

PLACE STUDIES

IN ART, MEDIA, SCIENCE AND TECHNOLOGY

Historical Investigations on the Sites and the Migration of Knowledge

edited and introduced by
Andreas Broeckmann and Gunalan Nadarajan

The volume presents sixteen studies about the complex interactions between art, media, science, and technology. Zooming in on specific places and historical moments, the authors describe exemplary instances of the fruitful interaction and collaboration between artists, engineers, and scientists. Analyses of the sites and trajectories of interdisciplinary knowledge production, as well as their ideological and institutional conditions, put a focus on the early Soviet Union, or the internationally dynamic period of the 1960s and 70s in Madrid, Sydney, New York, as well as in Poland, Sweden, and the Canadian West coast. Other essays deal with individuals like Vilém Flusser, Sigfried Giedion, and Jacqueline Tyrwhitt.

The book investigates multiple intersections between academic disciplines and cultural practices, enriching our understanding of creativity, variation, and historical change.

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You are now leaving the American Sector: The Russian Group *Dvizhenie*, 1962–1978

Margareta Tillberg

In the early 1960s, the art – technology – spectator triangle was fundamentally re-negotiated. This is the context for my presentation of the artist collective *Dvizhenie*, working in the USSR from 1962–1976. As my focus here is on the re-mediation of space in various aspects, two years of activities in emigration are added, as are investigations on the relationship between the art and science worlds in Russia, an area hitherto left almost entirely unattended. Despite *Dvizhenie's* productivity, it has so far barely been heard of in contemporary histories of art and media, a fate it shares with many other interesting artists from behind the Iron Curtain.

Dvizhenie was the first group in totalitarian Soviet Russia that worked with cybernetics in connection with art. Plugged into the art discourse beyond the Soviet Bloc, the art environments created by its members aimed to give the spectators a new, more participatory role. The group is an interesting case in its strategies of manipulating spatial and cultural geographies to show its artistic work. Among its fellow artists on the alternative art scene, holding “apartment exhibitions” was a widespread format used for reaching an audience. But instead of keeping away from the large public eye, *Dvizhenie* used quite the opposite tactics. *Dvizhenie* succeeded in producing huge shows “without content” from the point of view of Socialist Realist ideology, participated in exhibitions in the West despite its artists being confined to the totalitarian Soviet Union, and even managed to include classified technology in its art installations. How was this possible?

The first *Dvizhenie* constellation of 1962¹ involved fellow students from the Central School of Art, neighbouring the Tretyakov Gallery in Moscow: Lew Nussberg (25), Francisko Infante (19), Anatolyi Krivchikov (21), Vladimir Akulinin (19), Viacheslav Shcherbakov (21) and Mikhail Dorokhov (20), soon enough joined by Galina Bitt (born 1946) and Rimma Zanevskaya-Saphir². Due to a high working tempo and

conflicts concerning money, influence and authorship of the works, the turnover of group members was high. In 1971, only Nussberg, Infante and Bitt remained of the initial artists. Additional core members were Alexandr Grigoriev (born 1949) and Natasha Prokuratova (born 1948) who had both participated since 1967. The curator of the group, agent, press-spokesman (as he would be termed today) and self-appointed leader, was Lew Nussberg, a street-wise talent who grew up in Tashkent, Uzbekistan with his mother, his father being a labour camp prisoner. The kernel of the group, half a dozen adventurous young people with or without artistic or engineering education, made the drafts and sketches for the projects that were then realised in collaboration with the experts needed for each specific project: actors, musicians, chemists, electronic-engineers, instrument makers, architects, physicists, poets and dancers.

The interactive multimedia environments that *Dvizhenie* showed from 1964 and onwards echoed events in other parts of the world. The Fluxus tour of 1964 to Moscow and Leningrad was possibly the impulse for taking on the name “Dvizhenie” (which appeared that year), meaning flux – movement. Movement in the *Dvizhenie* version additionally stressed that “all the fundamental laws of dialectics are laws of movement”,³ making them a hybrid of formalist and socialist realist theories. Many ideas of these two separate movements coincided in the group’s thinking. They both arranged performances and happenings, they both adhered to a collective work process, and they both used the 1920s avant-garde as a major springboard for crossover activities including a merging of art with life proclaimed in manifestos. The founder of Fluxus Jürgis Maciunas, a Lithuanian expatriate living in Germany and the US, had studied “European and Siberian Art of Migration” and even sent a letter to Nikita Khrushchev offering to his people, “to help once again implant in the USSR the leadership of revolutionary arts”.⁴

From the late 1950s onwards, the trend to negotiate the role of the spectator in relation to the artwork became increasingly important. Combining art with theatre and game, legendary New York artist Allan Kaprow’s 1958 “happenings” and “environments”, included participation with the audience. Kaprow’s “Untitled Guidelines for Happenings” pointed out that the borders between art and its surrounding should be “kept fluid” and that the happening should “take place over several widely spaced, sometimes moving and changing locales”.⁵ The first cybernetic piece of art, *Musicolour* performed by Gordon Pask and Sheila McKinnon Wood at the Bolton Theatre in London in 1955, played with synaesthesia and “cybernetic architecture”.⁶ Other forerunners of a cybernetic art were Nicholas Schöffer and Roy Ascott. Schöffer’s cybernetic interactive sculptures, for example his 1956 *Ballet avec CYSPi* built with Philips computers, interacted with the movements of a dancer on the roof of Le Corbusier’s Cité Radieuse in Paris. *Dvizhenie* corresponded with

Schöffer, and Le Corbusier was topical in the 1960s debate on urban planning and architecture in Moscow where his headquarters for the workers' council were erected right in the city centre. There are parallels between *Dvizhenie's* ideas and Ascott's "behaviourist art" of the "Cybernetic Art Matrix".⁷ Both were interested in the interactive systems between the artwork and the spectator, both saw education through self-tutoring as a fruitful field for feedback, from a system level to an individual level, and they both published in the same journals in the late 1960s.

