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BEYOND ART: A THIRD CULTURE

**a comparative study in cultures
art and science in 20th century Austria and Hungary**

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Vision, Motion, Emotion: Moholy-Nagy's Experimental Activity

László Moholy-Nagy, born 1895 in Bácsborsod. In 1919 emigration to Vienna. From 1919 he was living in Berlin and had contact to the Dadaists. In 1921 he became acquainted with the Russian constructivism and was correspondent of the magazine *MA (Today)*. In 1922 exhibition with László Péri in the gallery Der Sturm; first photographs and telephone pictures. He finished the film-script for *Die Dynamik der Großstadt*. From 1923 he taught at the Weimar Bauhaus (metal-class). In 1924 photo-sculptures. From 1925 on publication of Bauhaus books. In 1927 encounter with Malevitch. In 1928 separation from the Bauhaus. Designs for the Berlin State Opera and the Piscator-theater. In 1929 first film *Marseille vieux port*. Publication of the book *Vom Material zur Architektur*. He organized the Stuttgart Werkbund exhibition *Film und Foto*. In 1930 he introduced the *Light Requisite* in Paris. Exhibitions in Stockholm, Amsterdam, Hamburg, Cologne, Paris, and Budapest. In 1931 lectures at the University of Arts and Crafts in Bratislava. In 1934 emigration to Amsterdam. 1935-1936 he lived in London. Worked on films, photo-books, and advertising jobs. In 1937 he moved to Chicago and became the director of the New Bauhaus. In 1939 he founded the School of Design. He died of leukemia in 1946.



László Moholy-Nagy
Construction, 1923
© VBK, Vienna, 2005

I don't really believe in mankind. Every human being reveals himself individually; much of it is art.

(from an interview in *The Little Review*, Chicago 1929)

Experiment in Totality is the biography Sibyl Moholy-Nagy wrote about Moholy in 1950. She records what he said to Robert Jay Wolff, one of his closest collaborators at the Institute of Design in Chicago, when he knew that he was dying of leukemia. "I don't know yet about my paintings, but I'm proud of my life." Moholy was aware that he had lived an unusual, eventful life, that he had been a leading figure of the first order, and that he had shared in the adventures of the avant-garde of the first half of the century. From Hungary, where he was born, to the United States, through World War I, the Soviet Revolution, and the Weimar Republic, Moholy-Nagy also experienced places like Berlin, London, and Chicago. His legendary optimism and extraordinary courage by no means prevented him from clearly recognizing that there were things in his life and complex work that were misunderstood, inexplicable, or shut off from direct, unanimous reception.

It is indeed possible to take the view that the popularity of the man and his œuvre suffered from an early point on (as it still does today) from the extreme diversity of interests and talents of this artist who, at a young age, definitively turned his energies and preferences to two fundamental, complementary areas of work. His teaching, first at the Weimar and Dessau Bauhaus from 1923 to 1928, then at the Institute of Design in Chicago from 1937 until his death in 1946 was augmented by educational activities, which he pursued at all possible, sometimes unexpected, opportunities. Secondly, Moholy-Nagy also adhered to a radical experimental practice, which he successfully applied to a wide variety of expressive forms: painting, typography, books, photography, film, sculpture, commercial and industrial design, stage sets, and trade show architecture.

For theoretical or practical reasons, certain areas of work prevailed at various stages of his life: for instance, painting, photography, and teaching predominated during his time at the Bauhaus and in Chicago. Later (1928-36), after leaving the Bauhaus, he built a life for himself as a freelance designer through film, photography, commercial design and trade show architecture in Berlin, Amsterdam, and London. However, Moholy did not bend his work to any aesthetic hierarchic structure. His definition of design, "Not a profession but an attitude," may be applied equally to his understanding of art and his conception of the role of the artist in contemporary society.

The fact that attention is often exclusively paid to the obvious formal and material eclecticism of his work means that only one medium, or only one particular moment or series is singled out for observation. The original dynamics and inner coherence of his work, which elude the traditional categories of art history (even the history of modern art), are often neglected. In fact, Moholy's thoughts and work bear no academic or orthodox relation to Constructivist ideology and art. After cutting short his law studies, Moholy embarked on a different path than Gabo, Lissitzky, or Rodchenko, for instance, and dispensed with any formal technical or artistic training. His poetic talent and interest in literature are rather those of the autodidact or gifted amateur, which did not, however, prevent him from accumulating scientific and technical knowledge, which is mainly reflected in his articles and books. As in the case of Gropius, the broad diversity of his interests and wide educational horizons conjure up the image of a Renaissance artist, a modern-day Leonardo, rather than the more contemporary figure of the engineer/artist. For a long period of time, there was a certain inscrutability to Moholy's texts and his enlightened notions, including his sudden lyrical outbreaks and descriptions of visions or technical projects that seem to be very well thought-out. We need only recall the light painting he described in a letter to Frantisek Kalivoda in 1934,

