

# PRINCIPLES OF WORKING WITH SOUND IN M. SHALYGIN'S ESSAY "RED BELLS OF JUAN MIRO"

*Dzhabrailova-Kushnir E. D.,*

*The applicant of the department of ancient music of the National Academy of Music P. I. Tchaikovsky, Ukraine, city Kyiv*

DOI: [https://doi.org/10.31435/rsglobal\\_wos/28022019/6344](https://doi.org/10.31435/rsglobal_wos/28022019/6344)

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## ARTICLE INFO

**Received:** 08 December 2018

**Accepted:** 23 February 2019

**Published:** 28 February 2019

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## KEYWORDS

timbre characteristics,  
sound objects,  
acoustic music,  
creativity of M. Shalygin,  
music of the XXI century,  
work with sound,  
composers' thinking.

## ABSTRACT

The aim of the research is to establish the specifics of M. Shalygin's work with sound (using the work "Red Bells of Juan Miro" as an example), which will allow a better understanding of the originality of his music, as well as the composer's method of organizing sound and its (sound) interpretation. Thus, using the integrated method which combines the auditory and structural methods of analysis, as well as the analysis of the spectrogram of the work, the properties of the timbre elements, the principles of the organization of musical tissue, as well as the features of composer thinking and creative methods will be established od M. Shalygin.

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**Citation:** Dzhabrailova-Kushnir E. D. (2019) Principles of Working with Sound in M. Shalygin's Essay "Red Bells of Juan Miro". *International Academy Journal Web of Scholar*. 2(32). doi: 10.31435/rsglobal\_wos/28022019/6344

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**Introduction.** Understanding the principles of the work of composers with sound is one of the pressing problems in contemporary musicology. From the twentieth century, the general spirit of experimentation and the active searching for new approaches to sound led to a significant change in the ratio of composers to the sound organization of works. The central object of interests become the most important sound, "raised to the rank of basic material", especially for artists who belong to music as autonomous art. [6; p. 293].

The change of the figurative world, imagery in acoustic modern music is also interconnected with the new approach to sound. The sound nature is the "found" sound of a particular instrument. His interpretation began to have a conceptual significance for composers

"Red Bells of Juan Miro", written by M. Shalygin, hasn't fallen into a circle of deep research interests in Ukrainian musicology yet. It can be stated that this article is the first time for musicological comprehension of the principles of M. Shalygin's work with sound material which ensures the scientific novelty of the study.

**Analysis of recent research and publications.** The most significant contribution to the development of the problem of sound and its organization in musicology was made by Y. Kholopov, V. Kholopov, F. Karaev, A. McGlignin, D. Smolly, M. Katunyan, I. Tukova, S. Ship, D. Danov, etc.

V. Kholopova notes that at the end of the XX - beginning of the XXI century in the latest musical currents «so active work with sound in all its parameters began, that "sound" became the original unit of musical composition» [8; p.128]. At the same time, the whole set of approaches to the sound and forms of expression "created a mosaic picture at close examination", as I. Tukova observes, by the end of the twentieth century, in the composer's practice, they formed two tendencies. [5; s.1].

The first one was called the phenomenon of "individual project" and "hyperindividualism" by Y. Kholopov [7]. In the musical fabric of the work "individual" became both a direct sound, and "means of elevation of structured material" [5; p.1]. The second tendency was characterized by the search for more "universal patterns" that could systematize (accumulated over the history of music) existing variants of sound solutions, as well as the principles of their organization.

Maxim Shalygin's works and composer's thinking are still very few studies. For the most part, these are short articles, interviews, and biographical information which have written by the composer and posted on his official website. It is known that the Ukrainian-Dutch composer, M. Shalygin is the author of works of various genres, including chamber, vocal, symphonic, as well as music for performances, ballets and cinema [1]. It is also noted that a significant place in the work of M. Shalygin is a precisely chamber-instrumental music has become the epicenter of creative experiments and searches for a young composer which being the focus of artistic ideas of his time. For example, in "The Red Bells of Juan Miro" (written by the composer for the ensemble of percussion), an essential part of the concept and an important composite component of the work is the type of sound and the "found" consistency of percussion instruments (including non-European ones)

**The aim of the research:** In this regard, the purpose of the study is to establish the specifics of M. Shalygin's work with sound (using the example of the work "Red Bells of Juan Miro") which will allow a better understanding of the originality of his music as well as the composer method of organizing sound and its interpretation.