Komsomol Youth Club: "Towards a synthesis in art"

The December 1964 exhibition "Towards a synthesis in art" represented *Dvizhenie's* break-through. According to their own estimations, 16,000 people visited the show.⁸ "We called 500 people, and every one told five more people" (interview with Lew Nussberg, Connecticut, USA, February 2007; henceforth LN). In *Dvizhenie's* early kinetism (moving, or giving the illusion of motion), electricity and electronics transferred the synthesis of light-colour-music-dance into a 'total' work of art, a multi-sensorial *Gesamtkunstwerk*. They included not only different kinds of art but also "different natural phenomena: smells, changes of temperature and humidity, movements of air, phosphorescent gases, electro-luminescence and much else".⁹ – "Why should we limit ourselves to traditional techniques?" (LN)

Kinetism was stamped as "formalism" of a kind that had not been publicly shown since 1932 when the avant-garde (Malevich, Kandinsky and the Bauhaus people) were officially denigrated as "alien" to a "truthful depiction" of the "revolutionary development" with "labour as the true hero"¹⁰. Moscow critic V. Vanslov wrote in the review "New art? No, just a formal experiment" that "instead of meaningless lines and coloured blots we have meaningless volumetric constructions", accompanied by "the sound of fragmented, at times hoarse, scratching, gurgling noises, so called 'electronical music'". Vanslov was careful to point out the origin of this "so-called art" to be the decadent West "and [that this art] expresses a void of ideas and a deep crisis of artistic creation. The 'artworks' by J. Tinguely, N. Schöffer and D. Bordiani [...] represent stupid and ridiculous attempts to convert abstract constructions into artworks."¹¹ That *Dvizhenie* was – for the first time in Soviet Russia in more than thirty years – directly alluding to the forbidden avant-garde even made it into international publications. Differently coloured lights projected onto screens, mirrors, nylon threads, smoke, sounds forming both melody and noise, produced an experience – at least according to the reviews¹² – of warmth and friendliness, a far cry from the harsh grey outdoors. The kinetic event immediately gave the artists' collective a central position in Moscow's intellectual circles; it opened doors for them and gave the artists

access to *samizdat* (self-printed) books by forbidden existentialists like Camus and Sartre, and *roentgenizdat*, records with forbidden jazz music discs pressed on x-ray plates, the cheapest plastics available.

From now on, a complex network of undertakings began simultaneously on various levels within and beyond the borders of the (almost) totally controlled dictatorship. Under the deliberately innocuous label of “decoration”, *Dvizhenie* were able to produce titillating forbidden avant-garde experiments. Nussberg drafted the overall ideas, wrote manifestos, made contacts with people who helped him to circulate information, organised the commissions and fostered a network with the political authorities.

Foreigners smuggled out material for exhibits in Prague *Klub Viola* and Zagreb *New Tendency*, both 1965, *Documenta 4* in Kassel 1966 and the *Nuremberg Biennale* in 1969, to mention but a few. They mediated contacts with international journals, initially Czech *Interstsena* and *Vytvarne umeni*, later *Leonardo*, *Form*, and *Studio International*. Successively, a mythological reputation was established in Paris and London that “*Dvizhenie* is the only group that manages to exhibit avant-garde art publicly”, thus “refusing to submit themselves to the official art doctrine”.¹³

At the same time, however, the space used for their exhibition, “Towards a Synthesis in Art”, was a youth club in the Dzerzhinski district (with one million inhabitants), administered by the Young Communist League. Komsomol was an extremely important player in the Soviet cultural sphere, where at every organisational level there was a party representative that made sure the content of each decision was made according to the party line.¹⁴ But every function was held by an individual. “And furthermore, there were different Soviets, party committees [...]. But without doubt: someone took the risk. [...] I know of cases, when they were fired [...] because we did not make the right exhibition.” (Interview with Viacheslav Koleichuk, Moscow, April 2007; henceforth VK) “And Nussberg had this magnetic power over people. And he already knew people in the West, artists and art historians. He was unfettered”, recalls Viktor Buturlin, 21 at the time (henceforth VB). A ‘con man’ well versed in techniques of social engineering, Nussberg, and his friends, would turn the head of more than one party functionary: “They felt we were special. We wore the latest fashion from Czechoslovakia, we were bold and beautiful and we presented our mission in their language.” (LN) *Dvizhenie* now supplied a series of official commissions: an exhibition at the House of Architects in Leningrad, sanctioned by the Party Secretary of the city, an event that saw ten thousand visitors¹⁵, the decoration for the entrance hall of the newspaper *Komsomolskaia Pravda*, and a competition for the roof of a stadium in Leningrad.

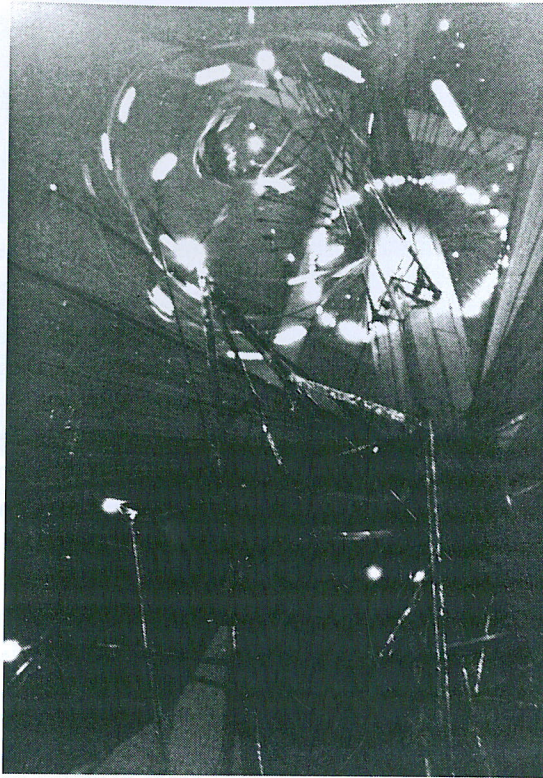


Fig. 1: "Flower", by Lew Nussberg variant from 1967. [courtesy of photo collection Lev Nussberg]

Kurchatov Institute of Atomic Energy: The Struggle between Man and Machine

Dvizhenie needed technology to realise its projects. Luckily enough, they had made Nikolai Kuznetsov's acquaintance. "Nik", the son of a former minister, admiral and war hero, immediately became an indispensable group member. He lived in a spacious nomenclature building across the street from the Kremlin, constructed from the stone that Hitler had brought to Russia for his monument celebrating the German victory of the World War II. "Once we spent weeks there working on our project, Nik's mother cooking excellent food for us." (LN) Nik was the one who somehow got access to technology, invented parts himself and programmed the machines. Well positioned, he worked with electronic instrument engineers at the Kurchatov Institute of Atomic Energy, a closed establishment.

