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RUSSOLO AND HIS TECHNICAL UTOPIA³

'The utopias of today can become the realities of tomorrow'

Karl Mannheim

Abstract: In our paper we put forward a new perspective for classifying Russolo's 'Art of Noise' as a crucial stepping stone in the development of musical phraseology at the beginning of the 20th century. Since Russolo's art is intimately related to the machine cult that was a focal topic in the ideology of the so called futurist movement, we are investigating the ways in which the theme of the machine was represented in different musical endeavours of that time.

By contrasting Russolo's experimental art with others such as Leo Ornstein's, we claim that Russolo's approach can be regarded as a revolutionary semiotic turn from the iconic, mimetic language rooted in the romantic tradition to an indexical language that was a necessary step towards modern machine music. The later revolution that utilized the technical innovations of the time using instrument machines – and by doing so self-referentially realized the technological utopia – was not only foreseen by Russolo, but he participated in the endeavour to create them.

Key words: futurism, Russolo, progressivism, utopia, semiotics, art of noise, machine-music.

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On June 2, 1913, no less than 2000 people gathered together in the Storch Theater Modena, to attend an extraordinary concert: Luigi Russolo and his friend and collaborator, Ugo Piatti on percussions, presented Russolo's newly constructed noise-intonators (intonarumori) for the first time. Unfortunately, no documents have been left about this particular event, but we have some information about other contemporary ones. Although we cannot reconstruct exactly what happened there that evening, a good guess can be made from the programme of a later noise concert held on August 11th, 1913 in the Red House in Milano. There Russolo conducted his own pieces, namely *Awakening of a Capital*, *Meeting of Automobiles and Airplanes*, *Dining Time at the Casino Terrasse*, and *Skirmish at the Oasis* that were written for nine different noise instruments.⁴

At these two concerts Russolo – who is counted as the first representative of the art of noise – introduced a thoroughly new arsenal of instruments (3 buzzers, 2 gurglers, 2 bursters, 1 shatterer, 1 thunderer, 1 shriller, 3 whistlers, 1 snorter, 2 rustlers), he did not use any of the well known traditional orchestral instruments and one of his aims was to exemplify all the previously established noise categories.⁵ But the most important thing is that the concerts at Modena and Milano were the first genuine manifestations of Russolo's peculiar aesthetic theory that was worked out in his manifesto *The Art of Noises* and its corresponding appendixes.

The aims of *The Art of Noises* are analogous to other contemporary avant-garde endeavors, proclaiming the necessity for the establishment of a new art. Russolo is far more radical in his proclaimed objectives than his colleague Francesco Balilla-Pratella, the author of *The Manifesto of Futurist Musicians*, who also made many bold statements on the topic of new art. The crucial difference between them lies in that noise-aesthetics, presented in the 1913 paper, claims much more than the sole imitation of urban life and its sounds. As Russolo put it: noise has to be an abstract raw material from which a new art can be generated. Though *The Art of Noises* is a permanent recollection of the surrounding ruthless life itself, a genuine noise artist cannot be satisfied with the simple impressionistic reflection of the voices of machines. The mapping of the physical properties of noises and the investigation of the possibilities of their integration into the art of music, became much more important for Russolo than for his contemporaries.

In what follows, we are attempting to highlight those dimensions of *The Art of Noises* which can shed light on the correlation of the early machine-music

⁴ Luigi Russolo, *The Art of Noises*, New York, Something Else Press, 1967, 14.

⁵ 1. roars, claps, noises of falling water, driving noises, bellows, 2. whistles, snores, snorts, 3. whispers, mutterings rustlings, grumbles, grunts gurgles, 4. shrill sounds, cracks, buzzings, jingles, shuffles, 5. percussive noises using metal, wood, skin, stone, baked earth, etc., 6. animal and human voices: shouts, moans, screams, laughter, rattlings, sobs.

and technical progressivism. We are investigating the influences of the 19th and early 20th century technological utopianism on the musical culture of the age. Instead of a historical-chronological reconstruction, our main goal is to set up a conceptual-logical order which can help us to interpret some otherwise almost unintelligible musical phenomena of the age.

