The article is a continuation of the author’s reflections on the phenomenon of musical polymorphism (the beginning is in Vol. 124, 2019; the continuation is in Vol. 128, 2020). Stravinsky’s use of the environment, space, motion, dissonance, and Janus morphemes is considered as his inheritance from a tradition dating back to the work of his great predecessors. The musical tableau Sadko by Rimsky-Korsakov, the introduction Dawn on the Moscow River to Mussorgsky’s Khovanshchina, and Borodin’s symphonic poem In the Steppes of Central Asia are a clear confirmation of this. In Sadko Rimsky-Korsakov reveals himself as the founder of musical polymorphism. The multi-element polymorphism of Mussorgsky’s Dawn on the Moscow River forms the basis of the first tableau in Stravinsky’s Petrushka. In the Steppes of Central Asia is an example of a multi-elemental, polymorphic structure, recreated outside an existing object: a native caravan crossing the desert, guarded by a Russian military detachment. Its stereophonic nature appears in the displacement of the textural elements to the rear and the foreground, their spatial compression or expansion, changes to the acoustic volume, sound coloration. Introductory violins octave unison in In the Steppes of Central Asia displays its hidden timbre-polyphonic nature. In the historical perspective, this compositional discovery by Borodin foreshadows a similar approach in Stravinsky’s musical language. The timbrical layering of the unison can be traced in Dances of the Young Girls from The Rite of Spring, The Lullaby in the Storm from The Fairy’s Kiss. The rhythmic ostinato features of Rimsky-Korsakov’s and Borodin’s scores are developed by Stravinsky to the elaborated part of his musical language. The structures with more or less constant, exact repetitions are used in The Rite of Spring, Three Tales for Children, Three Pieces for String Quartet, The Soldier’s Tale, The Wedding, Symphony of Psalms.

Keywords: oeuvre of Rimsky-Korsakov, Mussorgsky, Borodin, Stravinsky, Sadko, Dawn on the Moscow River, In the Steppes of Central Asia, Petrushka, The Rite of Spring, Three Tales for Children, Three Pieces for String Quartet, The Soldier’s Tale, The Wedding, The Fairy’s Kiss, Symphony of Psalms, polymorphism.

The artistic discoveries of Mussorgsky’s Dawn on the Moscow River are clearly reflected in Stravinsky’s Petrushka. Proof of that lies in not just the multi-element polymorphic beginning of the first tableau, but in the ways it develops. In shaping Dawn, Mussorgsky proceeds not from the principles of the established compositional patterns that were contemporary to him, but from features of natural phenomena (or more broadly, externally existing objects) reproduced by the music. In Stravinsky, The Shrovetide Fair is one such externally existing object. Its growing chaos is brought to life by means of textural condensation,
a gradual transformation of the musical fabric from multi-elemental and polymorphic into sonorous and coloristic. Playing the key, recurring role in this process is the sound coloristic pedal: the tremolo in the clarinets and horns (*the strolling crowd*), shaped into an overlay of two major seconds \( d-e \) and \( a-g \) (Example 1a).

**Example 1**

Stravinsky. Petrushka

a) First tableau, mm. 1–4

![Example 1a](image)

b) First tableau, reh. 2, mm. 1–3, piano

![Example 1b](image)

c) First tableau, reh. 3, mm. 1–4, piano

![Example 1c](image)
In terms of its role in the development of European musical language in the 20th century, that pedal is comparable with the introductory bassoon solo of *The Rite of Spring*. The pedal’s structural similarity with the ostinato element in the morph of the oceanic depths from the beginning section of Rimsky-Korsakov’s *Sadko* is stunning! The polyphonic interweaving of the main three-pitched motif with its rhythmically reduced retrograde in *Sadko* is transformed, in *Petrushka*, into a counterpoint of a melodically ascending second and its inverse-retrograde variant situated a fifth higher. The simultaneous two-speed tremolo in eighths of the horns and sixteenths of the clarinets is at first perceived as a vibrating spot of sound, the background for other elements that are melodically more individualized. But as things progress, it transforms the music of the *strolling crowd* into a vital means for the dynamic development of the musical fabric. In Rimsky-Korsakov’s *Sadko*, the ostinato element acts as a “load-bearing construction” of the introduction and emphasizes the boundaries of the form as the whole. In Stravinsky, in the beginning episode of the first tableau (five bars before reh. 1 to reh. 4), the music of the *strolling crowd* transforms from a background element into a textural layer, swallowing up other elements of the polymorphic musical fabric.