In 1966, *Dvizhenie's* success was crowned with the permission to make a production (exhibition and performance) for the Palace of Culture of the Kurchatov

Institute. An institute with enormous prestige, top-priority, classified research, the scientists lived and worked in kind of a closed community placed in a forest on what were then the outskirts of the city. “We exhibited at the Kurchatov Institute because the scientists that worked there also wanted to exhibit their achievements and they were interested in art. Confluence of physicists and poets [fiziki i liriki] was very fashionable. [...] The general opinion was that interdisciplinary approach enriches [...] inventive, non-standard ways of thinking.” (VK)

The value of *Dvizhenie's* contribution was considerable. “This was the first cybernetic performance in Russia.” (VB) Dressed in a body stocking of gleaming phosphorescent material made by the workrooms of the Bolshoi Theatre, in one of the performances Buturlin, the main mime artist danced alone with a mechanical “Flower”. The story was about a struggle between man and machine. “With numerous, pulsating lamps attached to it, the ‘Flower-machine’ was programmed to turn in any direction. It was arbitrary, I never knew when and what it would do [...]. At the beginning, the machine kind of suppresses me. But I filled its dead space with my energy and at a specific moment I started to force my will onto it allowing me to be able to leave its spell.” (VB) In “Metamorphoses”, a group of 11–12 artists performed with additional machine-creatures. Taking place in the dark, with only the small blinking lamps of the machine and the shining costumes of the artists in sight. Only a few visual documents remain.

Nussberg (who is the sole source of all the information in the Bochum exhibition catalogue, *Lew Nussberg und die Gruppe Bewegung Moskau 1962–1977*) spiced up the presentation of “Metamorphoses” as “half-legal”¹⁶. Undoubtedly, if you were hardly aware of the Kurchatov Institute (which indeed, most people were not) you would not go there. And situated exactly between two metro stops (the distances between the stations in Moscow being much farther than in Berlin, Stockholm or Tokyo), and as correct maps of the city were military secrets before the dissolution of the USSR in 1991, you would need to be taken there in order to find your way. Yet, judicially speaking, the show was made according to the rules. And sometimes rules were flexible. The Kurchatov scientists for example, were considered so important, that “they could formulate rules of their own, independently of the society out there” (interview with Raisa Kuznetzova, Moscow, Russia, April 2008).¹⁷ Underground stars such as Vladimir Vysotsky sang here. Poet Bella Akhmadulina read here and so did dissident writer Solzhenitsyn; soprano Vishnevskaja and cellist Rostropovich made their farewell performance before leaving the USSR. But nothing was certain. “It was not the Stalin years, but pretty strict. Not that we were suspected of any espionage on anyone’s behalf or so. They took us for artist-fools, but still, they kept an eye on us, controlled us.” (VB)

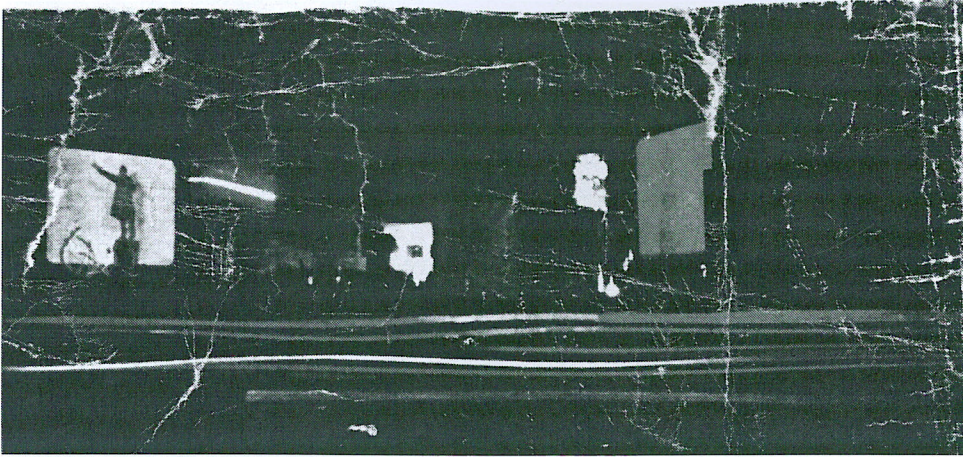


Fig. 2: “50 Year Celebration of the Revolution”. Lenin Square in Leningrad 1967. [Photo from Komsomol Journal *Smena*. Photo A. Lekhmus]

Public Squares and Embankments in Leningrad: “50 Year Celebration of the Revolution”

Next was the grandiose “50 Year Celebration of the Revolution” that took place in public places in Leningrad, the second biggest city in Russia, in 1967. The event, widely acknowledged in the press with front pages in the Leningrad Pravda, was projected under the patronage of the artist-in-chief Vladimir Petrov, the most powerful person responsible for the public decorations, and a good friend of Nussberg. The narrative, the glorification of Communist mythology, was impossible for the authorities to reject.

The centre of the performance – lasting half an hour and repeated every hour – was the large Lenin statue on the wide Lenin Square outside the Finland railway station (where he had arrived in 1917 to seize power), next to where the Neva River splits into two arms and gives an open view. The name of the performance “1917” with the life and deeds of Lenin as its theme, recalled the revolutionary “ten days that shook the world” when workers and farmers allegedly stormed the Winter Palace. A seven metre high “flame of revolution” comprised rotating elements and 650 different coloured lights of various intensities, sequences that were electronically programmed. Four screens, 14 by 16 metres and 8 by 6.5 metres, were used for colour-music projections and documentary film-clips to the sound of recordings of Lenin’s voice.

The project even embraced such suspect artists as the metaphysicist Malevich with projections of his “gegenstandslose welt”. At least according to a report in *Studio International*.¹⁸ In the Soviet press however, this detail was not mentioned.

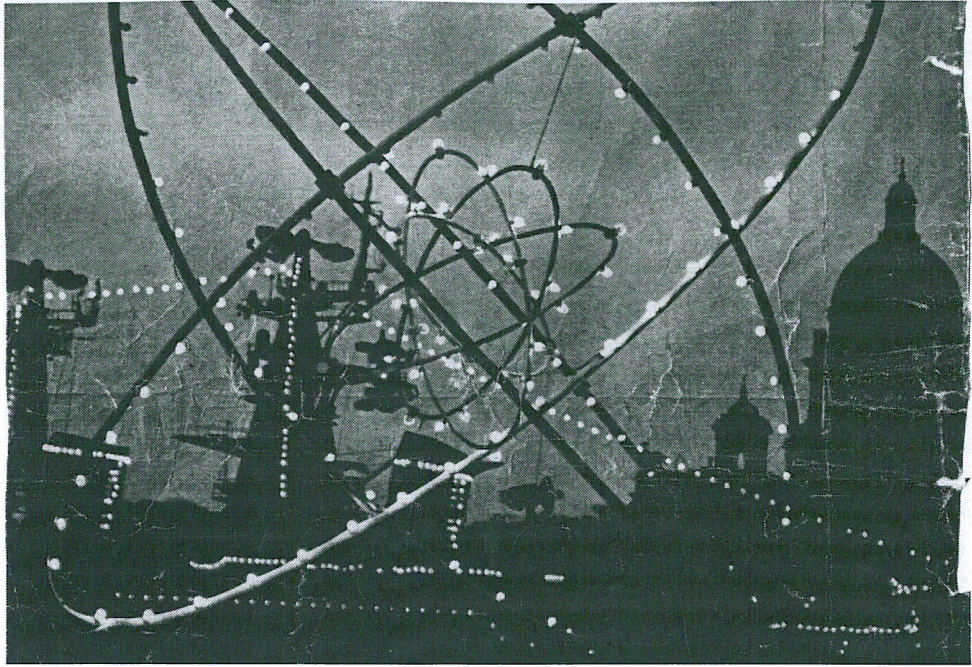


Fig. 3: “50 Year Celebration of the Revolution”. “Atom” at the University Embankment in Leningrad 1967. [Photo from Komsomol Journal *Smena*. Photo A. Lekhmus]

