani and bassoon).
- The anchoring factor of timbral bourdon dominant is the enhancement of the spectral base of bourdon's texture by stimulating resonant timbres of the low register (tuba, trombones, bassoons and double bass, (Reh. mark 3, bar 9). By adding and later removing a timbral resonance, the composer manages to expose the tonal cycle of sections of composition (D–B♭–D).
- A certain counterbalance to the resonance of low timbres can be observed in the coda (Reh. mark 6). Here an ostinato figuration of the melodic interval of second and its timbral alterations (clarinet in A and clarinet in E♭) are introduced, which helps emphasize the high part of the spectrum of the timbral texture and its dissonant nature (pitches D♯ and E form a dissonance with the main pitch D).

Conclusions

Our research leads us to the following conclusions:

1. As a consequence of the practice of dynamization of the archetypes of timbral texture, the latter undergoes a teleological transformation. They transform the function of timbre and other secondary musical parameters from the roles of supporting elements that help interpret tonal relationships, to the leading agents of composition's teleology.
2. The means of dynamization are individualized with each different archetype of timbral texture (antiphonal, responsorial, heterophonic and bourdon).
3. Antiphonal archetype of timbral texture enables a composer to polarize discrete and continuous natures of antiphonal alternation by employing individualized means of dynamization (developing variability of change, compaction, bourdonization, etc.) and thus autonomize the timbral texture
4. Responsorial archetype, being enriched by special means of dynamization (reduction of tutti, extended individualization of *soli*, the coexistence of subordinate layers, etc.) enables the teleological polarization of pure and fused timbral constructions in sense of sequentiality and simultaneousness. The opposition of these two components transforms the teleology of composition from pitch-centered to timbre-centered.
5. Heterophonic archetype of timbral texture enables transformations that are executed by dynamization of diaphony (selecting pairs of uniform timbres, forming their timbral and intervallic patterns, melodic contour, etc.). Timbral intensification of diaphony allows us to build a concentric type of teleology, which is notable for its polarized axis of timbral expression.
6. Particularities of Bourdon timbral texture (layering bourdon dominant in the lower part of the register spectrum, or cultivation of a dissonant textural periphery, exchanges between the edges of the register spectrum) enables the realization of a timbral design, which is notable for its teleologically polarized registers.

We would like to end on a generalizing insight that all of the discussed transformations and designs of timbral texture feature a code of polarity or opposition, such as discreteness/continuity, successive/simultaneous, polar concentrum, or polar edges of the spectrum. These polarities point towards an archetypical nature of timbral texture.

We would like to believe that new designs of timbral texture, which we unraveled in this paper, would contribute to the practice of timbre-oriented contemporary music, while the teleological ideas brought out would stimulate the field of music theory.

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Teleologinės tembrinės faktūros transformacijos orkestrinėje XX a. muzikoje

Santrauka

Teleologinė tembrinės faktūros aktualija išryškėja tuomet, kai tonalios mažoro-minoro sistemos centralizavimas ima blėsti dėl įsigalinčių modernių komponavimo technikų: simetrinių modusų, dodekafonijos, sonorikos, aleatorikos ir kt. Panašūs komponavimo metodai dažnai yra neatsiejami nuo tembrinio parametro aktyvacijos.

Tyrimo hipotezė orientuota į tembrinės faktūros archetipų dinamizavimo procesus, paskatinusius naują audijavimo būdą, kuris iš esmės transformavo kompozitoriaus santykį su skambesiu: iš tonalaus – į tembrinį.

Dinamizavimo priemonės individualizuojamos kiekvienam skirtingam tembrinės faktūros archetipui – antifoniniam, responsoriniam, heterofoniniam, burdoniniam.

Antifoniniam tembrinės faktūros archetipui pritaikius individualizuotas dinamizavimo priemones (plėtojant kaitos variantiškumą, sutankinimą, burdonizavimą ir pan.), atveriama galimybė kompozicijos mastu poliarizuoti antifoninės kaitos diskretiškumą su kontinualumu ir šitaip autonomizuoti tembrinę faktūrą. Antifoninis tembrinis projektavimas kompensuoja prarastas decentralizuoto tonalumo galias, kaip antai – kompozicijos visumos sąsają. Antifoninio projektavimo aktualumas iliustruojamas I. Stravinskio kompozicija *Jeux des cités rivales* iš baleto *Le sacre du printemps*.

Responsorinis tembrinės faktūros archetipas, praturtintas išskirtinėmis dinamizavimo priemonėmis (*tutti* redukavimu, *soli* individualizacijos išplėtimu, subordinuojamų sluoksnių koegzistencija ir pan.), liudija galimybę teleologiškai (kompozicijos mastu) poliarizuoti mišriųjų ir grynųjų tembrų darinius sukcesijos ir simultanikos aspektais. Šių sandų priešprieša transformuoja kompozicijos teleologiją iš tonalios į tembrinę. Responsorinio teleologinio projektavimo išskirtinumą iliustruoja ištraukos iš A. Honeggerio Simfonijos Nr. 5.

Panašiai veikia ir **heterofoninis** tembrinės faktūros archetipas. Sistemiškai dinamizuojant diafoniją (kaip antai – vienodų tembrų poras, jų seką, intervalus, tembrus atliepiantį melodinį kontūrą ir pan.), jis leidžia projektuoti koncentrinio tipo teleologiją, kuriai būdinga poliarizuotos tembrinės išraiškos ašis su jos kraštais. Heterofoninio teleologinio projektavimo realizacija iliustruojama B. Bartóko Koncerto orkestrui ištraukomis.

Galiausiai **burdoninės** tembrinės faktūros dinamizavimo savitumas (burdoninės dominantės „uždėjimai" registrinio spektro apačioje, disonuojančios periferijos plėtojimas viršuje, registrinio spektro kraštų vietos kaita ir pan.) leidžia realizuoti burdoninį tembrinės faktūros projektavimą, pasižymintį teleologiškai poliarizuotomis registruotėmis. Tembrinės-spektrinės teleologijos aktualiją atveria B. Britteno kompozicija *Sunday Morning* iš ciklo *Four Sea Interludes from Peter Grimes*.

Tikimės, jog straipsnyje atskleisti tembrinės faktūros projektai pravers šiuolaikinės muzikos praktikai, susijusiai su tembru, sonorika, elektronika, o išryškintos teleologinės idėjos stimuliuos muzikos teoriją.