As a starting point, we are investigating and interpreting Russolo's views on music by using simple semiotic concepts. His writings on the progress of music apparently express the views of technological progressivism. What calls for a deeper enquiry is the correlation of theory and musical experiments in Russolo's life and work.

Semiotics as a useful tool in analyzing Russolo's program

According to Russolo, the sphere of music has to be extended and changed not only with respect to the signified, the circle of the objects referred to by music as a work of art, but also with respect to the signifiers, the basic elements of the language of music.

Russolo places the history of music into a narrative which depicts a line of progress towards this end. Behind the historical narrative, there is an underlying avant-garde aesthetic programme as well. Its roots on the one hand can be traced back to the changes in the acoustic code of modern city life, and to the modernist technical utopias as presented in Russolo's manifesto on the other. This programme can be interpreted as a counter reaction against earlier models of music.

We investigate how one can interpret the two aspects of the Russoloan program and the connections between them. The first aspect is a radical shift in the range of signified objects. This shift is the consequence of the claim that music should draw attention to the environment which determines the "life world" of the artist. This claim is an expression of the above mentioned sympathy toward progressivism. The second aspect is the extension of the circle of signifiers. It is a goal which can be realised only by technological means, and as a consequence, the programme envisioned by Russolo can be grasped as a technological utopia awaiting realization.

The conceptual tools of Russolo are awkward to carry out the project, they are insufficient for setting up the prospected logical order. This is the reason why the task of explaining the phenomena has to be preceded by an interpretation of the Russoloan approach.

Our interpretative framework was inspired by a trichotomy of concepts developed to classify signs by one of the founding fathers of semiotics, C. S. Peirce. Peirce differentiates between the following categories in the second trichotomy of signs:

1. iconic signs, where 'there are *likenesses*, or icons which serve to convey ideas of the things they represent simply by imitating them.'⁶ So icons have specific properties in common with their objects (e.g. portraits).

2. indexical signs, where 'there are *indications*, or indices; which show something about things, on account of their being physically connected with them.'⁷ So indexes are directly influenced by their objects (e.g. a thermometer).

3. symbolic signs, where 'there are *symbols*, or general signs, which have become associated with their meanings by usage.'⁸ Symbols have a convention-based relationships with their objects.

In our view, the semiotic considerations behind the first two elements of the trichotomy can be useful in understanding the most important attempts in machine-music at the beginning of the 20th century. The use of Peircean semiotic concepts enables us to arrive at a clear-cut discussion of the phenomenon.

The iconic connection between the musical signifier and the signified is arbitrary, the presence of the icon does not make the existence of the signified necessary. An icon can function as an icon without the presence of the signified. We will call iconic the interpretative framework rooted in the romantic tradition, where the musical signs were given a narrative interpretation, and where music was grasped as something that tells stories, or describes real or fictional events or objects.

Composers (such as Leo Ornstein whose works will be discussed later) who were influenced by the modern city and the technical utopia, followed clearly the iconic type of phrasing. In their case, innovations have been made only in the sphere of the signified.

This way of renewing music was also a feature of Russolo's experimental music and aesthetics, so in this respect Tarasti has rightly stated about him: 'In his compositional aesthetics Russolo, in fact, goes back to the old model of romanticism and the generative course of the emotional content of music.'⁹ Yet Tarasti drew attention to a different kind of innovation as the content of Russolo's programme: the ingenious use of machine-generated noises as a part of the language of music. This extension, when looked at through the looking-glass of

⁶ C. S. Peirce, *What Is a Sign?*, §3., at: <http://www.marx.org/reference/subject/philosophy/works/us/peirce1.htm>.

⁷ Ibid.

⁸ Ibid.

⁹ Eero Tarasti, 'Music Models Through Ages: A Semiotic Interpretation', *International Review of the Aesthetics and Sociology of Music*, 1994, Vol. 25, No. 1/2, 315.

semiotics, results in an alternative signifier-signified relationship. The peculiar group of new musical signifiers, noises, exists in a causal relationship with the machines producing them. So because of the noise character of these signs, they refer to the machines as their sources in an indexical way.

