Naum Gabo [and] Antoine Pevsner

Introduction by Herbert Read, text by Ruth Olson and Abraham Chanin

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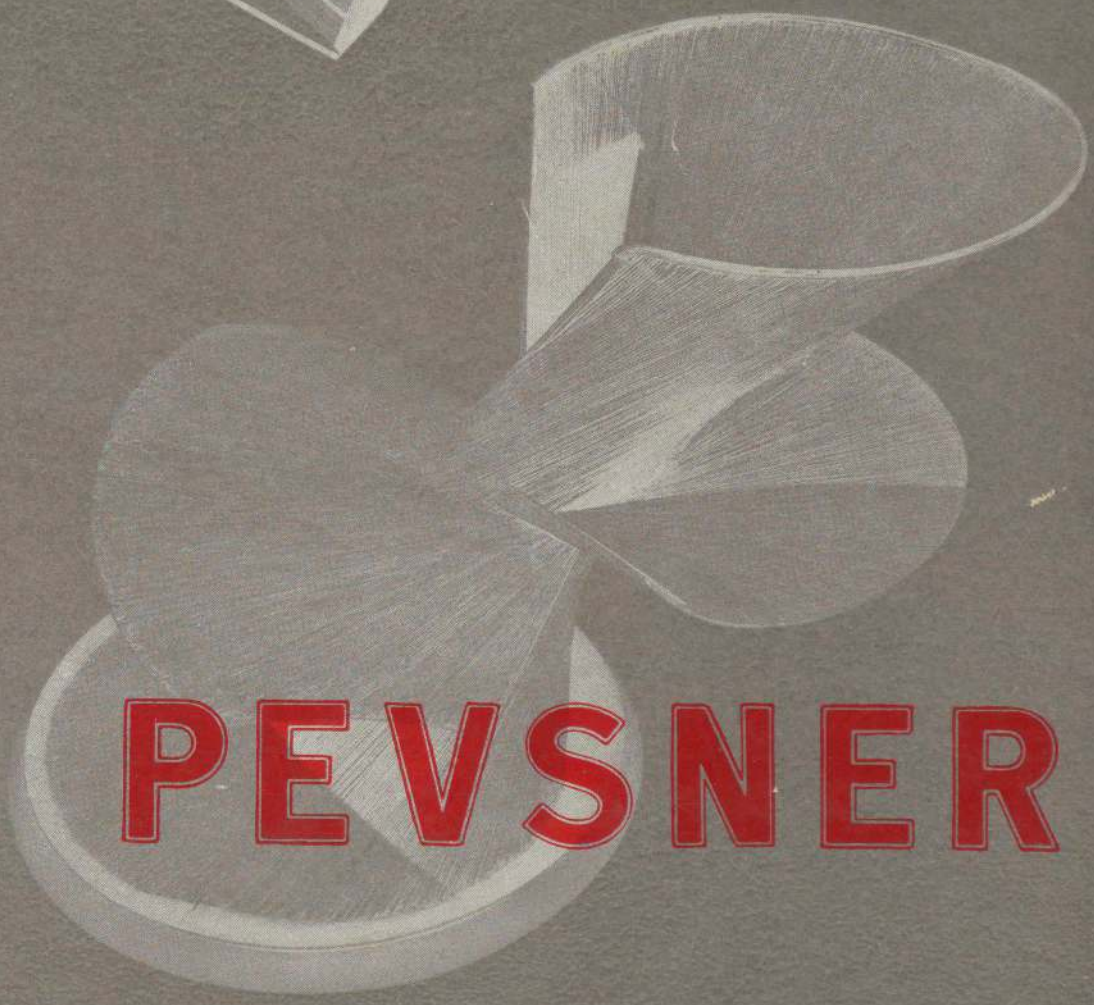
GABO



PEVSNER

The Museum of Modern Art, New York

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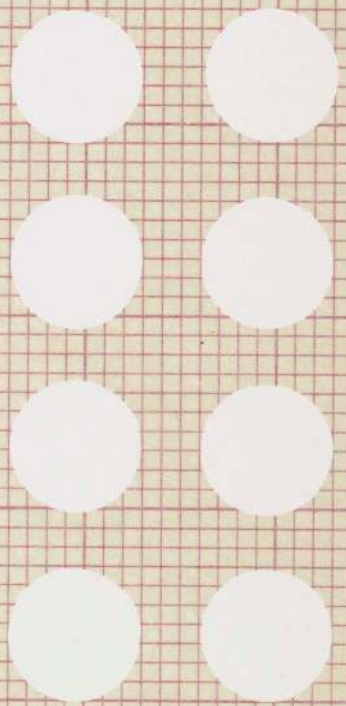

Ruth Olson and *Abraham Chanin*

Art, New York City

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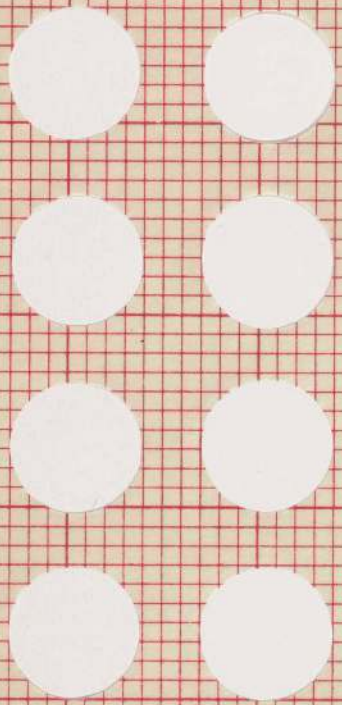

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Acknowledgment

On behalf of the Trustees of the Museum of Modern Art, I wish to extend grateful acknowledgment to Naum Gabo and Antoine Pevsner for their unsparing cooperation; to Wallace K. Harrison, Société Anonyme at Yale University and to Washington University, St. Louis, for lending works in the exhibitions; to Alfred H. Barr, Jr., and James Thrall Soby for invaluable counsel; to René d'Harnoncourt for his installation of the exhibition upon which this book is based; to Leo Castelli, René Drouin, Katherine S. Dreier and James Johnson Sweeney for gracious assistance and advice; to Herbert Matter for the photographs on pages 44, 45, 72, 73, 81; to Hannah B. Muller for aiding our research; to Leonard Eisenbud for scientific advice; and to Dr. Siegfried Kracauer, Nika Pleshkova, Henry Aronson and Margit Winter Chanin for help with translations.

MONROE WHEELER
Director of the Exhibition

Constructivism:

the art of *Naum Gabo* and *Antoine Pevsner*

by ***Herbert Read***

However much we allow for the speed of modern communications, we must nevertheless be struck by the apparent spontaneity with which a new and totally distinct type of art arose in several European countries during the five years preceding the First World War. In France, in Germany, in Russia, in Holland, in Italy, in Spain, even in England, movements were born which, though bearing different labels--labelled with the words Cubism, Suprematism, Neo-plasticism, Futurism, Vorticism, etc.--agreed in their fundamental attitude, which was a complete rejection of "naturalism" in art, and an attempt to establish "an art of pure form."

Many explanations, more or less profound, can be sought for this historical phenomenon. Most simply, we can regard it as an inevitable development within the technical tradition of European painting. Immediately precedent was the art of Cézanne. It is possible that French Cubism, as developed by Braque and Picasso under the genial tutelage of Apollinaire, was based on a superficial aspect of Cézanne's work. Cézanne himself was certainly a naturalist, and there is nothing in his career or statements which would sanction the theoretical or practical extremes of an art of pure form. We can be quite sure that he would have been revolted by the academic Cubism of a Gleizes or a Delaunay. Naturalism is, in fact, something which is not renounced without a profound spiritual conversion--a conversion which painters like Picasso and Braque have never experienced.

There is, apart from the immediate example of Cézanne, a tradition of much wider historical significance to which the anti-naturalist can appeal. Disregarding the remote examples of Neolithic and Celtic art, there is the tradition of Eastern art in general, which penetrated Europe in the Byzantine period. The Russian Constructivists, Gabo in particular, do not hesitate to link themselves with the Russian ecclesiastical style in art, with its universal tendency to abstraction; and with the later and more secular style of the so-called Symbolists (in particular with the work of Vrubel who flourished in the eighties and nineties of the last century).

There are two further explanations of the contemporary revolt against naturalism. The years before the First World War were years of increasing distrust, of spiritual and intellectual insecurity. A volcano was about to erupt from the ground under our feet, and its subterranean rumblings were being felt. Social tensions were acute, and since we are here concerned with two Russian artists, there is no difficulty in picturing to ourselves the political atmosphere of the last years of Czarism.

Underneath these social and political tensions lay the wider and deeper disease of a civilization which was rapidly losing its dogmatic assurance. Christianity was in a

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rapid decline, and the philosophies which provided some sort of substitute (Bergsonism, Pragmatism, Nietzscheism) created by their emphasis on change, on plurality, on eternal recurrence, an atmosphere of flux and impermanency. The inevitable reaction to such an atmosphere in art is away from any associations with the organic, the biologic, the natural, and towards abstraction.

This general "weltansichtlich" tendency was reinforced by a more concrete influence—the rapidly increasing "mechanization" of civilization. We cannot go on inventing machines, constructing machines, using machines, without in some degree being mentally influenced by machines. The extent to which a machine-imagery already dominates, for example, the minds of our children is not sufficiently realized. The machine is the universal and coercive symbol of our age. It was a resolve to admit this fact, and to accept the consequences, which in the year 1913 brought together in Moscow a group of avant-garde architects, engineers and painters. There were four animators of this group: Kasimir Malevich (b.1878:d.1935), Vladimir Tatlin (b.1885), Antoine Pevsner (b.1886) and Naum Gabo (b.1890).

This group was united in its anti-naturalism. As a general tendency, the new medium was to be not paint, but rather steel; the new method not composition on a plane surface, but rather construction in space. The form to be achieved was not necessarily harmonious or beautiful, but rather dynamic and quasi-functional. The work of art, that is to say, was to have the expressive qualities of an efficient machine. If the house, in Corbusier's famous phrase, was to be "a machine to live in," the Suprematist work of art might be described as a machine to live "with."

The limitations of this esthetic were soon to become apparent, and were to involve the disruption of the group. But first a few years of formative discussion, of ideological aggression, of practical construction, were to be lived through. It must be remembered that these were years of war, culminating in revolution. The years before the Revolution (1913-17) were years of united action against the established academism of the old order; the years after the Revolution were years of expansion, triumph, crystallization and separation. This second phase came to an end with the first exhibition of post-revolutionary Russian art held in Berlin in 1922.

The inner history of these years must be related by the participants; documentary evidence does not exist on which an objective account can be based. But one thing is certain: the history of this inner struggle among the artists of Moscow is an epitome of one of the most decisive conflicts in the evolution of modern Europe. The point at issue was the relation of art to society, and it was not the artists who were allowed to decide it. Nor was it left to the judgment of the people. The Communist Party, in its political capacity, condemned the modern movement in art in principle and in practice and insisted on a restoration of the pictorial naturalism which had prevailed under the old regime. This extraordinary "volte-face" must now be examined in more detail, but it may first be observed that the holding of an exhibition of the work of Gabo and Pevsner in New York in 1948 is a significant indication that the world at large is not yet prepared to accept a verdict imposed by force on Russian artists in the twenties.

Once the political revolution had triumphed in Russia, the immediate problem for progressive artists like the Suprematists was to extend the revolution into academic and educational spheres. This is never so automatic as a logical conception of revolution would seem to require. Institutions like universities and academies have a way of riding revolutionary storms, and of maintaining within a new political system the reactionary ideals of the old epoch. Revolutionary leaders at the same time are generally men of limited and even naïve cultural outlook; they think in terms of politics and power and are slow to perceive the necessary unity of a revolutionary change. Lenin was no ex-

ception to this rule and was little disposed to interfere in the politics of art. But the revolutionary artists themselves were of a different opinion, and in the first flush of victory they literally evicted the members and officers of the Imperial Academy and other art institutions. They created new institutions, the Vchutemas, or art workshops, which in their program and practice anticipated the Bauhaus which some years later was to become the focus of similar ideals in Germany.

The triumph of the revolutionary artists was, however, short-lived. The academicians were to find unhoped-for allies among the orthodox Marxists. A fierce debate occupied the years 1919-22. The revolutionary artists themselves were divided, Tatlin, Rodchenko and Stepanova protesting their orthodoxy; Gabo and Pevsner maintaining the integrity of their esthetic ideals. In 1920 both parties issued their separate manifestoes. For some time the debate was to continue, but there was no doubt on which side the all-powerful influence of the Party weighed. Influence in such a case implied action. Pevsner, Gabo and their associates were deprived of their membership in the Central Soviet of Artists, which meant in effect that they were deprived of all possibilities of making a living by the practise of their art. The only choice was between conformity and exile. Gabo and Pevsner chose exile. Tatlin and his associates remained in Russia, but it may be doubted whether their fate was more fortunate. For the real victor in this struggle was not any form of revolutionary art, Marxist or other, but the bourgeois academism of the nineteenth century.

The Marxist accusation against Gabo and Pevsner, as against artists of a similar persuasion in poetry and music, can be summed up in the word "formalism." According to their Marxist critics, the Constructivists, as they had called themselves since their manifesto of 1920, were guilty of creating an art which had no basis in "socialist realism." This phrase, which has no sanction in the writings of Marx or Engels, implies that the artist, instead of attempting to create a self-sufficient or "pure" work, should use his talent to interpret the phenomenal world (which is the general aim of naturalism) and in particular should interpret this "reality" in a way which furthers the official conception of the social order. At its crudest this dogma exacts a rigid adherence to a propagandist purpose in painting and sculpture; in the more arcane debates of the Moscow artists of 1920 it implied a generalized functional art. The Constructivist artist, that is to say, might find an outlet in functional architecture, engineering, etc., but apart from such outlets he must become a naturalist and paint in a pictorial idiom within reach of the more or less illiterate masses of the Soviet Union.

This debate, of course, has not been confined to the U. S. S. R., and it is still necessary to define and explain the principles for which artists like Pevsner and Gabo have suffered much persecution and which still baffle the understanding of many people of good will all over the world.

The fundamental argument is a metaphysical one and is as old as philosophy itself. It shifts its ground from time to time, and the antithetical terms do not always correspond. But there is always present a distinction between "what is" and "what is seen," between idea and image, between reality and appearance. There are extremists who deny such a distinction and argue either that everything is an illusion presented by the senses or that everything is a physical reality, even the mental operations of the brain which result in ideas. It is obvious enough that quite distinct philosophies can be founded on these arguments; what is not so obvious to most people is that quite distinct types of art can have similar bases. In epochs which were not, so far as we know, specifically metaphysical, the distinction was expressed merely as trust or mistrust in the face of nature—trust inspiring a mimetic or naturalistic art, mistrust inspiring an abstract or geometric art. In the history of art these two tendencies present extremely compli-

cated reactions, largely because the motivation behind them is completely unconscious. Elements from both traditions may be mingled along the shifting frontiers of the two types of civilization—the evolution of Gothic art derives its complexity from this very fact.

What has happened in our own time is simply that artists have based themselves consciously on one or the other of these metaphysical outlooks. To the dialectical materialist, any form of idealism is anathema; and "realism" (in the Scholastic sense of the word, which is also the Constructivist sense) is regarded as a form of idealism. An art which deliberately denies the self-sufficiency of the phenomenal world is, for such philosophers, as perverse as a religion which assumes a life beyond the grave. But everything in this argument turns, of course, on our definition of the word "reality." The dialectical materialists seem to confine its meaning to the immediate data of sense perception. To the great majority of philosophers that has always seemed a very jejune attitude. A comparison of these data soon discovers similarities or identities from which emerge, not merely the general laws which constitute the body of science, but universal concepts to which the sense-data always conform, and which therefore may be regarded as the bases of reality. These concepts are not, as the materialist assumes, illusory or idealistic. We cannot have final knowledge about them, but we are aware of their concrete manifestations. They are inseparable from matter, unimagined outside matter. They describe the forms which matter universally assumes—the way matter behaves.

Now let us turn to the principles which Gabo and Pevsner opposed to the materialists, and to which they gave precise expression in their Manifesto of 1920. In that Manifesto they made these points:

1. To communicate the reality of life, art should be based on the two fundamental elements: space and time.
2. Volume is not the only spatial concept.
3. Kinetic and dynamic elements must be used to express the real nature of time; static rhythms are not sufficient.
4. Art should stop being imitative and try instead to discover new forms.

These four axioms are not so innocent as they seem. The first one implies a decisive choice of that philosophy of life which we call realism in opposition to nominalism or materialism. If the artist makes this metaphysical choice, his activity must then, accordingly, be directed to an esthetic revelation of the elements of reality—that is to say, to a description or concrete representation of the elements of space and time. Moreover, it will not be a question of subjective interpretation; space and time are legal elements—they obey universal laws and are misrepresented or distorted if made the expressive media of personal emotions. This point has been well brought out by Piet Mondrian, whose writings on pure plastic art are perhaps the clearest expression by a practicing artist of its underlying principles:

> Gradually I became aware that Cubism did not accept the logical consequences of its own discoveries; it was not developing abstraction towards its ultimate goal, the expression of pure reality. I felt that this reality can only be established through "pure" plastics. In its essential expression, pure plastics is unconditioned by subjective feeling and conception. It took me a long time to discover that particularities of form and natural colour evoke subjective states of feeling, which obscure "pure reality." The appearance of natural forms changes but reality remains constant.* To create pure reality plastically, it is necessary to

* Gabo, however, rejects entirely the idea of a constant reality. He considers instead that reality is continually being created anew, that it has no fixed or absolute identity; he does not feel that any one conception of reality may be thought superior to others. To his mind the conception of reality as an ever-changing result of the universal, human, creative process is the essence of constructive realism. [Ed.]

reduce natural forms to the "constant elements" of form and natural colour to "primary colour." The aim is not to create other particular forms and colours with all their limitations, but to work toward abolishing them in the interest of a larger unity.*

The aim of Constructivist artists has been to give "a clear vision of true reality," and it might be objected that this is not essentially an esthetic activity. Between the objectivity of science and the creativity of art there is this difference: the one aims to "inform," the other to "please." The pleasure afforded by the work of art need not take the channels of emotional indulgence, of sentimentality. Pleasure results from many degrees of perception, and the purest pleasure is, according to the view I am presenting here, intellectual as well as (at the same time as) sensuous. This most refined degree of pleasure is only given in response to disciplined effort. The disciplines of art are (a) constructive skill, (b) selective observation, and (c) unitary vision. Skill and observation are essential to any type of art and in effective works of art do not vary much in quality (the observation which a Gabo practices—cf. his confession in the "Horizon" letter)†—does not differ from the observation practiced by a Leonardo or a Constable; Pevsner's technical skill is quite comparable to the skill of a Donatello or a Rodin). What varies enormously in works of art is the quality of intellectual vision. No amount of technical skill can compensate for the intellectual poverty of artists like Murillo and Bouguereau (a hundred names might be substituted from the nearest museum). On the other hand, the unitary vision of a Blake or a Cézanne will go a long way to make up for defects of technique.

The particular vision of reality common to the Constructivism of Pevsner and Gabo and the neo-plasticism of Mondrian is derived, not from the superficial aspects of a mechanized civilization, nor from a reduction of visual data to their "cubic planes" or "plastic volumes" (all these activities being merely variations of a naturalistic art), but from the structure of the physical universe as revealed by modern science. The best preparation for a true appreciation of constructive art is a study of Whitehead or Schrödinger. But it must again be emphasized that though the intellectual vision of the artist is derived from modern physics, the creative construction which the artist then presents to the world is not scientific, but poetic. It is the poetry of space, the poetry of time, of universal harmony, of physical unity. Art—it is its main function—accepts this universal manifold which science investigates and reveals, and reduces it to the concreteness of a plastic symbol.

What the work of art "expresses," in an emotional sense, depends very largely on what the spectator brings, in the way of an emotional set-up, to the work of art. Certainly the artist's business is not, and never has been, to anticipate the spectator's emotions (we can leave that to Hollywood). The artist can never control the emotional consequences of his work; he may, indeed, welcome them. But his first concern, his only concern in the act of creation, is with the standards of reality; and these standards, according to the Constructivist theory, are given in the physical mutations of space and time.

The acceptance of such a philosophical basis for art still leaves a considerable latitude in the manipulation of such elements. The principles common to Gabo, Pevsner, Mondrian, Nicholson, Domela and many other "abstract" artists lead to very different results in the works of art actually produced. These differences may to some extent be explained by the nature of the materials chosen to work in—Mondrian worked

* "Plastic Art and Pure Plastic Art." New York, Wittenborn, 1945, p. 10.

† "Constructive Art: An Exchange of Letters between Naum Gabo and Herbert Read," Horizon, London, X, 55 (July, 1944) p. 60, (Bibl. 14).

in linear forms and primary colors; Pevsner works in bronze and other metals; Gabo in plastics and other materials. But such differences are superficial; more important are differences of emphasis as between the elements of space and time or, more concretely, as between a "static balance" and a "dynamic equilibrium." Mondrian has defined this difference. A static balance "maintains the individual unity of particular forms, single or in plurality." A dynamic equilibrium is "the unification of forms or elements of forms through continuous opposition. The first is limitation, the second is extension. Inevitably dynamic equilibrium destroys static balance. . . . In plastic art, the static balance has to be transformed into dynamic equilibrium which the universe reveals."

The distinction here made by Mondrian is but one example of the new laws of composition which belong to the art of concrete realism. Such a "rationale of composition" must one day be written, but this is not the place to sketch even its outlines. To a certain extent the new science of art coincides with the old science of art; abstract the subjective associations from naturalistic or figurative art and we are still left with the mutual relations of forms, which must, in any work of art whatsoever, fulfil an expressive function. It is not in formal content that non-figurative art differs from figurative art; it is in its expressive intention, vis à vis the personality of the artist. It is very difficult for an artist to eliminate his personality, and most people do not wish him to make the attempt. But when he does succeed in such an attempt, the result is a work of art of an altogether different order. Mondrian, again, has expressed the difference very clearly:

> Although art is fundamentally everywhere and always the same, nevertheless two main human inclinations, diametrically opposed to each other, appear in its many and varied expressions. One aims at the "direct expression of universal beauty," the other at the "esthetic expression of oneself," in other words, of that which one thinks one experiences. The first aims at representing reality objectively, the second subjectively. Thus we see in every work of figurative art the desire, objectively, to represent beauty, solely through form and colour, in mutually balanced relations and, at the same time, an attempt to express that which these forms, colours and relations arouse in us. This latter attempt must of necessity result in an individual expression which veils the pure representation of beauty. Nevertheless, both the two opposing elements (universal-individual) are indispensable if the work is to arouse emotion. Art has to find the right solution. In spite of the dual nature of the creative inclinations, figurative art has produced a harmony through a certain co-ordination between objective and subjective expression. For the spectator, however, who demands a pure representation of beauty, the individual expression is too dominant.*

The significant claim in this statement, and in similar statements by the Constructivists, is that "a pure representation of beauty" cannot be achieved by "individual expression"—that is to say, by expressive means which are personal and subjective.

That the creation of a "pure" art in this sense is possible is certain. Apart from music and architecture, where the subjective element is eliminated without exciting a protest from the intelligent public, there exists a quantity of poetry, and that of the highest order, which is manifestly "pure" in this sense. English lyrical poetry before 1600, the poetry of Dante and Hölderlin, illustrate this impersonal beauty, this pure representation of the universal element in art. What is novel in the present situation is the attempt to create such an art by plastic means. The theoretical legitimacy of such an attempt cannot be questioned; what remains, as a difficulty if not as an objection, is the problem of "communication."

* Op. cit., p. 50.

There is no doubt that many people, not prejudiced by emotional factors, people of general esthetic sensibility, find difficulty in discovering an esthetic response to non-figurative art. I believe that in most cases such people cannot separate the superficial "decorative" appeal of a non-figurative composition from its constructive significance. They are like those people (not necessarily to be despised) who only appreciate the melodic or linear element in music, and are incapable of grasping its polyphonic depth.

I have discussed this problem of communication with reference to Constructivist art in the exchange of letters with Gabo already referred to (a part of which is reprinted on page 21). Essentially the problem is the same whenever the public is confronted with an original or "difficult" type of art; it is the problem which arises when the same public is confronted with the music of Stravinsky or the poetry of Eliot. A difficulty in philosophy or science—the "difficulty" of Heidegger or Carnap—is accepted as a necessary, or at least as a natural, price to pay. Plastic art suffers from its basic illiteracy. Because it is illiterate—a visual means of communication—there is an unwarranted assumption that it should be addressed to illiterate people. There is no logical or historical justification for such an assumption. The visual language may be just as difficult to learn as any verbal language; and within this visual language there are as many degrees of difficulty as there are in literature.

Nevertheless, the inherent difficulty of a subject, of a "vision," does not justify any imprecision of expression. But no one, I think, has ever ventured to accuse the artists now in question of any dimness or vagueness of this kind. There is no imprecision of visual language in a construction by Gabo or Pevsner: every piece has the absolute clarity of a Euclidean theorem. The development of both artists, during the past twenty-five years, is towards an increasingly exact equivalence of vision and expression. The experimental is gradually eliminated and anything in the nature of suggestive improvisation rigorously excluded. But in each artist there is also a development towards what I can only call an increasingly "poetic" vision. The element of deliberation which is implied by the very word "construction" is more and more completely fused in a spontaneous moment of vision, and parallel to this development the words themselves acquire a richer degree of "artifice," of material quality or patina. The bronze and copper constructions of Pevsner in particular often have the substantial richness of the bronzes of Ancient China.

