## The Evolution of My Kinetic Work

## Vyacheslav F. Koleychuk with V. Polyakoff

he unusual art revival that took place in the Soviet Union of the 1960s embraced and affected every kind of artistic production. In many respects, this movement stemmed from the seemingly long-forgotten ideas of the national avant-garde of the 1920s. It was not just the ideas themselves that were revived, but the spirit of a search that had been a natural expression of the first postrevolutionary years in the Soviet Union—an all-embracing urge to discover new ways in both art and life.

The constructivist tradition drew particular attention in the Soviet Union of the 1920s. The process of form-building, the specific peculiarities of the existence of a form in space and the interaction of form and color were among the problems that attracted most of the artists of that period. A trend toward experimentation with mobile forms manifested projects such as the 1919–1920 Monument to the Third International—or Tatlin's Tower—and the 1929 monument to Christopher Columbus by K. Melnikov (both of which were never built). These projects, beyond concentrating on the basic problems that were being tackled by constructivists at the time, also paved the way for an entirely new sphere of plastic art. However, it took no less than 30 years for the practical implementation of the solutions these projects offered to materialize.

Among the avant-garde artists in 1960s' Moscow who were concerned with kinetic form-building, those belonging to two factions known as the "Movement" and "Peace" groups were the most prominent. I belonged to the Peace group, which was comprised of young architects, engineers, artists and composers, including engineer Gennady Rykunov and Leon Theremin (Lev Termen), one of the founders of electronic music.

In 1967 a project of the Peace group realized the idea of monumental compositions with

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Fig. 1. The Atom, a light-kinetic composition of steel and duralumin,  $6 \times 12$  m, 1967. Designed by the Peace group, which included the author along with Gennady Rykunov and Leon Theremin.

ABSTRACT

he artist comments on a series of his artworks that show an evolution from minimal selftensile constructions to the artistic exploration of the principles of visual perception. Various kinetic

and transformable structures, in-

cluding "self-erected" construc-

tions, are described. His tech-

collages in which geometric pat-

terns define the forms of cut ele-

emerge inside the source picture. Working with new constructive or

visual principles, the artist looks

for the most elementary ways of

realizing methods of achieving

particular forms.

ments and phantom objects

niques of manipulating flat images are shown in a series of

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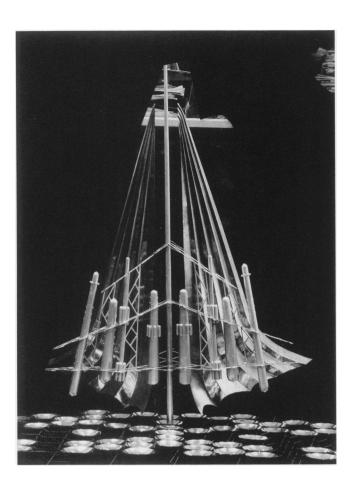


Fig. 2. Space-Plane, stainless steel, aluminum, mirrors and light,  $5 \times 7$  m, 1980. (Realized in 1981 for the Memorial Museum of Cosmonautics, Moscow)

spatial mobility. In Moscow's Kurchatov Square, we constructed a plastic form 6 meters wide and 12 meters high, which we named The Atom (Fig. 1). The work was composed of three bearings supporting a sphere that could rotate freely in space. The sphere itself consisted of duralumin rods connected to a steel frame. The duralumin's cold, silvery color, enhanced by a color-music device reproducing Theremin's "inhuman" melodies, created a truly enchanting impression. The Atom was, for us, the birth of an essentially new understanding of plastic art. It reflected new forms of aesthetic comprehension; it evoked a world that was neither anthropomorphic nor anthropocentric-as it had been traditionally perceived by Europeans since

the times of antiquity and the Renaissance—but technocratic and industrial. This world had no room for human feelings and emotions.

This became particularly obvious after the first wave of enthusiasm for the industrial era, bordering on the deification of engineering and mathematical thought, began to wane. Moreover, the historical experience Russian artists have gathered at the close of the twentieth century has set us above the constructivists of the 1920s: we now know only too well the price of deification.

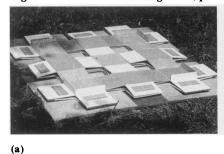
Starting in the 1970s, definite changes began to take place in my creative system as a result of this understanding. My work has become more organic, seeking to satisfy as fully as possible the human need for an ideal living environment. My designs over this period—such as the net-like roofing for the Soviet pavilions at EXPO '75 in Okinawa and EXPO '85 in Tsukubo—are close in form to natural structures. The former priority of engineering problems in my work has given way to my search for a form that can ensure the simplest mobile and durable construction. To quote L. Nervi, the accent is on "durability through form."

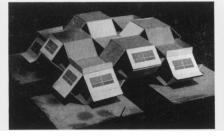
My use of traditional art forms is also a result of this shift. Though inherent in artistic design, the kinetic aspect is latent in traditional art. My series of polished bronze "Möbiuses" and "impossible"-objects-made-possible are a testimony to this effect. The very perception of these forms violates all tradition, and thus they contain a strong dynamic charge (Fig. 2).

