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Original article

Научная статья

The Factor of Spatiality and its Meaning for the Visual Interpretation of Music (on the Example of Two Melodramas in Arnold Schoenberg's Pierrot Lunaire) Фактор пространственности и его значение для визуального прочтения музыки (на примере двух мелодрам цикла «Лунный Пьеро» Арнольда Шёнберга)

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Abstract. The article examines the category of space in the aspect of its manifestations in the art of music and the comprehension of its specific features by researchers. A correlation is brought out between the phenomenon of spatial figurativeness, which appears during music perception and analysis, which is essentially close to the nature of synesthesia, and the corresponding visual images that are realized in contemporary solutions related to musical performance and production. The attempt is made to establish the objective foundations of "re-expressing" music in the language of the spatial-temporal visual arts.

Аннотация. В статье рассматривается категория пространства в аспекте её проявлений в музыкальном искусстве и осмысления их специфики исследователями. Проводится корреляция между возникающим при восприятии и анализе музыки феноменом пространственной образности, близкой синестезийной природе, и соответствующими визуальными образами, которые реализуются в современных постановочно-исполнительских решениях. Сделаны шаги к установлению объективных оснований «перевыражения» музыки на язык пространственновременных зрелищных искусств.

Keywords:

figurative interpretation of the musical text, spatial-temporal universals, the parameters of musical texture, the musical chronotope, perceptive space, visual versions of music, Arnold Schoenberg's *Pierrot Lunaire*

Ключевые слова:

образное прочтение музыкального текста, пространственно-временные универсалии, параметры музыкальной ткани, музыкальный хронотоп, перцептивное пространство, визуальные версии музыки, «Лунный Пьеро» А. Шёнберга

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Introduction

When studying various particular musical compositions, we aspire to achieve a certain integrality of achievement. The latter is aroused by a profound aspiration to refrain from stopping on analysis of purely musical structures and the images generated by them — abstracted to a certain degree from the concreteness of the real world. On the contrary, in most cases, we attempt to reveal the relatedness of music to the context of life and culture, to the universal and intersubjective meanings which comprise the objective foundations of its visual interpretation.

In the present case, we shall inevitably touch upon such exceedingly important parameters of sounding musical texture as time and space, which at the present time are studied under different angles. Thus, for the representatives of Larisa Kazantseva's school, space and time turns out to be taken as a basis of a number of scholarly explorations. In particular, according to Svetlana Mozgot's conception, "in the art of music, the category of space acquires the status of a semantic phenomenon" [1, p. 93]. Precisely to the same degree, both space and time become of paramount importance for Svetlana Sevastyanova, whose angle of research is concentrated on the theater on the screen [Ibid]. In his turn, one published work of Maria Makovetskaya states that the turn to the category of space provides musicologists

with the opportunity of realizing the process of reading out the "musical code" [2, p. 123]. Regina Budagyan and Marina Zaitseva's article examines the impact on musical space created by digital and visual technologies, which have generally led to the transformation of the musical culture of the turn of the 20th and the 21st centuries, having been actively incorporated into art activities "by musicians, theater directors, producers and visualizing designers," etc. [3, p. 368].

The phenomenon of the field of sound is presented in Pavel Ignatov's and Irina Aldoshina's work as synonymous to the conception of musical space through the prism of active direction, with the aid of which the authors study "the interconnection of the acoustics of theater and concert halls with the art of performance and auditory perception of musical concerts" [4, p. 37]. Analyzing Georg Friedrich Haas' musical works, Svetlana Lavrova makes use of the conception of "liminal spaces," in which liminality defines by itself "the threshold state of sound, from its origin in silence to the sound manifestation (epiphany)" [5, p. 26]. It is obvious that in all cases, without any exceptions, the point of departure for each of the authors is the realization of the integrality and unity of the ontological foundations of being, culture and the laws of human thinking, branched into specialized fields during the process of cognition.

This kind of position on the part of the researcher is, essentially, an interdisciplinary one. The familiar position is that the way, under which angle people perceive reality surrounding them, their picture of the world and the cultural consciousness of society and the individual being formed under the impact of the latter — all of this, in one way or another, finds its expression in artistic creativity. For this reason, interdisciplinary interactions take place not only in scholarly activity related to the arts, but in artistic activity itself that composers themselves engage themselves in (wherein we find numerous examples of creative impulses received by the artist from philosophy, history and all sorts of scientific, artistic and other ideas and theories), as well as performers and producers. In the latter case, the interdisciplinary aspect becomes transformed into the active aspiration towards the synthesis of the different arts in their most diverse forms, including those that are entirely untraditional. Substantive factors of these have been provided by the "visual turn" in culture, which emerged as far back as at the turn of the 19th and the 20th centuries, as well as the postmodernist predilections (towards eclecticism and the mixture "of everything in everything"), technological progress, not to mention the heightened interest in the psychological and the art-based research of the phenomenon of synesthesia.