This second aspect of the Russoloean program is focused on one of the least studied parameters of musical sound, i.e. timbre. Here his approach is due to his views on the obstacles to the progress in music. He regarded the obstacles as being in the narrow opportunities offered by the traditional instruments. But in his view, not only traditional, but modern music was also determined by the circle of pure sounds. Even the most radical composers relied only on the 5-6 instrument groups of the traditional orchestra.

As Russolo stated goose-stepping in music can be ended in one way only: 'We must break at all cost from this restrictive circle of pure sounds and conquer the infinite variety of noise-sounds.'¹⁰ Russolo's approach is not without forerunners, in 1906 Ferruccio Busoni in his *Entwurf einer neuen Ästhetik der Tonkunst*, a seminal work on European musical modernity, already wrote that the cause of the retrograde nature of the art of music, its convulsive adherence to conventions, was to be found in the narrowness of traditional instruments:

'Plötzlich, eines Tages, schien es mir klargeworden: daß die Entfaltung der Tonkunst an unseren Musikinstrumenten scheitert. Die Entfaltung des Komponisten an dem Studium der Partituren. Wenn "Schaffen", wie ich es definierte, ein "Formen aus dem Nichts" bedeuten soll (und es kann nichts anderes bedeuten); wenn Musik (dieses, habe ich ebenfalls ausgesprochen) zur 'Originalität', nämlich zu ihrem eigenen reinen Wesen zurückstreben soll (ein "Zurück", das das eigentliche "Vorwärts" sein muß), wenn sie Konventionen und Formeln wie ein verbrauchtes Gewand ablegen 'und in schöner Nacktheit prangen soll: diesem Drange stehen die musikalischen Werkzeuge zunächst im Wege. Die Instrumente sind an ihren Umfang, ihre Klangart und ihre Ausführungsmöglichkeiten festgekettet, und ihre hundert Ketten müssen den Schaffen wollenden mitfesseln.'¹¹

While in the case of Busoni the claim for new instruments needed for the music of the future remained only a sounding vision without a practical realization, from 1913 on, Russolo had overthrown his forerunner when he turned words into practice by constructing his own noisemakers. His starting point was the belief

¹⁰ Russolo: *Ibid.*, 6.

¹¹ Ferruccio Busoni, 'Entwurf einer neuen Ästhetik der Tonkunst', *Von der Macht der Töne*, Leipzig, Reclam, 1983, 70.

that music sounds and noise sounds cannot be arbitrarily separated from each other, because noises differ from sounds purely in their wavelength, frequency of oscillation, tempo and intensity and in that they do not display the orderliness and uniformity that pure sounds do.

The valorization of timbre was the result of this realization. Timbre is a parameter which is slightly independent of its physical bases because it is largely determined by the “form” of oscillation, while volume depends on the amplitude of oscillation while pitch depends on the frequency of oscillation. For Russolo, this line of argumentation legitimized his new criterion for identifying discrete sounds on grounds of their timbre.

The aesthetics of noise risks: that the bounds of pure sounds with respect to their quality and timbre can be eliminated by using noises (that is by sounds formed by irregular oscillations which are far richer in overtones than musical or pure sounds). Noises intensify overtones and multiply their presence in the material. By this total enharmonism, the art of noise could easily accumulate the realm of intervals smaller than a half note, which was already dreamed of by Busoni and his followers.

By using noisemakers, Russolo’s performances became bi-directional in their referential structure. The two different types of relations can be interpreted as iconic and indexical. The latter seems to overthrow the framework of the romantic model because it is not simply a narrative, iconic type of reference to machines and by them to technical progressivism. The indexical relation places the machine itself into the artwork by connecting the new set of signifiers to the noisemakers (intonarumori) themselves. Because of the causal relationship, due to the physical connection between the noise and the instrument, in contrast to the iconic type of signifying, the signified object has to exist, it has to refer to a real object, to something coexistent with the signifier itself. On the grounds of this distinction, we will present Russolo’s musical experiments as a stepping stone between the activism of the futurist programme and the realization of his own technological utopia in the field of music.