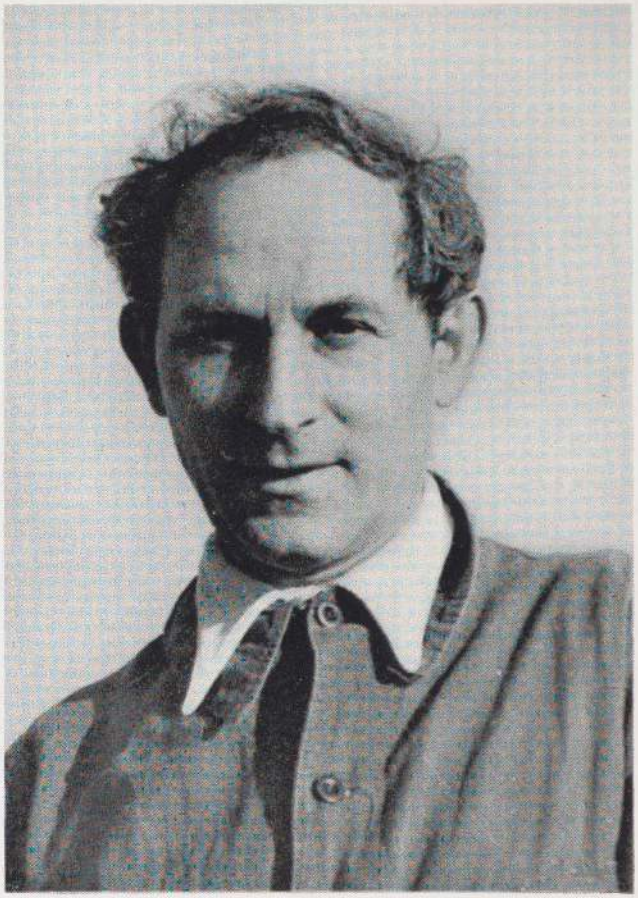
In addition, these works of art have what is so generally lacking in modern works of art—monumentality. Some of them are actual models for monuments in public places—airports and exhibition parks—and nearly all would gain from incorporation in architectural units. There is very little architecture worthy of their collaboration, and even where these constructions might be welcome, and might function with all the majestic rightness of Michelangelo's groups in the Medici Chapel, the will and the means to collaborate with such artists are lacking. But only such a collaboration would satisfy the artistic ambitions of Gabo and Pevsner, and only in such a setting would the full powers of their creative talents be engaged.

Much—perhaps most—of the art that is specifically "modern" is in the nature of a protestation; it is not decadent art, but it is a negative reaction to the decadence of our civilization, particularly to the defunct academic traditions of that civilization. But the art of Antoine Pevsner and of Naum Gabo is positive and prophetic, and it looks beyond the immediate convulsions of our epoch to a time when a new culture based on an affirmative vision of life will need and will call into being an art commensurate with its grandeur.

Herbert Read

"Geometry is to the plastic arts what grammar is to the writer."
Guillaume Apollinaire [1-p 22]

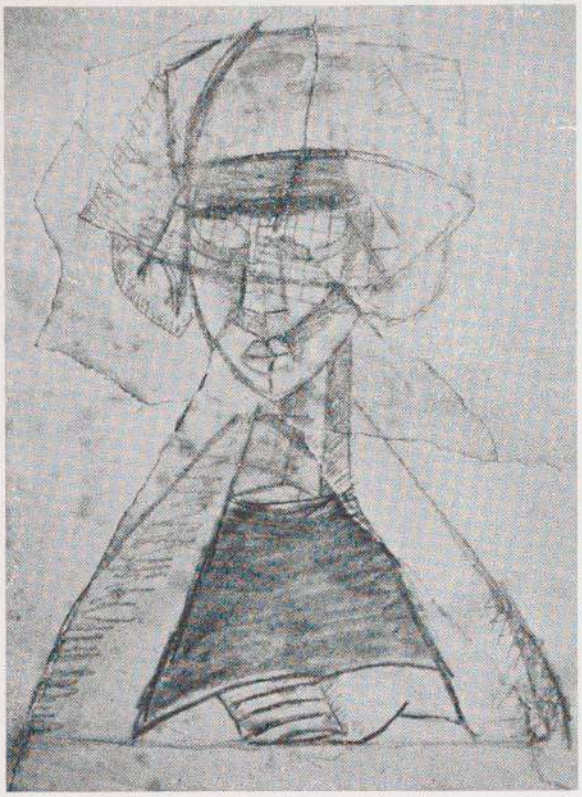
Gabo in his studio, 1935.



Naum GABO

Naum Pevsner, later to become Naum Gabo, was born August 5, 1890 in Briansk, an industrial area in Central Russia. His father was an executive of copper refineries. Since two of his sons were engineers and one was an artist, the father decided that Naum should become a doctor, and, after graduation from the Kursk Gymnasium, he sent him in 1909 to the University at Munich to study for a medical career.

Once away from home, Gabo found that his real interests were in science and the arts. The University offered him a brilliant faculty. The world renowned Roentgen, awarded the Nobel Prize for studies in the penetration of matter by radiation and the invention of X ray, was teaching experimental physics. Baeyer, the industrial chemist, and Graetz, expert in heat and electricity, were other notables on the faculty. Gabo studied mathematics, physics and chemistry and in 1912 included civil engineering among his courses.



DRAWING. 1916. Charcoal, 7½ x 6⅝". Owned by the artist.

In his art history classes, he sat under Professor Wölfflin, author of *Fundamental Concepts of Art History* who was developing a formalistic means of classifying art: the linear *vs.* the pictorial, vision of surface *vs.* vision of depth, open *vs.* closed forms, multiplicity *vs.* unity, absolute clearness *vs.* relative clearness.

In 1910 Gabo met the Russian-born Kandinsky, leader of the New Artists' Federation, and read his newly published *On the Spiritual in Art*. In this work Kandinsky declared: ". . . abstract and innermost nature are contained in each manifestation. . . . artists gradually turn to their material to test the balance of each separate element's innermost value. . . ."[2] He also sought a synthesis or significant affinity of the arts.

In Munich, outside the classroom, the advanced artists talked formal systems, philosophy and science. The French Cubists had shown there in 1910 at the invitation of the New Artists' Federation (Le Fauconnier and Picasso exhibited again in Munich in 1913, and Picasso a third time in 1914). By 1911 Kandinsky had created the first wholly abstract composition. The Munich "Blue Riders," an aggressive new group of painters led by Kandinsky and Marc, were exhibiting and writing in defense of their explosive abstractions and bright-colored expressionism.

More and more interested in art, Gabo took Wölfflin's advice and followed an over-ambitious itinerary on a walking trip through Italy. During the summer of 1912 he managed to visit many of the northern centers. While he dutifully covered the collections of old masters in Milan, Venice, Bologna, Alessandria, Pisa and Leghorn, the contemporary Italian artists were staging a violent revolt. Marinetti, poet; Boccioni, sculptor and painter, and others were publishing tradition-breaking manifestoes and alerting advanced artists all over Europe.

> A speeding automobile . . . is more beautiful than the *Victory of Samothrace*.[3]
>
> Take and glorify the life of today, incessantly and tumultuously transformed by triumphs of science.[4]
>
> The circumscribed lines of the ordinary enclosed statue should be abolished. The figure must be opened up and fused in space. . . . We shall have in a Futurist composition planes of wood or metal, stationary or mechanically mobile.[5]

Some of his vacations Gabo spent in Russia, where he became familiar with the Shchukine and Morosov Collections, so rich in modern French art. In 1913 and again in 1914 he visited his brother, Antoine, then working as a Cubist painter in Paris. Gabo went to the galleries and visited the *Salon des Indépendants*. He saw works by Lhôte, Gleizes, Metzinger and Léger, an especially systematic group of Cubist painters and theoreticians; he also saw one of Delaunay's famous early Cubist scenes of Paris, showing the Eiffel Tower. He met the Russian Archipenko, friend of Antoine, and an innovator in Cubist sculpture. From his solid, geometrically stylized figures of 1910, Archipenko had gone on to extend the Cubist interest in space and multiple planes by opening holes in his sculptures. These empty spaces functioned as a decorative part of the design and increased the number

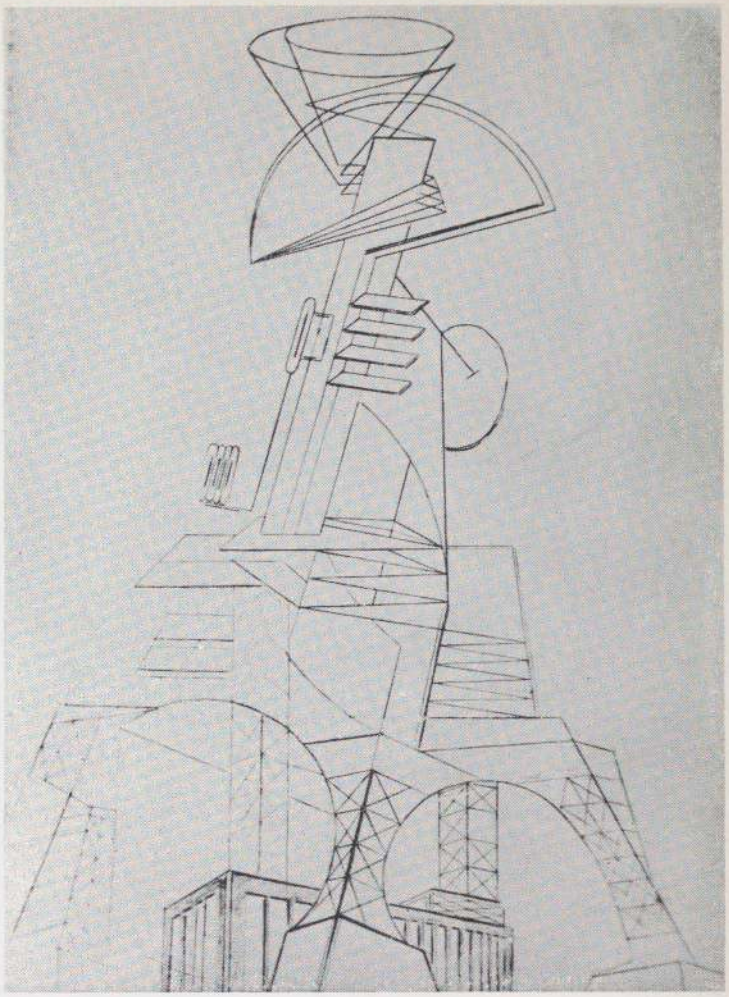
of surfaces. Concurrently, Archipenko responded to the Futurists' call for unorthodox materials by constructing in relief a series of figures—"Médrano" —out of polychrome glass, metal and wood.

Back in Munich Gabo continued his study of statics and kinetics. One afternoon on his way to class he passed a particularly sad-faced Negro. Deeply touched, Gabo turned back to his rooms and modeled a head in clay which he called *Slave*. Now almost forgotten, this piece was his first work of art and his last interest in naturalism.

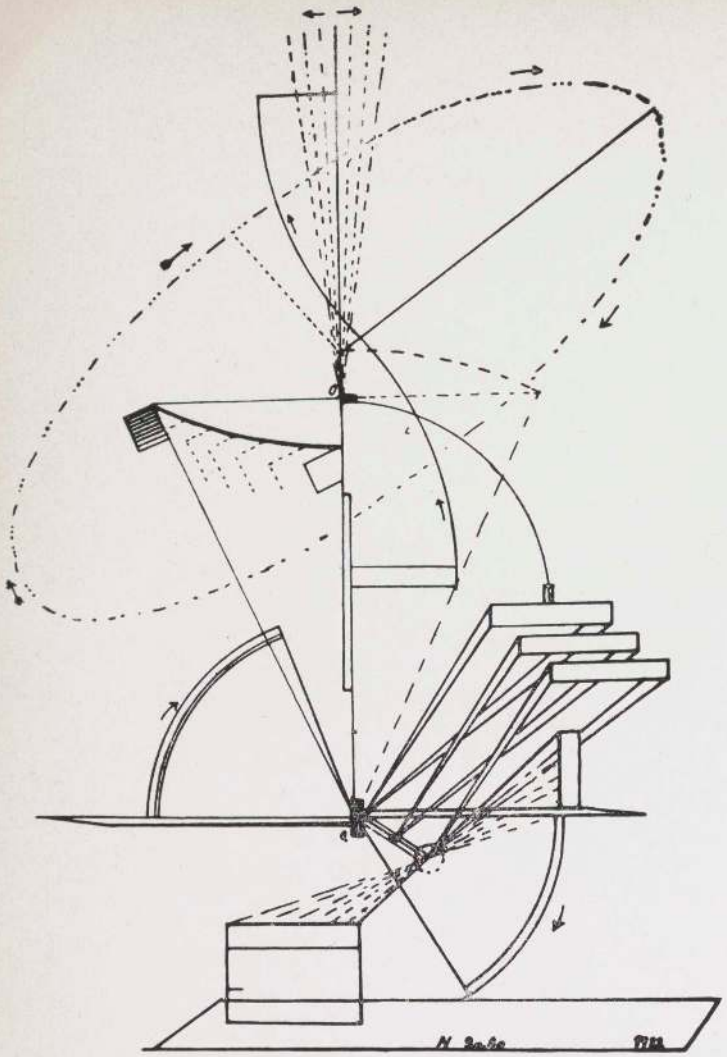
When war came in 1914 the progressive artists were scattered. Gabo made his way to Copenhagen and then to Oslo. His anxious family called home their older son, Antoine, and then sent him to be with Gabo. At this time Naum changed his name from Pevsner to Gabo to distinguish himself from his brother.

Stimulated by the advanced artists' theories and experiments, Gabo began to make speculations of his own. He constructed a *Bust* in 1915, out of some small, intersecting planes of wood. According to the artist, "Older sculpture was created in terms of solids; the new departure was to create in terms of space."[6] Although the *Bust* was related to Cubism, Gabo considered "the use of space in Cubism unsystematic, accidental, in a sense anarchistic." In physics Gabo had learned to make three-dimensional models illustrating the exact measurements of mathematical formulas. Now he was evolving a new method of measuring space in sculpture. *Bust* of 1916 (page 22) is a network of empty spaces defined by the joinings of thin plastic sheets. The full curves and clear geometric shapes suggest the early Cubist forms of Léger and Malevich. Within Wölfflin's categories it represents a synthesis of opposite qualities, of simultaneously open and closed forms, according to Gabo, "a kind of new classicism, free in conception but disciplined in application." These two works, a *Head* and an iron *Torso* done in 1917 complete the Norway series of works—works influenced both by Gabo's scientific training and artistic environment.

With the abdication of the Czar in 1917, Gabo and Pevsner rushed home to a country in the midst of revolution. At the overthrow of Kerensky in October, Lunacharsky, Commissar of Public Education, entrusted many advanced artists with leadership in the academies and museums of the new state. While still engaged in campaigns against the White Armies, the Soviet Government instituted some reorganization of civilian life. In Moscow the People's Commissariat of Education established *Vchutemas* (The Higher Art and Technical Workshop) to replace the old Imperial Academy of Art. On its staff were the two abstract painters Kandinsky and Malevich, Tatlin the creator of "counter reliefs," Sterenberg and Pevsner. Gabo set up his studio nearby. Eager to test their art within the new social philosophy, all of them, he says, "discussed and argued, each bringing something to the clarification of another's work. Our activities went on incessantly in both theoretical and concrete experiments at the workshops of the schools and in the artists' studios. Regular open discussions were held in the school auditorium. . . . This in the midst of a whirlwind of



PROJECT FOR A RADIO STATION. 1919-20. Pen and ink. Owned by the U.S.S.R.



DESIGN FOR KINETIC CONSTRUCTION. 1922. Pen and ink. Owned by the U.S.S.R.

war and civil war, utter physical privation and political strife. . . . This is the way we lived and worked from 1917 until 1920."

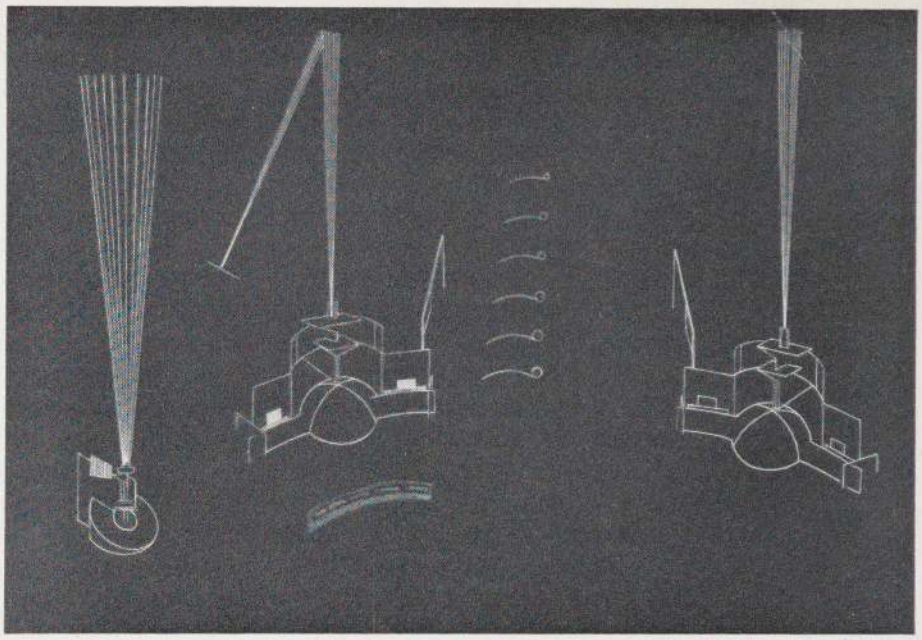
Tatlin felt that "the art of the future will be based on principles of construction . . . real material in real space . . . a synthesis of art, learning and technical knowledge."[7] He began such a synthesis in 1919 in the famous project *Monument to the Third International*. Of glass and iron and in rotating tiers on a slanting axis, it was intended as an office building as well as a symbol.

In this same year Gabo was occupied with a project for a radio station at Serpuchov, a textile town near Moscow. This initiated a series of works expressing a synthesis of painting, sculpture and architecture. The rendering is reminiscent of Delaunay's well-known *Eiffel Tower* of 1910. In his plan Gabo substituted structural and technical parts for architectural ornament. Like Tatlin's *Monument* it was planned for actual construction and use. But Gabo rejected his own plan and opposed Tatlin's tower as a kind of "machine romanticism. . . . It seemed too automatic in machine design. To take forms of the Eiffel Tower on a simple decorative basis was only to begin another academism. . . . I could not follow this path."

Gabo's opinions widened a schism already apparent in *Vchutemas*. Should art serve the revolution through techniques of construction devoted to popular activities, or was the essence of art speculative and spiritual? Historic debates were held at the school which, according to Gabo, "influenced in both directions so many students and artists that it is a pity they were not recorded. Maiakovsky, the poet, and Punin, the critic, were the chief spokesmen for Tatlin, Lunacharsky was neutral, I spoke for the pure Constructivists, a name given us by the critics. I showed them a photograph of the Eiffel Tower and said 'That which you think is new has already been done. Either build functional houses and bridges or create pure art or both. Don't confuse one with the other. Such art is not pure constructive art but only imitation of the machine.' "

In addition, Gabo investigated motion as an esthetic factor and in 1920 invented the technical, working *Kinetic Model*. He attached the base of a simple steel blade to a small, electrical machine which made it vibrate; one vibration interval was to be used as theme. But Gabo resented the need of the cumbersome motor and decided that "only future developments in heat and radio power will permit as yet unpredictable kinetic solutions." *Kinetic Model* was followed in 1922 with the *Design for Kinetic Construction* (above), a scheme for a more involved play of kinetic rhythms, and in 1925 with the *Monument for the Institute of Physics and Mathematics* (page 25) containing a motion pattern.

Kinetic Model put into concrete form the earlier proclamations of the Futurists, who had declared, "We firmly believe that only by means of motion does the object enact its drama and establish the conditions for artistic creation."[8] Gabo, while acknowledging to the full the Futurists' pioneering, nevertheless discards their program. "Ask any Futurist how he imagines speed, and on the scene will appear a whole arsenal of raging automobiles,



PROJECT FOR FÊTE LUMIÈRE. 1929. Whereabouts unknown.

rumbling stations, tangled wire, the clang, bang, noise and ring of the whirling streets. . . . This is not at all required for speed and its rhythms. . . . Look at a ray of sun—the quietest of the silent strengths—it runs three hundred thousand kilometers in a second. Our starry sky—does anyone hear it?"[9] This was the poetry of scientific motion that influenced the Hungarian, Moholy-Nagy and later the "mobiles" of the American, Alexander Calder.

Malevich, an outstanding figure in the history of Russian abstract art, started in 1913 to call his painting Suprematism, an art of pure sensation. He expounded the non-objective, *Bezpredmetnosti*, which means "without an object." Malevich's importance is now universally recognized; to Gabo he was spiritually close. Gabo's *Oval Relief* of 1920 moves into this realm of pure sensation. An early abstraction constructed in clear celluloid, it intercepts space with curved and diagonal transparent planes in place of physical motion. In another example, a construction of 1921, he used tubes of colored fluids to catch lights.

By 1920 Gabo felt secure in his views. The next gesture was a dramatic public display. He and Pevsner exhibited their works in an orchestra shell in central Moscow. Posted nearby and distributed as a handbill were copies of the *Realistic Manifesto*, their celebrated statement which proclaimed the tenets of pure Constructivism as deduced from three years of creative work and oral debate:

> We deny volume as an expression of space. Space can be as little measured by a volume as a liquid by a linear measure. What can space be if not impenetrable depth? Depth is the unique form by which space can be expressed. We reject physical mass as an element of plasticity. Every engineer knows that the force of resistance and the inertia of an object do not depend upon its mass. One example suffices: railroad tracks.
>
> We announce that the elements of art have their basis in a dynamic rhythm.[10]

But opposition was arising against abstract art in both popular and official quarters. Moreover conservative artists began to regain influence and threw their weight against the new movements.

Partly as a result of these pressures, a counter *Constructivist Manifesto* attempting to justify Constructivism ideologically was published, and another exhibition was organized the same year by

the group around Tatlin. These artists chose to stay and deal with the new Russian patrons of painting and sculpture: trade unions, returning Red Army soldiers and remaining elements of the middle class, all of whom wanted a more conventional art. Although the Soviet Government at first bought the works of advanced artists, including those of Gabo, the tide began to turn towards a style of relative naturalism, eventually termed "socialist realism" which was actually a revival of a popular academic style.

In 1922 the Soviet Government sent a large exhibition of all phases of Russian art to Germany and Holland. Gabo left for Berlin to supervise the Constructivist section of the exhibition, held at the Galerie van Dieman, and remained in Berlin for most of the next ten years. Here he met Marcel Duchamp and sold some of his constructions to Katherine S. Dreier, founder of the "Société Anonyme" in New York. Pevsner joined Gabo in Berlin, and in 1924 they held a joint exhibition, *Constructivistes russes*, at the Galerie Percier in Paris. Gabo was associated with the "Novembergruppe" in Germany, a comprehensive organization formed in 1918 during the first month of the Weimar Republic and engaging in art exhibitions, housing legislation and community activities. Its membership included Klee, Kandinsky, Barlach, Belling and Mies van der Rohe. Gabo exhibited in the major cities of Germany and Holland and lectured at the Bauhaus and in Dresden, Hannover, Cologne, Amsterdam, Rotterdam and Utrecht. He met the architects Oud and Rietveld and the painter Mondrian of the advanced Dutch "Opbouw" group.

In 1926 Gabo and Pevsner were shown with Theo van Doesburg of the "Stijl" group at the Little Review Gallery in New York City, and they were represented in the *International Exhibition of Modern Art* sponsored by the "Société Anonyme" at the Brooklyn Museum and in 1927 at the *Machine Art Exposition* in New York.

Involved with architectural activities at their height in Germany, and even going counter to the current machine esthetic,[11] Gabo created a series of constructions reminiscent of his approach in the Serpuchov radio station. Central to his Constructivist theme was the concept that "the constructive principle leads the plastic arts into the domain of architecture. Art formerly reproductive has become creative. It is now the spiritual source from which future architects will draw."[12] *Monument for a Physics Observatory* (page 25) of 1922 and the *Project for the Palace of the Soviets* (opposite) of 1931 were done in this vein. While still connected with collective projects in Germany, Gabo was commissioned in 1929 by the Berlin city architect Hugo Häring to design a night scheme, *Fête Lumière* (page 19) for the Brandenburg Gate. From long, narrow openings in a wooden base, light rays were to pierce the sky. The plan was abandoned because the wooden structure would have covered historic statues. The plastic construction of 1930 for a niche in the home of the architect Erich Mendelsohn carries light into the wall of a building. Light-reflecting spiral transparencies extend into *Circular Relief* (page 27) of 1925.

In 1927 Gabo and Pevsner were commissioned by the impresario, Diaghilev, to do the décor of the ballet, *La Chatte*. Acclaimed in Monte Carlo, Paris, London and Berlin, *La Chatte* brought to the stage and the audience for the first time their peculiarly lyrical Constructivism.

Gabo held his first one-man exhibition, *Konstruktive Plastik*, in 1930 at the Kestner Gesellschaft Gallery in Hannover.