Stravinsky creates an effect of increasing chaos in the behavior of the *strolling crowd* by using varying repetitions and sonic expansion of the initial bi-secundal counterpoint. In the second to last measure of reh. 1, its sound content expands to six pitches, thanks to a third tremolo in sixteenths based on the ascending major second b–c. One variant addition to this three-layer tremolo is its own horizontal projection: the two-element melodic figure in the piano. In ref. 3 two new variants appear: a rhythmic enlargement of the two-element melodic figure starting at reh. 2 and the two-bar harp glissando, ascending and descending along the degrees of lydian B-other, also increase the textural density of the musical fabric, facilitating its sonoric-coloristic rebirth.

At reh. 3 and 4, out of the four previously heard morphic elements, only two remain — the multilayer tremolo pedal in seconds (the *strolling crowd*) and the peasant male choir, based on the volochebnaya song “Dalalyn’, dalalyn’”. To maintain the latter in its role as the active, audibly perceptible melodic relief, Stravinsky resorts to a transformation of genre. The role of the textural upper layer is played by the signaling line in the flutes piccolo and oboes. Its beginning (sharply syncopated bursts of repeats) is based on the repetitive part of the rhythmically reduced variant of “Dalalyn’, dalalyn’”. The measured, rhythmically accentuated “stamping” of the same melody in the low strings adds weight to the textural foundation. The counterpoint of the choral and signaling variants of the volochebnaya song frames the music of the *strolling crowd*, the hum of which is shaped as the simultaneous sounding of the bi-secundal tremolo and its three textural derivatives.

This triumphant picture of Stravinsky’s polymorphic type of thinking must be enhanced with a few characteristic details. For instance, the ascending fourth $a^\sharp–d^3$ is presented in the first appearance of the flute solo (*shouts of the merchants*) in nine rhythmic
variants\(^1\). The counterpoint of the signaling and choral variants of the song “Dalalyn’, dalalyn’” at reh. 3 is shaped as a polymetric construction, where the 5/8 and 8/8 of the first is laid atop the 2/4 and ¾ of the second. The periodically ascending figurative bursts, such as, for example, in measure 6 at reh. 1, are presented as a vertical superposition of several rhythmic variants from a horizontal projection, shaped by the pitches of the *strolling crowd* music. The pitch expansion inherent to these variants anticipates the transformation of the music of the *strolling crowd* from a bi- to triple-secundal sonoric-coloristic pedal. The extremely high energy of that fragment (5 measures before reh. 1 to reh. 4) is in large part conditioned by the ascending fourths, which in one form or another penetrate into all elements of the musical fabric.

The beginning of *Petrushka*, just as many other pages of Stravinsky’s oeuvre, raises the question of the inevitable limits to discovering his music through analysis. Can all Stravinsky’s polymorphic diversity actually be described and systematized? Is there not some similarity here with the paradox of analyzing, for instance, Mozart’s music? Centuries of accumulated experience in that area still does not provide us an intelligible answer to the question of what, exactly, the secret is to the directly audible beauty in the great Viennese composer’s works. We observe something similar in Stravinsky’s music, as well. Its thrilling profundity, its power to subjugate, are based on the sense of newness arising at each listening. The inexhaustible polymorphic diversity of the Russian master’s music is reminiscent of the inexhaustible polymorphic diversity of the world around us. After all, waking up every morning, we find that the world around us has both changed and not changed. One has a similar impression listening, one more time, to the works of Stravinsky. Despite their relative fame, they nevertheless surprise and inspire us, each time, with how fresh and new they sound.

Given that laid out above, attempts to keep the study of Stravinsky’s musical language within the boundaries of any sort of pitch-based system or any set of stereotypical, repetitive compositional approaches would be counterproductive. One extremely important factor, playing a key role in the proper perception and understanding of Stravinsky’s musical imagery, is the correct sonic “settings.” By that I mean the sum total of linguistic, generic, stylistic, and sonic ideas saved in the memory of any musician or music lover. While in the case of a music lover these are all optional, for professional musicians and for musicologists and analysts, especially, the correct sonic “settings” are mandatory. The most important elements of these “settings” include a more or less adequate familiarity with the genre-related particularities of Russian folklore and a sufficiently complete understanding of the achievements of Russian professional musical culture in the 19\(^{th}\) to early 20\(^{th}\) century. The absence of any of these elements in the musical thesaurus of anyone analyzing Stravinsky’s music leads to irritating misunderstandings of various sizes: from incorrect characterizations of a specific fragment of text to the choice of a faulty overall aesthetic position. An example of the first is a fragment from the recent article by one of the most prominent English-language scholars of Stravinsky’s work, Stephen Walsh, and an example of the second is the already mentioned study by Italian musicologist Angelo Cantoni\(^2\).

\(^1\) Vsevolod Zaderatsky was the first to pay it attention (see: Задерацкий В. В. Полифоническое мышление И. Стравинского. Москва : Композитор, 2007. С. 26).