In semiotic terms, the futurist programme can be interpreted as an iconically signified object of the relevant artworks, and in some cases, the technical utopia under realization, can be interpreted likewise as an indexically signified one. The musical utopia, the realization of the programme was carried out mainly by electronic instruments. Our most important illustration for this will be Lev Theremin’s famous instrument, the Theremin.

The relationship of Russolo's programme to other futurist programmes

Russolo calls his writing *The Art of Noises* a futurist manifesto. Its explicit references to the general aesthetics of futurism cannot be doubted. Regarding its demands and tenets, this text is in accordance at least in three points with the founding text of the movement, *The Founding and Manifesto of Futurism* (Fondazione e manifesto del futurismo) formulated by Filippo Tommaso Marinetti: These points are the following:

3. 'We intend to exalt aggressive action, a feverish insomnia, the racer's stride, the mortal leap, the punch and the slap.
4. We affirm that the world's magnificence has been enriched by a new beauty: the beauty of speed...
11. ...we will sing of the vibrant nightly fervor of arsenals and shipyards blazing with violent electric moons; greedy railway stations that devour smoke-plumed serpents; factories hung on clouds by the crooked lines of their smoke; bridges that stride the rivers like giant gymnasts, flashing in the sun with a glitter of knives; adventurous steamers that sniff the horizon; deep-chested locomotives...' ¹²

Although in different ways, all three statements praise machines and movement, and what is more, the last point of the quotation is consonant with the closing remarks of the *Manifesto of Futurist Musicians* (Manifesto dei musicisti futuristi) published by Francesco Balilla-Pratella in 1911,¹³ which puts forward the proclamation of the 'reign of machines and the victorious realm of electricity'¹⁴ as the main purpose of musical futurism, and dreams of the portrayal of industrial plants, locomotives, ocean-liners, armoured ships, cars and airplanes.¹⁵

The aesthetics of *The Art of Noises* was definitely inspired by a similar conception, but the Russoloean suggestion on featuring machines in music exceeds the original aims of futurists and at the same time, it proves that the seemingly new futurist thought of imitating machines – leastways in the case of musical art

¹² F.T. Marinetti, *The Founding and Manifesto of Futurism*, at: <http://www.unknown.nu/futurism/manifesto.html> (the original version appeared in *Le Figaro*, February 20, 1909).

¹³ Or as some experts are maintaining in 1910.

¹⁴ Enrico Fubini, 'Der Futurismus in der italienischen Musik und seine ästhetischen und soziologischen Auswirkungen', in: Otto Kolleritsch (ed.), *Der musikalische Futurismus: ästhetisches Konzept und Auswirkungen auf die Moderne*, Graz, Universal, 1976, 30.

¹⁵ It is for certain that the idea of the 'music' of machines was not originated by Pratella, but Marinetti. In his later memoir Pratella himself recalled that the last paragraphs were written posterior by Marinetti. See: Rodney J. Payton, 'The Music of Futurism: Concerts and Polemics', *The Musical Quarterly*, 1976, Vol. 62, No. 1, 28.

– is in an intimate relation with the musical ideals of the recent romantic past. When Russolo writes that sole imitation should not be the final goal, and noise has to be only a raw material, an abstract material necessary for the new art of music, although not in an explicit way, he contests the standpoint of Marinetti and Pratella on ‘singing of’?

The futurist ideology fundamentally opposes the past. This is indicated by a common feature of the above-mentioned manifestos, namely that all texts address only the youth. The older generations, as representatives of the past, are excluded from the discourse when the futurists call for a fusion with the future and the present. As Pratella writes in the *Manifesto of Futurist Musicians*: ‘I appeal to the young. Only they should listen, and only they can understand what I have to say. Some people are born old, slobbering spectres of the past, cryptograms swollen with poison. To them no words or ideas, but a single injunction: the end.’¹⁶ Or in Marinetti’s above-quoted manifesto: ‘Friends, away! Let’s go! Mythology and the Mystic Ideal are defeated at last. [...] There’s nothing to match the splendor of the sun’s red sword, slashing for the first time through our millennial gloom!’¹⁷

At the level of iconic, narrative references, futurists turn their backs on romantic ideals. For them, the subject matter of music or of any other art could only be the city or the machine, the new world of technology, the compelling and at the same time awesome marvels of science. The aim of this programme is a total and basically uncritical fusion with the realm of machines. In spite of all, the continuity with romanticism is obvious. Although the futurists left behind the objects important for romantics, their claim for a new experience of unity and the artistic means they used in persuading audiences connects them to romanticism.