One of the vivid manifestations of the noted movement towards this synthesis was the creation of visual versions of representation of the so-called "absolute music," i.e., the works which did not assume possessing any accompanying visual element derived from ritual, the theatrical stage or the cinematic screen. In the writings of Alexander Chernyshov¹

they have even received their own genrerelated appellation, which emphasized in these "synthetic artistic texts" the defining (content-based or form-generating) role of musical natural recurrences: a theater performance based on a piece of music, or a film based on a piece music.

While analyzing the examples of such mixed artistic genres, we shall bring forth the following hypothesis. The "translation" of the heard (i.e., music) into the seen (the visual element) is carried out in an arbitrary manner, not as much through subjective imagination as by means of a link existing in reality. What is meant here are the psychophysical spatial-temporal sensations and perceptions.

As it is generally known, space and time, which pertain to the list of basic cultural constants defining the human being's worldview and practical activities universal scholarly categories. Comprehension of their essences has always occurred in the various branches of scholarly knowledge, in art and in everyday life practice. It becomes quite reasonable that the conceptions involving space and time differ from each other both in the historical dimension and in line with the objects, aims and natural recurring laws of each of the fields of cognition explicating the precise boundaries of content, features and functions of the given concepts.

The Phenomenon of Musical-Artistic Space

The present article shall discuss the musical-artistic space and time of a concrete work of art. Let us clarify, what is it that is understood in the present day under the specified concept in music, and wherein lies its essence, turning our main attention towards musical space.

The present category, which is gradually achieving the status of an academic musical term, right before our eyes, is actively used in contemporary music scholarship. We shall

¹ Chernyshov A.V. Mediamuzyka: osnovy teorii, praktika i istoriya [Media Music: The Foundations of Theory, Practice and History]: *Thesis of Diss. ... Doctor Sci.: 17.00.02*. Moscow, 2013. 40 p.



bring forth certain workable definitions of musical space.

In the broad sense, analogously to such conceptions as informational, social, artistic and spiritual space, musical space presents a part of the artistic-communicative environment, being filled with music that either sounds out in reality or exists in potentiality.

In a narrower sense, musical space may become endowed, on the other hand, by a metaphysical meaning, presuming the presence of the ideal artistic world of a musical composition and its figurative-poetic content that becomes explicated verbally or by visual means. On the other hand, it can be understood as a spatial material-acoustic and textual-graphic expression of the composer's musical ideas and thoughts, as a "field of spatial characteristic features of musical semantics," a sort of "integrated mediated synesthesia."2 The justifiability of such a definition is stipulated by the fact that sound itself in its infinite diversity of pitch, timbre, dynamics and rhythm is already endowed by spatial and dynamic features, presenting itself as the bearer of information about the space-and-time pertaining to life and art.

Thereby, Svetlana Vasenina's research work "F e n o m e n muzykal'nogo prostranstva v kontsertnoy praktike i zvukozapisi" ["The Phenomenon of Musical Space in Concert Practice and Sound Recording"], as one example among many, indicates the undoubted connection between sound and space: "Sounds, whither close or remote, concentrated or dissipated, directed towards an object or gliding past it, arriving from the front, from the side or from the back, — all of these, according to the composer's thought, are significant for auditory perception, for the art of music." The argumentation of the presented point of view may be discovered in the fact that "the direction of musical sounds, their correlation with each other, bear intentions of musical expression, which reveal themselves, in particular, in the spatial solution, as well."

To summarize, it is possible to bring forth several levels of the meaning of musical space, which include:

- a) physical space, which music fills up with sounds and which provides the factor stipulating "the categories of form and types of formation of music"⁴;
- b) the textural-phonic level of the artistic musical text realized by means of specific musical coordinates of the vertical level, the horizontal level and the depth, as well as by means of the correlation between the background and the relief generating spatial extra-musical associations and figurative visual analogies⁵;
- c) the artistic-sonic environment formed by the spatial features of the musical material⁶ that manifests the composer's musical ideas; in other words, the space of the composer's thought materialized in the form of musical sound⁷.