\(^2\) In Cantoni’s case (see: Cantoni A. The Language of Stravinsky. Hildesheim ; Zürich ; New York : Georg Olms Verlag, 2014. 500 p.), we have the mistaken Second Viennese School centric view of 20\(^{th}\)-century musical culture in assessing the work of the Russian master (for more, see: Гливинський В. В. Переосмислюючи Ігоря Стравінського історично і теоретично // Науковий вісник Національної музичної академії України імені П. І. Чайковського. 2022. Вип. 133

ISSN 2522-4190 (print) Науковий вісник Національної музичної академії України імені П. І. Чайковського. 2022. Вип. 133
Two interrelated conceptual miscalculations are characteristic of the analytical methodologies currently applied (mostly in English-language musicology) to Stravinsky’s music. The first is based on an arbitrary selection of some fragment of the text and the search for constructive analogues to it in other texts. In the second, a profoundly “visual-centric”, non-contextual, non-intonational analysis of the structure of a selected fragment leads to no significant conclusions about its role in the artistic work as a whole. A recent article by yet another well-known English-language Stravinsky scholar, Joseph Straus, is a clear example of this sort of analytical technique. In the initial, multi-element polymorph of Petrushka, the author singles out the tremolo in the clarinets and horns (the strolling crowd) — tetrachord sc [0257] (d-e-g-a) — as the characteristic set of pitches in a Stravinsky’s harmony, and the unison of the four solo cellos in the upper register (folk musician playing) — tetrachord sc[0235] (h-cis-d-e) — as the typical pitch foundation of the composer’s melody. Together, they form a structure of two fifths: d-a/e-h — Model 2 of a “fundamentally bi-quintal structure” in the music of the Russian master. Straus identifies a total of six such models in Stravinsky. They differ from one another in terms of the interval that separates the quintal components. For example, in Model 2, that interval turns out to be a major second, in Model 3 it is a minor third, etc., up to and including a tritone. The varying components of these models are the PC, fifths, harmonic axis, harmonic fill (027/057, 0247, 0257), harmonic fill (triads), fourths, melodic fill (primary spans) 0135/0235/0245, melodic fill (secondary spans), and scales that form them (see table on page 4).

Straus’s analytical approach, which claims to cover everything, has its conceptual limits. When projected on a specific artistic text, as is evident from taking the beginning of Petrushka as an example, it is incapable of describing the special intonational, generic and stylistic features of the text or of revealing the dynamic forces which shape it. Furthermore, Straus often ignores elements of the musical fabric that do not fit the analytical method he proposes. In the beginning of Petrushka, that extra element is the flute solo (shouts of the merchants), based on the same pitch model as the tremolo in the clarinets and horns (the strolling crowd). It is difficult to say what is most important and what is secondary here. The relationship of the two morphic elements can be seen both as a melodic line with accompaniment and as harmony interwoven with the melodic figure. Many of Stravinsky’s sound constructions are characterized by a similar ambiguity, the kind found in the Janus morpheme. This immediately puts in doubt one of Straus’s initial theses about the tetrachord sc[0257] (d-e-g-a) belonging exclusively to the harmonic thinking of the Russian master. The American scholar mentions that he is making no comment on a vital aspect of the flute solo: the modulation in the tetrachord sc[0257] (a-h-d-e) in measures 4–6 of reh. 1. The appearance of the third a–e fifth further cripples the bi-quintal basis for Straus’s theoretical observations.
If we look at what happens in the first 13 bars of *Petrushka* from a different angle, the internal logic to how the musical fabric develops is made significantly clearer. We can define this other angle as *zonal-harmonic*. It comes down essentially to the gradual accumulation, in the musical fabric, of pitches from a different functional-harmonic area. The pitch content of the beginning bars, the pedal fifth \( d-a \) of the *strolling crowd*, hints that the tonality of the first tableau of *Petrushka* is D-minor (even despite the fact that its mediant \( f \) first flashes in during a descending passage in the second violins starting the last measure of reh. 1, which is to say 12 bars later). The pitch content of the *folk musician playing*, layered over the bi-secundal pedal of the *strolling crowd*, brings a polyfunctional subtext to the ballet’s musical fabric. Thanks to the tetrachord \( h-cis-d-e \) we can hear the fully discernible movement toward the harmonic dominant in D-minor. Reinforcing this trend is the tetrachord \( a-h-d-e \) in the solo flute in measures 4–6 after reh. 1. We should stress that the characteristic feature of the zonal-harmonic development, the feature that gives it flexibility, is the incomplete pitch presentation of one or another harmonic function in the zone of its development. In the historic retrospective, that principle acts as a continuation and development of functionally ambiguous moments in Rimsky-Korsakov’s tonal-harmonic thinking from the musical tableau *Sadko*.

