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# Mikhail Matyushin's Contribution to Synthetic Art

### Bulat Galeyev

he great Russian poet Alexander Block wrote at the beginning of the 20th century: "Russia is a young country and its culture is a synthetic culture." One of the leading trends of the time in the synthesis of arts involved the union of music and visual images, primarily abstract painting. Most often it was combined, with the rejection of material paint in favor of "incorporeal light." The Institute "Prometei" has for many years conducted research into the Russian contribution to this particular trend in synthetic art. Together with the well-known names of Scriabin, Kandinsky and Tchiurlionis, we think it also worth mentioning the names of such artists as W. Baranoff-Rossine and G. Gidoni. In this paper I discuss the creative work and ideas of another pioneer of lighting art—Mikhail Matyushin, whose name has become known in the West only in recent decades.

Matyushin dedicated his "Memoirs of the Futurist" (known also under the name "The Career of the Artist") to the "following collective of art synthesis explorers" [1]. This intriguing fact generates a question: What did he himself do in this area, to search for followers?

First of all, it appears that even from a purely biographical point of view, he was, so to speak, a "synthetic" figure similar to M.-K. Tchiurlionis or A. Schoenberg. A professional musician who studied at the Saint Petersburg Conservatory, he played violin in the Saint Petersburg Court Orchestra for many years; at a mature age, after a period of amateur drawing, he studied painting at an art school and in other studios; composed music [2]; experimented with quarter-tone soundings; designed and made a violin; played on a stage; put forward a scientific concept of "organic culture"; studied the fourth dimension of space and its display in art; and investigated problems of harmonization of colors, colors and forms, and colors and sounds [3].

All this has given Matyushin's biographers grounds to compare him with the artists of the Renaissance epoch. He did not simply "collect" his versatile talents and interests but always considered them in obligatory correspondence. As he wrote:

Does the painter (sculptor, architect) know how the writer works? And what does the musician know about the work of the painter or the writer? There is a full or partial dissociation between them, and full ignorance in another's creative process. I never withdrew into any special area, I appeared as a musician and as a painter, and always liked and studied architecture.... It goes without saying that simultaneous reading of the wide range of sensations during perception expands and enriches any observation and a creative image in art [4].

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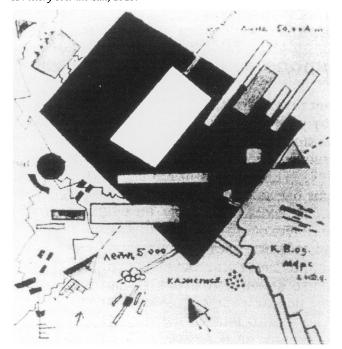
For Matyushin, such a variety of sensations, as well as the joining together of both rational and intuitive cognition, would lead to "organic culture," the characteristic feature of which is the perceiving of the world as an "organic whole."

But did Matyushin himself relate to synthetic arts (or Gesamtkunstwerk, to use the accepted German term)? (Of special interest to me are those that involve music and light.) Most likely, he did, including light-music synthesis, having experienced the first urge to do so in his

youth. Here is Matyushin's own description (written many years later) of impressions received during the favorite occupation of his student days—regular attendance of Conservatory Orchestra rehearsals:

I remember the charm of sound and color synthesis, merged in one extraordinary whole. I did not comprehend it completely, but I felt it somehow, and enjoyed it, now discerning, now join-

Fig. 1. K. Malevich, cartoon of the scenery for the opera A Victory over the Sun, 1913.



ABSTRACT

he author explores the pioneering ideas and experiments that the Russian musician and artist Mikhail Matyushin (1861-1934) contributed to the theory and practice of synthetic art. Special emphasis is placed on light art, light music and Matyushin's reflections on analogies between visual and performance art and on synesthesia. The article adduces some new facts, taken mainly from Russian sources not readily accessible to Western researchers. Although Matyushin did not make a significant contribution to the cause of actual light-musical synthesis, he did make interesting forecasts in this area, which still have value for the modern reader.