Examination of musical space in the aspect of synthetic analogy presents itself

² Kolyadenko N.P. *Problems of Musical Synesthetics : Monograph*. Novosibirsk, 2015. P. 25.

³ Vasenina S.A. Fenomen muzykal'nogo prostranstva v kontsertnoy praktike i zvukozapisi [The Phenomenon of Musical Space in Concert Practice and Sound Recording]: *Thesis of Diss. ... Cand. Sci.* Nizhnii Novgorod, 2012. P. 3.

⁴ Asafiev B. *Muzykal'naya forma kak protsess*. [*Musical Form as a Process*] Book 1 and 2 / edited and with an article by E.M. Orlova. 2nd Edition Leningrad: Muzyka, 1971. P. 186.

⁵ Nazaykinsky E.V. *Logika muzykal'noy kompozitsii [The Logic of Musical Composition].* Moscow: Muzyka, 1982. 319 p.

⁶ Mozgot S.A. Muzykal'noe prostranstvo v tvorchestve Kloda Debussi [Musical Space in the Music of Claude Debussy]: *Thesis of Diss.* ... *Cand. Sci.* Saratov, 2006. P. 5.

⁷ Glazyrina E.Yu. Prostranstvo-vremya muzyki [The Space-Time of Music]. *The Pedagogics of Art.* 2011;(3):3–4.



as an extremely intriguing phenomenon. In addition to the research of the Novosibirsk musicological school, headed by Doctor of Arts, professor Nina Kolyadenko, we have in mind an original idea formulated by Bulat Galeyev. Its essence lies in the intention to juxtapose the reception of physical gravitation and the gravitation of modes and scales in music, which makes it possible to compare musical space with the construction of the universe. Following this mode of thinking, Galeyev examines Boleslav Yavorsky's theory of modal rhythm and Paul Hindemith's harmonic system. Mention is also made here of Arnold Schoenberg's serial thinking, which is studied from the position of a constantly expanding universe8.

Questions of musical space-time — the chronotope of the "mutual reversibility of spatial and temporal relations...the transformation of constantly changing processes into spatially visible forms...in line with the semantics of the reflected object or the experienced emotional state" — are researched in Marina Starcheus' dissertation. A direct relation with substantiation of our point of view is inherent in the basic chronotopes of music highlighted by the scholar:

- "the musical-acoustic chronotope based on spatial-temporal relations of the overtone series;
- the intonational (sound-semantic) chronotope defining the spatial-temporal forms of the processes of intonation;
- the architectonic chronotope conducive to the unmediated transmission of musical temporal processes into perceptible forms;
- the notated musical score chronotope in which the sound elements frequently

behave as if they follow the laws of visual images — merging into sonorous 'spots' or breaking down into 'points' or 'patterns."

We find an interesting aesthetic aspect of understanding space in music on the basis of a new vision of the differences and the closeness between the spatial and the temporal arts in Mikhail Gnesin's article "O prirode muzykal'nogo iskustva i o russkoy muzyke" [About the Nature of the Art of Music and about Russian Musicl (1915). Noting the general artistic patterns of musical and figurative-plastic images the flexibility of the musical material (as the adaptability of the musical theme towards transformations) and its formalization (structuration into musical form), he arrives at the following idea: musical images unfolding upon perception are a "category of plastic images," which are, essentially, spatial in their essence¹⁰.

It is impossible to overlook another conception of the spatial qualities of music, which is valuable on the practical plane of "spatial musical communication (perception)." It belongs to the wellknown cultural activist and popularizer of the art of music, Mikhail Kazinik. In his interpretation, such a perception of music is contrasted to "horizontal" listening to and following the musical events as the first stage of familiarization of a musical composition and consists in the comparison of the latter with the spatial-capacious simultaneous perception of the musical composition as a whole. What results from this is not passive hearing, but an intensive listening-and-thinking process of analysis of the thematic development, drawing the resources of memory in the form of a continuous juxtaposition and

⁸ Galeyev B.M. Sinestezia i muzykal'noye prostranstvo [Synesthesia and Musical Space]. *Muzyka – kultura – chelovek [Music – Culture – Human Being*]. Issue 2. Sverdlovsk: UrGU, 1991. Pp. 36–43.

⁹ Starcheus M. O hronotopah muzykal'nogo myshleniya [About the Chronotopes of Musical Thinking]. *Music Academy*. 2003. No. 3, p. 160.