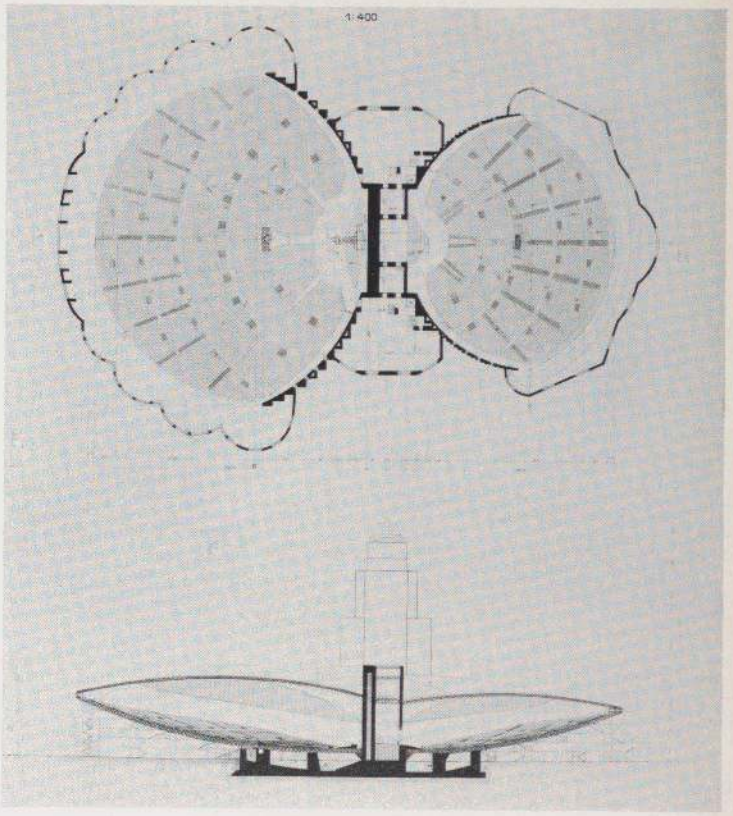
In 1932 Gabo abandoned what was to him a spiritually sick Germany to spend three years in Paris. On his arrival he worked as a leader of the group "Abstraction-Création, art non figuratif," composed of artists concerned with the order of form as such. Writing in their publication, Gabo reiterates the spiritual and intellectual perspective of his art. "By means of constructive techniques, today we are able to bring to light forces hidden in nature and to realize psychic events. . . . We do not turn away from nature, but, on the contrary, we penetrate her more profoundly than naturalistic art ever was able to do."[13] And later Gabo stated in conversation, "Our knowledge is out of a series of mental images. There is no other basis for perception or action. Concepts of mind are our own creation out of reality." In as early a work as *Column*, done in 1923 (page 26), Gabo subordinates the stress on structural elements and suggests architecture. The *Monument for an Airport* of 1924-25 and its later variation of 1932 (page 28) subtly reflect Europe's increasing interest in the conquest of space by flight. Attracted by the

enthusiasm of the English artists, by the activities of the "Design Unit One" group organized by Herbert Read and by the new London art quarterly, *Axis*, Gabo decided to settle in London in 1935. He was invited to exhibit at the Lefevre Gallery in London in 1936. During this year his work was shown in two exhibitions in the United States: in *The Abstract Art of Gabo, Pevsner, Mondrian and Domela* at the Wadsworth Atheneum in Hartford, and in an exhibition with Mondrian and Pevsner at the Chicago Arts Club. In the following year he was represented extensively in the Museum of Modern Art's exhibition, *Cubism and Abstract Art* and in London at Duncan-Miller, Ltd. in *Abstract Art in Contemporary Settings*. In 1936 he married Miriam Israels, a painter and descendant of Joseph Israels.

With J. L. Martin and Ben Nicholson he edited *Circle, International Survey of Constructive Art*. Gabo felt that *Circle* alone was as important to the development of constructive art in Europe as the earlier manifesto and discussions had been in Russia. The stir of publicity and criticism begun by *Circle* in 1937 was climaxed during the war by the exhibition *Contemporary Art* in 1942 at the Museum of the City of London.

In 1937 Gabo had a one-man exhibition, *Constructions in Space*, at the London Gallery. The following year he visited the United States to supervise a one-man show at the Wadsworth Atheneum in Hartford, and he also held exhibitions at Vassar College in Poughkeepsie and at the Julien Levy Gallery in New York. His *Spiral Theme* was purchased as a fountain project for the General Electric Company pavilion at the *New York World's Fair*, but it was never installed. His work was exhibited in the *San Francisco Golden Gate Exposition* in 1939.

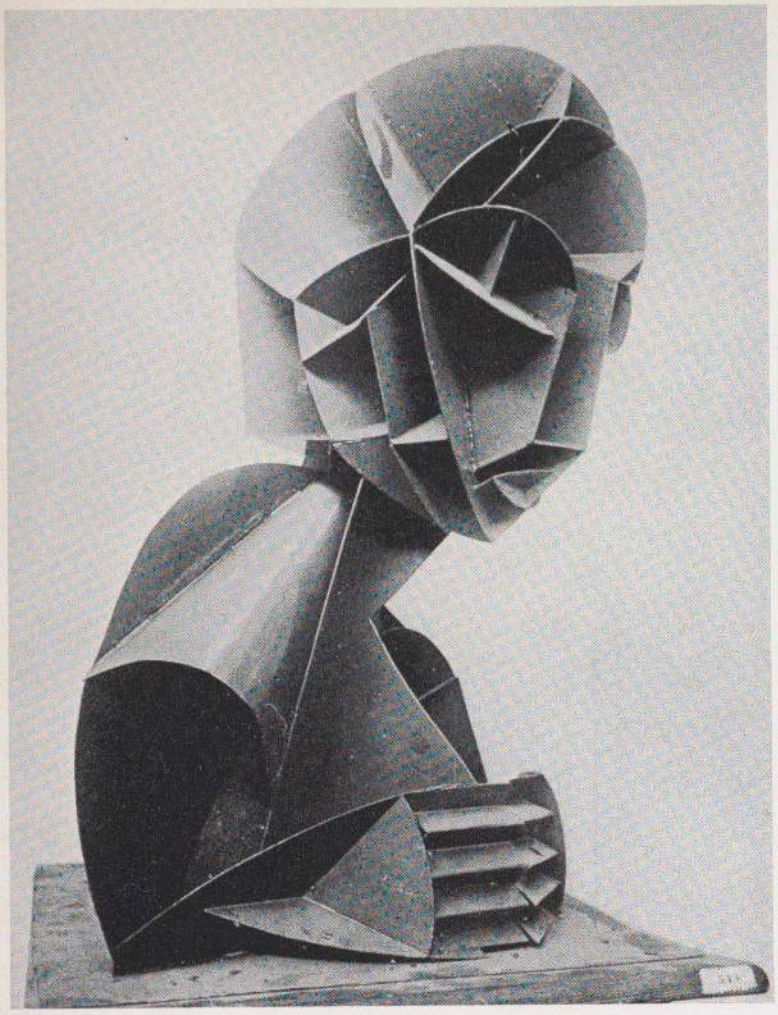
Back in England at the outbreak of war, Gabo moved to St. Ives, Cornwall, where he advised and worked with young artists and continued constructing. At the same time he became involved in English public life, broadcasting on the B.B.C. and writing articles on constructive art. He worked with Herbert Read in a design research unit intended to promote artistic co-operation with industry and, in 1944, received an assignment from Read to design the Jowett automobile. On D-Day he wrote to Herbert Read: "I have come to the conclusion that a work of art restricted to what the



PROJECT FOR THE PALACE OF THE SOVIETS: AUDITORIUM AND THEATRE DETAIL. 1931. Owned by the U.S.S.R.

artist has put in it is only a part of itself. It only attains full stature with what people and time make of it. . . . 'Abstract' is not the core of the constructive idea I profess. The idea means more to me. It involves the whole complex of human relation to life. It is a mode of thinking, acting, perceiving and living. . . . Any thing or action which enhances life, propels it and adds to it something in the direction of growth, expansion and development, is constructive. . . . I think that the image of my work is the image of good—not of evil; the image of order—not of chaos; the image of life—not of death. And that is all the content of my constructions amounts to . . . all that the constructive idea is driving at."[14]

In 1946 Gabo left England for the United States and settled in Connecticut where he now works.



BUST. 1916.
Plastic, 17⅜" high.
Owned by the artist.

Notes

[1] Arthur Jerome Eddy, *Cubists and Post-Impressionists*, Chicago, McClurg & Co., 1919, p. 81; translated from Guillaume Apollinaire, *Les Peintres "Cubistes,"* 1913, p. 15.

[2] Wassily Kandinsky, *On the Spiritual in Art*, New York, The Solomon R. Guggenheim Foundation, 1946, pp. 34, 36; first published in 1912 and translated originally as *The Art of Spiritual Harmony*.

[3] Marinetti, *Manifesto del futurismo*, Paris, Figaro, 1909; as quoted in Alfred H. Barr, Jr., *Cubism and Abstract Art*, New York, Museum of Modern Art, 1936, p. 54.

[4] U. Boccioni, Carrà, Russolo, Balla, Severini, *Manifesto dei pittori futuristi*, Milan, 1910; as reprinted in Boccioni, *Pittora, scultura futuriste. Dinamismo plastico*, Milan, 1914; as quoted in Barr, *loc. cit.*

[5] U. Boccioni, *Manifesto tecnico della scultura futurista;* as reprinted in Boccioni, *Pittora, scultura futuriste. Dinamismo plastico*, Milan, 1914; as quoted in Barr, *op. cit.*, p. 60.

[6] All quotations without documentation come from conversations with the artist.

[7] N. Punin, *Tatlin-protiv kubizma*, Petersburg, 1921.

[8] U. Boccioni, *Pittura, scultura futuriste . . .*, Milan, 1914, p. 201; as quoted in Rosa Trillo Clough, *Looking Back on Futurism*, New York, Cocce Press, 1942, p. 96.

[9] N. Gabo and A. Pevsner, *Realistic Manifesto*, Moscow, 1920. (Bibl. 1.)

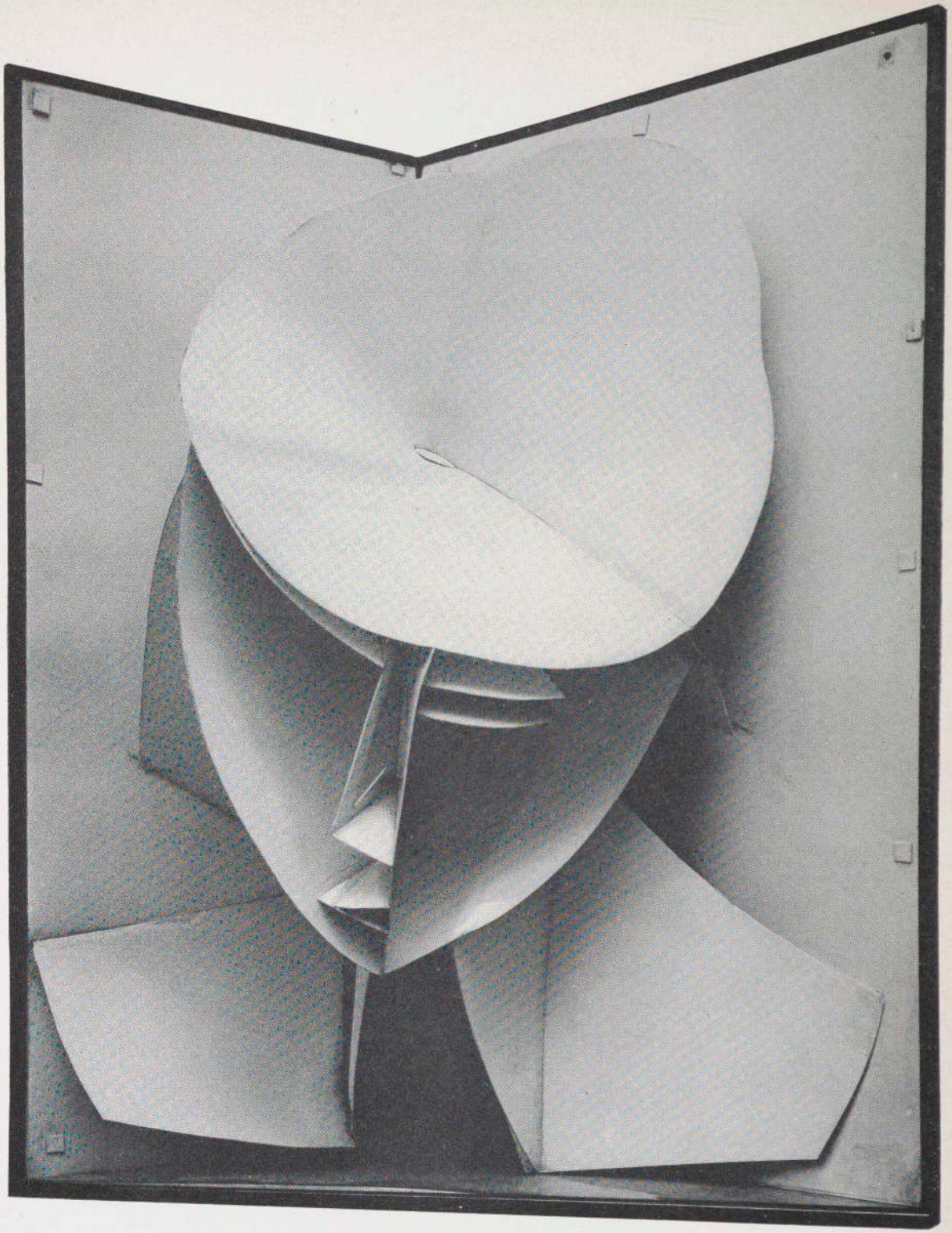
[10] Robert Goldwater and Marco Treves, *Artists on Art*, New York, Pantheon Books, 1945, pp. 454-5; translation from *Abstraction-Création, art non figuratif, No. 1*, Paris, 1932, p. 27. (Bibl. 1.)

[11] Naum Gabo "Constructive Art," *The Listener* (B.B.C. Publication), XVI, No. 408 (Nov. 4, 1936), 848: "Our works are often blamed for being contemplations of machinery. . . . We admire the forms of machines when they are functional. . . . We do not think that the plastic content of a *Constructive Monument for the Institute of Physics and Mathematics* is any further from the ideas for which such a building was intended to serve than a naturalistic design with its usual attributes." (Bibl. 6.)

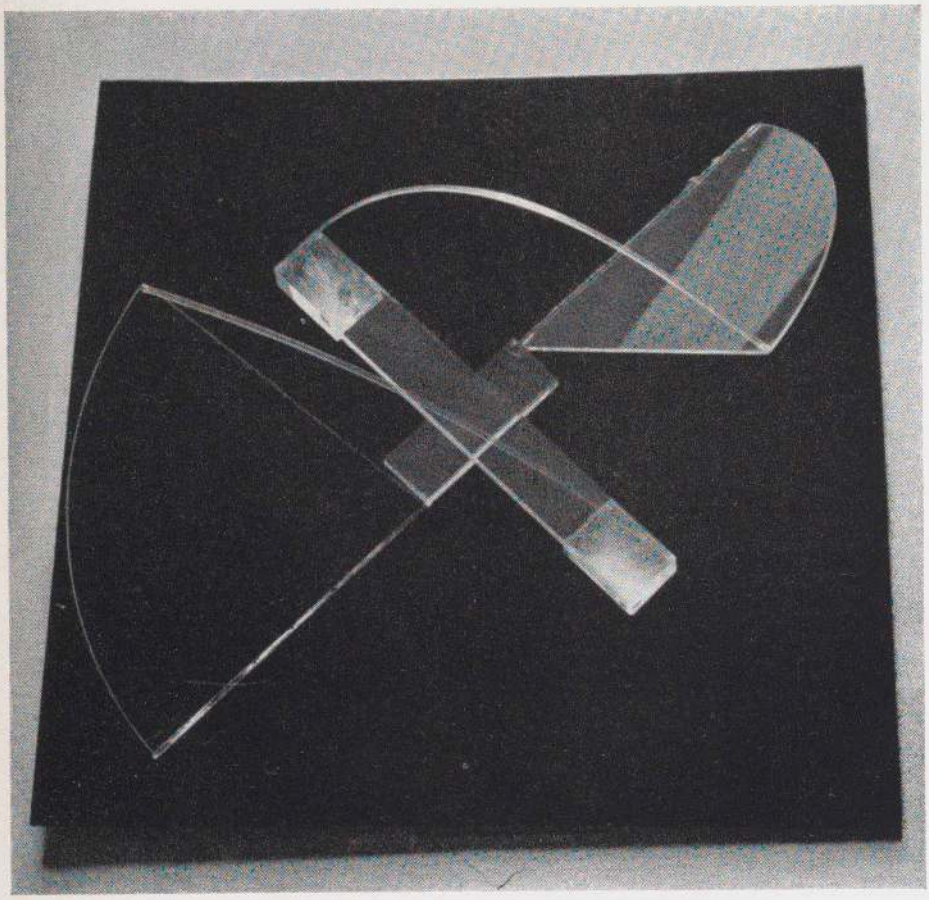
[12] *Abstraction-Création . . .*, *op. cit.*, p. 14.

[13] *Ibid.*

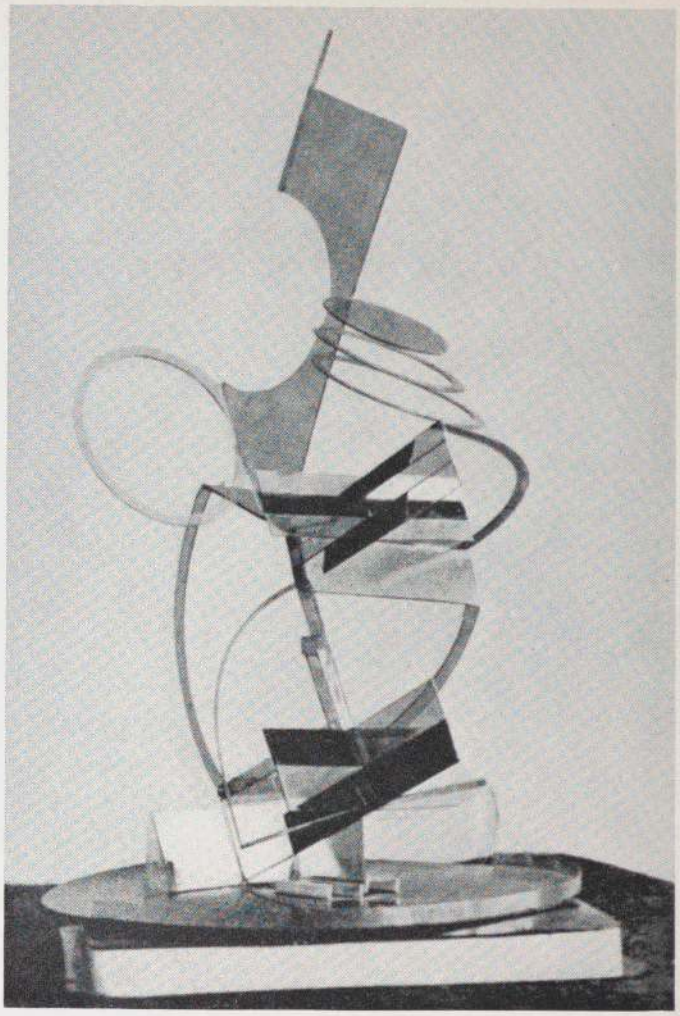
[14] "Constructive Art: An Exchange of Letters between Naum Gabo and Herbert Read," *Horizon*, London, X, 55 (July, 1944), 57-65. (Bibl. 14.)



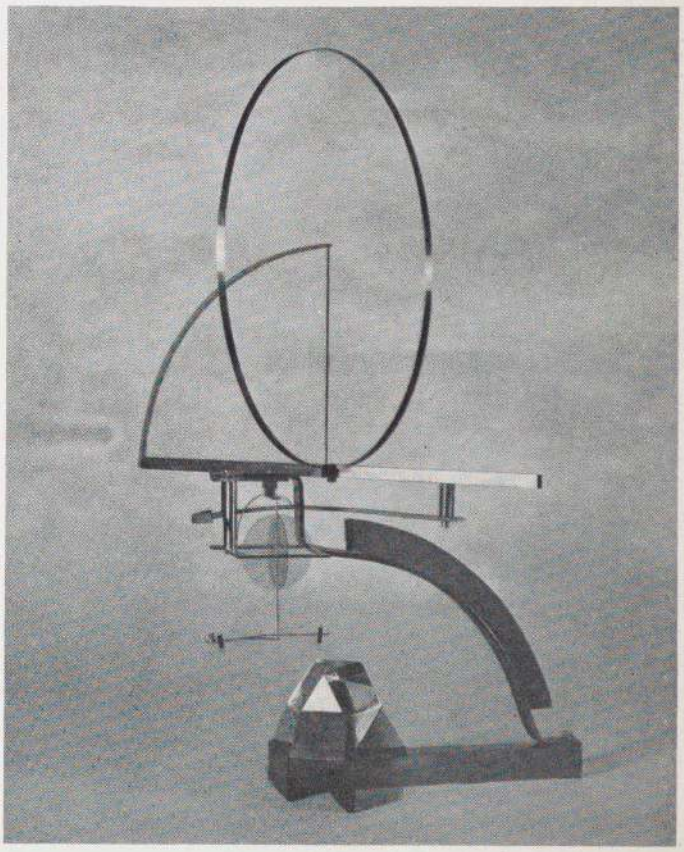
HEAD OF A WOMAN. 1916.
Celluloid and metal, 24½ x 19¼".
The Museum of Modern Art, New York, Purchase Fund.



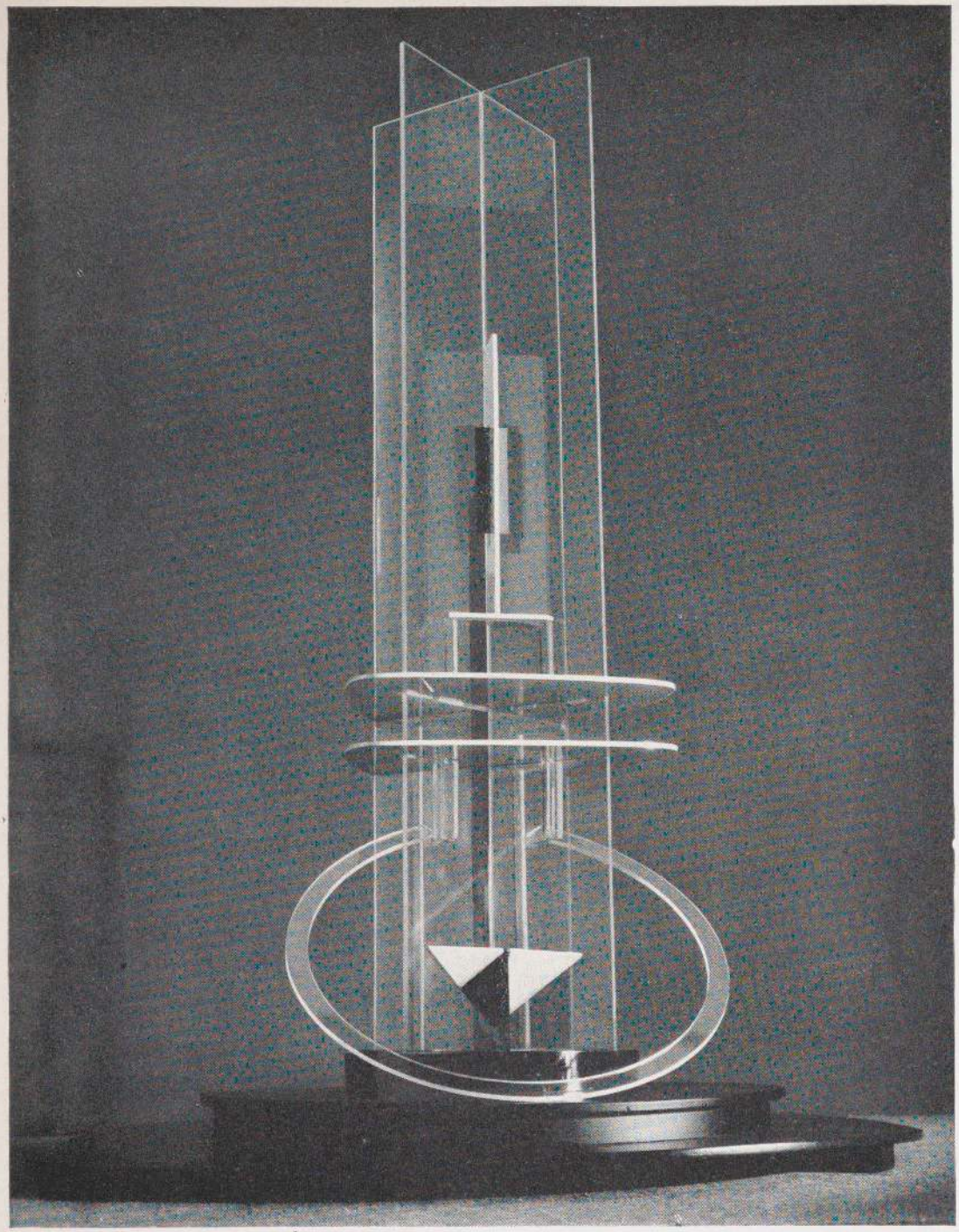
SQUARE RELIEF. 1920.
Plastic, 17½" square.
Owned by the artist.



MONUMENT FOR A PHYSICS OBSERVATORY. 1922.
Plastic, metal, wood, 14" high.
Collection Miss Katherine S. Dreier, Milford, Conn.