On the university embankment, *Dvizhenie* had placed two gigantic, moving, sparkling, crystal-like objects, symbolising Cosmos and Chemistry, scientific promises of a better future. The Komsomol journal *Smena* (meaning “change”) underlined the “union of art and science” and included the institutional affiliations of the group members: Valerii Glinchikov was a research associate at the Institute of Transportation, Ludmila Orlova worked at the All-Union Research Institute of Technical Esthetics, Kuznetsov at the Kurchatov Institute, Buturlin came from the Moscow Engineering and Physics Institute, and Koleichuk from the Moscow Institute of Architecture, Department of City Planning.¹⁹

Cyber-theater

The blitz-performed cybernetic environment *Cyber-event*, sometimes also entitled *Cyber-theater* and consisting of a mock-up shown to a small audience, paralleled this official commission in 1967. As the content was not clear-cut and the elaboration only preliminary, it was only shown to friends. Not that it was completely secret. The Komsomol journal reports: “... Peter Paul Fortress. Crowds of tourists move

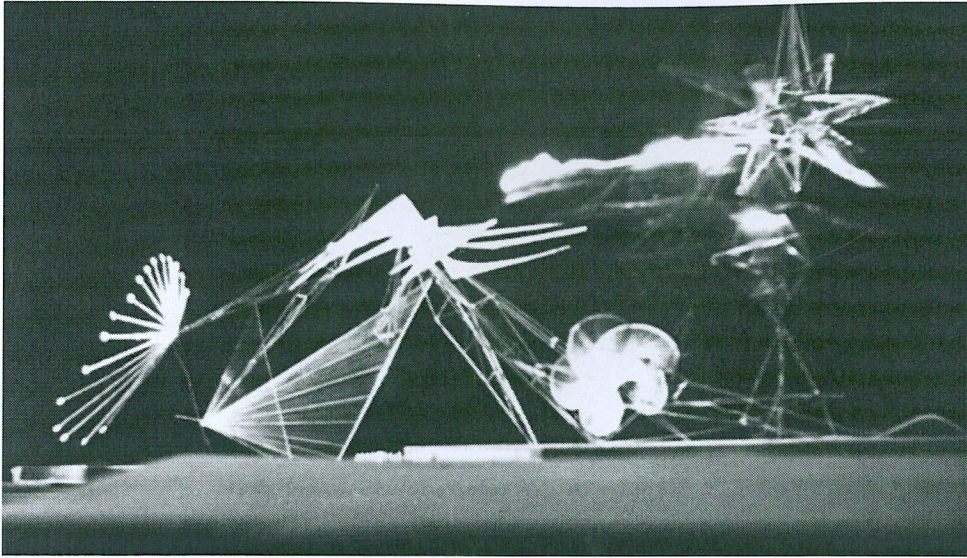


Fig. 4: Cyber-theater, Leningrad, 1967. [courtesy of photo collection Lev Nussberg]

along the wooden bridge towards the old gate. Not far from the entrance – the ‘Engineer House’. Doors closed to keep curious eyes away. But the house is not empty. Through the windows strange, incomprehensible objects are seen, reminding one of magnified fairy-tale butterfly wings.”²⁰ The *Kiberteatr* was a project for an interactive play between *kiberi* (metal automata) as actors and spectators stepping up onto the stage, where a “working, semi-automatic model” of 20 m² was situated, containing 18 cyber-creatures – *kiberi* – the biggest being approximately 150 × 100 × 80 cm. The cyber-beings were programmed with simple automatic mechanisms. In this period they lacked advanced technical means “but that is only for the time being”.²¹ The cyber-beings gave feedback to the spectators through sensors and were able to perform rudimentary movements, emit “fixed, pulsating and twinkling light” with varied colour and intensity, sounds of a “semi-logical and semi-phonetic language”, and “concrete’ sounds”, as well as “puffs of coloured non-toxic smoke or gas in various colours and smells of various kinds”. When realised, the *kiberi* were to be 25–50 metres tall and move in a “specially created landscape” of five square kilometres with footpaths, some leading across water or fire or across “crystallic media” made by holography. The whole area was to be equipped with radio and colour television communication and “all the action is to be programmed (as well as each of the objects) and follow a general script”. Two years after the cyber-performance, Nussberg’s project description for the *Cyber-theater* appeared, somewhat extended and translated into English, in the well-reputed journal on art and science *Leonardo*²².

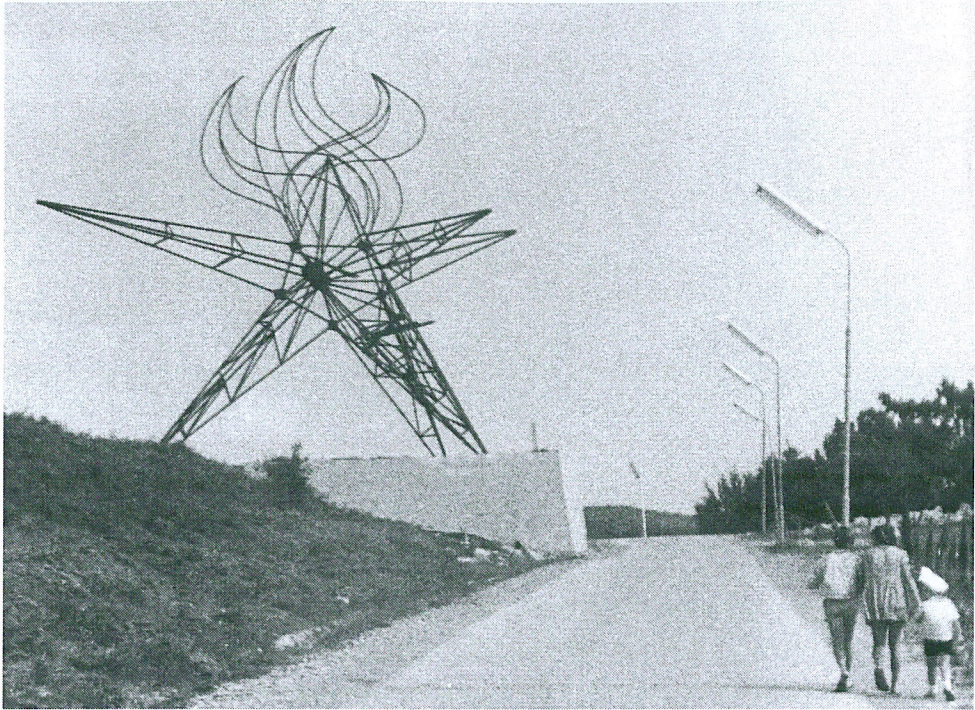


Fig. 5: Entrance to Black Sea pioneer camp “Little Eagle”. Large flame made by Dvizhenie. [courtesy of photo collection Lev Nussberg]