¹⁰ Cit. from: Karachevskaya M. Op. cit. P. 110.



comparison of the various states of the thematic formations and their separate elements on all the stages of their "lives," upon all the dramaturgical turns, revealing the substantive depths and the meaning of the work of art.

Similar literature studies. contemporary musical research works clearly demonstrate a rejection of a purely, associative understanding of the spatial aspects of music in favor of a confirmation of the reality of the existence of the present regularities, since the authors base themselves on objective spatial traits of each of the components of the sounding musical texture — from the musical sound, the musical-verbal structures / expressive means, musical intonation, and musical texture to the architectonics of form, in general, and its dramaturgical unfolding.

Upon examination of spatial effects in music in their *perceptual* aspect,¹¹ it has been established that the present phenomenon is connected with real three-dimensional spatial directedness of the subject of perception. However, it is connected not in a direct manner (since, as Evgeny Nazaykinsky writes, in everyday communication, in art and science, human beings operate, as a rule,

¹¹ For more detail about this, see, for example: Nazaykinsky E.V. O psikhologii muzykal'nogo vospriyatiya [About the Psychology of Musical Perception]. Moscow: Muzyka, 1972. 388 p.; Titova T. O prostranstvenno-vremennoy modeli vospriyatiya odnogolosiya i mnogogolosiya [About the Spatial-Temporal Model of Perception of Monophony and Polyphony. Vospriyatie muzyki: sbornik statey [Music Perception: Compilation of Articles] / under the editorship of V.N. Maksimov. Moscow: Muzyka, 1980. Pp. 156-166; Orlov G.A. Vremennye kharaktiristiki muzykalnogo opyta [The Temporal Characteristic Features of the Musical Experience]. Problemy muzykal'nogo myshleniya [Issues of Musical Thinking]. Compilation of articles. Compiled and edited by M.G. Aranovsky. Moscow: Muzyka, 1974. 336 p.

with "abstract quasi-spatial perceptions"), but by means of "interim links that comprise the chain of graduate transitions from the real, physical space, to the imaginary, illusory."¹²

The general psychological foundation for such a transfer of the "spatial experience onto musical perception" and the "transformations of the temporal and the spatial into each other" consists in:

a) in "combined complex activities of various systems of analyzers" of the human psyche in comprehension of the surrounding reality, "particularly in the reflection of space and time of the functioning, the diverse organs of the feelings and receptions intersect and combine together to the greatest degree, particularly, here the prevailing role is played by the principle of the systematic approach of the analyzers"¹³;

b) in the capability of perceptible consciousness to recreate visual, tactile, motoric-motional orientations from generalized spatial-temporal *auditory* ones; to carry out "transitions from one perceptive modality (hearing) to others (vision, the tactile sense, as well as motion)."¹⁴

On the other hand, — which is also mentioned by Nazaykinsky, — music is a temporal art, but exists (i.e., it is performed and perceived) in conditions of the spatial dimension. Moreover, as has already been mentioned, the unit of the matter of music, the bearer of information — the musical sound — as well as all the meaning-bearing sound structures of higher levels are endowed with their own spatial parameters. In all likelihood, it becomes appropriate to reveal the possibilities of the established visualization of musical images particularly at the intersection of these features of music and the peculiarities of its reception.

¹² Nazaykinsky E.V. Ibid. P. 108.

¹³ Ibid. P. 104.

¹⁴ Titova T. Ibid. P. 160.



Oliver Herrmann. "Pierrot Lunaire: One Night, One Life"

We shall illustrate the way particularly how the textural-phonic, intonational and architectonic features of sound create the perceptible spatial effect, by turning to concrete examples. In our view, they demonstrate optimally the direct and indirect conditionality by means of specific spatial characteristic features of the music and its multifold visual interpretations. In particular, we shall demonstrate the example of Oliver Herrmann's film: "Pierrot Lunaire: One Night, One Life."

The illusion of transference through space appears in Schoenberg's cycle at the end of the 17th movement of the cycle, titled "Parodie" ["Parody"] — in the steps of the retreating Duenna, which in Herrmann's work transformed into the picture of the withdrawal and levitation of the soul freed from the hardships of corporeality. The specific spatial texture of the double mirror canon in the selfsame melodrama, the semantics of which — namely, mimicry present itself as a sign, indicating towards the clownish caricature of the experience of love. At the same time, in the film, it presents an imprint of death as the reverse side of life and love, their "mirror image."