Fig. 2. M. Matyushin, fragment of the score to the opera A Victory over the Sun, 1913.

ing endlessly. I sat somewhere, noticed by no one, and looked, listening at the same time. Especially I liked, while listening, to look out of the window, or at a huge chandelier in the sky-light opening. Extraordinary beautiful colors-now orange, blue, now brightly jolly green, flashing in the crystal facets of the chandelier-merged with the sounds of Schubert's "Unfinished Symphony," and I felt unsurpassed bliss. And only there, where this joy is sounding and shining, the bliss is coming upon us. It was difficult for me to leave all that; when the music came to an end and the colors faded, contours of the windows and columns assumed orphaned appearance. The first experience of light and sound synthesis had been embedded in my mind. Later on I thought of it much and made experiments. It seems to me that art will be inevitably synthetic. Only such art can make people really happy, joyfully taking and giving in their creative work [emphasis added] [5].

Certainly, the level of hope for the potential of synthesis claimed in Matyushin's final phrase is extremely high. Its realization was obviously expected only in the vague future. All the same, Matyushin kept searching for ways and methods to approach this new, still unknown Gesamthunstwerk, based upon the synthesis of music and dynamic light.

This search was manifested in a more or less traditional form in his language,

by frequent use of synesthetic metaphors to describe acoustic phenomena (for example, "glassy, transparent sounds"); it manifested also in his experiments with painting, aimed at indirect, associative assimilation of musical thinking, similar to those conducted by Kandinsky and other abstract artists. Matyushin's series of canvases of 1918, known as "musical-painting compositions," grew out of these experiments [6].

Matyushin came closest to the real assimilation of the expressive potential of dynamic light in his scenic experiments. First of all should be mentioned his notorious futuristic opera of 1913, A Victory over the Sun, where Matyushin was credited as composer (the script was by A. Kruchenyh and V. Khlebnikov, the scenery by K. Malevich) [7] (Figs 1-3). I shall not describe this famous performance in detail here. There is already much written about it in the West, not to mention in Russia. Let us note only that very stylized (sometimes mobile) scenery and appreciably abstracted costumes were used. As for colored lighting, it played a minor role. The staging had much in common with other scenic projects of the early 20th century: "scene compositions" by Kandinsky and "abstract pantomimes" by O. Schlemmer, and in general with a scenographic

school known as "theater of the painter." Then in 1921–1922, Matyushin and his friends and disciples promoted an experimental staging of plays by Elena Guro and subsequent experiments by other authors (Guro, Matyushin's former wife, had died shortly before that, and the spectacles were carried out in her memory) [8,9]. Matyushin wrote about one of these events:

On the eve of the New Year 1923, we made a small exhibition. Two guys, Ender and Sergey, invented a column (made of paper), from the floor to the ceiling and put a light source inside, running up and down, creating the effect of a sunbeam falling upon the column. Small lanterns were moving all over the ceiling. I devised the folded envelopes lying around a column, which would suddenly rise, expanding into the shapes of cones, cubes and spheres, each with an actor hidden inside. It was a very impressive and weird sight when the arisen shapes started to move around the column [10].

Spectators settled down in the center of a hall, and the action developed around them. According to Matyushin, "The movement of forms ... advanced the purpose of putting an end to the domination of the actor on a stage," expanding the limits of the possible in dramatic art.

Matyushin's words are confirmed by other participants in these spectacles. From the memoirs of O. Matyushina, the second wife of the artist: "No actors were seen. Only paper models-cubes, spheres, pyramids—playing on the stage. Color and light dominated.... I do remember spectators' reactions. I saw them turning still, fascinated with music, with the game of light and color" [11]. Other eyewitnesses, for example N. Kostrov, recalled the specially designed spatial movement of the sounds: "Real and abstract, transparent and opaque imagesforms moving and revolving in the playing light; multi-texture sounds traveling over the heads of the spectatorsall this created fantastic pictures" [12].