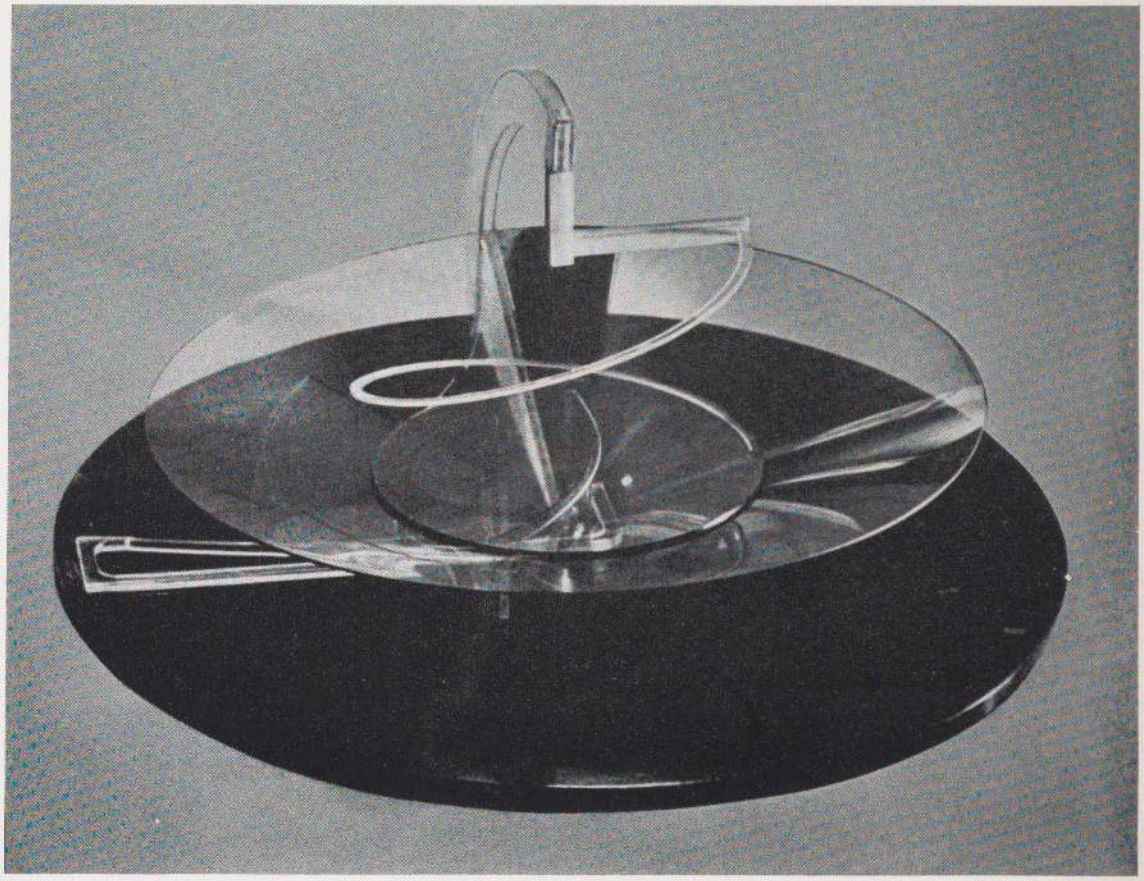


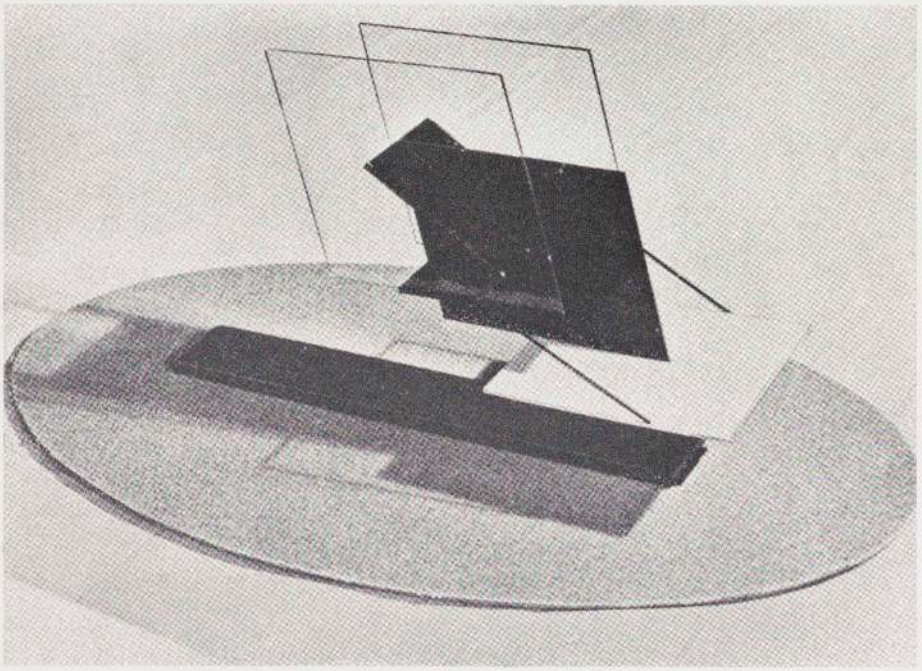
MONUMENT FOR THE INSTITUTE OF PHYSICS AND MATHEMATICS. 1925.
Glass and bronze, 24" high.
Owned by the U.S.S.R.



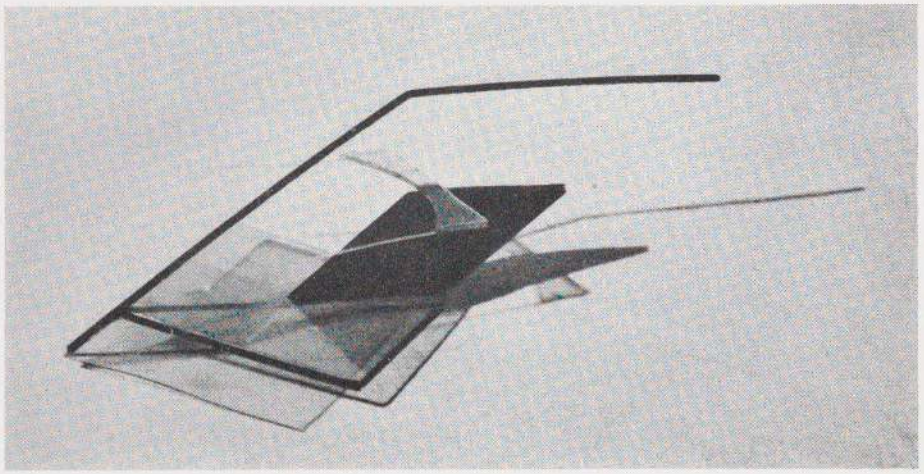
COLUMN. 1923.
Glass, plastic, metal, wood, 41" high.
On extended loan to the Museum of Modern Art, New York.

CIRCULAR RELIEF. 1925.
Plastic on wood, 19½" diameter.
Owned by the artist.

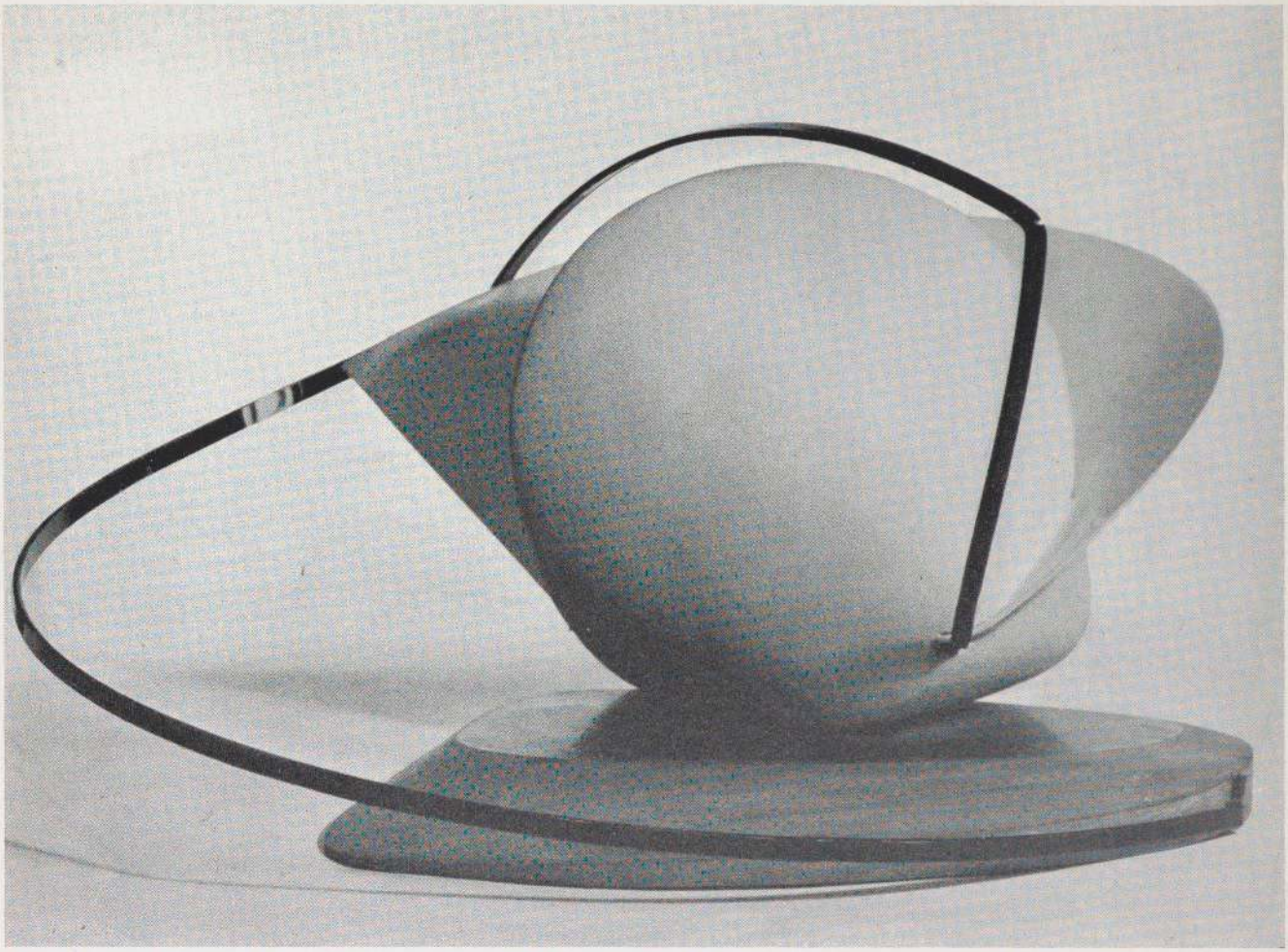




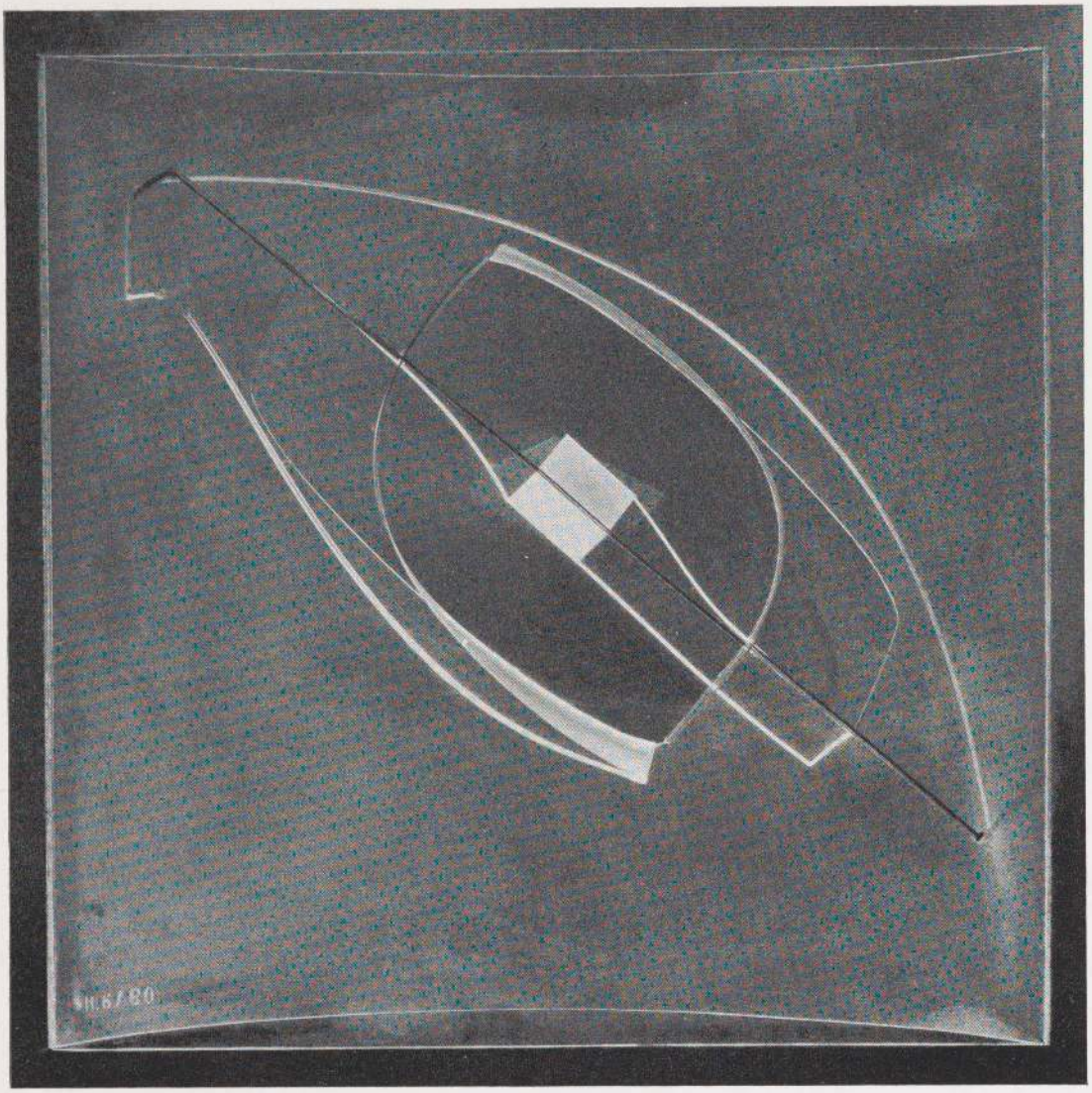
MONUMENT FOR AN AIRPORT. 1924-25.
Glass and metal, 5′ high.
Owned by the artist.



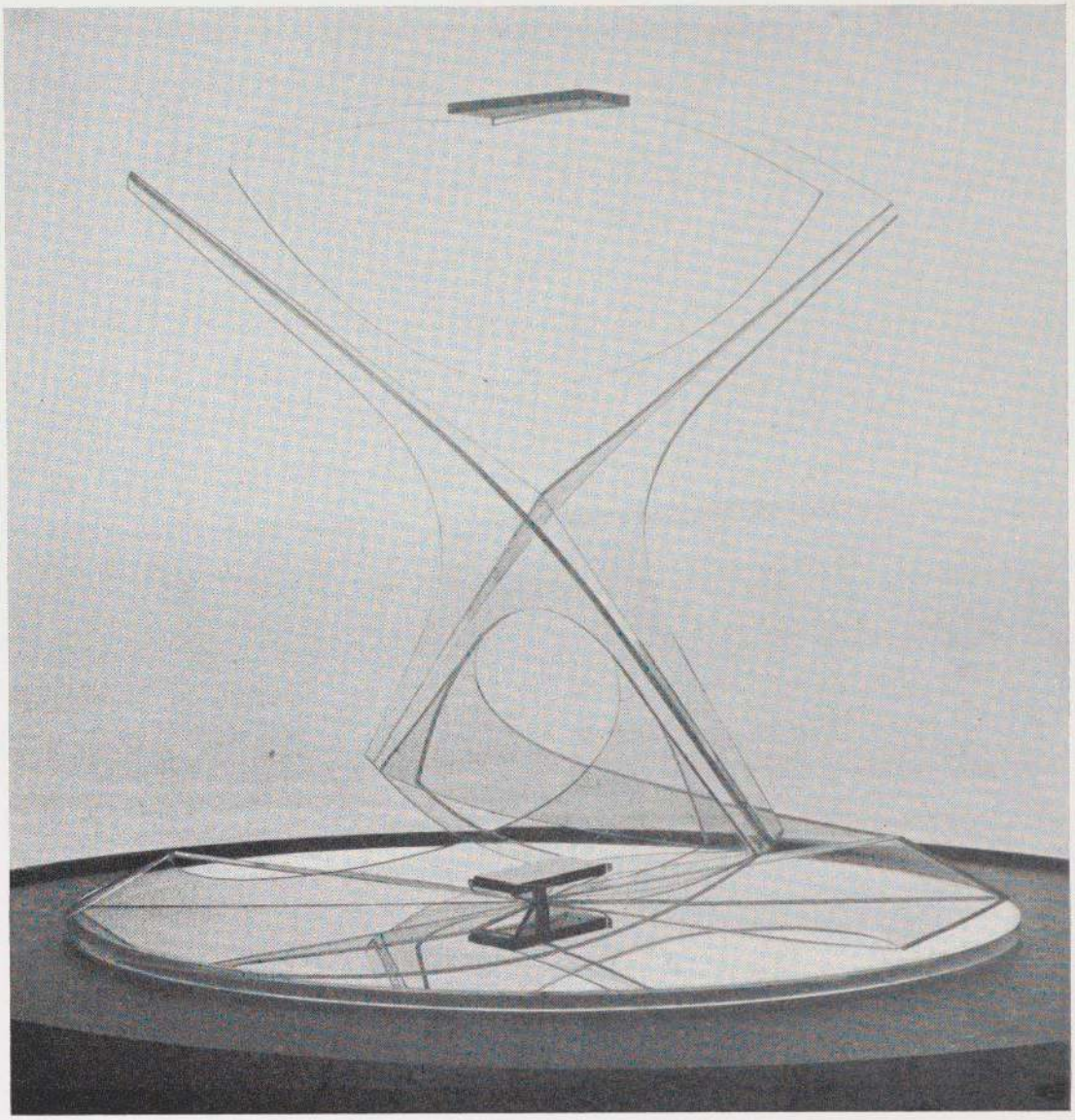
MONUMENT FOR AN AIRPORT 1932.
Plastic and metal, 42½″ long.
Owned by the artist.



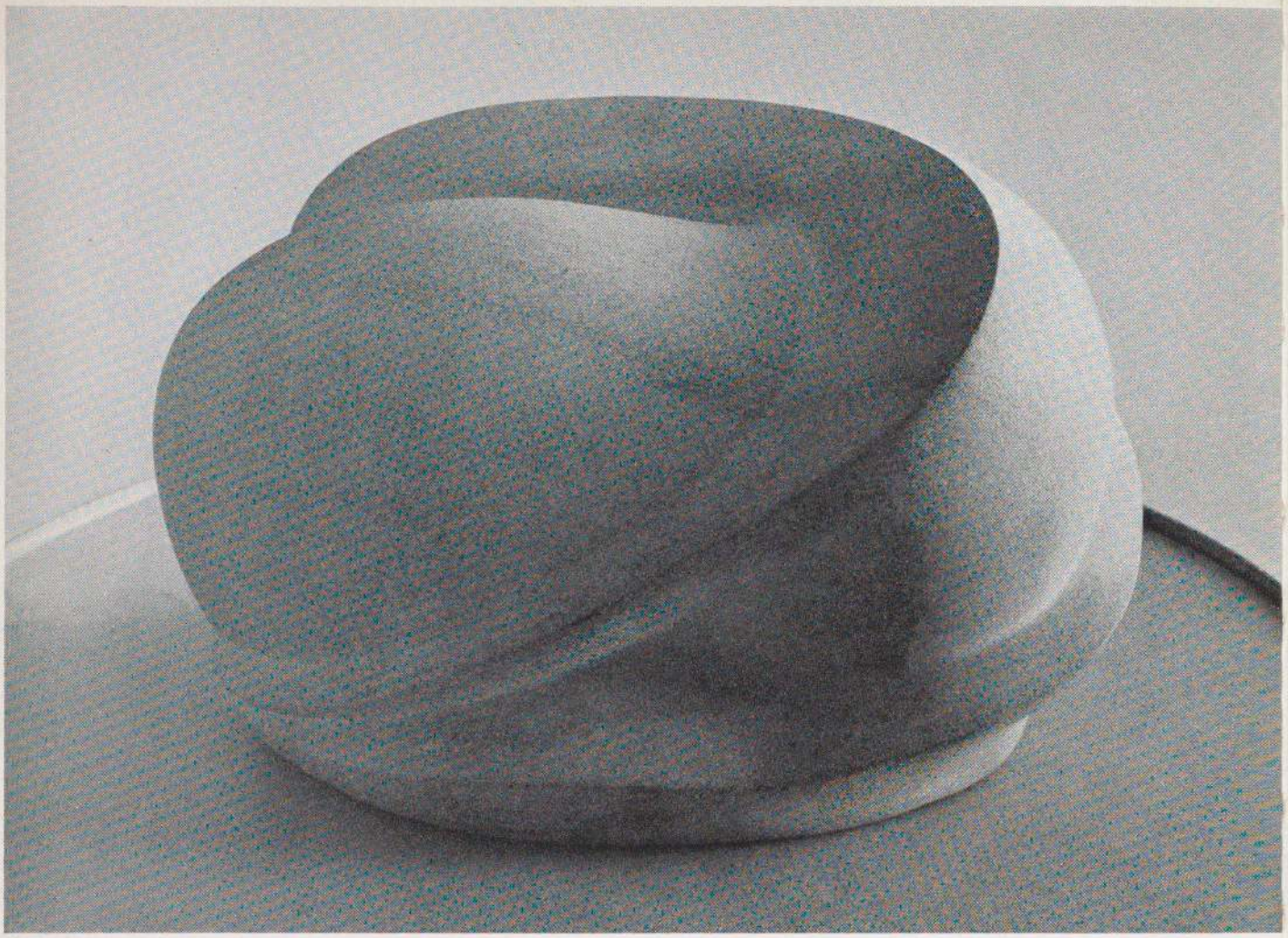
CONSTRUCTION. 1933.
Portland stone, plastic, wood, 27" long.
Owned by the artist.



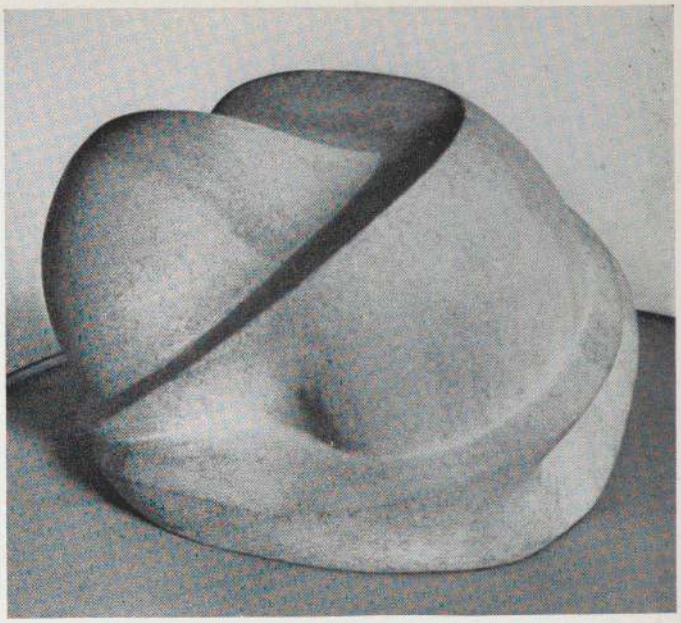
CONSTRUCTION ON A LINE, NO. 1. 1935-37.
Plastic, 17" high.
Private collection, New York.

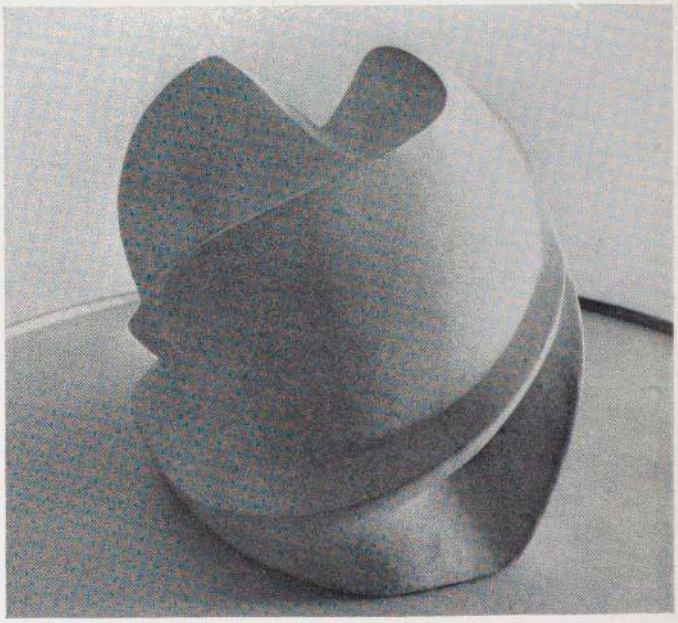


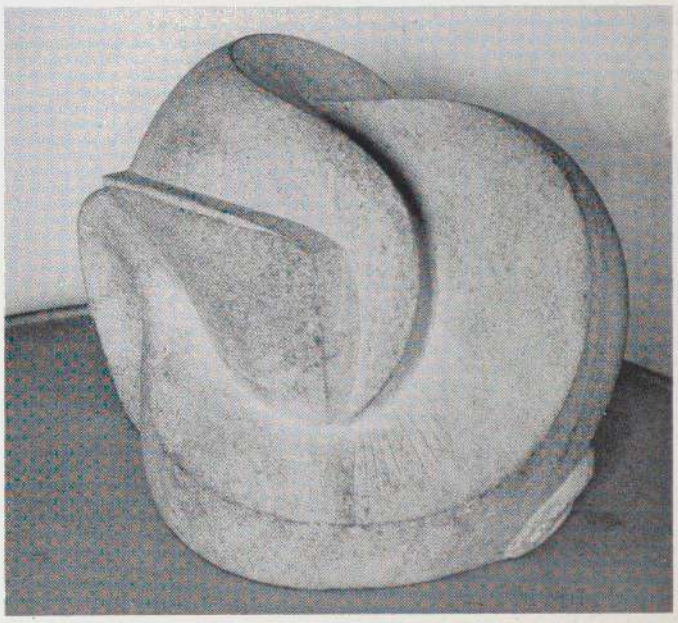
TORSION. 1928-36.
Plastic, 13¾" high.
Owned by the artist.