Many melodramas contain spatial and light illustrations of the sound effects: the glitter of the treasures (No. 10), the radiance of the moon (No. 1), candle flare (No. 11), water currents (No. 20), condensable darkness, and many other images, potentially transformed into visual images of similar varieties.

In No. 14, "Die Kreuze," the poetic image of the approaching and then the receding enraged mob, its increscent hatred towards the Poet and its violence against him, manifested by textural, timbral and dynamic means — all of this is comprehended and "re-expressed" by Herrmann in his dynamic, noisy scenes of shoot-ups, pursuits and catastrophes, spanning through vast expanses of space. Let us focus our

attention on certain concrete spatial-musical peculiarities of "Die Kreuze," the movement that is, essentially, the dramatic culmination of the entire composition. The intonational spatial aspect, connected with directedness of the sound, is characterized here by an extreme intonational and melodic intensity: in the refrain, in the Sprechstimme vocal part the ascending leaps of intervals of sevenths or ninths, along with the rise in the tessitura (up to A-flat5), alternate with the "backslidings" along intervals of semitones in such a way as to form angular and distorted intonational relief (see the spots marked in pink and turguois colors in Example No. 1).

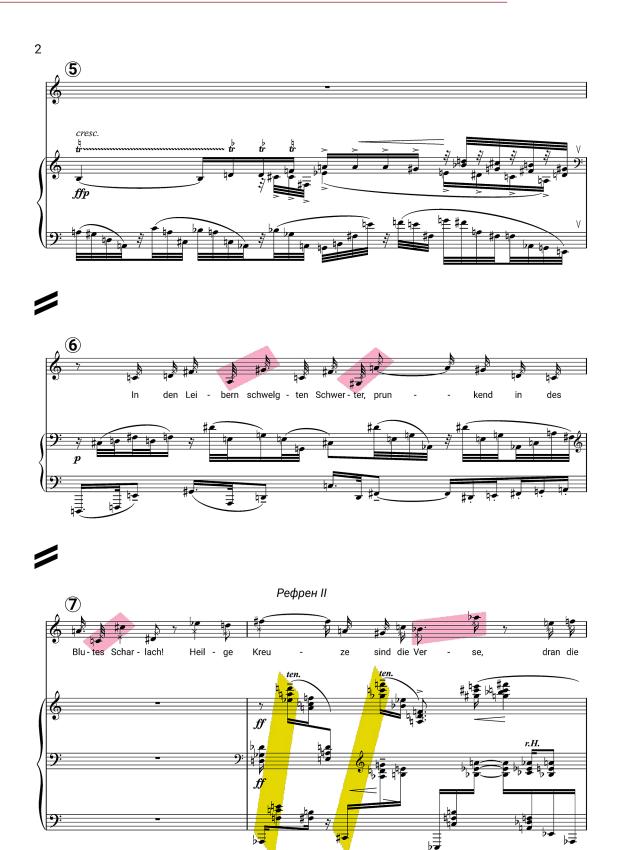
With each new statement, it becomes more and more intensive, in line with the outline of events. The piano part articulates the broad iambic "thrusts" alternating between several registers, frequently exacerbated by declamatory, pathetic dotted rhythms (see the spots marked in yellow). The thickset fully sounding and, simultaneously, extremely versatile chordal texture with its contrast of registral strata reveals its chief phonic quality — its harshness, "percussiveness" and capaciousness. The latter applies both to the vertical dimension (its incorporation of extreme registers) and phonic saturation, the source of which is provided by frequent stratifications of various complexes of chords forming cluster sounds and overtone resonances. These peculiarities pertain already to the musical-acoustical chronotope. Its ontological foundation — the correlation between the lower overtones, in particular, 2:3, — is revealed in the repetition of the two identical chords opening up No. 14 at its conclusion: the final sonority is "recolored" with an intensification of the qualities of acoustic vibration by means of three pitches complementing it, situated below the main chord, forming perfect fifths equally distanced from each other. Another phenomenon similar to the latter is the textural and phonic appearance of the second episode of the piece (the poet's