i dream of light machines that can be used to manually or automatically/mechanically project visions of light into the air, into large spaces, onto screens of unusual texture or fog, gas, and clouds. i have created countless projects; the only thing missing was the client who would commission me to build a light fresco or light architecture consisting of graduated straight and curved walls lined with artificial materials such as galalith, trolith, chrome, or nickel, and which, at the touch of a switch, could be immersed in shining light, fluctuating symphonies of light, while the surfaces slowly shift and dissolve into an infinite number of controlled units. i wish i had a bare room with twelve projectors, which would activate the white void underneath the intersection of colorful bursts of light.

Many of Moholy's writings and some of his major works — for example, the *Light Requisite* (1922-30) or the *Space Modulators* (1930-1940) — represent a very specific link (or, in less successful instances, a collage) of poetic intuition and theoretical reflection. Indeed, Moholy's objects often appear to be experimental structures: aesthetic and cognitive models rather than works of art. Attention has often been drawn to the qualitative difference between the results of his work and the more or less unfinished appearance of certain works — above all his paintings — that sometimes bear the imperfect traces of the artist's experiments with

technique. In the 1930s, on the other hand, Moholy produced unprecedented material and light effects by painting on industrially produced synthetic plastic grounds (celluloid, Bakelite, Trolith, Galalith, and acrylic glass) which he would lightly scratch to make the paint adhere. This constant focus on the material constitution of the work, the search for the appropriate expressive material, has a history that far exceeds the mere desire to translate new technological possibilities into artistic forms. At the beginning of his years in Berlin, Moholy had the opportunity to analyze the concept of "facture" as developed by the Russian Constructivists after Tatlin, which V. Markov defined in factual-theoretical terms in his book, *Schaffensprinzipien in den plastischen Künsten* (Creative Principles in Sculpture), published in 1914. According to the definition proposed by G. Conio in his anthology of texts, manifestos, and documents of Russian Constructivism, "facture" means "... the formal and, at the same time, material quality of a work" and "... thus refers to both matter and manner."¹

Moholy interpreted and adapted certain Constructivist viewpoints and forms, which he encountered in Berlin in Lissitzky's circle and during the first exhibition of Russian art organized by D. Sterenberg at the Van Diemen gallery in 1922. In the same year, he and Kemény signed the *Dynamic-Constructive System of Forces* manifesto published in *Der Sturm*, while in 1923 his name appeared alongside those of E. Kállai, Kemény, and L. Péri in the Hungarian journal *Egység*, beneath an explanation for the making of a Russian-style Proletkult organ. However, he felt disappointed at the failure of the Hungarian revolution and was disturbed by the growing turmoil in Europe in the 1920s and 1930s. Consequently, he became increasingly distrustful of politics and specifically of the link between politics and the culture. He evolved a humanist and utopian manner of thinking in which culture, especially visual culture, becomes the driving force behind change.

*Beneath their paltry dyed red shell, the revolutionaries forgot the true meaning of the revolution. They forgot to propel life's inner revolution. They forgot culture.*²

"The Spiritual and Social Aspects of Constructivist Art," a lecture he held for students at the Bauhaus in 1923, contained his definition of Constructivism, which, he asserts, should be compulsory for the School. This definition contains the principles of the New Vision,

*Constructivism, our new dimension, has no other aim than to take part in life. It is profoundly connected to the spirit of evolution, which has produced science, civilization, and the system that determines social life. Like all of these, Constructivist art is processual, forever open in all directions. It educates the human ability to perceive, the ability to react emotionally and to draw logical conclusions.*³

Moholy's experience in the U.S.A., first at the New Bauhaus and later at the Institute of Design in Chicago, did not so much relativize what he had learned in Europe, but radicalized it, in Moholy's opinion at least. His often problematic relations at the Institute of Design, in a system absolutely governed by economic concerns, confirmed his stance. The frequently heard reproach — that Moholy had become estranged from Bauhaus in the United States and betrayed its aesthetic and social program in favor of an increasingly close integration of applied design into industrial production — must be countered by pointing out that Moholy constantly endeavored to give priority to training, to developing the students' creative skills. In other words, he devoted much to the experimental search for knowledge with regard to the evolved object or finished product. In his last public statement, a lecture at the Conference on Industrial Design as a New Profession, held in New York in November 1946, he notes:

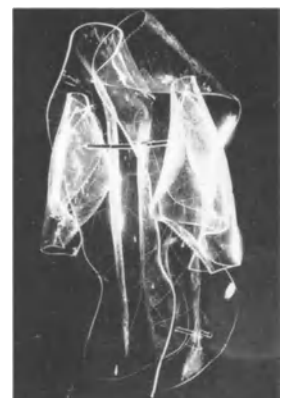
*One day we shall fully comprehend the confusion of the industrial revolution. On the one hand, we teach people to read and write, while on the other, we deprive them of this skill by means of advertising, radio, and other propagandistic media, which appeal to the basest of instincts for the sake of profit.*⁴