The zone of the harmonic dominant in D-minor, noted in measures 1–5 after reh. 1, gets replaced by the subdominant zone. With a polyrhythmic figurative burst and a new secundal pedal, \( b-c \) (hinting at the VI degree!), Stravinsky introduces a new morphic element: the doubled-in-thirds unison of the bassoons, cellos and double basses (peasant male choir). The obvious dorian G-minor of that element against the background of the polyfunctional pedal (I, V, and VI degrees) in the music of the *strolling crowd* finishes the expository phase for the multi-elemental material of *Petrushka*. There’s no need to point out here how far the actual process of creating this musical fabric departs outside the bounds of Straus’s bi-quintal theoretical scheme. The mirror-image functional-harmonic logic (\( T — D — S \) instead of \( T — S — D \)) brings the beginning of *Petrushka* closer to the beginning of the middle section of the romance *Spring (The Cloister)*. In the repeated appearance of the beginning material (from measure 4 at reh. 2) the T and D spheres become structurally condensed. In contrast, the S sphere grows into a self-sufficient section, where the musical fabric transforms from polymorphic to sonoric-coloristic. If we turn to cinematographic approaches of conveying events, we can imagine the movement of the camera, zooming out to a panorama and blurring individual details. The sudden wide shot (beginning of reh. 5) takes in the *Drunken Revelers*.

The music of the *Drunken Revelers* is yet another morph of the morpheme based in the song “*Dalalyn*, *dalalyn*”. One of its characteristic features is the dense monorhythmic chordal texture in which we can trace a successive connection with Rimsky-Korsakov’s piano harmonization of the volochebnaya song. Of special interest, in the harmonic aspect, is the concluding phase in the development of the folk melody, where the root \( g \) is surrounded by \( f \) and \( a \), which indicates the possible harmonization of the folklore sample in natural G-minor. But Rimsky-Korsakov harmonizes the tune in the dorian G-minor! The major subdominant, its potential role as the dominant of F-major, its resolution at D-minor as an imitation of the interrupted cadence, carries into the sound of “*Dalalyn*, *dalalyn*” individual features that reinforce its national identity.

The specific subdominant majorness of the dorian G-minor is clearly audible in Stravinsky, as well. The chordal parallelism in the piano part, noted at points in Rimsky-Korsakov’s adaption, in *Petrushka* expands into a sequence of complex multipart textural
verticals. One typical Stravinsky’s feature is the rotational three-pitch melodic motif f–e–d in the first and second trumpets. Its minor-second friction with the other elements of the multipart chordal texture creates the morpheme of dissonance, which is so characteristic for Stravinsky.

The repetition of the music of the Drunken Reuelers at reh. 6 is marked by modulation from the dorian to natural G-minor. This modulation is shaped as a canon in fourths of two variants of the song “Dalalyn’, dalalyn’”. The proposta (from g) in the harp, horns and oboes is a doubled-in-thirds, rhythmically even variant of the folk tune. Stravinsky brings the risposta (from c) that starts two bars later in the strings, clarinets and flutes as close as possible to the rhythmic structure of the folklore original.

In the first tableau of Petrushka (before The Magic Trick), the simultaneous sounding of the shouts of the merchants and the strolling crowd acts as a kind of leittheme. Its relationship to other textural layers brings stereophonicity to the musical fabric. We have a similar, striking example of polymorphic stereophonic fabric from 19th-century Russian music in Borodin’s symphonic poem In the Steppes of Central Asia.

Any examination of the sound material in music tends toward two poles: the sensually concrete and the abstractly logical. For the first, the key concept is texture. For the second, it is sklad (the transliteration of Russian word склад). Tatiana Bershadskaya has provided a detailed examination of the concept of sklad in the St. Petersburg school of music theory. Defining sklad as “the structural logic of a musical fabric,” she identifies three main types of it in the history of European music from the middle ages to the 20th century: monodic, polyphonic, and harmonic. Their structural elements are, respectively, “pitch, the summation of pitches as the coordination of thematically differentiated units, and the summation of pitches as a holistic unit (chord)”.

Bershadskaya uses the term polystraty (poliplastovost') to describe fragments of musical works in which “the musical fabric is layered at different levels which are heard simultaneously but on different planes”. Yet in musical practice, we find complex cases in which the textural components have figurative-semantic and acoustic independence, transcending the boundaries of polystraty. For instance, in an article about electronic music, Igor Krasilnikov announces one additional textural sklad: stereophonic, in which “the spatial and coloristic environment in which the musical fabric develops, formed by electro-acoustic means, has substantial meaning in the construction of the musical whole”.