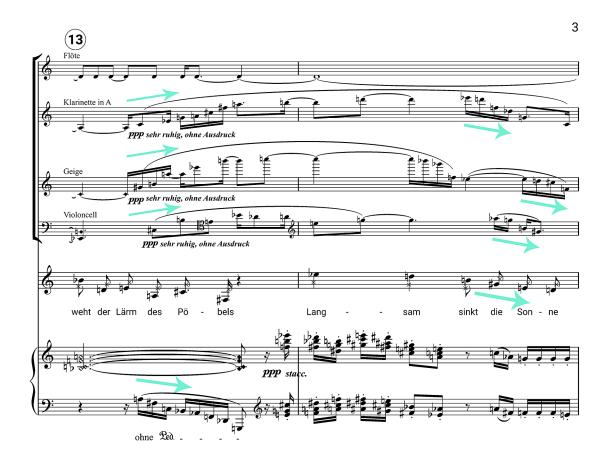
Пример № 1. А. Шёнберг. «Лунный Пьеро». № 14 Die Kreuze Example No. 1. Arnold Schoenberg. "Pierrot Lunaire". No. 14 Die Kreuze











death). Starting from m. 10, the piano's monochrome timbral quality, in its almost percussive quality on the dynamic mark of ff, becomes replaced by the emotionally expressive sound of the quintet of strings and woodwinds on the dynamic mark of ppp. There is a prevalence of "frozen" tremolo-sounds (such as flutter-tonguing on a flute) repeated in an ostinato-manner, or of sustained, prolongated sounds and soundcomplexes, effects of harmonic sounds created by the strings and the piano. The part of the Sprechstimme voice (the very manner of which is connected with the enrichment of phonic colorfulness and incorporation of the intonation of speech) is lined up here from descending short motives, manifesting the state of sorrowful shock.

The intonational chronotope-related process is expressed no less visibly or figuratively in the other textural peculiarities of "Die Kreuze." Thus, in the first episode (starting from m. 5),

containing the description of the flock of vultures (presenting a metaphor of the mob) torturing the poet, and the blood pouring from his wounds, there is a prevalence of uninterrupted swirls of precipitating and, once again, soaring passages, trills, and "pecking" successions of marcato sounds. In the second episode, starting from m. 13, during the words "far from the clamor of the mob," as the result of the melodic motion proceeding in different directions (descending in the piano part, ascending in the parts of all the other instruments) and the dynamic decrease to ppp, the impression is created of the emptied-out space in the middle register (see the spots marked in yellow in Example No. 1). The setting sun is depicted by means of the continually descending motion in all the voices, whereas the flickering specks of the waning light by the repetitions and specific techniques of sound generation — staccato, pizzicato and spiccato.



The music of this movement of the cycle clearly hears the architectonic chronotope, looks it over graphically, and experiences it emotionally. The form of the whole is lined up in correspondence with the rondo form of the poem's text and the overall logical stages of formation of the musical form (i:m:t). This can be perceived especially with the aid of the refrain, stated three times, which slightly changes its scale during each statement (21/2 m. - 3 m. - 11/2 m.), acquiring a different emotional-semantic gradation each time. Along with the episodes, a tracedout psychological relief is formed, reflecting the "energetic waves" of the process of the emotional and intellectual experiences. Incidentally, Ernst Kurth also classified the energetic element together with the types of musical space, along with the visual, the tactile and the auditory. The events in the fragment of Herrmann's film to which the aforementioned music is applied are lined along similar logical and emotionalpsychological phases — albeit, shortened, nonetheless, repeated numerous times.

Musical space also includes the graphical musical score. Its visually fixated details make it possible to disclose many of the substantial elements of music which escape auditory perception due to the unusual concentration of the musical events occurring at such a short temporal stretch. Thereby, an immensely thorough visual analytical work is required by the score of "Pierrot Lunaire," which is oversaturated with musical eventfulness.¹⁵

Conclusion

The resulting conclusion of the aforementioned would be the following. The spatial phenomena and effects, including those of a synesthetic nature, are an inalienable quality of the music itself and an important element of its perception and cognition of the auditory process. We find a validation of this in Tatiana Titova's writings: "...during the process of musical perception, consciousness relies, first of all, on generalized spatial-temporal characteristic features, and through them proceeds towards recreating the visual, tactile or motoric-motive images."16. In our case, the concept of "space" presents the intermediary link — a binding in the creation of various visual versions of interpretation of music.



¹⁵ See: Vybyvanets E.V. Arnold Schoenberg's "Pierrot Lunaire" through the Prism of Artistic Tradition. *Herald of the Adyghe State University. The Series "Philology and Art and Studies"*. 2016. Issue 2 (177), pp. 240–247.

¹⁶ Titova T. Op. cit. P. 160.



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