As we know, a new understanding and attitude to sound rebelled already in the XIX century. First of all, it was connected with the transformation of the classical tonal system and with the gradual emancipation of phonism. The final formation of another work with sound takes place in C. Debussy, in whose work the emphasis is shifted from the tone of the interconnection (in the pitch organization) to the colorful side of the sound. Starting from the twentieth century, phonism becomes the most powerful element of the system which subsequently led to "sonoristics" [4]. The composers moved away from the traditional ideas about sound, as a simple "segment" of musical tissue and turned to unleashing its potential. In particular, their attention was focused on the physical nature of sound, timbre characteristics, as well as the possibilities of splitting a semitone into microintervals.

Also, sonorism instead of consonances with noticeable tones introduced the "undifferentiated monolith", which began to have timbres characteristic [8; 144]. A similar transformation has occurred with polyphony: instead of a combination of differentiated voices, a tendency has appeared towards the layering of voices and the formation of polyphony layers. However, these sound formations constituted only one side of sonorism, as noted by the researchers. In real music practice, sound without a certain pitch became more and more important - in a multitude of drums and in various new means of sound production.

Another incentive for the new approach to working with sound was the active development of electronic music which allowed composers to explore the depths of sound material and create acoustic as well as rhythmic structures of any complexity. What naturally influenced the perception of sound matter and significantly expanded the composers' understanding of the semantic range of statements in the language of music. For example, M. Shalygin in one of his electro-acoustic works made the type of movement of "synthetic sound objects" and the speed of their transformation part of the musical concept.

The search for new "non-classical" methods of sound extraction has caused among composers the need for an invention or the introduction of exotic, often oriental instruments into circulation. In particular, composers use gongs and bells in their works, dictated by the fact that these instruments have sound properties that can obscure and dissolve for musical constructions. As acoustics A. Koestler notes, "listening to the sound of bells, we hear much more than just chordal ratios. First of all, we observe the effects of interference between sounds. The brilliant tone shatters into its elementary components" [10; p. 41]. And this is already quite different from the "coloring" of a static tone with the help of various timbre substitutions in a classical orchestra. Therefore this sound can be perceived as living "organic integrity" which passes through almost imperceptible phases of changes and shades.

For these reasons the textual types of sonorics which in most cases can not be differentiated by ear in tone height or by separate voices (characterization can only be the properties of sound: volume and density) musicologist A. McGlavin classified according to the principle of the external "drawing": the dot, line, strip, spot, loose, flow [2]. In other words, the researcher proposed to analyze sonorary

(and sonorist) music with the help of auditory and structural analysis methods, singling out "fortifications" (sound objects) in a musical fabric and observing their functions.

This article will also use the methods of auditory and structural analysis as well as the analysis of the spectrogram of the work since they allow to evaluate the work both from an aesthetic point of view (to characterize sound material and its psychophysical effects) and to define the principles of working with sound and the composer's mindset.

Musicologist A. McLelyn also noted that in the process of auditory perception of a sonorous sound, "material-specific, extra-musical performances are noticeably amplified", often due to the name of the work itself [3, p. 385]. So, for example, S. Gubaidulina named her composition "Light and Dark", A. Schnittke - "Yellow Sound", E. Denisov - "Signs on White". M. Shalygin, having included in the title of the work "Red Bells" and the name of the painter Juan Miro, a surrealist of the twentieth century, emphasized not only the programmatic artistic outline, but also the character of the composition's sound.

Musicologist A. McGlavin also noted that in the process of auditory perception of sonorous sound, "concrete-material, non-musical concepts" are noticeably enhanced which is often due to the very name of the work [3; p. 385]. For example, S. Hubaidulina called her composition "Light and Dark", A. Schnittke - "Yellow Sound", E. Denisov - "Signs on the White." M. Shalygin also included in the title the work "Red Bells" and the name of the artist Juan Miro (surrealist of the twentieth century) emphasized not only the programmatic artistic canvas but also the character of the sound of the composition.

**Research results:** It follows that from the end of XX - beginning of the XXI century, the main feature of composer work with sound - different principles of its interpretation. Plunging into the world of sound, the composers began to reveal his new properties and thus reveal other possibilities of its content.

At the same time the sound became perceived by composers as a "rolled-up process", the spatial-temporal realization of which can be represented as a form of work. So, the acoustic sound material began to be conceived as "organic integrity" as well as in the electronic music "synthetic sound object". That essentially expanded and substantially changed the very meaning of composite development.

An example of such composer work with sound is the work of M. Shalygin "The Red Bells of Juan Miro", written in 2011 for the Ensemble of Percussion.

In this composition the strike group includes Thai gongs, vibraphone, cow bells, still-drum, steel cymbals, gran cassa (big drum), opera gong, crotali (pompeii plates) as well as thunder sheer.