The echo effect, reverberations, the displacement of the sources of sounds to the rear and the foreground, their spatial compression or expansion, changes to the acoustic volume, sound coloration — the author of the article classifies all these as stereophonic phenomena. Some of them, it should be noted, have a lengthy history in European musical culture. One of the brightest examples of an artistic presentation of stereophonics is Borodin’s symphonic poem In the Steppes of Central Asia. The work

1 I was not able to find corresponding term in English music theory.
2 Бершадская Т. С., Титова Е. В. Звуковысотная система музыки. Словарь ключевых терминов / Санкт-Петербург. политехн. ун-т. Санкт-Петербург, 2012. С. 104–105). Taking Bershadskaya’s idea further, Nina Afonina defines sklad as “the type of interaction between textural components that is typical of the era and/or musical genre”. As the structural elements of monodic, polyphonic, and harmonic sklads, Afonina lists, respectively, “a pitch in a linear sequence of pitches, the summation of melodic lines, and chords and their sequences” (see: Афонина Н. Ю. Сольфеджио . Гармония. Материалы комплексного курса. Санкт-Петербург ; Саратов : Амирит, 2020. С. 34).
3 Бершадская Т. С., Титова Е. В. Звуковысотная система музыки. С. 91–92.
relies on the effect of “two musics” sounding at once, on the interaction of two contrasting sets of materials in the musical space: Russian and Eastern.

From the point of view of morphological analysis, In the Steppes of Central Asia is an example of a stereophonic, multi-elemental, polymorphic structure, recreated outside an existing object: a native caravan crossing the desert, guarded by a Russian military detachment. In the symphonic poem, the morpheme of the environment is realized in four elements: two instrumental types (the desert, the caravan) and two vocal types (Russian, Eastern). Thanks to their interaction, the stereophonic polymorph in In the Steppes of Central Asia is enriched by features of the morphemes of space and movement.

The Borodin’s masterpiece begins with the desert element, an unusually high octave flageolet pedal e–e, in two solo violins. The textural doubling there (played by two pairs of solo violins) serves as a background for the Russian element, a melodious tune with features of lyrical and soldier’s songs. Borodin crafted the spatial morph of the Russian detachment, now visible, now disappearing over the horizon, with unrivaled compositional mastery. The octave pedal in the violin groups plays the role of the pitched-based axis of this morph, uniting on a common pitch the emergence of the Russian tune, in A-major by the first clarinet and in C-major by the second horn. Something unbelievable happens: the timbre-stressed harmonic distance between A-major and C-major is perceived as spatial distance between locations of an external object. Essentially, Borodin interprets the harmonic functionality stereophonically, using it to recreate frontal movement of sets of sounds. Do we need to explain how far ahead of its time this great Russian composer’s musical thinking was?

It is no less striking that the start of the violin octave unison in In the Steppes of Central Asia immediately displays its hidden timbre-polyphonic nature (thanks to the layered pedals in the flutes and oboe). In the historical perspective, this compositional discovery by Borodin foreshadows a similar approach in Stravinsky’s musical language. The timbral layering of the unison can be classified as an expressive resource based, Zaderatsky believes, on the uncovering of its (the unison’s) polyphonic subtext. In Stravinsky, the hidden timbral polyphony is displayed in various textural elements. One vivid example of timbral layering in an ostinato-repeating, complex, multitiered chord is the start of Dances of the Young Girls from The Rite of Spring.

The eight measures of reh. 13 in Stravinsky’s ballet belong to the composer’s long list of passages that revealed new horizons for musical expressiveness (Example 2). It has

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1 Some characteristics of In the Steppes of Central Asia are provided in Arnold Sokhor’s book (see: Сохор А. Н. Александр Порфирьевич Бородин. Жизнь, деятельность, музыкальное творчество. Москва ; Ленинград : Музыка, 1965. С. 556–562).
2 Program notes for In the Steppes of Central Asia read as follows: “In the monotonous, sandy steppes of Central Asia, a peaceful Russian song, foreign to that land, rings out for the first time. We hear the approaching tramp of horses and camels, and the plaintive sounds of an Eastern tune. A native caravan guarded by Russian soldiers crosses the boundless steppe. It completes its long journey trustingly and without fear under the protection of Russian military might. The caravan moves further and further away. The peaceful melodies of the Russians and the natives merge into a single common harmony, whose echoes long resound over the steppe before eventually dying away in the distance” (quoted in: Сохор А. Н. Александр Порфирьевич Бородин. С. 556).
3 The creation process and the intonational sources of the Russian melody are described by A. Sokhor (see: Сохор А. Н. Александр Порфирьевич Бородин. С. 558–559).
4 Задерацкий В. В. Полифоническое мышление И. Стравинского. С. 78.
become axiomatic to believe that rhythm plays a dominant role in this fragment. Its sonic two-dimensionality consists of the combination of regular (ostinato) repetition and irregular dynamic accents. In terms of pitch, the chord at reh. 13 is based on the vertical unification of two tertial structures in a semitone relationship. The Fes-major triad and the first inversion of the minor-major seventh from es, layered atop one another, form a diatonic cluster consisting of degrees from the harmonic As-minor. The conflicting third-ness and second-ness emphasize an internal fissure, the hidden polyphonicity of the aggregate harmonic vertical. Timbrical layering comes to the final flourish when the horns double the accented ostinato beats in the strings.