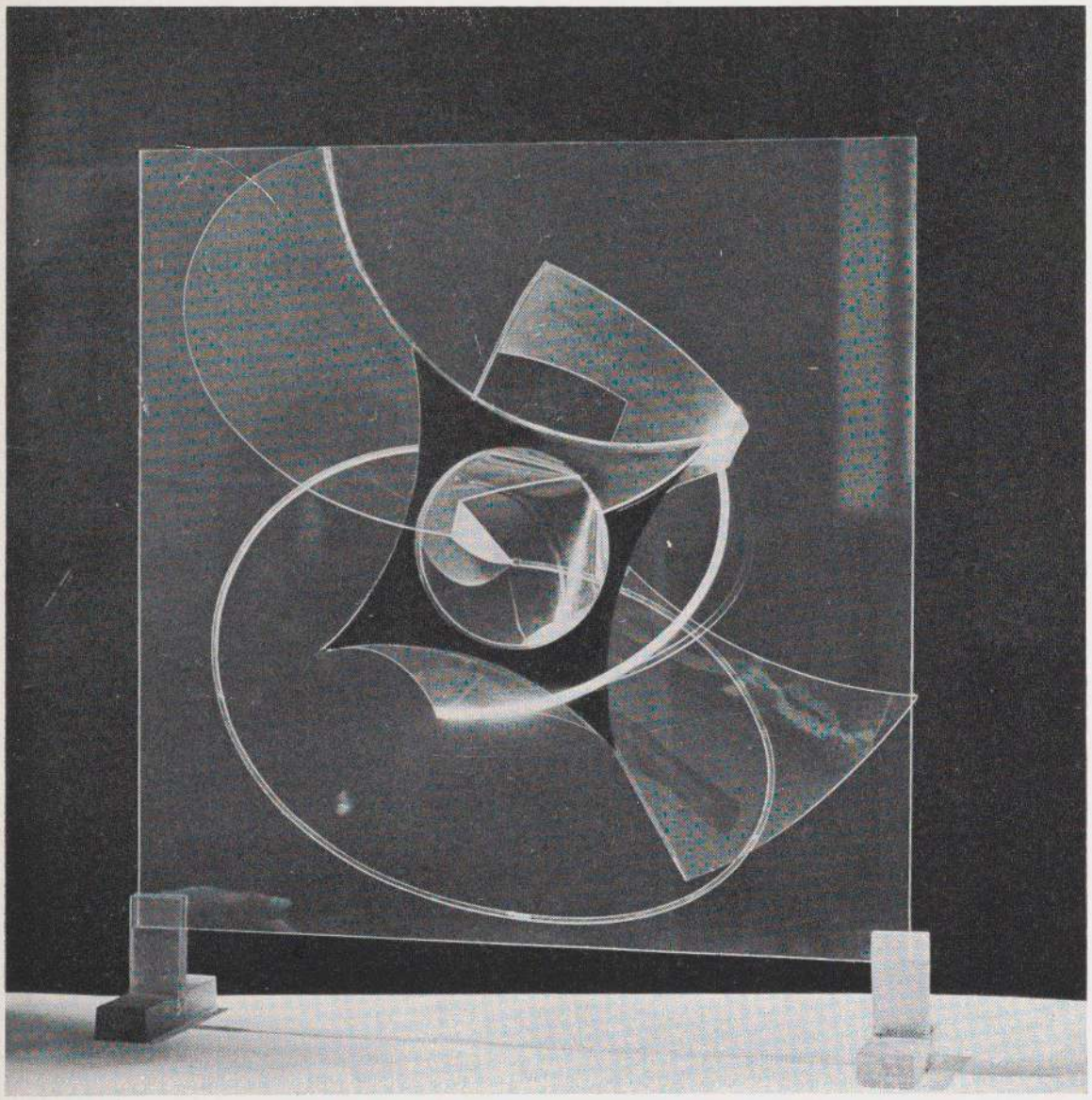
KINETIC STONE SCULPTURE. 1936. (Four views.)
Portland stone, 14½" long.
Owned by the artist.

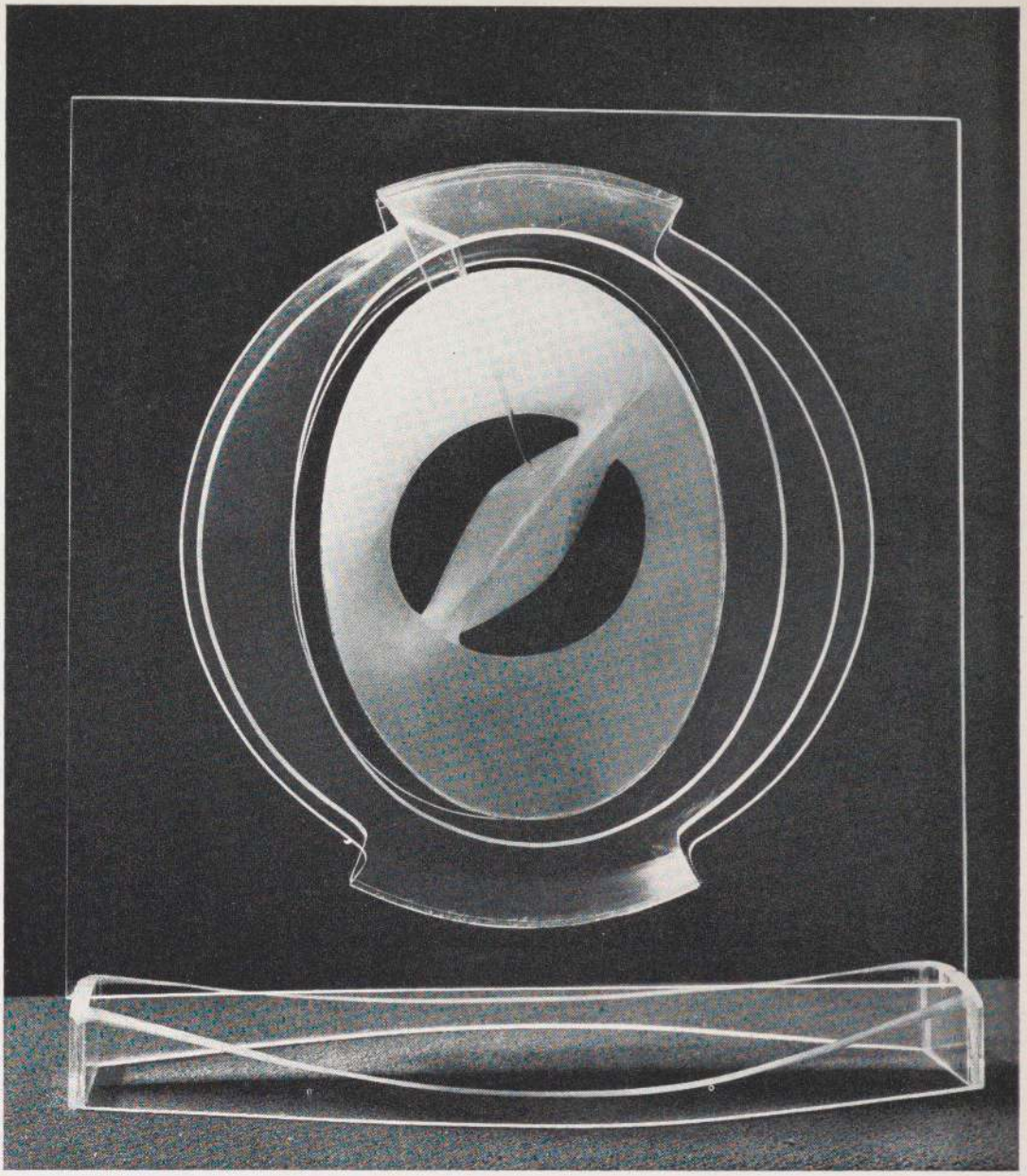




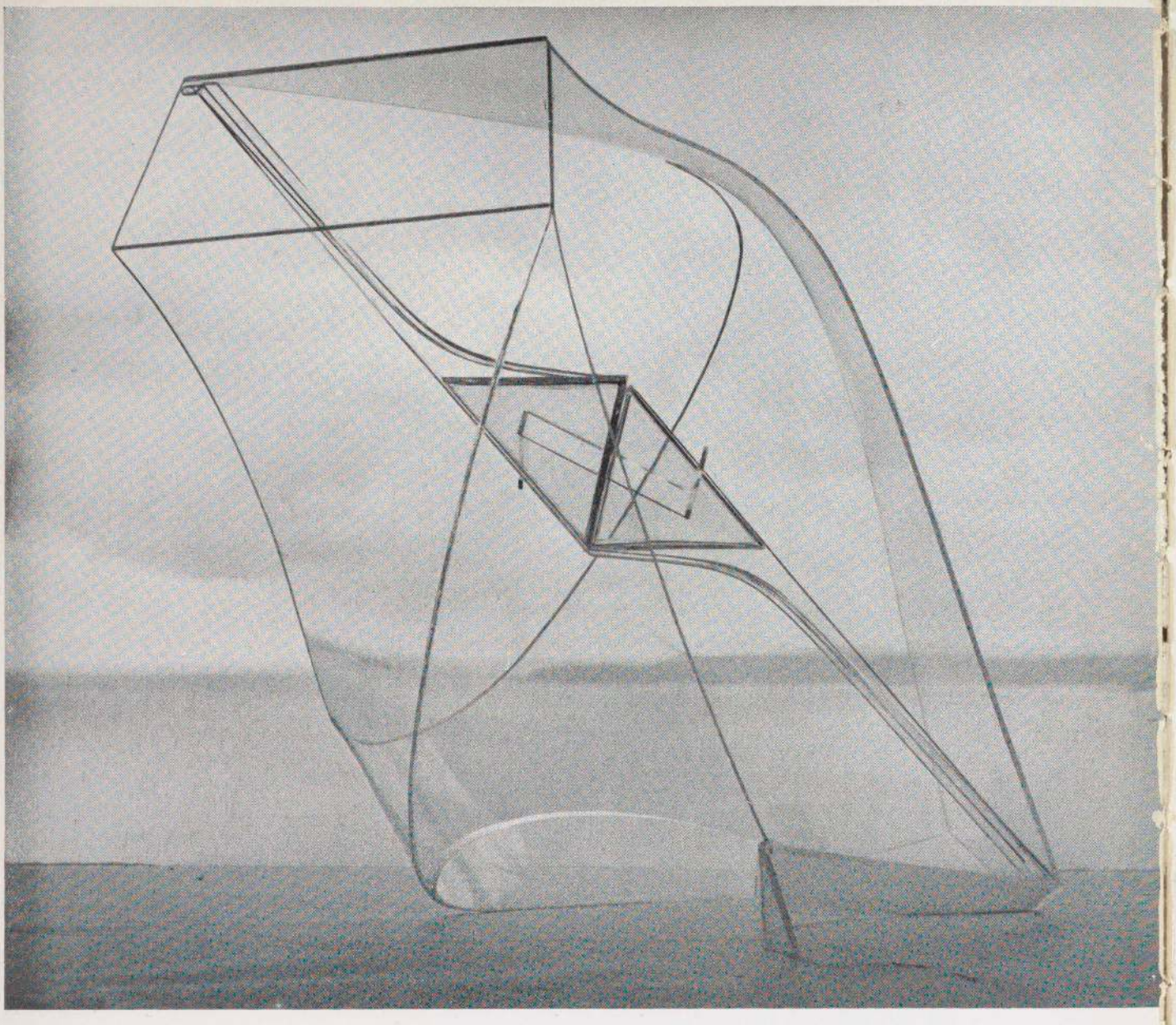


CONSTRUCTION ON A PLANE. 1937.
Plastic, 19" square.
Owned by the artist.

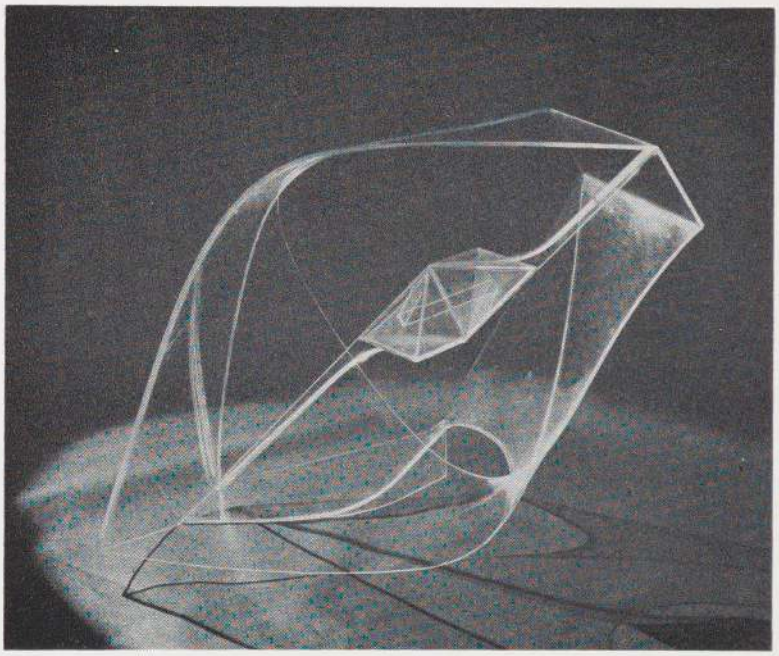




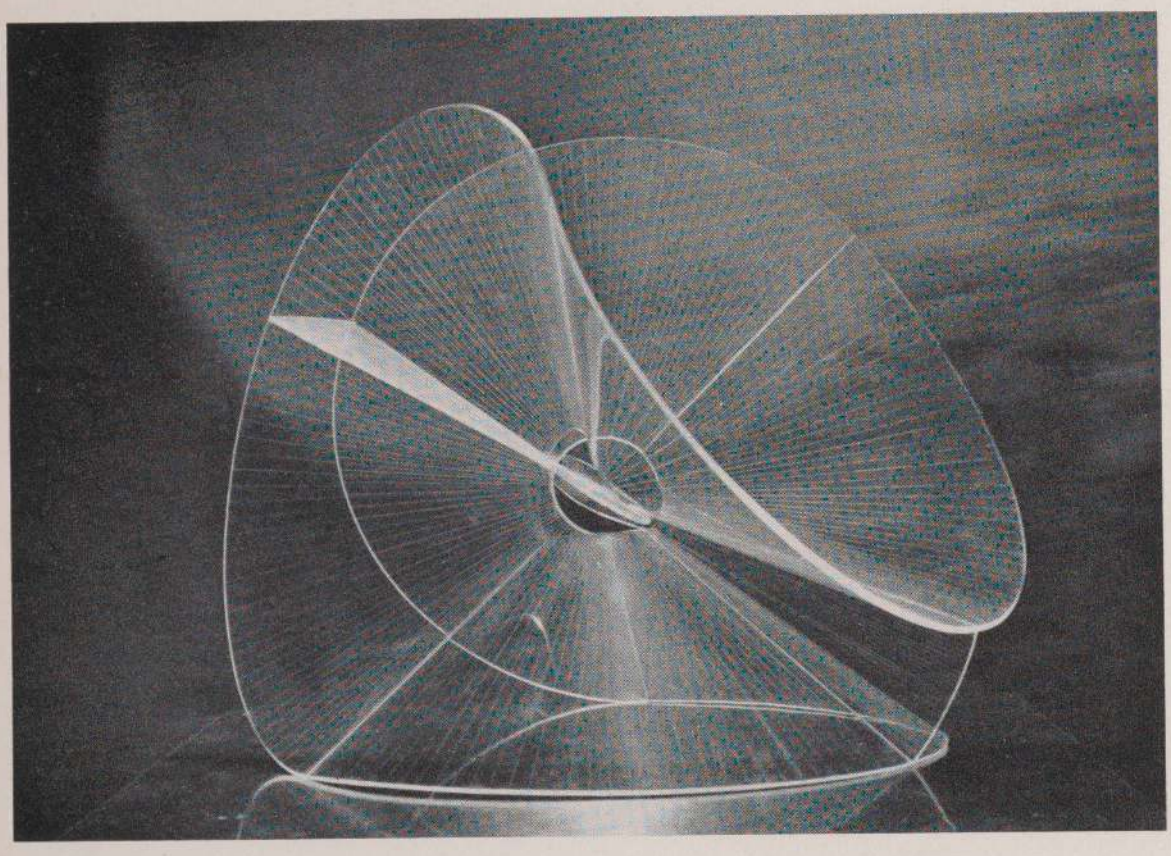
CONSTRUCTION WITH ALABASTER CARVING. 1938-39.
Plastic and alabaster, 15½" high.
Owned by the artist.

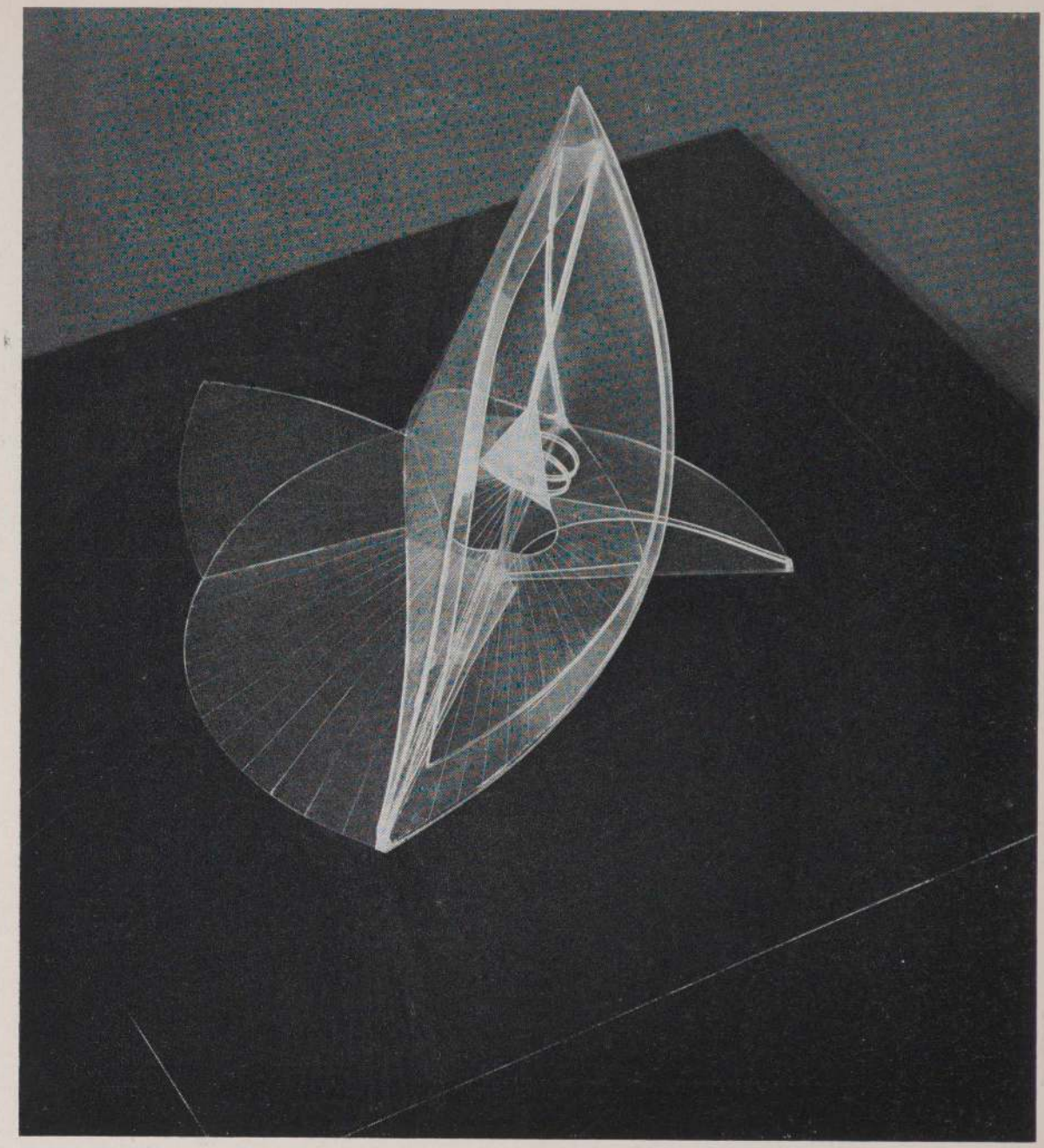


CONSTRUCTION IN SPACE WITH CRYSTALINE CENTER. 1938. (Three views.)
Plastic and crystaline, 18½" wide.
Owned by the artist.

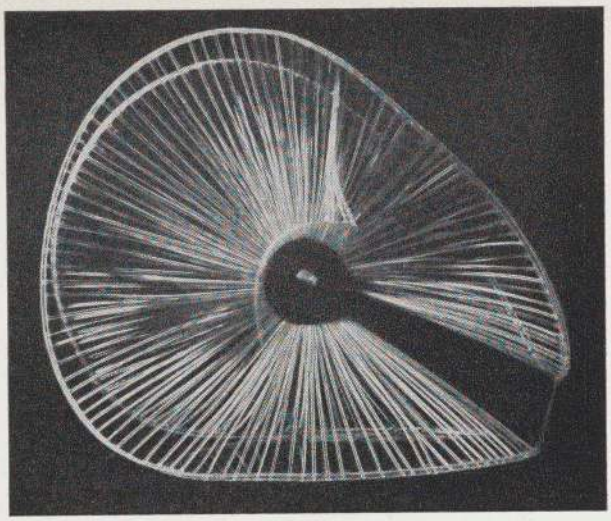


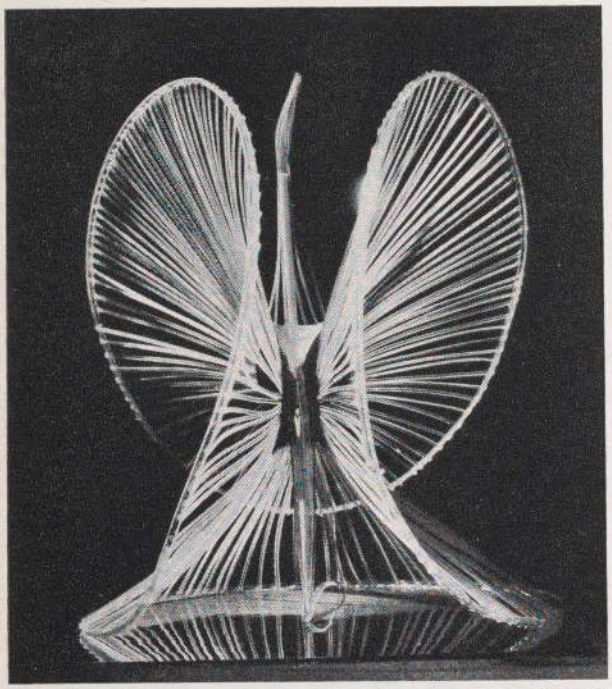
TRANSLUCENT VARIATION ON SPHERIC THEME. 1937.
Plastic, 22⅜" high.
Owned by the artist.

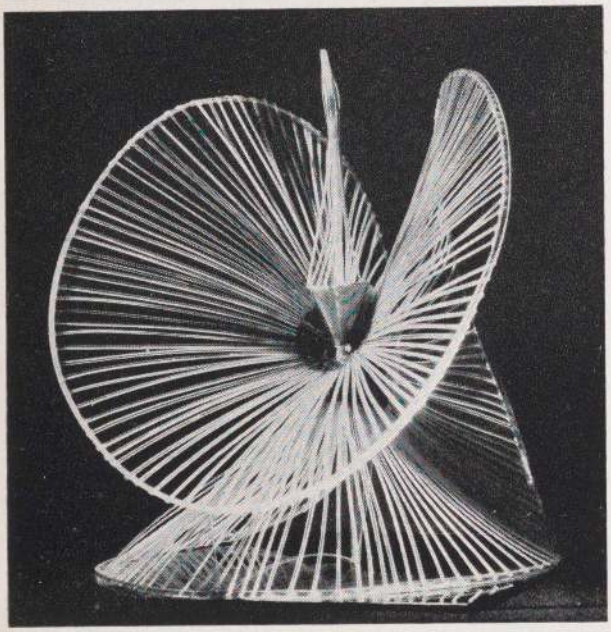


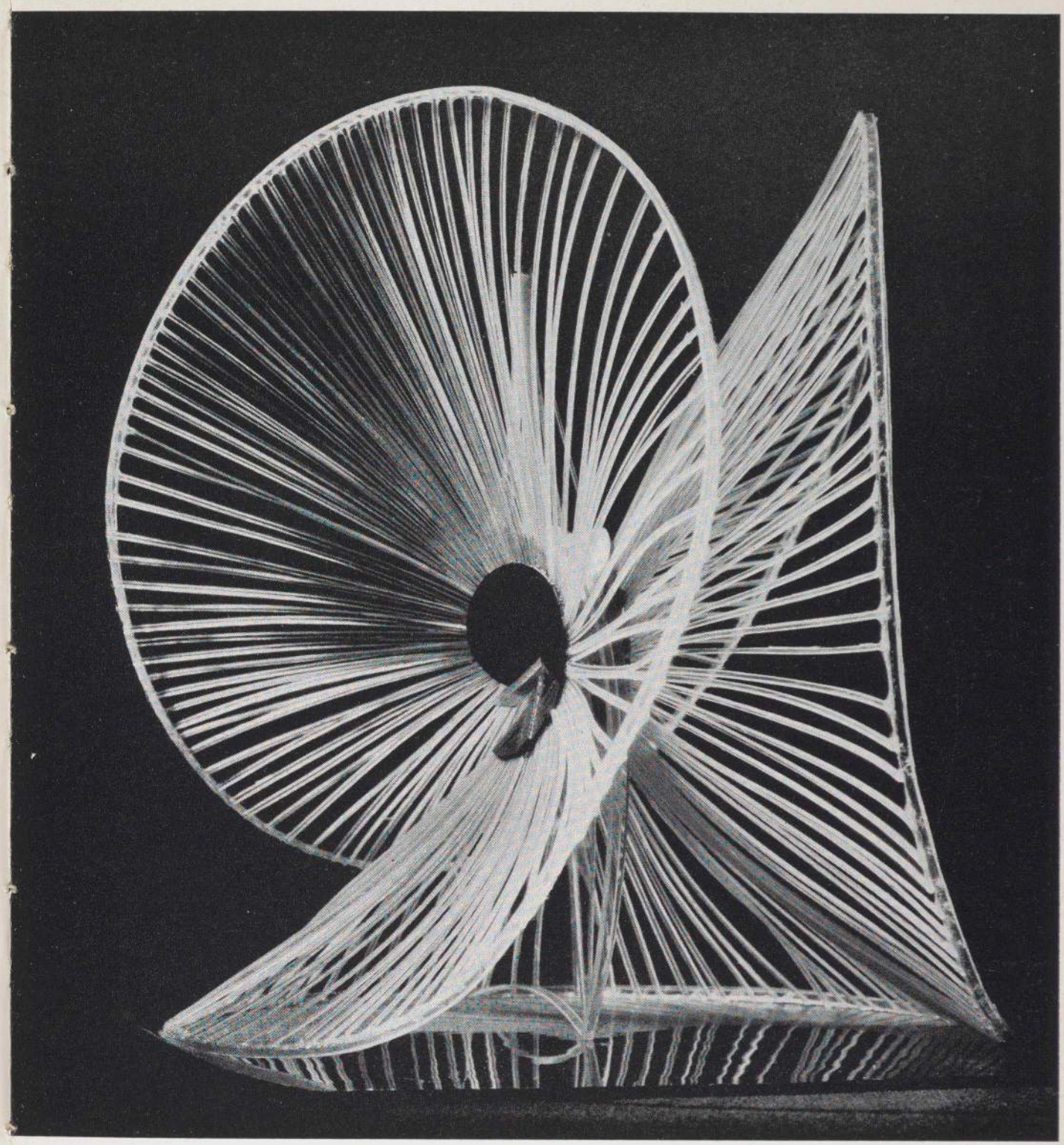


SPIRAL THEME. 1941.
Plastic, 24″ high.
The Museum of Modern Art, New York,
gift of the Advisory Committee.