As can be seen from the above list of instruments a large number of them is not part of the symphony orchestra and some of them - opera gong, gran cassa and thunder sheer - do not have a certain height of sound. The difference in sonority is only in cymbals, vibraphones, cow bells, still-drum, Thai gong and crotali. We can conclude that the composer's timbre of sound quality and rhythm are more significant for the organization of the work rather than a certain height of sound.

Note also that the artist Juan Miro whose name the composer included in the title of the work there is no work that would be called "Red Bells". Therefore, we can assume that the composer has formed his own collective image which arose in his immersion in the aesthetic world of the artist's works.

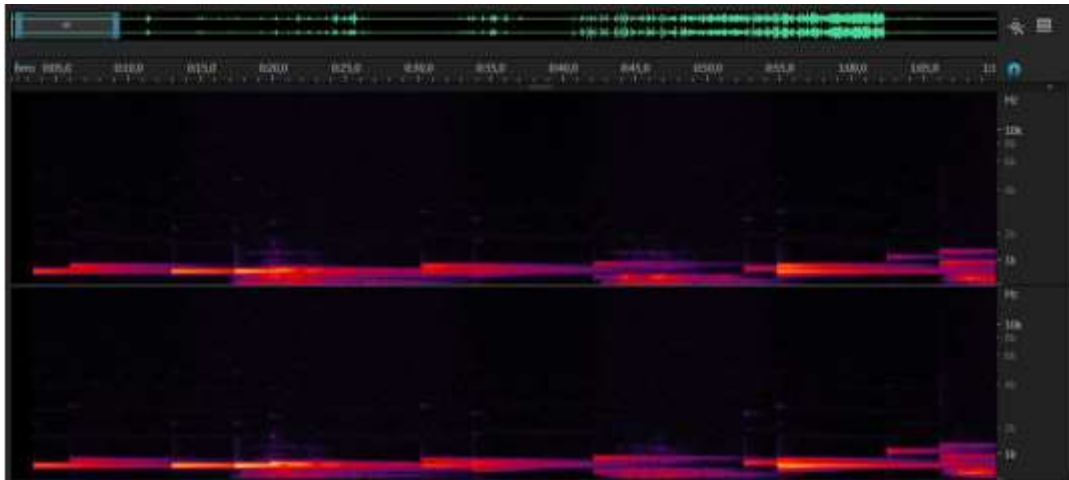
It is known that the main characteristics of the artistic language of Juan Miro are simplification of forms and use of local colors. However, the artist tried himself in ceramics and lithography, creating sculptures, borrowing part of the symbols from the Japanese calligraphy. So, about his work, the artist wrote: "What I am looking for is a motionless motion that which would be equivalent to what is called eloquence of silence, <...>, it would also be described by the term" dumb music "[9; p. 100]. In turn, M. Shalygin in his personal conversation with the author of this article also noticed that he always felt the connection of the artistic method of Juan Miro with the oriental aesthetics, in particular Japanese culture. In this regard, as the composer admitted, "my music turned out to be completely Japanese".

In its structure, "Red Bells" is a one-part independent completed work. In this composition, the sound complex is felt as a holistic, indivisible component of its elements, a unit that acquires the timbre and is perceived as a rumor as a single stream.

The development of musical material in this work is based on the principle of slow dynamic and texture growth. The composer uses a separate sound as a certain line which has the length of sound and the internal dynamics of development. Hence the enhanced value gets the idea of varying the properties of musical sound. So, this work uses two principles of variation of sound. The first one

is the soundness and rhythmic variation of musical material without timbre changes. At the same time, this type does not lead to a substantial change in the quality of sound (Example 1a, b).

Example 1a.



Example 1b.

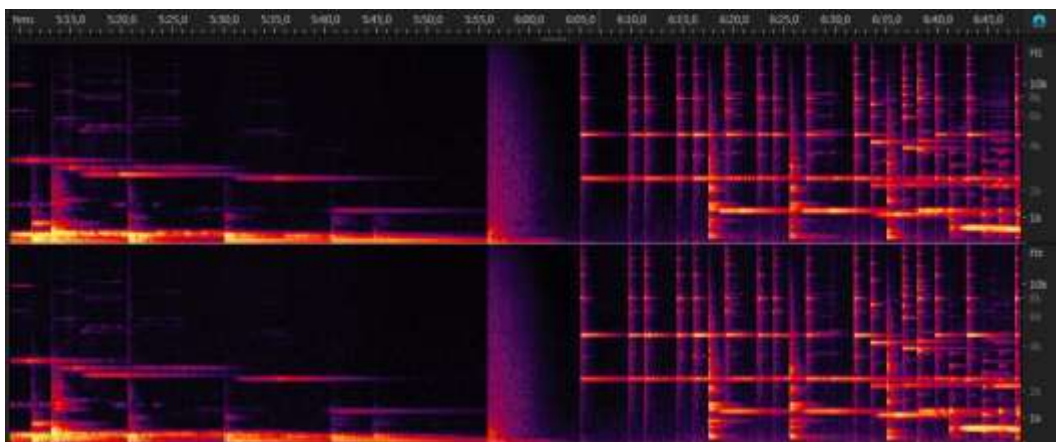
Vibraphone  
(without motor)