Example 2

Stravinsky. Dances of The Young Girls from The Rite of Spring (reh. 13)

The total artistic effect is difficult to describe in words. Nevertheless, I will note the impression it gives of massive strength, potentially explosive energy, inexorable forward motion, and keen kinetic expressiveness. The ostinato-repeating chord overcomes its acoustic one-dimensionality thanks to an interval-structured, rhythmic-dynamic, timbrical two-dimensionality that takes shape in the process of repetition. From the morphological point of view, the beginning of Dances of the Young Girls is a most intriguing example of the Janus morpheme.

The timbral polyphony of the unison is discernible in the oboe solo of The Lullaby in the Storm, from The Fairy’s Kiss. Stravinsky unfolds the Tchaikovsky-style melody — a lyrical declamation, with emotional turbulence, punctuated by syncopation — in his own variational melodic style. The intense linear development (never going outside a fifth) in the initial four and a half bars can be likened to solo singing. The tessitura jump in the second half of the fifth bar, as well as the octave doubling of the oboe melody by the English horn and flute at the end of reh. 2, resemble choral entries (Example 3).
Stravinsky. The Lullaby in the Storm from The Fairy’s Kiss (reh. 2)

Example 3

The timbrical layering is Stravinsky’s way of making someone else’s musical material his own. For example, in the initial two bars of the first variation from Canonic Variations on “Vom Himmel hoch da komm’ ich her”, the upper voice of the Bach organ original is performed by the oboe and two flutes. At first, the oboe is timbrically polyphonicized in an octave doubling by the flutes. Then the instruments change places. The harp takes part in the timbrical layering of both the upper and middle original voices, carried out by the bassoons. The timbrically layered unison, and the melodic line unfolding in turns by various instruments (Schoenberg’s idea of Klangfarbenmelodie), are evidence of the high concentration of tools for music expression characteristic of late Stravinsky.

The morph of space in the initial 27 bars of In the Steppes of Central Asia is the morpheme of the environment’s first phase of deployment. At the foundation of the second (intermediate) phase is the morph of movement. Borodin shapes it as counterpoint, formed by layering the violin octave pedal $e^3-e^4$ (the desert element) over the rhythmic ostinato in the violas and cellos (the caravan element). Both elements are transformed in the process of development. The desert element is timbrically layered by the octave pedal in the horns and periodically repeating $e^2$ in the oboe. Its harmonic complexity is caused by layering on the pedal fifth $a-e$ in the flutes and clarinets. The caravan element, after moving by degrees of the chromatic scale, transforms at the end of the second phase into the bournon fifth $A-e$ in the violas and cellos. In the morpheme of the environment’s third phase of deployment, that fifth becomes the ostinato accompaniment to new material: the ornamental melody in the English horn (the Eastern element), in which “certain symbols characteristic of the music of several Oriental peoples are certainly seized upon”\(^1\). Borodin lays out the Eastern tune in three strophes over a strictly ostinato foundation of violas and cellos.

Structures with more or less constant, exact repetitions are used in many of Stravinsky’s works. For instance, the idea of the strict ostinato is most consistently carried out — practically for the whole length of the form — in the first piece from Three Pieces for String Quartet, and in the song Tilim-bom from Three Tales for Children. The unvarying repetition of the first piece from Three Pieces for String Quartet is presented in the form of a three-measure structure in the cello. There is a paradox to this textural element, consisting of its own internal variation. The breakdown in the frequency of repetition in the first three-tone

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\(^{1}\) Сокор А. Н. Александр Порфирьевич Бородин. С. 559.
motif with the minor-ninth doubling of the second tone, on the third beat of the first bar, defers the understanding of the textural element as strictly ostinato, at least until its third appearance. Together with the pedal note in the viola, the exact repetition of the cello forms something akin to the upside-down bourdon fifth in *In the Steppes of Central Asia*, in which the pedal note is higher than the rhythmically active part. Furthermore, the consonant quintile foundation of Borodin’s bourdon is transformed by Stravinsky into an acutely dissonant clustered sound structure as an excerpt from the chromatic scale: es–d–des–c.