Black Sea pioneer camp “Little Eagle”

Dvizhenie's cybernetic environments had a great experimental potential by moving in the borderland of art, architecture, and design and by using industrial materials and new technology. Thanks to the tremendous success with the “50 Year Celebration of the Revolution”, *Dvizhenie* received the commission to conceive and construct a creative and interactive playground at the Little Eagle pioneer camp on the shores of the Black Sea. At last it seemed possible to combine cybernetic ideas with an official commission.

“We worked 10 months at the Black Sea with developing an artificial ‘Island of Flowers’ based on the principles of feedback and game theory”.²³ Here it is not Norbert Wiener’s future computer playing chess, but the future hopes of the socialist state – the young pioneers. The pioneers were to enter the projected new environment in the form of an artificial island, to learn and experience by interaction, for example, Einstein’s world of relativity. Natalia Prokuratova, a student at the Leningrad Engineering Institute for Railroad Transportation before joining *Dvizhenie*, described their aims: “we were convinced that if you were free from social and ideological pressure, this

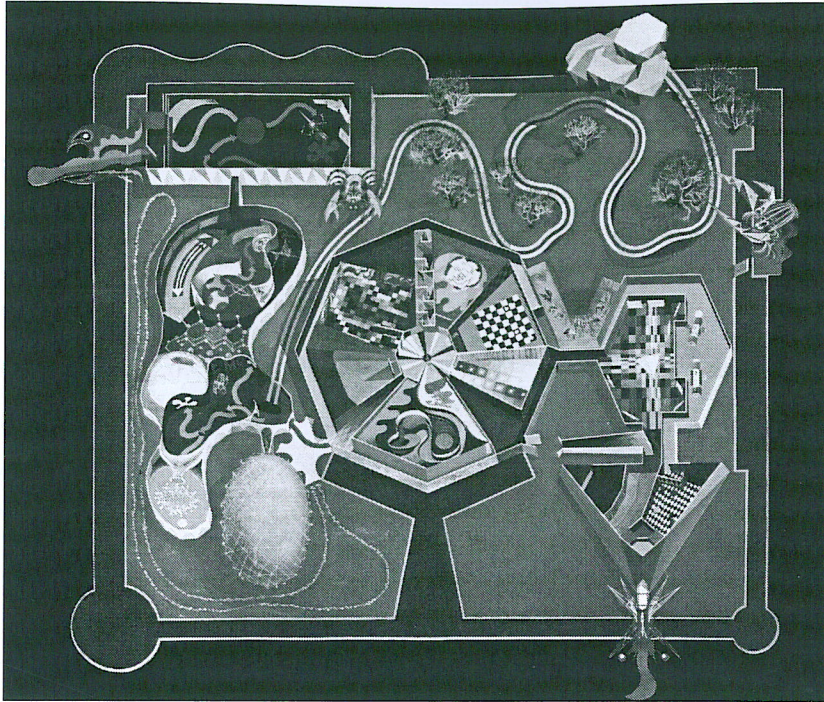


Fig. 6: Artificial 'Island of Flowers' based on the principles of feedback and game theory", Black Sea pioneer camp "Little Eagle", project presentation. [courtesy of photo collection Lev Nussberg]

'sphere of initiation' would urge spontaneous creative principles to rouse aesthetic aspects of perception of the surrounding".²⁴ The idea was that the pioneers were to make active choices and think independently, which was dynamite in the socialist school system. In the words of Soviet philologist Anatoly Gladilin: "They attempted to make a herd of us – to have us vote, move, approve, guard as one, unanimously, consistently – in short, we were supposed to be silent pawns on the chessboard of world history, our place was in close ranks, multitudinous and obedient to the will of the ruler. Our job was to march, and they would decide where. But we don't want that, we don't want it."²⁵

As the summer came to an end, the "Island of Flowers" was still not built. What remained was a project that Lew Nussberg still works on.

Virtual Space: Artificial Bion-Kinetic Environment

Nussberg's first draft for an *Artificial Bion-Kinetic Environment* – *IBKS* was made in 1968.²⁶ It is the description of a fantastic future city of 35–40 million people, attached to an artificial environment somewhat reminiscent of a computer game *avant la lettre*. The artificial bionic (biologically electro-architectonic) sphere was an “autonomous homeostasis” which included many self-sufficient homeostatic “microzones”. Constructed upon the paradigm of a game, “continuous, stochastic corrections will be introduced to the programme by the visitor”, a feedback loop with impulses given by the “visitor” would change the outcome of the plot.

Nussberg's project for *IBKS* recalls Norbert Wiener's discussion of society as an organism with science as its central system in a homeostatic interrelationship. After his visit to the Congress on Control and Automation in Moscow in 1960, Wiener, with rudimentary knowledge of Russian (his father was a professor of Slavic languages at Harvard), became a public person in Russia. Wiener's message was that any society needs development. Cybernetics was his way of describing that, in terms of a non-static homeostasis and a non-rigid “permanence of Marxianism”: “It is not the form of rigidity that is particularly deadly so much as the rigidity itself, whatever the form.”²⁷ This paragraph in *God and Golem* was written as a response to his critics in the USSR and asserted the importance of science as a contributing tool to this change which, however, had to be “assessed anew every generation or so”.

“Wiener was my Bible”, Nussberg acknowledged. (LN) Also in Nussberg's *IBKS* description, the dynamics between the various parts was stressed. The visitor was to communicate with the zone by way of radio and television channels, with transmitters attached to a light purpose-made overall. Visually, the artificial bio-kinetic environment was characterised as a “space-carpet”, whose texture-like basis is the “normal, natural world”. By way of kinetic means, independent artificial micro-structural phenomena and artificial creatures were to appear, as patterns in the carpet: “Artificially created living creatures, ‘flowers’, ‘trees’, ‘thunderstorms’, and ‘rainbows’, ‘fantastical machines’ (automatic machines that have little in common with what one can imagine today), ‘incredible’ chemical structures and multi-dimensional crystal forms, ‘gas lumps’, as for example holophrastic image-phantoms, multi-coloured luminous, fizzing accumulations and many, many additional synthetic phenomena and structures down to the level of the molecule.”²⁸

Nussberg's manifesto gave voice to a dream of a better, more organised world in contrast to the “badly organised, badly illuminated” world outside the artificial zone.