Nipple gongs

A musical score for two instruments: Vibraphone (without motor) and Nipple gongs. The score is written in 4/4 time. The Vibraphone part features a melodic line with dynamics ranging from *pp* to *mp* and includes a *soft attack* marking. The Nipple gongs part features a rhythmic accompaniment with dynamics ranging from *pppp* to *pp*. The score is divided into two systems by a double bar line.

The second leads to a new sound quality where the sound in most cases is associated with the transformation of the sound object due to sound-like, rhythmic and textual changes (Example 2a, b, c).

Example 2a.



Example 2 b

Musical score for Example 2 b. It consists of four staves: Crotali I, Vib, Gran Cassa, and Nipple gongs. The Crotali I staff shows dynamics from pppp to pp. The Vib staff has dynamics from pp to pppp. The Gran Cassa staff has dynamics from pp to pppp, with a note marked 'with fingers'. The Nipple gongs staff has dynamics from pp to pppp.

Example 2 c

Musical score for Example 2 c. It consists of four staves: Crotali I, Crotali II, Cow bells, and Vib. The Crotali I staff has dynamics from fff to fff. The Crotali II staff has dynamics from fff to fff, with notes marked 'do not damp' and 'metal cracks'. The Cow bells staff has dynamics from f to f, with notes marked 'do not damp'. The Vib staff has dynamics from p to pf.

Also according to the number of stages of the growth of sound and due to pauses, which become part of the concept of immersion in the vibration of the sound of bells the work can be divided into 3 sections or three phases.

So the first section of its duration is the shortest and performs the function of entry (pp), the second - the development where there are two waves of amplification of sound. And the third section is culminating.

The work begins with the silent sounding of the vibraphone (c - f) in a duet with alpine gong (sound c) (Example 1a, b) where from the beginning (and further throughout the entire work) the timbre and rhythmic forms of thematism are put forward on the foreground. In the future the duo is joined by cymbals (p) which slowly disappear in the shimmering sense of Thai gong, and eventually completely dissolve in the general ensemble of bells cow bells, crotali, still-drum, and Thai gong.

Note also that in each of the three sections the composer uses a certain set of tools which is introduced gradually in the musical fabric. For example, in the first section for the most part there are instruments that have a certain height of sound. In the second one - there is a combination and among different voices there are those that do not have the exact height. In the end in the third phase of the development of musical material M. Shalygin uses exclusively the timbre - opera gong, gran cassa and thunder sheer which in their sound output music into a complete sonority space and create the effect of the imperceptible blurring of the limits of the general flow.

**Conclusions.** Analysis of music showed that for M. Shalygin in "Red Bells Juan Miro" type of sound the selected texture plays a constructive role. The technique of working with the sound (which during the work is gradually moving from the sound-permeability to the sonar) reminds the work of the "objects" in electronic music. The structural qualities of bells consonant, sound percentility and rhythm are also important elements for creating the integrity of the composition, but the sonority characteristics are at the forefront. So in addition to the vertical and horizontal the author of the work has another new dimension - "depth" which is achieved through the effect of the sonority parameters. In this case the patterns of constructing a musical composition here are traditional (variability) but are performed by new means: mainly by changing the sonority quality of the "object".

We also note that from the point of view of its artistic and stylistic orientation, "Red Bells of Juan Miro" represent an individual synthesis of timbre discoveries of Western European music with the spiritual and cultural practices of the East, with prolonged listening to the fluidity of sound, its fluctuations and overtones. The wavy deployment of musical structures, the power of sound, combined with leisurely musical time, on the one hand is nothing more than an expression of the emerging emotion due to the travel of a "hilly landscape" of musical form. On the other hand it is a manifestation of the desire of the composer to immerse the listener in the fluidity of the inner life as

well as in the unplanned motion of the sound of music, which leads to the effect of the interaction of static and dynamic in the main and the main expressive effect of the composition.

The continuation of the study of M. Shalygin's work is now seen as a promising task and the work "Red Bells of Juan Miro" becomes a vivid example of contemporary interpretation of sound material. From this point of view it will be interesting in the next study to draw parallels between the creative method of M. Shalygin and other composer styles of the late XX - early XXI century.

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