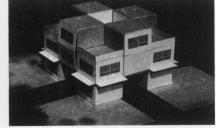
Another link in my creative chain was the development of self-producing forms, from my projects for a self-building house (Fig. 3)—ideal for areas especially subject to seismic activity—to the simple self-erecting structure of a radiotelescope project (Fig. 4).

One of my latest inventions-self-collage—introduces kinetics onto the flat surface of a sheet. Self-collage is a technique for obtaining qualitatively new visual structures from an integral image by singling and cutting out elements endowed with a certain symmetry and joining these elements through interchanging repetitions and combinations. This singling and cutting out of elements is intended to do more than merely extend the traditional images I have chosen as subjects, such as the well-known painting The Moon-Night by Aivazovsky (which became Sphere, 1983) or the popular Savrasov canvas The Rooks Have Come, reproduced as a postage stamp (which I turned into Greetings from Kiev, 1988). The viewer is shown the "bricklaying" procedure that went into the making of the image, which gives a clear understanding of how an image can be easily manipulated to result in new forms and new images.

Fig. 3. Model for a self-building house, pictured in three stages, plywood, tempera and nylon wires, 1 m × 1 m × 45 cm, 1973.







(b) (c)

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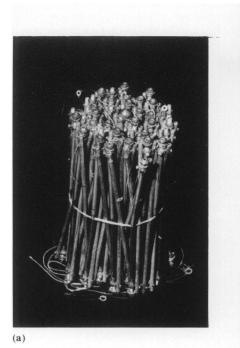


Fig. 4. Model for a self-erecting radio-telescope, aluminum tubes, steel strings and metal cord, 1972–1973. (a, above) The collapsed and packed model. (b, right) The erected model.

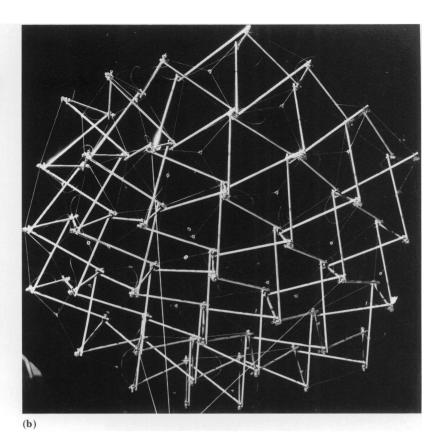


Fig. 5. Biotecton, polished bronze and polyvinyl chloride (PVC),  $8\times5\times5$  cm, 1985. Designed as a prop for a film production, the Biotecton represents a kinetic object from an imaginary planet. (a) Biotecton in the neutral position before transformation of the egg. (b) Biotecton after transformation.

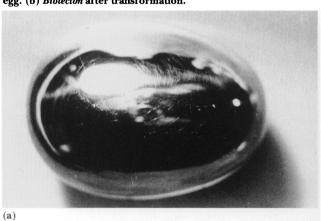




Fig. 6. Model wearing constructive dress composed of netting, string and rods, 1992. Executed with Irina Anishenko and Anna Koleychuk. (Photo: Dmitry Davidov)





Fig. 7. Model wearing constructive hat composed of netting, string and rods, 1992.

The best demonstration of the flexibility of the principle and variety of compositions can be found in a series of works derived from one particular image. One day I bought 30 typographically printed reproductions of a photograph of a seascape in a book shop.

Cutting out and replacing parts of the image within each of the reproductions, I obtained a series of different phantom situations created within the source image. The soft tonal and colour gradations of the sea and sky contrasted with the acuteness of the geometric patterns.

I called this series Seacape Inserts, stressing my interference with the original idyllic picture (Color Plate A No. 1).

After being invited by film director Georgi Danelia to produce the props for his allegorical comedy Kin-dza-dza?!, whose main characters are people from outer space who need "their own" household appliances, instruments and the like, I became a designer of "outerspace" objects. One of my inventions, the Biotecton, is reproduced in Fig. 5. Its actual useful qualities—as well as its ability to travel in every direction—could be explained only by a "genuine" representative of "another world."

Some of my most recent work includes a new series of fashion objects—composed of netting, string and rods—that give the impression of wrapping the figure in a misty cloud (Figs 6, 7). Certainly this sort of dress requires a new type of underwear!

I showed this strange fashion at the opening of my last exhibition in January 1994 at the Tretyakov Gallery in Moscow. The exhibition was almost entirely dedicated to stereographics, the principles of which I first experienced while polishing aluminum plates. I noticed that the scratches on the surface of the metal create tiny reflections that form three-dimensional pseudo-holographic images. I explored the nature of this effect in 1993 and will discuss it in a future article.

For more than 30 years I have been exploring the visual aspects of culture, technology and human perception. These aspects influence the development of visual thinking in art, architecture, design and science, and result in the better understanding of nature.