But in the case of the language of music not only a shift happened in the class of objects referred to by musical narratives. An important new element appears with Russolo’s work, namely the claim for the renewal of the sound producing toolbox of musicians which Russolo considers as the next stage of ‘progress’ in music. In Russolo’s view, musicians have used up all the possible variations inherent in traditional tools and because of the radical change of the human environment, the emergence of the acoustically transformed realm of the city, traditional pure sounds can not cause emotions effectively.

Why is this so significantly different from the overall futurist programme itself? This may become clearer if we go back to the distinction of iconic and indexical. Russolo’s noisemakers on stage become the signified objects of the signifiers produced by them, so the composition does not simply picture the noises of

¹⁶ Francesco Balilla-Pratella, *Manifesto of Futurist Musicians*, 1912, at: <http://www.unknown.nu/futurism/musicians.html>.

¹⁷ F. T. Marinetti: *Ibid.*

the awakening city. It does more, it creates them. The noises of the intonators are not simply imitating an object in the outside world. They are the productions of technical progress themselves, and as brand new sounds, they are tangible evidences of an autonomous world of musical timbre, of a musical possibility never existent before. The intonators as technical instruments are the embodied forms of their noises by the indexical connection to them.

One might draw a clear parallel between the futurist programme and a category of Karl Mannheim's *Ideology and Utopia*. Futurism is a radical version of what Mannheim called the second form of utopian mentality, the liberal-humanitarian idea. This form of mentality is rooted in the chiliastic time experience, even though it is a secularized version of it. It grounds its worldview on the idea of historical progress. Its treatment of time is one-sided. In its perspective, the past is nothing, the future is everything.

As Mannheim wrote, 'a state of mind is utopian when it is incongruous with the state of reality within which it occurs', which is 'reality-transcendent', which is 'oriented towards objects that do not exist in the actual situation'.¹⁸ These statements are in part applicable to the futurist mentality, but futurism lacks some elements of real utopian thinking. It only preaches about the aesthetic excellence of technological progress and modern life, and it raises its voice for the necessity of shifting references in art. Futurism draws attention to the sphere of technology, but it has no detailed concept, no palpable expectations about the future. However some theoreticians¹⁹ think that in order to speak of real utopias, it is indispensable to have more detailed, realizable views of the future. Since futurists did not have full-fledged utopias in their minds, their programme sponged on the preexistent technological progressivism, and with no underlying utopias, futurist manifestos are only empty shells, they are only mere propagandas of progressivism.

Russolo is an exception in this regard. Although his program can be called a utopia only in a very limited sense, he has a tangible project about how to create a new world, a new order in a particular corner of society, namely in the art of music. It is important to highlight again that his art not only draws attention to technological progress, but becomes a part of it!

In the remaining paragraphs, we will first compare Russolo's project with the one of his contemporaries. After this, we will take a closer look at a very interesting event, the introduction of a new musical instrument in the early days

¹⁸ Karl Mannheim, *Ideology and utopia: an introduction to the sociology of knowledge*, London, Routledge, 1991, 173.

¹⁹ Elisabeth Hansot, *Perfection and Progress: Two Modes of Utopian Thought*, MIT Press, 1974, 3.

of the Soviet Union which might help us to understand more about the utopian side of the Russoloean project.

A 'futurist' musician using the iconic approach

We might list the names of many composers, especially from the beginning of the 20th century, who praised the age of machines and electricity and, as a proof of their ecstasy, produced compositions with a narrative content grouped around the machine-experience. It is well known that among them many were thought to have strong connections to the futurists – and those who were denigrated with the phenomenon of futurism, were often the targets of those critics who were committed to the conservative artistic- and worldviews.