Written twenty years later, in a different context, in the face of different constraints, these words almost seem to echo his letter of resignation from the Bauhaus, submitted after his friend, Gropius, had been replaced by Hannes Meyer, an advocate of a technocratic, utilitarian style of leadership:

*We are now in danger of becoming what we had opposed as revolutionaries — a talent factory, where only results count, and the development of the human being as a whole is overlooked.*⁵

Moholy's thoughts and work, indeed his entire life, are an exemplary embodiment of the heroic adventure and arduous fate of the avant-garde artist in the first half of the twentieth century. The utopian plan shared

1. Gérard Conio, "Le Constructivisme Russe," *Le Constructivisme dans les Arts Plastiques. Theoretische Texte, Manifeste, Dokumente. L'Age d'Homme*, vol. I (Lausanne 1987).
2. Sibyl Moholy-Nagy, *Moholy-Nagy — Experiment in Totality*, 2. ed. (Cambridge: MIT Press, 1969).
3. Ibid.
4. Sibyl Moholy-Nagy, op.cit.
5. Steven A. Mansbach, *Visions of Totality. László Moholy-Nagy, Theo van Doesburg and El Lissitzky* (Ann Arbor: UMI Research Press, 1980).



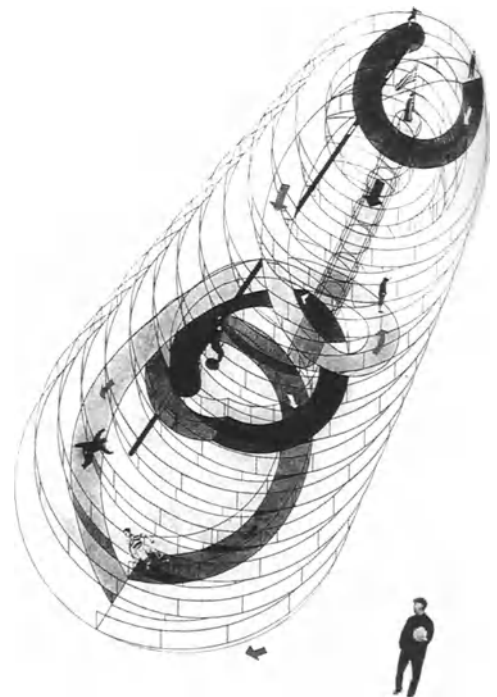
László Moholy-Nagy
Space Modulator 101, 1940
© VBK, Vienna, 2005

by a whole generation of artists — to devise a new type of art and new forms that would suggest and shape a “desirable future order” — would soon be confronted with the harsh realities of the world. In this context, Moholy's steadfast optimism and pragmatism set the standards for what was an immeasurable effort. The bold venture, which began in 1937, of grafting the Bauhaus ideal onto the socially, economically, and culturally different foundation of the United States, was meant to provoke crass contradictions that would stimulate his thoughts. In this respect, *Vision in Motion*, published in 1947, one year after his death, can be regarded as his chief work, a kind of mental *Light Requisite*. Starting with the work performed at the Institute of Design, the book provides a summary of his whole life's experience. *Vision in Motion* is both his ethical and his aesthetic legacy; it is one of the most important books ever to be written on modern art and culture. Reading the brilliant chapters in which Moholy discourses on the possible relations of art and technology, the fundamental yet neglected role of education in modern society, or on the new relations of space and time shaped by James Joyce, it becomes evident that the artistic experiment Moholy proposes is not aimed at creating an ideological vision or constraint, by way of manufacturing the necessary objects and works, but rather to achieve a flexible, curious gaze: the gaze of the subject in the world.

László Moholy-Nagy (Kassel Museum Fridericianum Kassel / Verlag Gerd Hatje: 1991) pp. 9-12.

Catherine David, born in 1954 in Paris. Studied Literature, Linguistics and Art History. 1972-1990 curator at the Musée National d'Art Moderne, Centre Georges Pompidou, Paris. 1989-1991 professor at the École du Louvre. 1990-1993 lecturer at the Institute for Ethnology at the University of Paris X Nanterre. Since 1990 curator at the gallery National du Jeu de Paume, Paris. Artistic director of the documenta X, Kassel, 1997. 2001-2003 guest lecturer for art history at the RWTH Aachen. From 2002 director of Witte de With, center for contemporary art in Rotterdam.