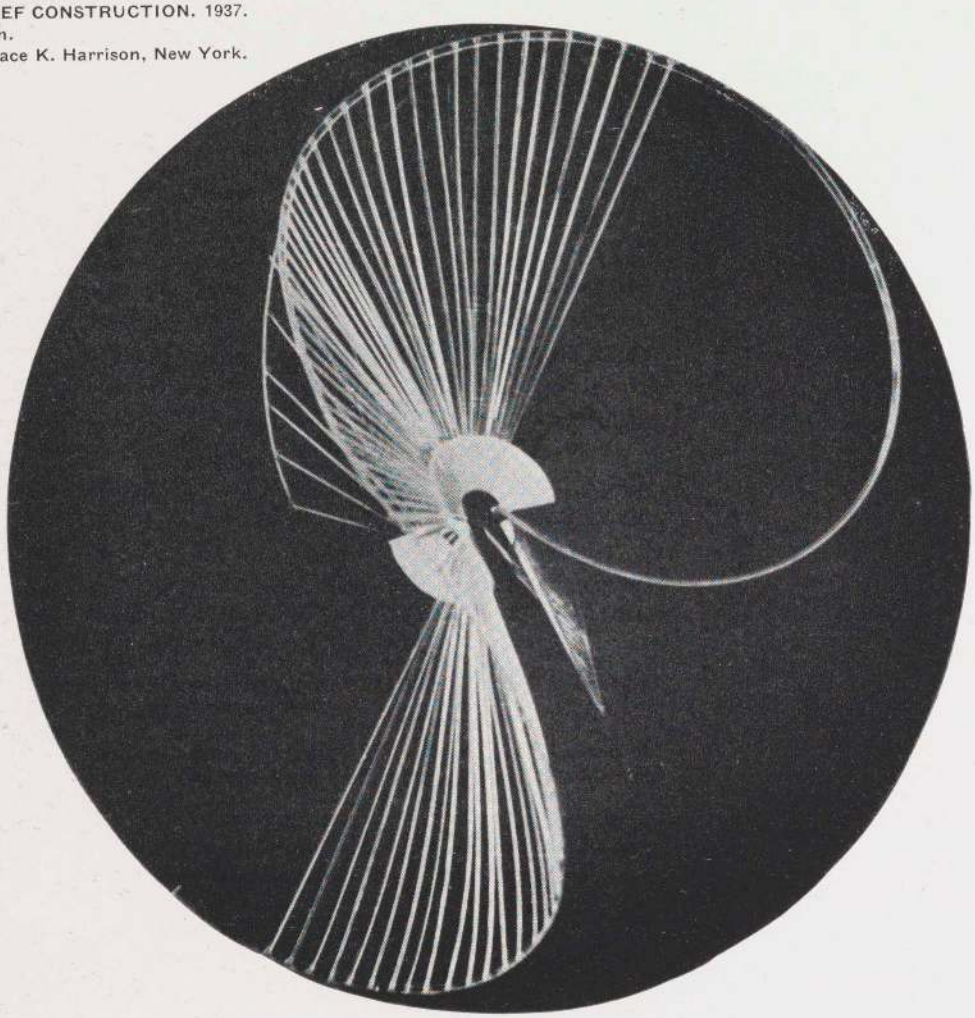


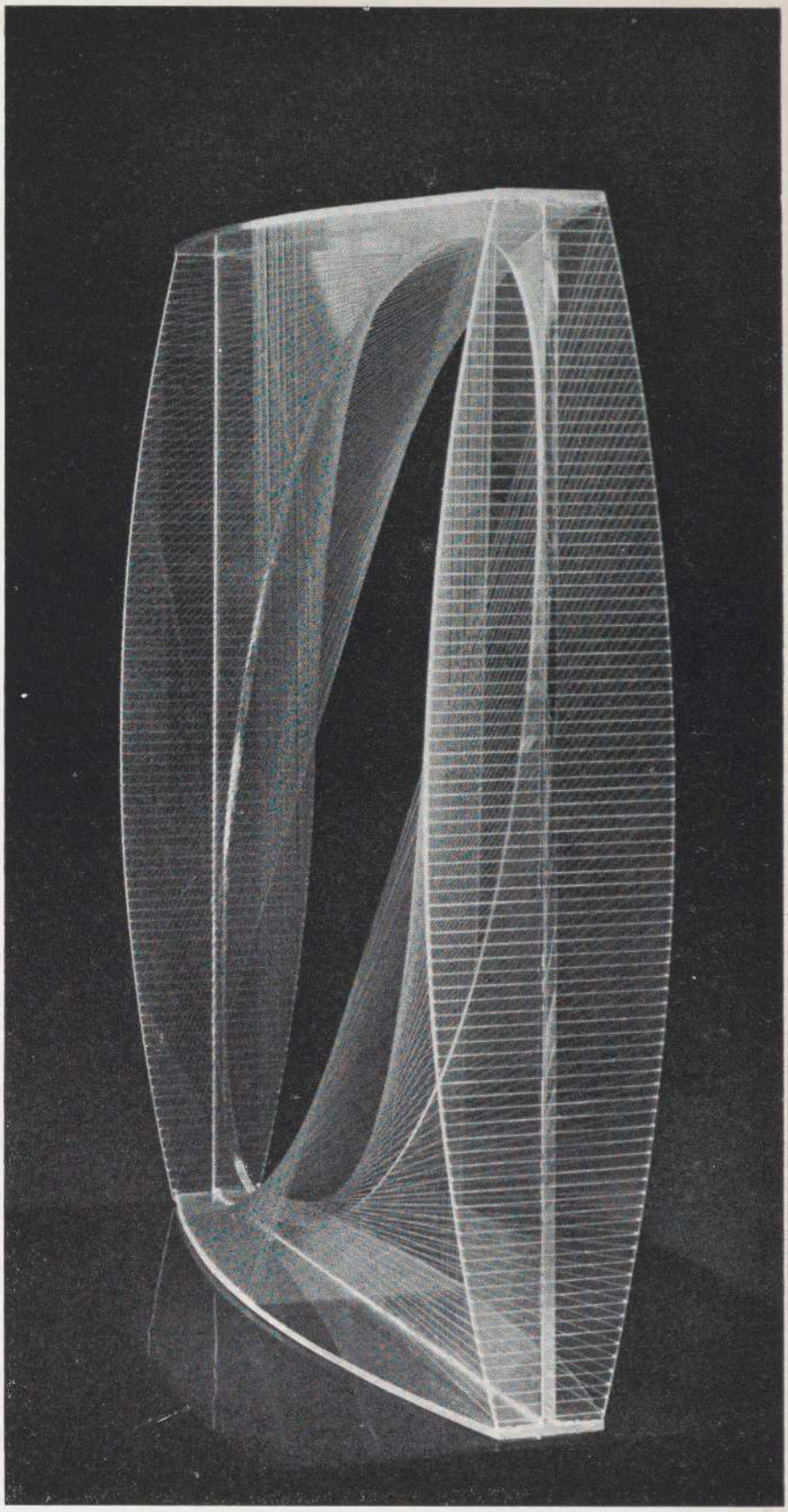




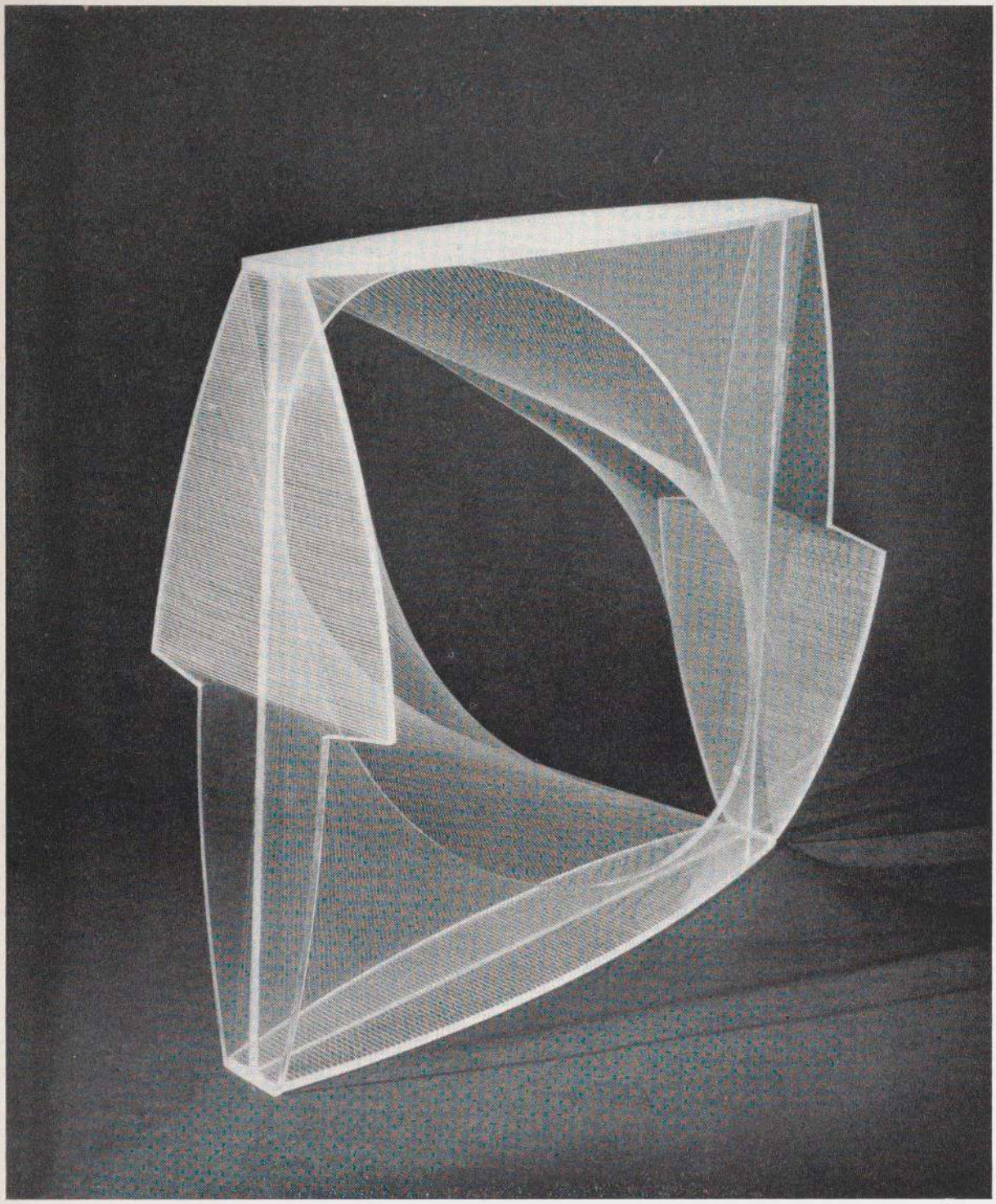
SPHERIC CONSTRUCTION, FOUNTAIN. 1937. (Four views.)
Plastic, 16" high.
Owned by the artist.

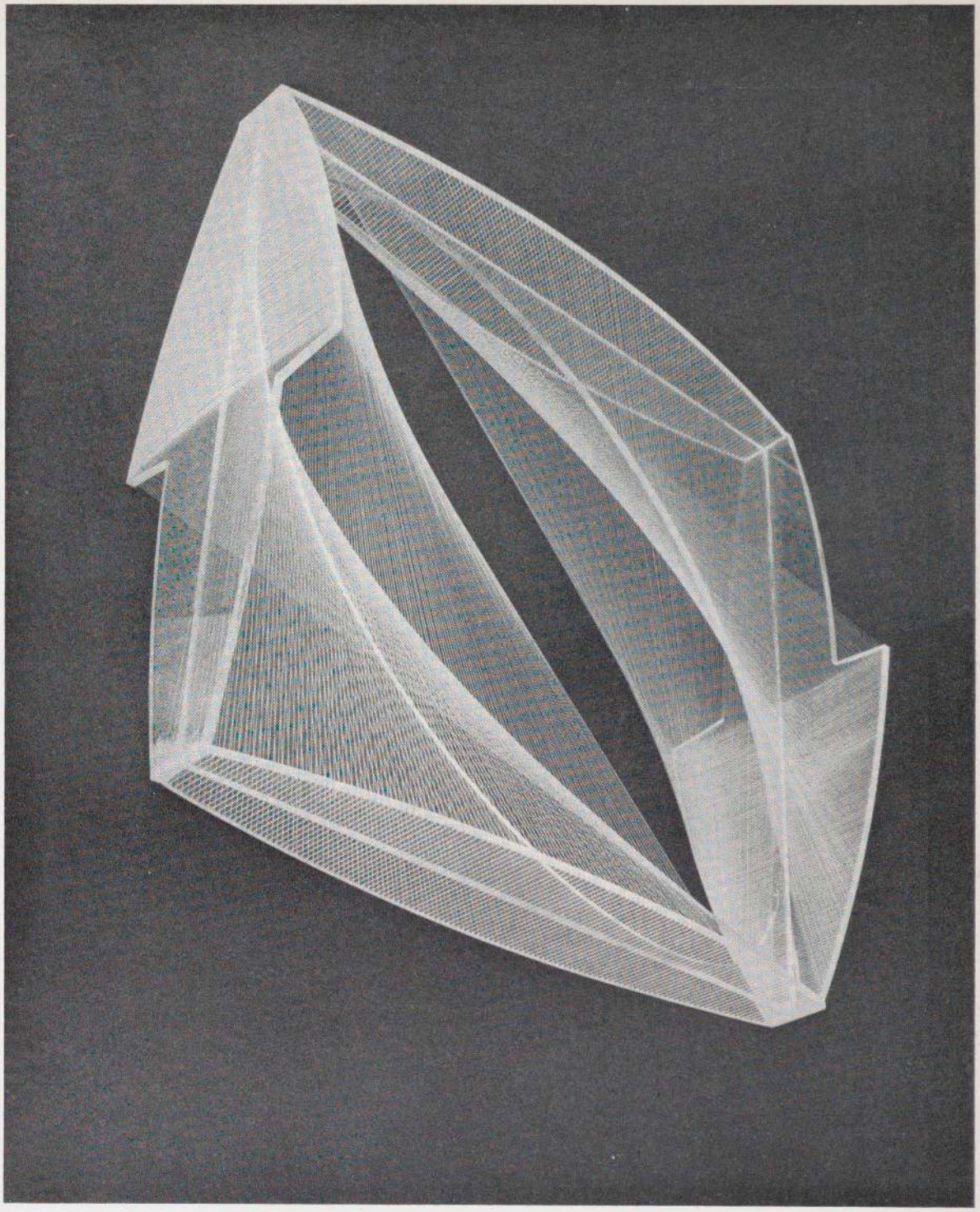
SPHERIC RELIEF CONSTRUCTION. 1937.
Plastic, 18" high.
Collection Wallace K. Harrison, New York.



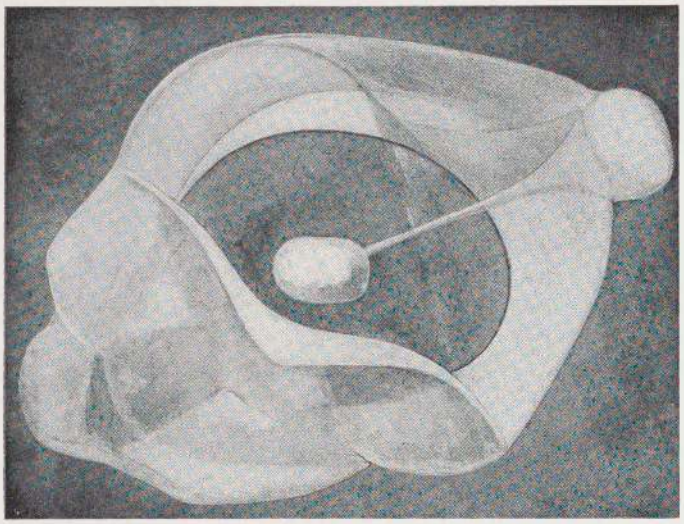


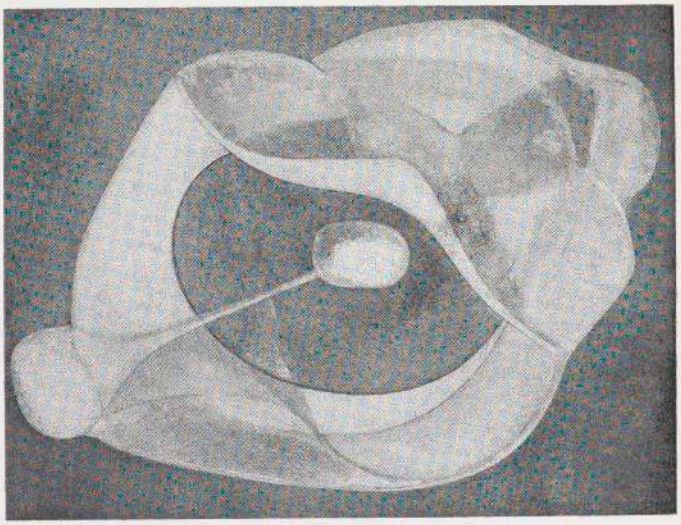
LINEAR CONSTRUCTION, VARIATION,
1942-43.
Plastic, 18″ square.
Private collection, England.





LINEAR CONSTRUCTION, VARIATION, 1942-43. (Two views.)
Plastic, 24¼" high.
Owned by the artist.





KINETIC PAINTING. Conceived to be seen in different positions. 1940-45.
Oil on composition board, 7½ x 10½".
Owned by the artist.

Catalog of the Gabo Exhibition

A star preceding the title indicates that the work is illustrated. In the case of free-standing sculpture, the largest dimension is given; in other cases, height precedes width.

*Bust. 1916. Plastic, 17⅜″ high. Lent by the artist. *Ill. p. 22.*

*Head of a Woman. 1916. Celluloid and metal, 24½ x 19¼″. The Museum of Modern Art, New York. *Ill. p. 23.*

*Square Relief. 1920. Plastic, 17½″ square. Lent by the artist. *Ill. p. 24.*

*Column. 1923. Glass, plastic, metal, wood, 41″ high. On extended loan to the Museum of Modern Art, New York. *Ill. p. 26.*

Construction in Space with Balance on Two Points. 1925. Metal, glass and plexiglas on wood, 50″ wide. Lent by the artist.

*Circular Relief. 1925. Plastic on wood, 19½″ diameter. Lent by the artist. *Ill. p. 27.*

Red Cavern. 1926. Rodoid, plexiglas and metal, 25⅜ x 20⅜″. Owned by the artist.

Construction in a Niche. 1930. Plastic, cork, 24⅛ x 23¼″. Lent by the artist.

*Monument for an Airport. 1932. Plastic and metal. 42½″ long. Lent by the artist. *Ill. p. 28.*

*Construction. 1933. Portland stone, plastic, wood, 27″ long. Lent by the artist. *Ill. p. 29.*

*Torsion. 1928-36. Plastic, 13¾″ high. Lent by the artist. *Ill. p. 31.*

*Kinetic Stone Sculpture. 1936. Portland stone, 14½″ long. Lent by the artist. *Ill. pp. 32, 33.*

*Construction on a Line, No. 1. 1935-37. Plastic, 17″ high. Lent anonymously. *Ill. p. 30.*

*Construction on a Plane. 1937. Plastic, 19″ square. Lent by the artist. *Ill. p. 34.*

Spheric Theme. 1937. Opaque plastic, 22½″ wide. Owned by the artist.

*Translucent Variation on Spheric Theme. 1937. Clear plastic on black plastic base, 22⅜″ high. Lent by the artist. *Ill. p. 38.*

Spheric Theme (2nd Variation). 1937. Plastic, 22¼″ high. Owned by the artist.

*Spheric Relief Construction. 1937. Plastic, 18″ high. Lent by Wallace K. Harrison, New York. *Ill. p. 42.*

*Construction in Space with Crystaline Center. 1938. Plastic and crystaline, 18½″ wide. Lent by the artist. *Ill. pp. 36, 37.*

*Construction with Alabaster Carving. 1938-39. Plastic and alabaster, 15½″ high. Lent by the artist. *Ill. p. 35.*

The Green Bowl. 1939. Gouache, 9⅞ x 12¾″. Lent by the artist.

*Spiral Theme. 1941. Plastic, 24″ high. The Museum of Modern Art, New York, gift of the Advisory Committee. *Ill. p. 39.*

*Linear Construction, Variation. 1942-43. Plastic, 24¼″ high. Lent by the artist. *Ill. pp. 44, 45.*

Nocturne. 1943. Oil on paper, 8 x 9¾″. Lent by the artist.

*Kinetic Painting. 1940-45. Oil on composition board, 7½ x 10½″. Lent by the artist. *Ill. p. 46.*

Kinetic Painting. 1940-45. Oil on canvas, 8 x 9⅛″. Lent by the artist.

Kinetic Painting. 1940-45. Oil on composition board, 7½ x 10½″. Lent by the artist.

A photograph of the following work is in the exhibition.

*Project for the Palace of the Soviets: Auditorium and Theatre Detail. 1931. Owned by the U.S.S.R. *Ill. p. 21.*

Gabo Bibliography

Not included are references to exhibition reviews appearing in newspapers, usually at the time of the exhibition openings. Also not included are references to more general texts which merely mention the names of the artists.

The arrangement of the artist's writings is chronological. Material about the artist is arranged alphabetically, under the author's name, or under the title in the case of unsigned articles. Publications of organizations are entered under the name of the organization when that name is distinctive. All material, except items preceded by †, has been examined by the compiler.

ABBREVIATIONS: Ag August, Ap April, comp compiled, D December, ed edited, edition, F February, hft Heft, il illustration(s), Ja January, Je June, Jy July, N November, n.d. not dated, no number(s), p page(s), por portrait(s), rev revised, ser series, sup supplementary.

SAMPLE ENTRY for magazine article. DAVIDSON, MARTHA. Gabo: constructions in space. Art News 36no29:14-15 Ap 16 1938.

EXPLANATION. An article by Martha Davidson, entitled "Gabo: constructions in space" will be found in Art News, volume 36, number 29, pages 14 to 15, the April 16, 1938 issue.

* Items so marked are in the Museum of Modern Art Library.

Hannah B. Muller

WRITINGS BY GABO

1. Realistic Manifesto. (Written in collaboration with Antoine Pevsner.) Moscow, 1920.
   Printed as handbill for distribution at exhibition of 1920. No other publication of the complete text is known. An excerpt, translated into French, appears
* in Abstraction-Création, art non figuratif no1:27
* 1932; translated into English in Robert Goldwater and Marco Treves. Artists on art. p454-5 New York, Pantheon Books, 1945, and in bibl. 16; translated into German in bibl. 27. Briefer versions of
* the same excerpt are published in D'Aci i d'Alla 22:28 D 1934, and in bibl. 35. Other formulations of the same principles appear in bibl. 9,15,29 and in Pevsner bibl. 11,12.

* 2. Gestaltung. il Bauhaus 2no4:2-6 1928.

* 3. Bauhausstil . . . [Antwort an Frau Brandt] Bauhaus 3no1:21 1929.

* 4. [Statement] il Abstraction-Création, art non figuratif no1:14 1932.

* 5. [Statement] il Abstraction-Création, art non figuratif no2:16 1933.

* 6. Constructive Art. il The Listener 16no408:846-8 N 4 1936.

* 7. Modern Art and Architecture. il Journal of the Royal Institute of British Architects ser3,44:213-15 Ja 9 1937.
   Speech given at meeting of Royal Institute of British Architects during discussion on architecture in relation to the arts. Reprinted, in part, with revisions, under title: Toward a unity of the con-
* structive arts, in Architectural Forum 69:435-8 (Plus no 1:3-6) D 1938.

* 8. The Constructive Idea in Art. *In* Circle; international survey of constructive art. Editors: J. L. Martin, Ben Nicholson, N. Gabo. p1-10 London, Faber and Faber. 1937.

* 9. Auszug aus einem Brief von Gabo und Pevsner. il Das Werk (Basel) 25no8:255 Ag 1938.

*10. Frank Lloyd Wright. Focus no4:51-2 Summer 1939.
   Contribution to an informal discussion held on series of lectures given by Frank Lloyd Wright at Royal Institute of British Architects, London.

*11. Centre Party v. Left Wing: Discussion between Eric Newton, William Coldstream, and Naum Gabo. The Listener 23:163-5 Ja 25 1940.

*12. The Concepts of Russian Art. World Review (London) p48-53 Je 1942.

*13. Prepare for Design. il World Review (London) p43-9 Ap 1943.

*14. Constructive Art: an Exchange of Letters between Naum Gabo and Herbert Read. il Horizon 10no55:57-65 Jy 1944.
* An excerpt is reprinted in Michael Rothenstein. Looking at paintings. p63 London, G. Routledge, 1947.

*15. Extraits d'une Lettre de Gabo et Anton Pevsner. Réalités Nouvelles no1:63-4 1947.

See also 36.

WRITINGS ABOUT GABO

*16. Art of This Century, New York. [Catalog] ed. by Peggy Guggenheim. p89,91,138 il por New York, 1942.
   Exhibition catalog listing 2 works by Gabo. Reprint of excerpts from Realistic Manifesto, p138.