The above-mentioned Russian descent of Leo Ornstein, pertains to this later group. He became our example of the iconic type of reference because he wrote an important piano work in the same year when the *Art of Noises* was written. The first European introduction of the piano work in question, the *Suicide in an Airplane*, was commanded by the composer himself in the summer of 1914 in London in company with other extraordinary works like *Wild man's dance* and *Dwarf-suite*. This work was the reason why contemporary reports started to refer him as a futurist composer. The concert was held at the same place, where Russolo first achieved greater international success with his noisemakers. The young master, who besides 'futurist' was also called radical, ultramodern and what was more demonic, he overawed and shocked his audience at the same time.

To show how this happened, here is an excerpt from the Daily Mail, 28th March, 1914 issue where a commentary on the concert was published:

'Wild outbreak at Steinway Hall. Pale and frenzied youth. Mr. Ornstein, dressed in velvet, crouched over the instrument in an attitude all his own, and for all the apparent frailty of his form dealt it the most ferocious punishment. ... One listened with considerable distress. Nothing so horrible as Mr. Ornstein's music has been heard, so far-nothing at all like it, save Stravinsky's *The Rite of Spring*. Sufferers from complete deafness should attend the next recital.'²⁰

Although in the contemporary reception there were voices stating that compared to Ornstein, Scriabin and Schoenberg were 'poor modernists', looking back from our time, Ornstein is not as radical and new as the art of the composers of the Second Wiener School or the Russoloean approach to music. There is no doubt

²⁰ Vivian Perlis, *The Futurist Music of Leo Ornstein: Notes*, 2nd Ser., 1975, Vol. 31, No. 4, 739.

that the particular use of instruments, the strident dissonance and the frequent use of tone clusters gave a unique sounding to the works of Ornstein.

The short, extremely fast, repetitive phrases which gave the impression of percussions, moved the works of the American composer-pianist closer to the contemporary works of Stravinsky, and caused the impression of perpetual motion and acceleration in the listener. This also characterizes the piece *Suicide in an Airplane* where a short, always present, triple-pulse bass figure recalls the incessant noise of aircraft engines. Here Ornstein joins that tradition where the machine is symbolized by a continuous and smooth movement and whose beginnings date back hundreds of years before the 20th century. Despite the tragic aspect of the content of the work (suicide) the song we are dealing with takes it as its duty to celebrate the era of the machines.

The iconic gesture remained to be meaningful also in the case of new instruments. With few exceptions, the first era of electronic musical instruments was dominated by keyboard instruments. Of these, only a few sought to create totally new timbres, the goal was rather the faithful imitation of the sounding of existing instruments.²¹

Because of the imperfections in sound and complicated handling of his intonators in the early twenties, Russolo also began to construct a machinery, the so-called Rumorarmonio or Noiseharmonium, capable of reflecting the sounds of his intonators in a more credible way. Russolo presented the harmonium resembling an electric organ for the first time in November 1924 at the First National Futurist Congress.²²

The instrument of the socialist utopia

The Russoloan endeavor is one part of the reason why the instrument patented by Lev Theremin in 1921, the Theremin, became a sensation. This machine dazzled the Soviet Union and Western Europe and the U.S. because not only on the keyboard, but no human touch was required to play on it. The instrument operating by the use of the triodic oscillators invented by the Russian Popov, and perfected by the American Lee de Forest overawed the general public with its ethereal timbre not resembling the 'voice' of any other known instrument.

The Russian physicist, who was also the inventor of the first electric alarm and the interceptor bug, caused a great sensation already when introducing his instrument for the first time in 1921 on the 8th All-Russian Congress of Engineers.

²¹ Hans Ulrich Humpert, *Elektronische Musik*, Mainz, 1965, 20.

²² Barclay Brown, 'The Noise Instruments of Luigi Russolo', *Perspectives of New Music*, Autumn 1981 - Summer 1982, Vol. 20, No. 1/2, 46-47.