The *Artificial Bion-Kinetic Environment* should “in the case of a catastrophe [...] be coded and programmed [...] in order to enable its transmission [...] over very large distances, even as far as other planets”.²⁹ The reference to “Planet Earth” recalls the

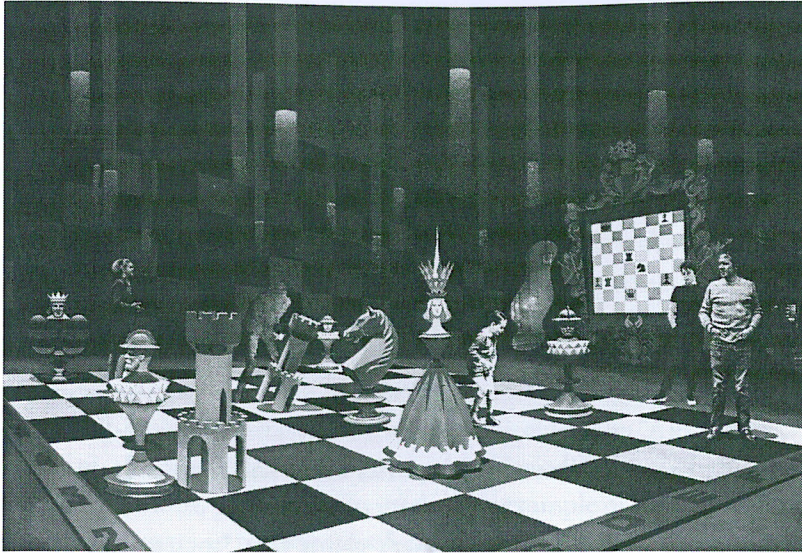


Fig. 7: “Chess” Project for artificial ‘Island of Flowers’ based on the principles of feedback and game theory”, Black Sea pioneer camp “Little Eagle”. [courtesy of photo collection Lev Nussberg]

visionary Buckminster Fuller, whose spherical geodesic dome, within which different climates can be produced, was erected in Moscow in 1959, as part of US trade fairs. With its new kind of order, the *IBKS* represented a secluded world to be built within a totalitarian dictatorship.

Leaving the “Catacombs”

When Nussberg arrived in Vienna in 1976, the Western art world was eager to meet him. Articles about *Dvizhenie* had left it astonished for more than a decade. Dissident-émigrés were treated like rock stars. Adding to the poor reputation of the USSR, they confirmed that the Potemkin villages were empty. In the article “Nous sommes des peintres juifs” in *Le Matin*, Nussberg’s situation is described, as “after persecution by the KGB, he had to live underground”.³⁰ The decision to “at last leave the ‘Soviet paradise’” was that no creative work was possible because of “constant hunting by the KGB”.³¹

No doubt, the level of aggression was high in the political arena, and art an important weapon. Reporting from the Venice Biennale, *Time* of 1977 said it was “steeped in controversy because of this year’s explosive theme: cultural dissent in Eastern Europe”. The black headlines “Miracle from the Catacombs” articulated

how Soviet authorities had “launched a furious anti-festival campaign that included threats of diplomatic and commercial reprisal”. The spectators of course “flocked”.

“Hah, exclaimed Lew Nussberg, a 40-year-old conceptual artist with a handlebar mustache [...]. The wall between the work and the spectator must come down, from the Louvre to Disneyland [...] and his swooping arms described his own grand schemes for city-sized artificial kinetic environments in the artistic utopia of A.D. 2500.”³²

“Yes”, Nussberg confessed when I met him recently in his present home in Connecticut, USA, “I was sent here from the future”. Today, Nussberg still refines his futurologist scheme.

Geographies of Dissent: Networks and Isolation

I fully agree with Norbert Wiener’s claim that “society can only be understood through a study of the messages and communication facilities which belong to it”³³, but we must add: *and through the way in which people use these facilities*.

Ilya Kabakov (born 1933) describes the pre-perestroika Moscow art milieu as an “extraordinarily strange and paradoxical phenomenon” where he, struggling to mould his personal voice in a hostile environment, experienced the pressure of “constant extinction by the surrounding monolithic Soviet world” resulting in a feeling of “total internal isolation”.³⁴ Not only were the Soviet artists secluded from the outside world: they were also actively hiding from the public in order to be able to work at all; from time to time they did not even know of like-minded people in their own city. In some cases, it was only through publications made abroad and smuggled into the USSR that they came to know of each other. The Swiss businessman Jacque Melkonian saw this isolation and decided to found and sponsor the unofficial art review *a-ya*, published in Paris 1979–1986: “I immediately realised how difficult the life of the Soviet artists, who had to fight for their right for independence from the canons of the state, was in comparison with the situation in Czechoslovakia, Hungary or Poland [...]. The artistic process was confined to the individual; there were no exhibitions, polemics or art market.”³⁵ The conditions in which the art worlds behind the Iron Curtain functioned were not comparable to those in the West. No matter how much political “thaw” Khrushchev had initiated after the severe suppression under Stalin, culture still remained under the control of the state in a way that no democratic country would find acceptable. Exhibitions were, on a continuous basis, closed down or even criminalised, contacts with the West suppressed, admission to or rejection from art schools or the all-embracing

Artists' Union was based not necessarily on talent, but on political profile. However, during the years of reduced control, new cultures began to appear.

In contrast to the usual backdrop of dialectics, where official and unofficial were in complete opposition, our closer look at the strategies used by *Dvizhenie* has enabled us to reveal how the group managed to renegotiate given conditions and thus to occupy an original niche they had defined on their own terms (to the extent that this was possible under the circumstances). They staged formalist works of art lacking messages that mirrored party doctrine, and they worked on a freelance basis, – unbelievable as this may seem in hindsight, since lacking a permanent job was criminal according to the constitution. The term “unofficial”, often used to describe art expressions that were not commissioned or that were in other ways not embraced by the official authorisation of the All-Union Artists' Union, is not applicable here. “Alternative”³⁶ is a more suitable term, although *Dvizhenie's* enterprises also added to this concept a ‘leporello’ of new connotations, presenting an intriguing example of nonconformist routes finding new coordinates in the Moscow-Leningrad landscapes.