In the charming vocal miniature *Tilim-bom* from *Three Tales for Children*, the strictly ostinato element $g–c^1–f–g^1$ in the piano part is laid on the foundation of a morph playing out the morpheme of the event, the extinguishing of the fire in the goats’ house. Repetitions of that element personify quickly flowing time, and also depict (thanks to the distribution of pitches in the wide register) the hustle and bustle of everyone who wants to take part in the event.

Stravinsky first used an exactly repeated sound construction, personifying a real temporal process, in *Dances of the Young Girls* from *The Rite of Spring*. In that music, the morph of the event consists of two ostinato elements: a four-pitch motif $des^1–b–es^1–b$ and a chord formed by layering a Fes-major triad and the first inversion of the minor-major seventh from es. The elements are genetically connected, so that in terms of pitch, the first is a part of the second. But their roles in the imagery and meaning of the whole are different. The four-pitch motif, imitating the ticking of clockworks, is set running by the end of the *Introduction*. Following that, *Dances of the Young Girls* begins with the second element, in which its origin, based on movement and dance, is dominant.

In the first phase of the form’s deployment in *Dances of the Young Girls* (reh. 13–24), the elements take turns, layering atop one another, generating new situational counterpoints that precisely repeat (see, for example, the double basses, cellos and violas lines at reh. 16, 17). Foreshadowing the appearance of the dance melody in the horn at reh. 25, they merge into an ostinato pulsing background layer in the strings. In the second phase, the ticking element is passed from instrument to instrument, sometimes fading into the depths of the orchestral sound and sometimes emerging to the foreground, especially when it is played by the horns, trombones or tuba.

Overall, the music in *Dances of the Young Girls* can serve as something of a standard for Stravinsky’s strictly ostinato technique. We find it reproduced in later works by the Russian master. For example, the exact “marching” repetition of the double bass (personification of the cheerful gait of the traveling hero) is used in most of *The Soldier’s March* from *The Soldier’s Tale*. The ticking element in *Dances of the Young Girls* is reproduced in the exposition and reprise of *Airs by a Stream* (*The Soldier’s Tale*), and in the musical fabric of the first and third parts of *Symphony of Psalms*. The final scene in *The Departure of the Bride* from *The Wedding* is worth extra attention. The ritual weeping by the mothers of the bride and groom (reh. 82–86) is one of many instances in which the vocal and instrumental components of the score are united not by contrast, but by similarity. Stravinsky creates the dense emotional atmosphere of the final farewell on the basis of a polymorphic interpretation of the plaintive minor second. The lamenting parts for women’s voices, intoning the minor second $a^1–b^1$ in an improvisational manner, are supported by the strictly ticking ostinato in the first and third pianos. The layering of the minor ninth on the minor second allows the composer to achieve register-based layering in the musical fabric even within the monotimbre of the two pianos (Example 4).
I will note that the semantics of the ticking clock is something Stravinsky has in common with his New Viennese contemporaries. In several pieces chronologically proximate to The Rite of Spring — Five Pieces for Orchestra, op. 16 (1909) by Schoenberg, Six Pieces for Orchestra, op. 6 (1909) and Five Pieces for Orchestra, op. 10 (1911–1913) by Webern — a ticking clock plays a role that highlights the contrast in the musical fabric as a whole. In the first three pieces of Schoenberg’s cycle, it is a short departure to reality from the closed subjective space of the main musical image. In the concluding section of the first piece, Premonitions, the ticking of the clock is formulated as a multilayered minor-second duplet ostinato in the woodwinds and brass, layered over the main thematic element, a triplet ostinato motif in the harp. The slower tempo written into the score, and the obvious textural-acoustic prevalence of the duplet layer over the triplet layer, is interpreted as a departure from deep reflection, as the restoration, for a moment, of contact with the external world (see mm. 4–10 after reh. 14). In the second piece, The Past, the ticking of the clock is presented in the form of a tertial-quintal ostinato in the flutes, woven into the musical fabric in the pre-reprise section of the form as a whole (reh. 10). In the third piece, Summer Morning By a Lake: Chord-Colors, the external world calls attention to itself with the major-seundal ticking of the woodwinds, harp and celesta, emerging in the background of the coloristic sound pedal in the strings (mm. 1–2 after reh. 5).