László Moholy-Nagy
Kinetic Constructiv System, 1922
Constructions with paths of movement
for play and transport
© VBK, Vienna, 2005



László Moholy-Nagy

Light Requisite for an Electric Stage

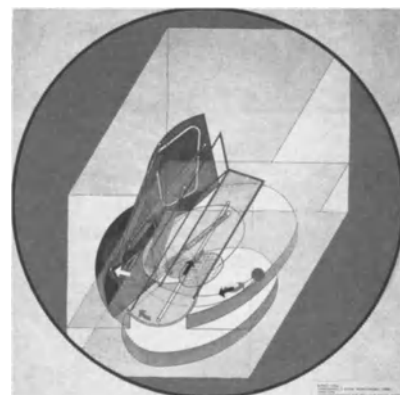
Today, adjustable artificial electric light makes it easy to produce strong lighting effects. With electrical energy, one can carry out different pre-calculated movements, which can be repeated without deviations. Light and motion once again become elements of creation, in accordance with today's system of references. The fountains of the Baroque era, the jets of water and water settings seen in Baroque festivities can be creatively revived with the help of light fountains and mechanical, electric moving images. These methods will probably be used in the near future in advertising, as carnival entertainment, and to heighten suspense in the theater. It is even foreseeable that these and similar "light plays" will be transmitted via radio, partly as television advertising, partly as real light-plays, if receivers are equipped with their own lighting devices containing electric adjustable color filters operated by remote control from the broadcasting company. For instance, shadow plays would also be possible. Stenciled pieces of cardboard, like the art supplements in today's magazines, will be enclosed in the radio magazines, and can be inserted in the machine. The first experiments with these kinds of light plays will have to be confined to very simple light and motion processes, as most people are not even ready to accept these kinds of apparitions, let alone deal with them in an experienced manner. One such initial step is the *Light Requisite for an Electric Stage*, which was sponsored by AEG for the exhibition of the German Werkbund in Paris and constructed by the AEG theater department. The *Light Requisite* is an apparatus for the demonstration of special lighting and motion effects. The model consists of a cubic box (120 x 120 cm) with a circular opening in front, which is open to the stage. A number of electric bulbs — yellow, green, blue, red and white — are mounted around the opening, at the back of the plate (about seventy 15-watt bulbs and five 100-watt searchlight bulbs). Inside the box, parallel to the front side, there is a second plate, which also has a circular opening. It is also provided with electric bulbs of various colors ranged around the opening. Individual bulbs flash up in various places according to a pre-set plan. They illuminate a constantly moving mechanical device, which is made partly of translucent material, partly of transparent material, and partly of perforated material, in order to ensure the best possible linearity of the shadows projected onto the rear wall of the closed box. (If the projection takes place in a darkened room, the rear wall of the box may be removed, and the colors and shadows can be projected onto any size screen behind the box.) The mechanism is built on a circular plate carrying a three-sectioned frame. The dividing walls are made of transparent Zellon, and one wall is of vertical metal staves. Each of the three sections of the frame has a moving image, which goes into action when this section of the revolving plate faces the opening to the stage. The motion play of the first section: three staves gently rock (since the ceiling differs from the floor) along an endless track. Various materials, such as translucent gauze, parallel horizontal staves, and wire are mounted on the three staves.

The motion play of the second section: on three planes, lined up front-to-back, is a large, immobile aluminum plate; in front of this is a smaller, perforated, polished, nickel-plated brass plate, which moves up and down. Meanwhile, between the two, a small ball rolls around on a roller coaster.

The motion play of the third section: a glass spiral is wound around a glass staff. This describes a conical movement in opposition to the large disc. The point of the cone touches the floor made of a slanted, bisected glass plate, which in turn is suspended above another mirrored circular plate.

The *Light Requisite* could be used for many optical observations, and it seems important to me to systematically continue with these experiments, as a way to develop light and motion design

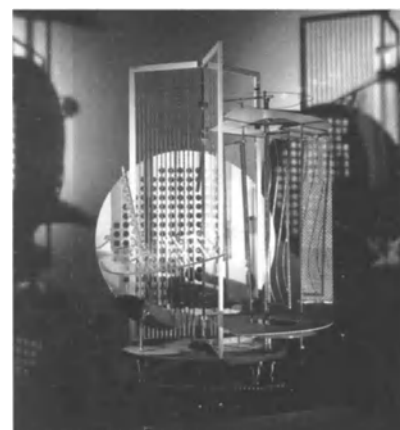
Die Form, 5: 11/12 (Berlin: 1930): 297



László Moholy-Nagy
Drawing of the Light Requisite
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László Moholy-Nagy
Light Requisite for an electric stage, 1922/30
Designer: Moholy-Nagy, Berlin, constructed by Stefan Sebök, cert. Engineer.
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László Moholy-Nagy, *Light Requisite*, 1930
Replica of 1970, mobile construction with different metals, plastic, wood and electric motor, 151 x 70 x 70 cm
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