Kineticism, at the same time forbidden as art and still producing decors that could be used in official contexts, was the label *Dvizhenie's* used for its work. Its manifold potential could be applied in architecture, design and sets for theatre and film. Every project had its tailor made strategy and each audience received a different message in accordance with complex logistics. Their designs were produced for displays at big industrial fairs that were sometimes filled with propaganda themes for nation-wide celebrations. Nussberg placed popular slogans in the exhibitions “that corroborated that what we were doing had already been aspired to by Lenin: to develop both science and art”(VK). These kinds of headings, necessary to minimise the risk of having the exhibition closed but not necessary for promotion in the West, added, however, exotic local flavour.

With shows in the biggest cities occupying the most visible places, they played on the noisiest of drums instead of silencing their voices by opening the doors to their apartments for a selected few. According to their manifestos, the vision was to redefine and redesign society and the role of citizens; ideas inspired by the 1920s avant-garde, and reminding of Guy Debord and the 1960s Situationist architecture debate, suggesting that the borders of art and life should be crossed.

Dvizhenie moved in new areas of performance art and environments, cybernetics and design, domains that had not existed previously and were thus opened up for new players. The networks that they created did not conform to previously existing classifications, transcending borders between different cultures of art, science and technology.

Dvizhenie's methods suggest how admission to information and technology was communicated in the post-war Soviet Union. More than the actual machines,

however, I would like to draw attention to how knowledge, information and insights were used to reorganise space both in the real world, and in the mind; a refusal to accept the given monolithic structures, the use of public spaces to present forbidden artists, the play with the image of a totalitarian USSR versus the West, the exploitation of classified areas in the USSR as alternative spaces for performances, and the teasing with secrets not shown to the normal citizens.

The *Dvizhenie* artists manipulated the official and the alternative to make their exhibitions possible under the headings “kinetic”, “cybernetic” and “synthetic”. Within the environments, “kinetic” indicated the dynamics experienced but not changed other than by your presence (comparable to a club interior of today), “synthetic” evoking alternate perceptual positions of sense impressions in the minds of those present, and the notion of the “cybernetic” suggested to what extent the reactions and actions of the audience were to decide over these motions and in how far the spectator’s feedback would have an influence on the pre-set functions. Crossing the threshold of the cybernetic environments was the means of entering into an inner space enabling the pioneers to think freely. *Dvizhenie* built art environments in the external physical reality, although this was a non-acceptable art form in the USSR. The constructed concrete spaces in which its audience was to physically move, thus suggested an infringement upon the traditional aura of the artwork that eventually was to move from the virtual to projects that would change urban life. And these artists did not confine their ideas merely to their friends, but communicated them with the world “out there”. At least where and when it suited them.

In spite of *Dvizhenie* being presented as “clandestine” and “underground” in the Western press, this only partly describes their position, and to some extent even causes confusion when we try to understand how they worked. Nevertheless, this confusion gave them acclaim and respect on both sides of the Iron Curtain. *Dvizhenie* achieved access to information and technology, prestigious exhibition spaces in the SU, shows and opportunities to publish in the West.

The *Dvizhenie* collective continued to work with large-scale projects until Nussberg emigrated. It made a model for a musical illumination for the Moscow Kremlin, seven big kinetic machines for the celebration of the 50th anniversary of the Soviet circus (this received high official acclaim by the Minister of Culture, Ekaterina Furtseva who, incidentally lived in the same building as Nik Kuznetsov). They produced showrooms for the Ministry of Electronic Industry, such as “Kinetical Games”, “Electrical Garden”, “Mirror-Impulse”. And for the Soviet pavilion at the international exhibition on construction materials in Moscow in 1971, they produced the display “Glass” – all very expensive works sponsored by the industry. Additionally they made sets for numerous film productions, and shot their own films that were, however, not shown publicly.

Interestingly, a closer look at the documentation on *Dvizhenie* reveals that in many cases Nussberg himself, directly or indirectly, was its source – this of course can evoke smiles from those who are in the know. At the same time, can he be blamed for wanting to be acknowledged in the international art community, considering the enormous efforts *Dvizhenie* members went through to externalise their thoughts in the real world? Other artists, likewise of great importance in Eastern Europe, are still unknown outside their own direct surroundings, never translated and seldom exhibited. On the international arena, the visual arts are the cultural practice least known, simply because it has been so difficult to make their works accessible. In this way, *Dvizhenie* ought to be grateful for having had such a diligent manager who turned its artists into true “dual citizens”³⁷, citizens both of the country where they worked, and with an international passport.

At first sight, it seems paradoxical that *Dvizhenie* and its members were able to move between both extremely official and alternative spaces. But if we replace “inofficial” and even “alternative” with “creative”, the image changes. The people interested in cybernetics, new technology, possibly in combination with art and design, bionics, architecture and urban planning – these people were all creative. And all who worked with innovation – artists, scientists and writers – had much in common. Not least, they belonged to the absolute elite in a highly elitist society.

In some ways, Lew Nussberg and *Dvizhenie* bring to mind Steward Brand and his *Whole Earth Network*, the latter bringing together the disparate cultures of the Cold War military-industrial research world (with the Soviet Union as The Enemy) and that of the San Francisco bohemia.³⁸ For sure there were toxic beach parties also in Russia, not to mention the secrecy of the military. But if the activities of the *Whole Earth Network* were a way of disseminating and popularising new high-tech inventions, here the game was different. And the central difference, that the USSR indisputably was a totalitarian dictatorship, transposes *Dvizhenie's* ventures into a differently sounding key.

Interviews with:

VA: Vladimir Akulinin, Moscow, Russia, April 2007.

VB: Viktor Buturlin. St. Petersburg, Russia, March 2008.

FI: Francisco Infante, Moscow, Russia, April 2007.

VK: Viacheslav Koleichuk, Moscow, Russia, April 2007.

RK: Raisa Kuznetsova, Moscow, Russia, April 2008

LN: Lew Nussberg, Connecticut, USA, February 2007.