Matyushin's disciples and colleagues describe in their memoirs his subsequent work as a lecturer and researcher in the Academy of Fine Arts and the State Institute of Art Culture during the first post-revolutionary decade. These memoirs were written many years later, at a time close to our own. When they assert that Matyushin studied problems of "color music" in itself (that is, beyond a theatrical stage), it seems a simple use of modern terminology for description of long-past events [13]. According to more reliable scientific-analytical sources and

Matyushin's own documents, it is possible to ascertain the following facts.

As a theorist Matyushin was interested in the hierarchy and interrelations between different sensory modalities. While admitting the genetic primacy of touch, he considered it necessary to study the correlation of this sensation to color, shape and sound [14]. But he most steadfastly analyzed correspondences that occur within the same sensory modality (sight most of all). In modern psychological terms they are referred to as "intra-modal" synestheses. He investigated preferred associations between colors and shapes (similar research was carried out by Kandinsky in Moscow in the early 1920s). In Matyushin's opinion, each color is comparable to a certain shape. Experiments brought him to the conclusion that curved, smooth shapes are associated with warm colors, and pointed, cut shapes with cold ones [15].

The archives contain a manuscript by Matyushin under the intriguing title "About a Sound and Color" [16]. He starts with the general analysis of a problem, then addresses concrete analogies between a sound and a color. Discussing the phenomenon of color-bearing music (whose existence was quite obvious for him), he warns against simple analogy between two physical "vibrations" (let us keep in mind that this analogy was a starting point both for the mechanists of Castel's time—the 18th century—and theosophers of the turn of the 19th and 20th centuries).

At the same time, Matyushin noticed that associative analogies between color and sound (to be exact, between color and the register of a sound) might be valid. Low tones are comparable to dark, rich, dense colors (for example, red); high tones, to light colors (yellow, sky-blue) [17]. Many researchers of synesthesia and "color hearing" expand "lightness" (i.e. "brightness") from a property of color into one of other sensory modalities, considering it an "intermodal property." Apparently, Matyushin was unaware of these views and ventured to experiment on his own. He decided to examine what would happen if two sorts of sensory stimuli were presented simultaneously to the subject: a sound of a certain pitch (high/low) together with a card of a certain color (light/dark). His experimentation showed that when low pitch was accompanied by "light" color, it was subjectively perceived as higher pitch. On the contrary, a dark color shifted subjective evaluation of high pitches to the lower end. Matyushin repeated his experiment in the opposite direction and

obtained symmetrical results. High pitch shifted subjective evaluation of dark colors to the "light" end; low pitch shifted "light" color to the "dark" end. (Tables containing results of these experiments can be found in a German book about Matyushin [18]; see also memoirs by his friends and colleagues and recent research works [19]). Some of these researchers emphasize that Matyushin's conclusions anticipated later results obtained in the laboratory of Soviet physiologist S.V. Kravkov, who studied the interactions of sense organs and published his materials in the late 1940s [20].

Matyushin's findings are similar to those of investigations carried out in the Leningrad Institute of the Brain, also in the late 1940s [21]. It seems that all this research was done independently, but Matyushin was the first to carry out such experiments with the psychology of art in mind. Fortunately, he never tried to deduce any "formula of art synthesis" on the basis of his results. (Others attempted this later. For example, Soviet engineer

K. Leontiev, starting from Kravkov's work, designed in the late 1950s a device for "automatic transformation of auditory information into color" [22]. It can be seen that he tried to revive the mechanistic "color music à la Castel" [23], in an updated, physiology-based version.)