*17. Basel. Kunsthalle. Konstruktivisten. 20p il 1937.
   Exhibition catalog listing 2 works by Gabo.

*18. Beaumont, Cyril W. Complete book of ballets. il p972-3 London, Putnam, 1937.
Description of scenery designed by Gabo and Pevsner for *La Chatte*.

19. Constructions in Space: Naum Gabo's Work in Plastics. il Plastics 2no9:50-1 F 1938.
Includes quotations from article by Jan Gordon, and from notes sent by organizers of London Gallery exhibition.

*20. Davidson, Martha. Gabo: constructions in space. Art News 36no29:14-15 Ap 16 1938.
Exhibition, Julien Levy Gallery, New York.

*21. Design Review. il Architectural Review 96:24-5 Jy 1944.
Use of plastics by Gabo.

22. Dreier, Katherine S. Modern art. p70,74-5 il por New York, Société Anonyme, Museum of Modern Art, 1926.
Issued in connection with International Exhibition of Modern Art held at the Brooklyn Museum, N-D 1926.

23. Galerie van Diemen, Berlin. Erste russische Kunstausstellung. 31p il 1922.
Exhibition catalog listing 9 works by Gabo, 1 by Pevsner, with textual reference to Gabo, p13-14.

*24. Gibson, William. Notes sur six artistes qui travaillent en Angleterre. il Choix 2no12:61-8 [n.d.]
Gabo, p62.

*25. Giedion-Welcker, Carola. Modern plastic art. p14,128-33,154 il Zurich, Girsberger, 1937.

*26. Kállai, Ernst. Konstruktivismus. il Jahrbuch der Jungen Kunst 1924:374-84.

*27. ——— Der Plastiker Gabo. il i10; Internationale Revue 1no7:245-9 1927.
Includes excerpts from Realistic Manifesto.

*28. ——— Der Raumplastiker Gabo. il Das Neue Frankfurt 4no1:17-19 1930.

*29. Kestner Gesellschaft, Hannover. Gabo: konstruktive Plastik. 6p il 1930.
Exhibition catalog listing 23 works by Gabo. Includes quotations from Realistic Manifesto.

30. Levy, Julien, Gallery, New York. [Exhibition catalog] 1938.
Lists 15 works by Gabo.

*31. Lissitzky, El & Arp, Hans. Die Kunstismen. p xi, plates 4-5 Erlenbach-Zürich [etc.] E. Rentsch, 1925.

32. Little Review Gallery, New York. [Exhibition of works by Gabo and Pevsner] 1926.
Exhibition catalog listing 5 works by Gabo.

*33. London Gallery. Catalogue of constructions by N. Gabo. 3p [1938]
Exhibition catalog listing 16 works by Gabo.

*34. Lozowick, Louis. Modern Russian art. p42 il New York, Museum of Modern Art, Société Anonyme, 1925.

*35. Moholy-Nagy, László. The new vision. 3d rev. ed. p45,49,74 il New York, Wittenborn, 1946.
Includes excerpts from Realistic Manifesto, p49. These excerpts are also reprinted in the author's
* Vision in motion. p238 Chicago, Theobald, 1947.

*36. Murray, Marian. Constructivist exhibits sculpture at Avery memorial. il por Hartford Times Mr 22 1938.
Includes statements by Gabo.

*37. Naum Gabo, Constructivist. il por London Bulletin no8-9:14 Ja-F 1939.

*38. New York. Museum of Modern Art. Cubism and abstract art [ed. by Alfred H. Barr, Jr.] passim il New York, 1936.
Lists 7 works by Gabo. Includes bibliographical references and biographical notes.

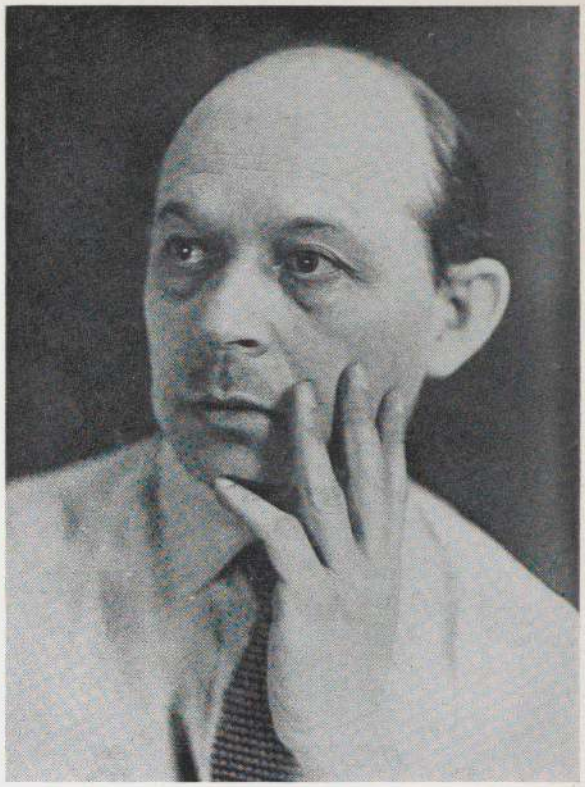
*39. New York University. Museum of Living Art. A. E. Gallatin collection. p[29] il New York, 1940.
Lists 1 work by Gabo. The Gallatin collection is now in the Philadelphia Museum of Art.

*40. Optimism Keynote of Naum Gabo's Stimulating Art. il por Sunday Republican (Waterbury, Conn.) Je 8 1947.

*41. Propert, W. A. The Russian ballet, 1921-1929. p54-5 il London, John Lane, 1931.
Description of scenery designed by Gabo and Pevsner for *La Chatte*.

*42. Wadsworth Atheneum, Hartford. Constructions in space: Gabo. il folder [1938].
Exhibition catalog listing 15 works by Gabo.

Pevsner in his Studio, Paris.



Antoine PEVSNER

Antoine Pevsner was born in Orel, Russia on January 18, 1886. Because his father's interests lay in copper refining, his two older brothers chose engineering careers. Antoine rejected industry entirely and decided to become an artist. Eventually he used the same metals which the rest of his family manufactured, but with them he created esthetic forms.

Antoine's youthful ambitions met with approval. At the age of fifteen he was sent to Kiev for rigorous study in the liberal arts and to prepare for entrance into the Academy of Fine Arts. The two years he spent under the Academy's teachers of painting, sculpture and architecture left him keenly disappointed. Full of restlessness, one thought became clear to him: "I saw that modern [academic] art was indisputably inferior to ancient art."[1] Two roads out of the academic sterility offered themselves to the dissatisfied student. One was medieval art in which the Kiev area abounded and for which contemporary leaders such as Vrubel and Bakst had a profound and romantic attachment. The other led through the modern French collections of the Moscow merchant

princes Morosov and Shchukine, to the Russian painters influenced by them, and on to Paris. Pevsner eagerly explored both directions.

Antoine and several rebellious schoolmates left their academy in 1910 and set out on a tour of the old Russian monuments. Kiev itself, first home of the Greek Church in Russia, was a treasure house of medieval art. Center of a wealthy court from the tenth to the twelfth century, it was famous for its square-built, onion-domed churches, filled with frescoes and glittering mosaics. The ancient Pechersky cave monastery, a workshop for the production of icons, was still attracting thousands of artists annually. Pevsner recalls his impressions of this art: "The inverted laws of ancient perspective struck me deeply. Giving an impression of mobility, forms appeared sometimes open, sometimes closed . . . at the same time moving in and moving out, hollow and raised—a phenomenon which produced the sensations of life itself."

The Russian Primitivists' concern with archaic and folk art was reinforced by their study of the modern French works in the brilliant collections of Morosov and Shchukine. In 1910 a radical group of artists formed "The Jack of Diamonds" (*Bubnovy Valet*) which included first Cézannists and Primitivists, then Futurists and Cubists. Exhibitions and publications reflected the atmosphere of the French capital. Pevsner went to the St. Petersburg Academy of Beaux-Arts in 1911, but left after one year. Paris seemed irresistable. "France appeared to me the light of reason, of genius and of art in full ferment. I decided to make the trip."

Arriving in 1911 during the revolutionary *Salon des Indépendants* there remained no doubt in Pevsner's mind about the correctness of his decision. "The freedom of spirit and the bold conceptions of the French artists, the revolution being made in the arts and the atmosphere of turmoil of the period astonished and stunned me." In the now famous *Salle 41* of the *Indépendants*, Pevsner saw the first Cubist group exhibition including works by Delaunay, Le Fauconnier, Metzinger, Gleizes and Léger. The Cubists' break with academic painting, their determination to take nothing in traditional art for granted and their insistence on experiment all supported Pevsner's own resolve to establish through "laboratory researches" some valid system of plastic expression.

After a year at home, Pevsner returned to Paris in 1913 where he knew two young artists who, like himself, were bringing a particular love of their national heritage to the formal revolt in Paris: Archipenko, the pioneer Cubist sculptor, and Modigliani. Through them Pevsner came closer to Cubist circles where activities were increasingly aggressive and coherent. Under this influence he began his painting *Study of a Head*, 1914-18. The "Section d'or," a group of painters from *Salle 41*, met regularly, exhibited, published and expounded. Out of these discussions Gleizes and Metzinger wrote *Du Cubisme* in 1912, the first book on the movement, and it was followed by *Peintres cubistes; méditations esthétiques* by Guillaume Apollinaire, poet, critic and Cubist spokesman. Léger, Delaunay and others expanded the body of theory:

> The painters have been led quite naturally, one might say by intuition, to preoccupy themselves with the new possibilities of spatial measurement which, in the language of modern studios, are designated by the term: the fourth dimension . . . [which] appears to spring from the three known dimensions: it represents the immensity of space eternalizing itself in all directions at any given moment.[2]
>
> This space [pictorial space] we have negligently confounded with pure visual space or with Euclidean space. . . . If we wished to refer the space of the painters to geometry, we should have to refer to the non-Euclidean scientists; we should have to study, at some length, certain theorems of Rieman's.[3]
>
> Distance or time, concrete fact or pure conception, nothing refused to be uttered in the language of the painter, as in that of the poet, the musician or the scientist.[4]

Convinced of the importance of the Cubist approach, Pevsner commented: "I observed at the very beginning of Cubism that some of the painters created chaotic forms, others achieved works through an entirely new formula. The conception which surprised me in Cézanne and after him in all the Cubists was that they had utilized and applied a strongly drawn line and were thus adopting the formula of Byzantine art. In the beginning Cubism worked to a certain extent according to classical form; at all times it gave importance to line, and the procedure of cutting out and superimposing objects was its principal revolt."

To the rationale of the Cubists, the Futurist sculptor, Boccioni, made further insistence on motion:

> Dynamism is the simultaneous action of the particular and characteristic motion of the object (absolute motion), together with the transformations experienced by the object as a result of its displacement in a moving or motionless milieu (relative motion).[5]

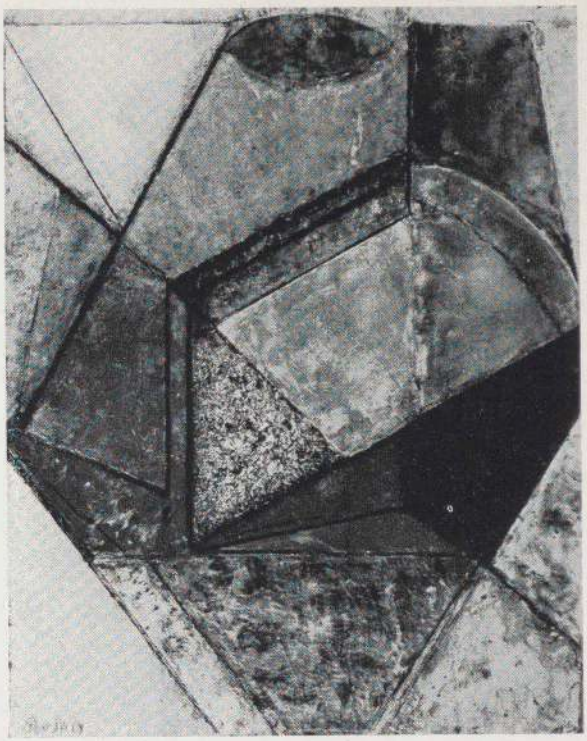
Pevsner saw Boccioni's 1913 exhibition of "architectonic constructions." Though he says it did not impress him at the time, these works anticipated Pevsner's later concern with motion and contemporary esthetics.

When World War I broke out in August, 1914, Pevsner's father called him at once to Russia and then sent him to join his younger brother Gabo in Norway. Gabo was a science student just turned sculptor. Pevsner recalls: "I was plunged in my own research and problems of painting and could observe from a certain distance the development of Gabo's first constructions. Judging their importance impartially, I saw that the vision was rich, a new direction opening up infinite sources."

In the comparative isolation of neutral Norway Pevsner could look back on his experiences in Paris and select out of Cubism what seemed vital to his own work. He completed several paintings which he now considers transitional. Of these, *Carnival* and *Absinthe* (pages 54 and 55), done in 1915-16, are now in the Museum of Modern Art in Moscow. *Carnival's* subject is a seated woman with a fan. The rocking motion of the figure, indicated by a sequence of lines behind it, suggests the contemporary interests of Léger and Duchamp. *Absinthe* is a traditional early Cubist still life. Each part of the table or glass takes its own direction, creating the sensation of objects in motion. Pevsner works out the receding and projecting planes almost as a scientist might work through an experiment toward a resolution of the elements.

With the sudden abdication of the Czar in March, 1917, the two brothers returned to Moscow. Pevsner set about making order out of chaotic family affairs and then turned with great interest to review the development of Russian art since his visit in 1914. The Soviet Government meanwhile began to consolidate its regime and reorient civilian life. The Russian progressive artists, some from pre-war France and Germany, were allowed a free hand in their field. Replacing the old Imperial Academy with the workshops of the *Vchutemas*, they organized a curriculum based on contemporary artistic trends. Pevsner received an official professor's post. Among the several outstanding members of the staff, Tatlin and Malevich were closest to Pevsner's direction. Tatlin had made constructions, in wood, glass and metal since 1913. In the same year the Suprematist Malevich had stripped art to essentials, arriving at a penciled black square on white. Reviewing his approach in a later *Bauhaus* book, Malevich wrote:

> The artist who wants to develop art beyond its painting possibilities is forced to theory and logic.
>
> The element of Suprematism is free, in painting as well as in architecture.
>
> Suprematism opens art onto new avenues and new possibilities in eliminating so-called practical considerations. . . . The artist is no longer bound to the canvas but is able to shift his compositions into space.[6]



ABSTRACT FORMS. 1913. Encaustic, 17¼ x 13½". The Museum of Modern Art, New York, gift of the artist.

ABSINTHE. 1915-16. Oil, 31½ x 21". Owned by the U.S.S.R.

Pevsner, in seeking a method of solving what the Cubists had left unsolved, was impressed with the Malevich Suprematist system. After a period of study in the new milieu, Pevsner returned to his own work, some of which had been begun as abstract designs in 1913. *Abstract Forms*, 1913 (page 53), related to Gleizes's and Jacques Villon's earlier style of working flat, diagonal planes, is Pevsner's first completed abstraction. In another abstract painting, *Harmony in White*, 1917, Pevsner refines color as subtly as Malevich in the same period. However, both these paintings also indicate an entirely personal direction, insisting on pigment as an independent and tangible substance. His *Oil Painting* of 1917-18 indicates by its title the artist's awareness of medium. Although not raised off the surface, the forms in this painting, through use of perspective, appear to recede or project independently. In addition, color is used to separate planes still further. In the sense that his paintings are put together with forms of material substance which appear to move in space, Pevsner begins to think of his works as constructions.

Toward 1920 the *Vchutemas* ideas of art, society and reality began to crystallize. While Pevsner agreed with Malevich on the purity and independence of art, he disagreed with his two-dimensional concept of canvas space and the restriction of color to flat tone. Sympathetic to Tatlin's use of actual materials built into space, Pevsner nevertheless rejected his concern with engineering and any subjugation of art to popular demands or socio-ideological requirements. After passionate debates at the school among students, staff and public, Gabo and Pevsner took an independent stand. They exhibited their work in an orchestra shell on the Boulevard Tversky in central Moscow in August, 1920. Their point of view was documented in the *Realistic Manifesto*:

> Space and time are the two elements which exclusively fill real life (reality).
>
> To realize our creative life in terms of space and time: such is the unique aim of creative art.
>
> . . . we shape our work as the world its creation, the engineer his bridge, the mathematician his formulas of a planetary orbit.
>
> One may watch with interest the experiments of the Cubists. But these experiments are conducted only along the surface of art, not touching its foundations; and there results a delineation of volume and a decorativeness of plane as in the old art.
>
> In the field of painting the task of Futurism went no further than revised attempts to affix on canvas the optical reflex. . . . It is clear to anyone that we cannot re-create motion through a single graphic record of a series of snapshots of arrested movement.
>
> Life does not know beauty as a measure in esthetics. Reality is the highest beauty.[7]

In 1922 the Soviet Government sent the *First Russian Art Exhibition* to Berlin. In the catalog introduction, D. Sterenberg, Commissar of Art and Science, wrote: "During the blockade Russian artists have tried to get in touch with their Western comrades through announcements and mani-

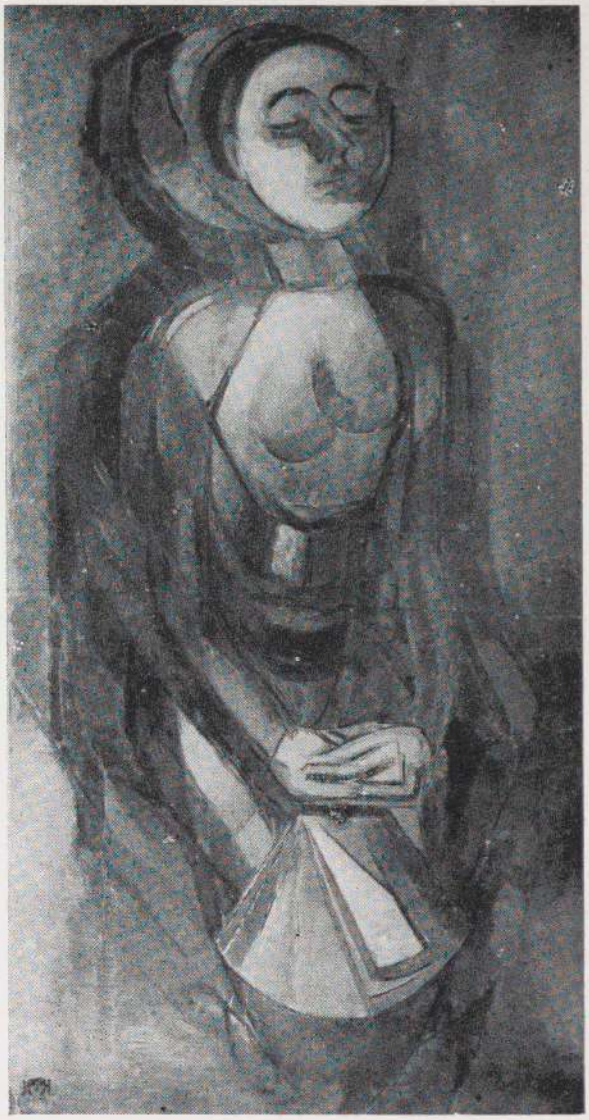
festoes. . . . With this exhibition we want to show Western Europe the creative gains Russian art has made through the years of war and revolution."[8]

The works of both brothers were included in the exhibition which Gabo helped to supervise in Berlin. Pevsner, who had recently married Miss de Voinoff-Chilingarian, remained in Russia with his bride. The *Vchutemas*, now under the pressure of academic artists supported by officials acting in the name of the proletariat, became more insistent upon its ideas of utilitarian and realistic art. For Pevsner no such return to naturalism was possible. He has related that he returned to his studio one day to find it padlocked. In 1923 Russia's waning interest in pure Constructivism coupled with the Weimar Republic's enthusiasm for the new art drew him to Berlin.

There Pevsner met Marcel Duchamp, the Cubist and Dada artist long concerned with construction and motion, and the American patron of modern art, Katherine S. Dreier, founder of the "Société Anonyme." During the nine months spent in Berlin he began his first construction.

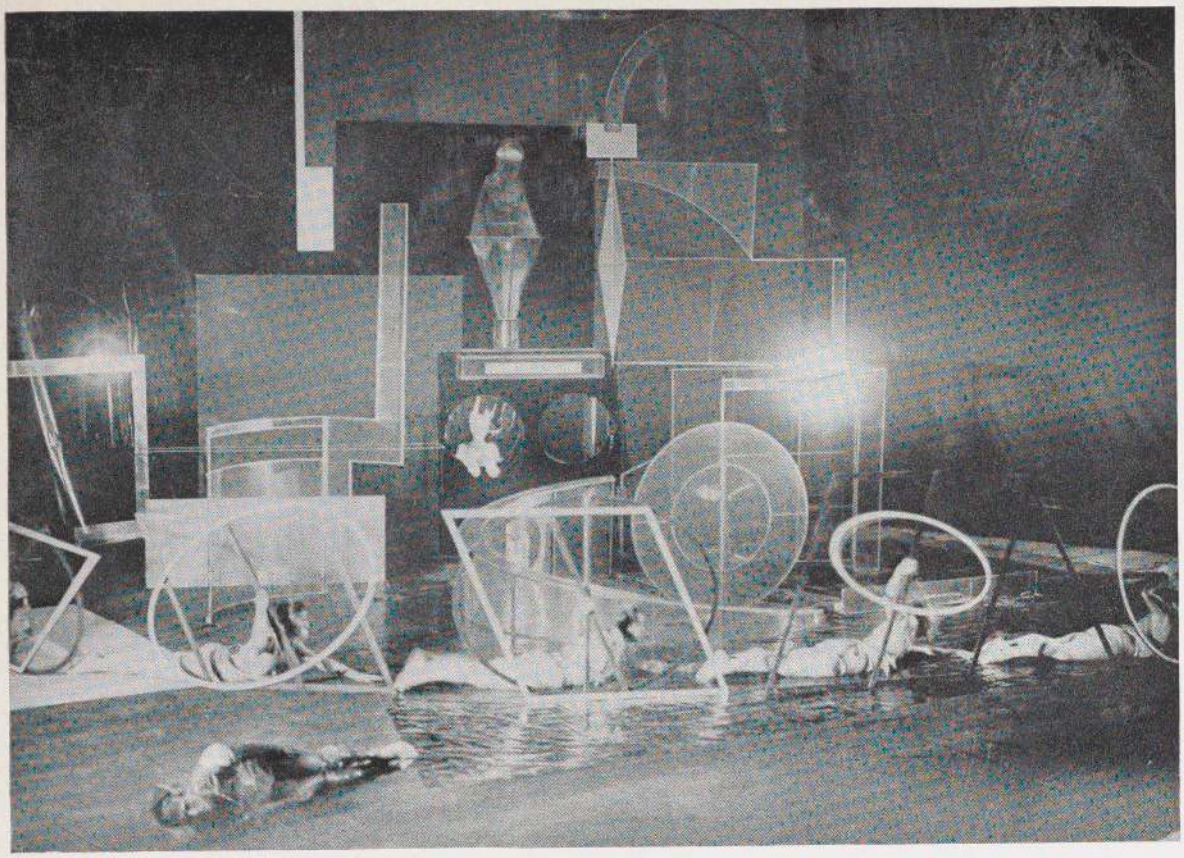
In October, 1923, Pevsner returned to France. He exhibited with Gabo the following June at the Galerie Percier in Paris. In the catalog the critic Waldemar George introduced the constructive idea as symbolic of an approach to life, citing Pevsner and Gabo as the expert craftsmen and realizers of its expression in art. Pevsner had continued his new departure in Paris and exhibited works partly painted and partly constructed with the use of Gabo's transparent planes.

Pevsner eliminated any element of perspective in a series of relief constructions. *Bust* of 1924-25? (page 60), introducing the circle and V characteristic of his later work, frees itself in high relief from a simple metal plaque. Other figure pieces such as *Torso*, 1924-26 (page 58), exploit light through the various densities and directions of the planes. Masterpiece of the series is the *Portrait of Marcel Duchamp*, 1926 (page 59). A multifaceted construction symbolizes the artist who, while omnipresent in artistic circles, abandoned art for the intricate manoeuvers of chess. Intangible and complex, the portrait pays witty homage to a man and a period. In its synthesis of a given style with a personality close to that style, its construction is comparable to Picasso's Cubist tribute to the collector Ambroise Vollard.



CARNIVAL. 1915-16. Oil, 27½ x 19¾". Owned by the U.S.S.R.

In 1926 Pevsner's works were included in exhibitions in New York at the Little Review Gallery and the "Société Anonyme." In 1927 the lyrical and spatial Constructivism of Pevsner and Gabo was introduced to large audiences in Western Europe through the ballet. Diaghilev, former leader of the "Mir Iskusstva" who had brought to ballet the décor of brilliant artists such as Benois and Bakst and later Picasso, Braque and Derain, commissioned the brothers to design the décor for



SETTING FOR BALLET, "LA CHATTE." 1927. Plastic, oil cloth, wood, steel.

La Chatte.[9] In it, the choreographer Balanchine called for full body motion and architectonic group dancing. As a result the Constructivist setting was an integral part of precisely planned motions in space and light. Pevsner completed his Cubist Constructivist period with the central figure in this décor. The free-standing figure was conceived as curved, empty space cut out of a three-dimensional diamond-shaped frame. Omnipotent as the symbol of a classical goddess, the vacuum mannequin towered over the real bodies of her dancer subjects, who complemented her rigidity with violent gymnastic dance.

During the twenties Paris was a center of interest in the machine, which influenced the art world under the banner of *style mécanique* and was climaxed by the *International Exhibition of Modern Decorative and Industrial Arts* of 1925. Mechanical inventions shared halls with the works of fine artists. Film and art fused to spread the humor and drama of mechanical devices. Léger designed *Ballet mécanique*, an abstract film in repetitive motion, and a laboratory scene for l'Herbier's film *L'Inhumaine.* From Berlin came Freund's *Die Sinfonie der Grosstadt* in which clocks, streetcars and trains clanged out the pulse of the city.