Endnotes

- 1 In many cases, exact years are difficult to establish insofar as the information from various group members is not coherent. For example, Vladimir Akulinin establishes 1963 as the founding year of the group (personal communication, Moscow, Russia, April 2007), Francisco Infante 1964 (personal communication, Moscow, Russia, April 2007), whereas Lew Nussberg insists on 1962.
- 2 According to Vyacheslav F. Koleychuk, "The Dvizheniye Group: Toward a Synthetic Kinetic Art", *Leonardo*, 1994, Vol. 27, No. 5, p. 433, Bitt and Zanevskaia-Saphir participated from the very beginning.
- 3 Lew Nussberg "Chto takoe kinetizm?". Manuscript, private archive, Moscow, 1966, translated and published as "What is Kinetism?", *Form* No. 4, Oxford 1967. Quote from p. 22.
- 4 Letter from Maciunas probably to Nikita Khrushchev, reprinted in *Fluxus East. Fluxus Networks in Central Eastern Europe*, exhibition catalogue ed. Petra Stegmann, Berlin 2007, p. 15. For Maciunas' education, see *ibid.* p. 265.
- 5 Allan Kaprow "Untitled Guidelines for Happenings", 1965, reprinted in *Theories and Documents of Contemporary Art*, eds. Kristine Stiles & Peter Selz. University of California Press, 1996, p. 709.
- 6 Andrew Pickering "Ontological Theatre: Gordon Pask, Cybernetics and the Arts", *Spectacular Experiments: Practices of Evidence-Production in the 17th Century*, eds. H. Schramm, L. Schwarte & J. Lazardig, Berlin 2005, p. 5.
- 7 For Roy Ascott, see Edward A. Shanken "Cybernetic and Art: Cultural Convergence in the 1960s", *From Energy to Information. Representation in Science and Technology, Art, and Literature*, eds. Bruce Clarke and Linda Dalrymple Henderson, Stanford University Press, 2002, pp. 255–277.
- 8 "Perechen prakticheskoi deiatelnosti". Manuscript, private archive, Moscow (no date).
- 9 Lew Nussberg "Chto takoe kinetizm?" Manuscript, private archive, Moscow, 1966.
- 10 Quotes from Gorky's speech advocating socialist realism, from the "First All-Union congress of Soviet writers 1934, Stenographic report" *Pervyi Vsesoiuznyi s'ezd sovetskikh pisatelei 1934. Stenograficheski otchet*, eds. Ivan Luppul, et al. Moscow 1934.
- 11 Quotes from V. Vanslov "Novoe iskusstvo? Net, formal'nyi ekperiment", *Khudozhnik*, No. 10, Moscow, October 1966 pp. 15–17.
- 12 See for example Czech critic Dusan Konecny's "Moscow kinetists", *Studio International, London*, 1966, pp. 90–91.
- 13 As quoted in Michel Ragon, "Peinture et sculpture clandestine en U.R.S.S.", *Jardin des arts*, Paris, No. 200–201, juillet-aout 1971, pp. 2–6.
- 14 For a compassionate description of Komsomol strategies, see Alexei Yurchak *Everything Was Forever, Until It Was No More*, Princeton University Press, 2006.
- 15 "Perechen prakticheskoi deiatelnosti". Manuscript, private archive, Moscow (no date).
- 16 See *Lew Nussberg und die Gruppe Bewegung Moskau 1962–1977*. Exhibition catalogue, Bochum, 1978, p. 23.
- 17 Raisa Kuznetsova, head of the Kurchatov Museum and widow of Nikolai Kuznetsov. Moscow, April 2008. For Nikolai Kuznetsov's professional life, including his commitment to briefing on the Chernobyl catastrophe which caused his premature death, see Raisa Kuznetsova "Naperechet serdtsa blagie...", *Kurchatovets*, No. 5–6 (1041–1042), 2005.
- 18 *Studio International*, No. 12, London 1967 p. 287 (author of the article not indicated).
- 19 E. Kasatkina & E. Orlova "Dvizhenie v dejstvii", *Smena*, No. 1, January 1968, "Pravda" publishers, pp. 16–17 and cover headline "Kinetizm – soiuz iskusstva i nauki" (folio size format).

- 20 E. Kasatkina & E. Orlova "Dvizhenie v dejstvii", *Smena*, No. 1, January 1968, "Pravda" publishers, p. 16.
- 21 Lew Nussberg "Kibersobytie'. Kratkaia annotatsia (k sozdannoi kineticheskoi modeli 'Kibersobytie')", dated "Piter – Moscow September 1967". Private archive, Moscow, re-printed in V. F. Kolejchuk *Kinetizm*, Moscow Galart, 1994, pp. 53–54.
- 22 Lev Nusberg "Cybertheater", *Leonardo*, Pergamon Press 1969, Vol. 2, pp. 61–62.
- 23 Natalia Prokuratova, "Chistaia zemlia Aleksandra Grigorieva", in *Aleksandr Grigoriev. Nedvizhnyi polet*. Exhibition catalogue, Izdatel'stvo Znak, Moscow 2005, p. 2.
- 24 Ibid.
- 25 Anatoly Gladilin (born 1935) emigrated to Paris in 1976. *The Making and Unmaking of a Soviet Writer* appeared in English, Ardis, 1979. Quotation from Inger Thorup Lauridsen & Per Dalgard: *The Beat Generation and the Russian New Wave*, Ardis, Ann Arbor, 1990, pp. 126–127.
- 26 Lew Nussberg, "I.B.K.S. – Iskusstvennaia bion-kineticheskaiia sreda", signed "Moscow 1968 (and the Black Sea coast)". Manuscript, private archive, Moscow.
- 27 Norbert Wiener, *God and Golem*, MIT Press, 1964, p. 83.
- 28 Lew Nussberg, "I.B.K.S. – Iskusstvennaia bion-kineticheskaiia sreda". Manuscript, private archive, Moscow, 1968.
- 29 Ibid.
- 30 Michel Ragon, "Nous sommes des peintres juifs", *Le Matin*, 6th January, 1978.
- 31 Exhibition catalogue *Lew Nussberg und die Gruppe Bewegung Moskau 1962–1977*. Bochum 1978, p. 34.
- 32 Quotés from "Miracle from the Catacombs. Soviet dissident artists breath free at the Venice Biennale", cabled by Time Rome Bureau Chief, Jordan Bonfante, *Time*, 28 Nov. 1977, pp. 30–31.
- 33 Norbert Wiener *The human use of human beings. Cybernetics and society*, Doubleday, New York (1950) 1954 p. 16.
- 34 Quoted from Ilya Kabakov in *Primary Documents. A Sourcebook for Eastern and Central European Art Since the 1950s*, Laura Hoptman and Thomas Pospiszyl, eds. MIT Press, 2002, p. 7.
- 35 See *A-Ja. Zhurnal neofitsial'nogo russkogo iskusstva. 1979–1986. Reprintnoe izdanie*, eds. Igor Shelkovsky & Alexandra Obukhova, ArtKhronika, 2004, p. xx.
- 36 For the term "alternative art", see "*drugoe iskusstvo*" *Moskva 1956–76*, eds. Leonid Talochkin & Irina Alpatova, Moscow, 1991; and *Soviet Alternative Art (1956–1988) from the Costakis Collections*, ed. Maria Tsantsanoglou, Athens, 2006, p. 13.
- 37 For dual citizens in this context, see the "Introduction" to *Primary Documents. A Sourcebook for Eastern and Central European Art Since the 1950s*, eds. Laura Hoptman and Thomas Pospiszyl, MIT Press, 2002, pp. 9–10.
- 38 For Steward Brand and the *Whole Earth Network*, see Fred Turner, *From Counterculture to Cyberculture*, The University of Chicago Press, 2006.