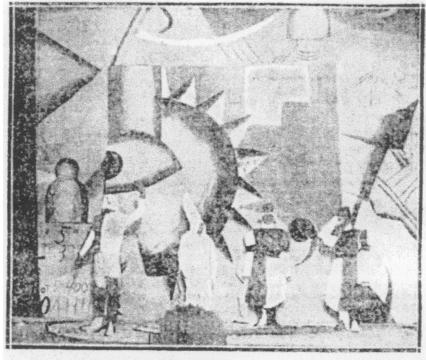
It is not known whether Matyushin intended to realize music and light (color) synthesis beyond the theatrical stage. Many documents have been lost, but those that remain show him to have been an artist with keen interest in art research at various levels, including those of physiology and psychology. Of course, he never promoted his conclusions in the form of a "model algorithm," binding for all. His basic research relating color and space interactions was carried out on a more subtle and profound level [24]. This is especially clear from his reflections about the nature of synesthesia and its displays in culture (language, art).

He wrote: "The set expression 'crimson chime' [the Russian equivalent of "mellow chime"]—a subtle, mellow, trans-

Fig. 3. Scene from A Victory over the Sun (photo published in the Russian newspaper Early Morning, 1913).

г. Сараджевъ, предебдатель о-ва "Сламя» г. Комичевъ в мя. др. осталось съмо зучие восноминацие, и при персомъ удоснемъ случай и съ удовольствіемъ още разъ прійду въ этоть радушный городь.

## ТЕАТРЪ ФУТУРИСТОВЪ.



2-ая картина 2-го дійствія оперы футуристовь "Побіда нада солняснь». Картина называется: "Несущів солище, кории которыхь пропадли аринчетикой".

parent, shining sound-clearly shows that our eye as though hears, and our ear as though sees" [25]. Take notice of the repeated "as though," which excludes physiological or "physical" explanation of synesthesia (color hearing). Moreover, Matyushin rises to lofty synesthetic comparisons in the field of art when he, for example, points out the profound analogy between music and design. (By the way, I proposed this analogy independently and have studied it for 40 years as a clear example of global synesthetic metaphor [26]). In Matyushin's abovementioned memoirs, written at the end of the 1920s and published in 1994, one can read the following passage, to which I would readily subscribe:

Amazing similarity of a winding curve with a consonance of the third suggests comparison of visual and auditory images in the historical development of ornament. In ornaments of savages one can so clearly hear a drum and three or four consistently repeating sounds. I think, having taken simple examples in music and illustrating them in consecutive order by ornaments, it would be possible to show quite an interesting connection of what has been separated until now. To apply this method to modern music —what a revelation it would give us regarding our estimation and understanding of the creative process in the historical development of art [27].

There are many such interesting lines in Matyushin's literary heritage. But beyond particular theoretical concerns, it is sometimes difficult to concretize what form of art synthesis he asserted. It seems also that as in the case of another Leningrad light artist of the same period, G.I. Gidoni, this uncertainty was not incidental, but motivated by the social situation of that time [28]. Soviet Russia was rushing into futurity, its aims having been determined only in the general, conceptual form, with little relation to reality and sometimes against its demands. Artists felt like pathbreakers of the new world and did not worry about the vagueness of the future. It was easier for artists than for the rest to fall into a euphoria of selfless revolutionary devotion. Matyushin could not avoid the pathos of such a declaration as: "We are already on a brink of a mighty community uniting all our abilities. Architect, musician, writer, engineer, organized by the new social environment, will make common cause creating works of art completely unknown to a bourgeois society" [29].

Humankind has not yet determined to what extent the social revolutions, with all their victims, can be justified. It is especially difficult to reproach artists for hurrying their time. Their pathos was not so dangerous, but always fruitful. Were it not for the Russian Revolution, would the pragmatic West ever have experienced the revelations in art presented by Tatlin, Theremin, Klutzis, Gidoni and Matyushin? Let us leave this question open. Returning to the basic question announced in the title, we finally come to the conclusion: Although it is not clear whether Matyushin considered "color music" ("light-music") as a possible realization of his dear "synthetic art," he was, beyond doubt, one of the pioneers of new art. In the epoch following Scriabin and Kandinsky he was seeking ways to understand the nature of synthetic art, to develop new means and methods applicable to this new art. The lofty pathos and earnestness of his search exemplifies subsequent generations of artists.

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