This event also aimed at presenting the so-called GOERLO program, a program with the aim of electrification of the Soviet Union. Glev Anfilov remembers the event as follows:

‘The inventor came nervously onto the stage. In the auditorium he saw the famous scientists Krzhizhanovsky, Bonch-Bruevich and Chatelin, and a crowd of noisy, impatient and curious youths. He gave a brief description of his instrument and apologized that (he or it) would have to play unaccompanied. The grand which stood on stage was completely out of tune. Then a strange music, unlike anything yet heard, floated over the quiet audience. The vibrating electrical tone, now swelling and now falling, was singing familiar airs which sounded new and unusual. There were Russian folk songs, a selection from Tchaikovsky’s *The Queen of Spades*, and from Saint-Saens’s *Le carnaval des animaux*.’²³

By its unique timbre and exotic sounding, the Theremin was considered mediating the voice of ‘distant planets’ and it directed contemporary attention towards space. But, as the above mentioned Tchaikovsky and Saint-Saens pieces indicate, the repertoire played on Theremin was rather mundane. The revolutionary Theremin brought about neither the revolution of noises nor that of enharmonism.

But it played an important role in the utopia which proclaimed the ‘victorious realm of electricity’. For this reason, as the fame of Theremin’s genius reached Lenin, he invited the young professor to the Kremlin for a personal meeting. As the story goes, Theremin presented the ‘radio watchman’, the ancestor of today’s alarms, and after that he also presented the instrument. Lenin showed intense interest for the instrument, and after trying out the Theremin, he allegedly repeated his still famous aphorism: ‘Communism equals soviet power plus electricity’.²⁴

Why did Lenin support the public introduction of the instrument? Because in his eyes it was a realization of the progressivist utopia. In Karl Mannheim’s thought, the socialist utopia is intimately related to the liberal-humanistic mentality as the former is a radicalized version of the latter. Although the socialist utopia is a far-fetched utopia in contrast to the futurist ideas, they are compatible with each other as the case of the Russian futurist movement might show.

Russolo’s noisemakers might be grasped as prefigurations of modern electric synthesizers which are capable of producing timbres in endless variability. Although Russolo himself wanted to extend the realm of noises, more precisely that of dissonance according to the contemporary tendencies in music, his basic

²³ Albert Glinsky, *Theremin*, Illinois, University of Illinois, 2000, 27.

²⁴ *Ibid.*, 30.

aim was the enrichment of the realm of timbres by technological means that was realized by devices such as the Theremin and some other electrical instruments.

Instruments capable of extending the realm of timbres can be regarded as realizations of Russolo's limited utopia. In these cases, artificial sounds refer to the technological utopia in an indexical way. Where music turns out to be the limitless extension of fantasy, not only musician and music appear on the stage, but also the embodied technical utopia that promulgates the victory of communism or that of modern city life over the pathetic past.

Гергељ Кертес
Адам Игнац

РУСОЛО И ЊЕГОВА ТЕХНИЧКА УТОПИЈА

САЖЕТАК

У овом чланку изложили смо нову перспективу за класификовање Русолове *Уметности буке*, као камена темељца у развоју музичке фразеологије на почетку 20. века. Будући да је Русолова уметност дубоко усађена у култ машине, која је била централни предмет у идеологији такозваног футуристичког покрета, истраживали смо начине на које је тема машине била представљана у различитим музичким стремљењима тог времена.

Супротстављајући Русолову експерименталну уметност радовима других уметника, попут Леа Орнштајна (Leo Ornstein), сматрамо да Русолов приступ може бити сагледан као револуционарни семиотички окрет од иконичког, миметичког језика, укорењеног у традицији романтизма, ка индексном језику. Овај приступ се може посматрати као неопходан корак ка модерничкој музици машине. Потоњу револуцију која је користила техничке иновације датог времена, употребљавајући машину као инструмент – и радећи то свесна сопствене технолошке утопије – није предвидео само Русоло, али је он био један од оних који су учествовали у напорима да је створе.

Кључне речи: футуризам, Русоло, прогресивност, утопија, семиотика, уметност буке, машина-музика.