Compared to Schoenberg, the ticking clock in the third and fifth pieces of Six Pieces for Orchestra, op. 6 by Webern, is more laconic, graphically sharper, structurally disarticulated and well-ordered. In measures 5 and 6 of the third piece, the ticking unison lines in the flute, muted horn and glockenspiel, formed by a sequence of melodic thirds, display features of reflective symmetry in their structure. The ticking of the clock in measures 19 and 20 of the fifth piece present a clustered type of multilayered textural imagery, created by the layering of ostinato lines in the trumpets, celesta and harp. In the last six bars of the sixth piece of Webern’s cycle, we have the ticking of the clock (the ostinato figure in the harp) conjoined with its chimes (the measured pulsing of the celesta and the sounds of the untempered bell). In Five Pieces for Orchestra, op. 10, the ticking of the clock is used only in the third piece. The repeated fourth in the harp and pulsing tones in the celesta which personify it provide counterpoint to the expository and reprise appearance of the work’s main melodic line (mm. 1–3, 8–10).

Returning to Borodin, we should note that the A-minor improvisational, lacelike descending melody of the Eastern tune, in its last strophes (mm. 44–72), is harmonized by a chain of thirds in the clarinets. Combined with the melodic pillar tones, the links in that chain form an exquisite harmonic sequence of triads based on the primary and secondary
degrees of A-minor. These triads are connected by diminished seventh chords. In this fragment, Borodin’s score sounds reminiscent of the colorful harmonic “wanderings” of chordal pairs in the pedal element from the morph of the ocean depths in Rimsky-Korsakov’s musical tableau Sadko. In the middle section of the form, the Eastern melody is transposed to F-major and is radically diatonicized: the clarinets accompany it exclusively with the degrees of an F-major triad. We will also note the change in the pedal layer. The violin octave union $e^3 – e^4$ is displaced one fifth lower. In the concluding, fourth phase of the deployment of the environment in In the Steppes of Central Asia, Borodin resorts to a repetition of the second phase, based on the caravan element.

Asafiyev’s famous definition of the form of the Introduction to Stravinsky’s The Rite of Spring as “the growth process of the musical fabric” can just as reasonably be applied to the polymorph of the environment in In the Steppes of Central Asia. Here, the Russian tune is highlighted by the violin octave pedal $e^3 – e^4$. The pedal fifth $a – e$ layered on top of it diatonicizes the caravan element, facilitating its transformation into the bourdon fifth $A – e$. The chromaticism of most of the caravan’s movement grows in the minor-second downward slippage of the thirds accompanying the Eastern tune. In Borodin, the interaction between elements of the “growing” musical fabric, which replaces the normative thematic development so characteristic of classical and romantic music, is striking for its originality and genuine novelty. Such an implementation of the idea of growth anticipates, with genius, the fundamental traits of musical thinking in the subsequent century!

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ПЕРЕОСМислюючи Ігоря Стравінського історично і теоретично — ІІІ

Актуальність теми статті зумовлена необхідністю виявити подібності в поліморфному музичному мисленні Миколи Римського-Корсакова, Модеста Мусоргського, Олександра Бородіна та Ігоря Стравінського.

Мета статті — охарактеризувати поліморфні особливості мови М. Римського-Корсакова, М. Мусоргського, О. Бородіна, що становлять основу творчих звершень І. Стравінського, ключової постаті в музичній культурі ХХ століття.

Методологія дослідження передбачає новий, морфологічний тип аналізу, що ґрунтується на категоріальній парі «морфема — морф», запозичений з лінгвістичної морфології. Для розгляду музичних фрагментів залишається один з ключових постатей в музичній культурі XX століття.

Результати і висновки дослідження. Морфологічний аналіз творів М. Римського-Корсакова, М. Мусоргського, О. Бородіна й І. Стравінського надав змогу виявити певний набір інваріантних звукових конструкцій (морфем), імунентна концептуальність яких безпосередньо пов’язана з асоціативно-образними можливостями слухацького сприйняття. Морфема середовища спирається на взаємодію двох чи більше звукових послідовностей, нескоординованих щодо часу вступу. Конструкція морфеми руху поєднує ритмічно регулярну й нерегулярну горизонтальні. Перемішування і мелодичний рельєф утворюють морфему простору. Морфема дисонансу наявні малосекундові, тритонові, або великосептимові тертя. Морфема Януса виявляє властивості текучості, мінливості, неоднозначності. Морф — це морфема як у вигляді співзвуччя, так і в формі більше-менше розгорнутої побудови. Морфема і морф співвідносяться як інваріант і варіант. Морфеми середовища, руху, простору, дисонансу Януса втілені в текстах конкретних творів як морфи, взаємодіють, надаючи музичній тканині особливу якість поліморфності. Поліморфізм, як новий тип музичного мислення, сформований у творчості М. Римського-Корсакова, М. Мусоргського й О. Бородіна, повною мірою розкриває свої потенційні можливості у І. Стравінського.