Pevsner created a series of constructions in which brass and bronze are cut and joined in flat sections held together by screws. In the austere *Dancer* of 1927-29 (page 61), close in style to the goddess of *La Chatte*, Pevsner had already encased the human figure as a geometric void. *Abstraction* of 1927 (page 62) uses machine forms themselves. The *Construction* of 1931-33 surrounds with metal sections the frame of *Dancer*. In *Construction for an Airport*, 1934 (page 64) Pevsner works with a machinist's loving care of his instruments and pays frank tribute to technology.

In May, 1930, Pevsner became a citizen of France. By 1932 French Cubists who had formerly been associated in the "Section d'or" and in the dealer Léonce Rosenberg's gallery "L'Effort moderne" re-formed in a larger, international constellation of artists, "Abstraction-Création, art non figuratif." The movement was dedicated to abstract art whether of Cubist, "de Stijl" or Constructivist origin. Pevsner and Gabo were important as founders and as Constructivist leaders.

Writing in the new group's publication, Pevsner reviews the relations of art and science:

> The most precious discovery, the understanding of first causes and principles, is refuted by the progress of modern science . . . each new technical creation is proof of the non-validity of preceding creations. . . . If there still exists an exterior likeness between a technical creation and an artistic construction, the first aids in calculating the perturbations of planetary mechanics, while the other gives us the possibility of bringing to light the hidden forces in nature.[10]

Pevsner's metal constructions from machine forms were frequently entitled "projection into space" or "developable surface"—a surface such as that of the cone or the cylinder which can be affixed flush onto a flat plane without cutting.

In 1935 and 1936 Pevsner was represented in exhibitions at Hartford, Connecticut, at the Chicago Arts Club and in the Museum of Modern Art's exhibition *Cubism and Abstract Art*. He contributed to the London publication *Circle, International Survey of Constructive Art*. With Constructivist and Dutch "de Stijl" artists, he exhibited at the Kunsthalle in Basel in 1937, and the following year he participated in a group exhibition at the Stedelijk Museum in Amsterdam. In England on a visit to Gabo, he exhibited with Arp, Brancusi, Moore and others at the Guggenheim Jeune Gallery in London. During the war, he was working in seclusion in Paris.

Pevsner was organizer in 1946, with Gleizes, Herbin and others, of a new group, "Réalités Nouvelles," dedicated to non-representational art. This group held its first exhibition at the *Salon des Réalités Nouvelles* in Paris. In 1947 Pevsner was given his first one-man show at the Galerie René Drouin, and Drouin published a monograph, *Antoine Pevsner*. "Réalités Nouvelles" issued its first publication and held its second exhibition shortly after. Pevsner now lives and works in Paris.

The gigantic constructions of the modern world, the prodigious discoveries of science have changed the face of the world, while artists were announcing new conceptions and forms. A revolution is imposed on the arts and on the emotions—it will discover a new world as yet scarcely explored. Thus we have arrived, Gabo and I, on the road to new research of which the guiding idea is the attempt at a synthesis of the plastic arts: painting, sculpture and architecture. . . . It is not fanciful to think that the epoch which will succeed ours will be once more, in the history of humanity, a period of great collective works; that it will witness the execution of imposing constructions in vast urban spaces. The plastic arts will fulfil their mission if they become master of forms capable of making their effort, of creating in great spaces and of inspiring corresponding emotions.[11]

Notes

[1] All undocumented quotations are derived from unpublished statements by the artist.

[2] Guillaume Apollinaire, *The Cubist Painters: Aesthetic Meditations*, New York, Wittenborn and Co., 1944, p. 12; first published 1913.

[3] Albert Gleizes and Jean Metzinger, *Cubism*, London and Leipsic, 1913, pp. 28-9; first published 1912.

[4] *Ibid.*, p. 60.

[5] U. Boccioni, *Pittura, scultura futuriste . . .*, Milan, 1914, p. 195, as quoted in Rosa Trillo Clough, *Looking Back on Futurism*, New York, Cocce Press, 1942, p. 101.

[6] Kasimir Malewitsch, "Die Gegenstandslose Welt," *Bauhausbücher II*, Munich, Albert Langen Verlag, 1927, pp. 49, 98.

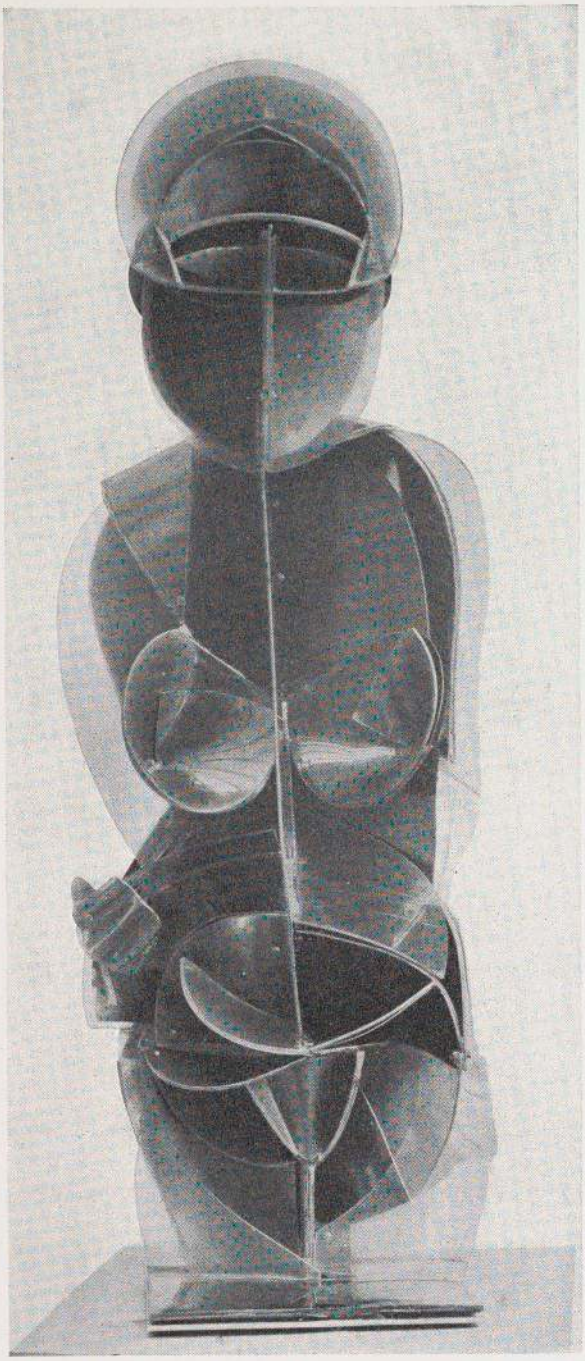
[7] Robert Goldwater and Marco Treves, *Artists on Art*, New York, Pantheon Books, 1945, pp. 454-5; translation of sections of the *Realistic Manifesto* reprinted in *Abstraction-Création, art non figuratif, No.. 1*, Paris, 1932, p. 27. (Bibl. 1.) Other sections quoted from *Realistic Manifesto* have not been reprinted and are in the possession of the artist.

[8] Galerie van Diemen, *Erste Russische Kunstausstellung*, Berlin, 1922. (Gabo Bibl. 23.)

[9] Cyril W. Beaumont, *Complete Book of Ballets*, London, Putnam, 1937, pp. 972-3: *La Chatte*, ballet in one act. Book: Sobeka. Music: Sauguet. Scenery and costumes: Gabo and Pevsner. Choreography: George Balanchine. First produced: Théâtre de Monte Carlo, April 30, 1927, with Mlle Olga Spessiva, M. Serge Lifar. Based on an Aesop fable.

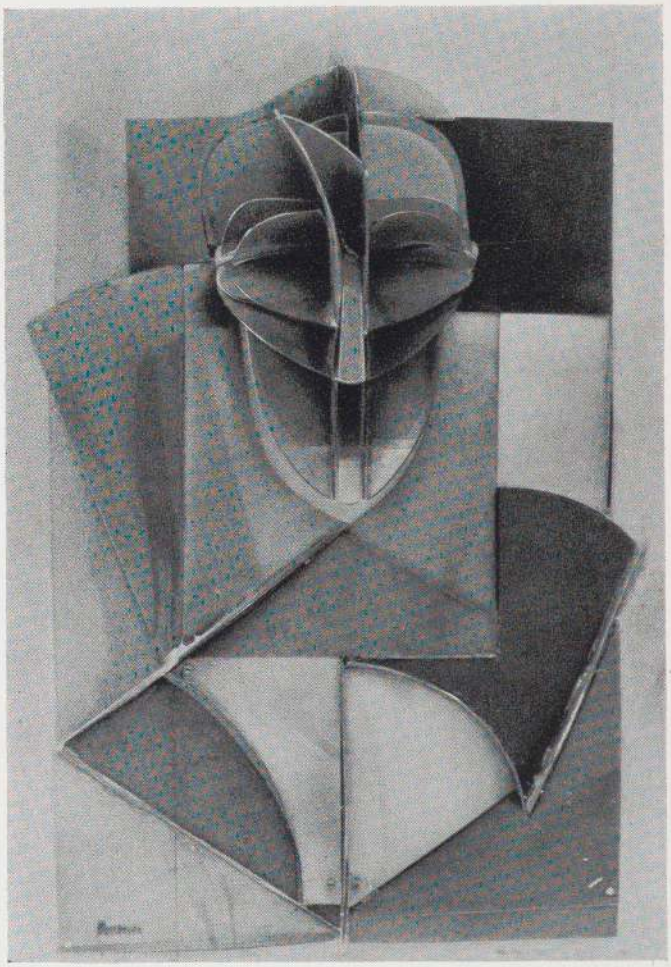
[10] *Abstraction-Création, art non figuratif, No. 2*, Paris 1933, p. 35. (Bibl. 2.)

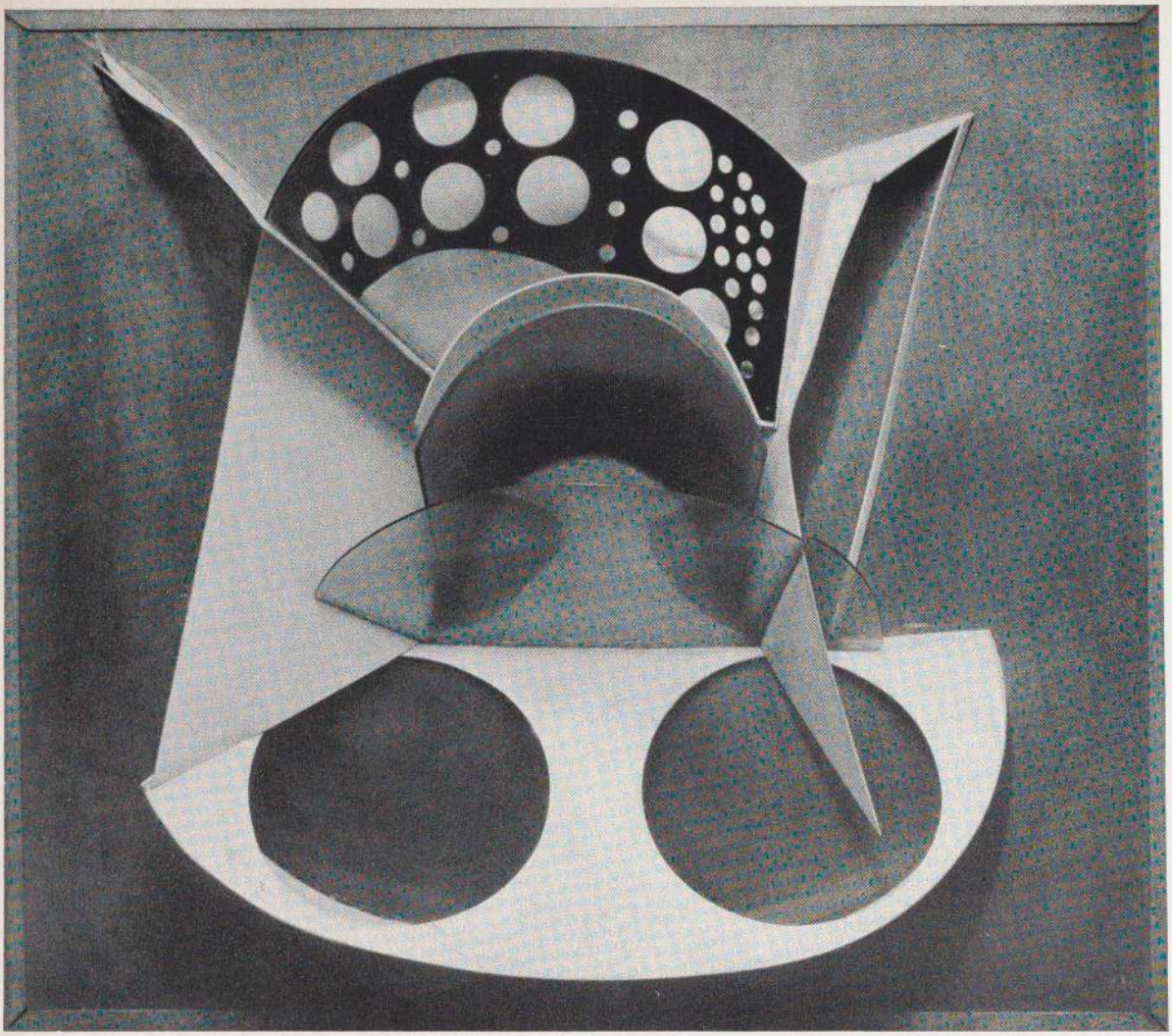
[11] René Drouin, Galerie, Paris, *Antoine Pevsner*, Paris, 1947, [p29-105]. (Bibl. 12.)



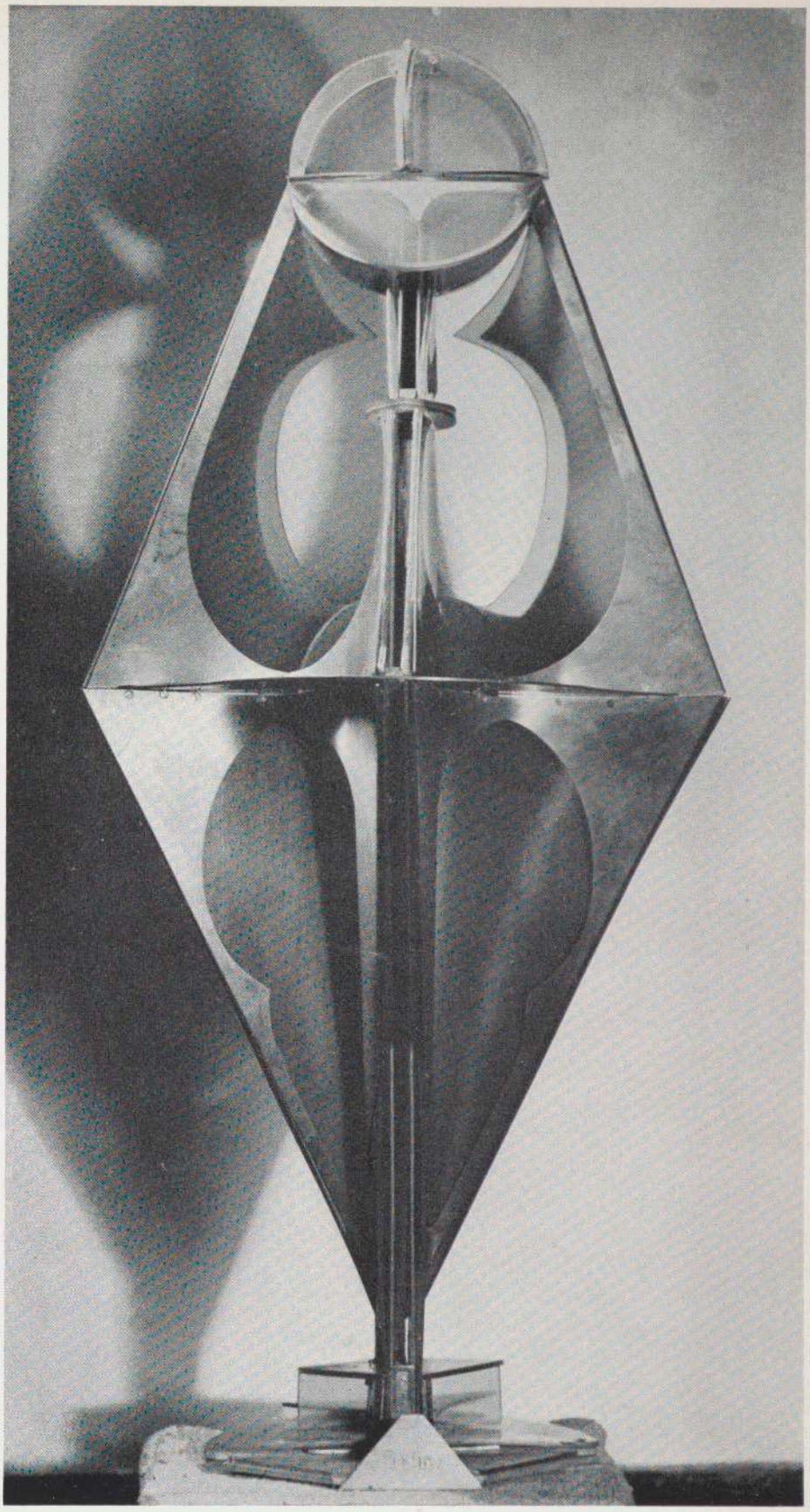
TORSO. 1924-26.
Brass and plastic.
Collection Miss Katherine S. Dreier, Milford, Conn.

PORTRAIT OF MARCEL DUCHAMP. 1926.
Celluloid on zinc, 37⅛ x 25⅝".
Société Anonyme, Yale University.

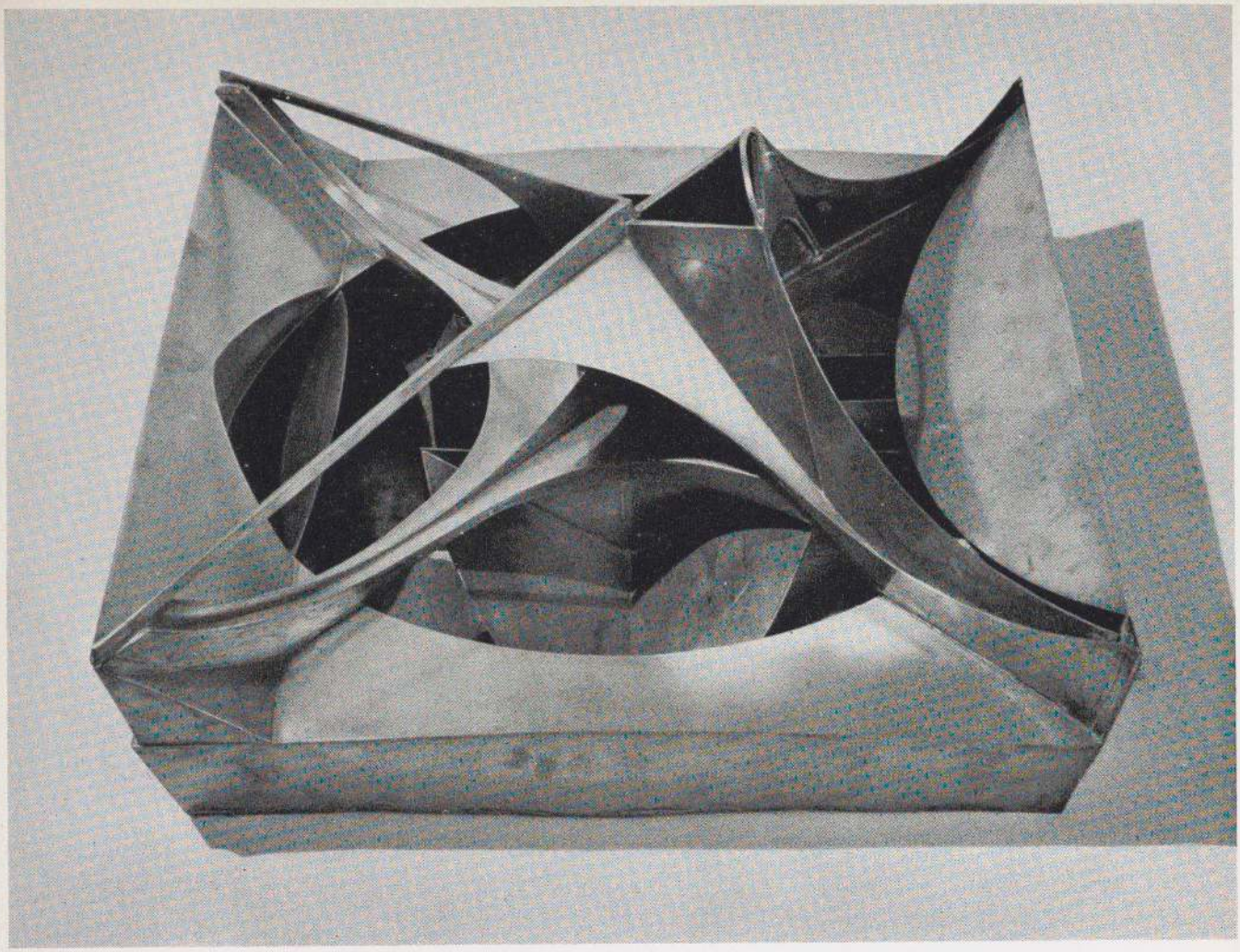




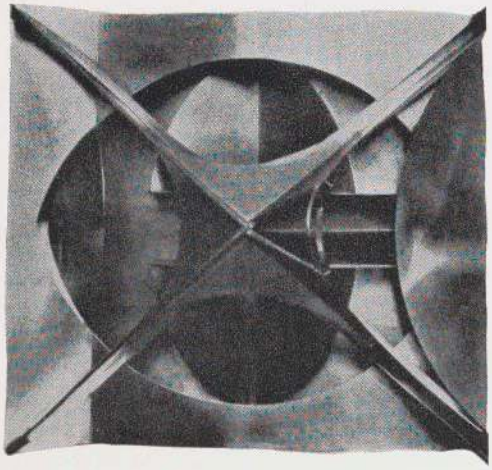
BUST. 1924-25?
Metal and celluloid, 20⅞ x 23⅜".
The Museum of Modern Art, New York, Purchase Fund.

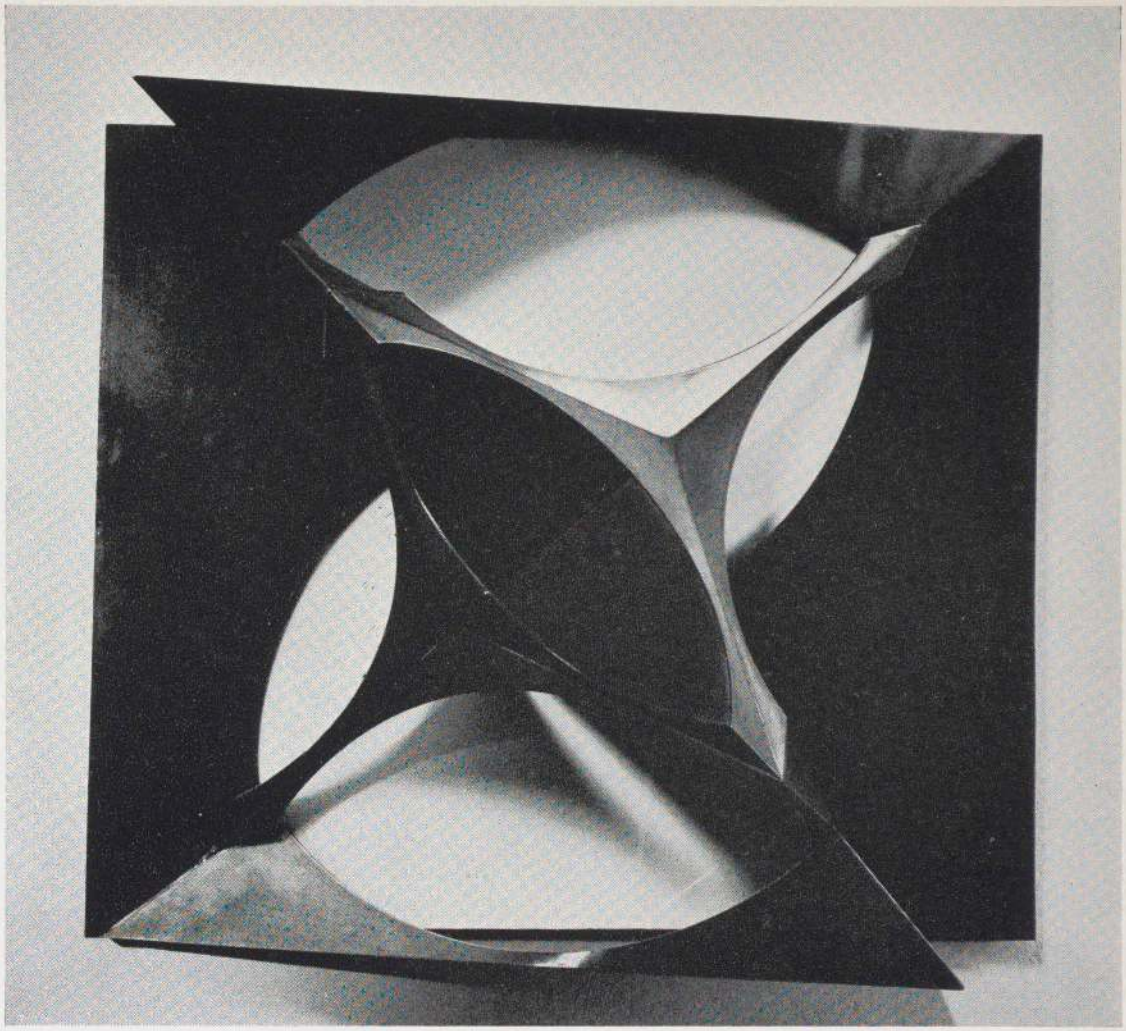


DANCER. 1927-29.
Brass and celluloid, 31 ¼" high.
Société Anonyme, Yale University.

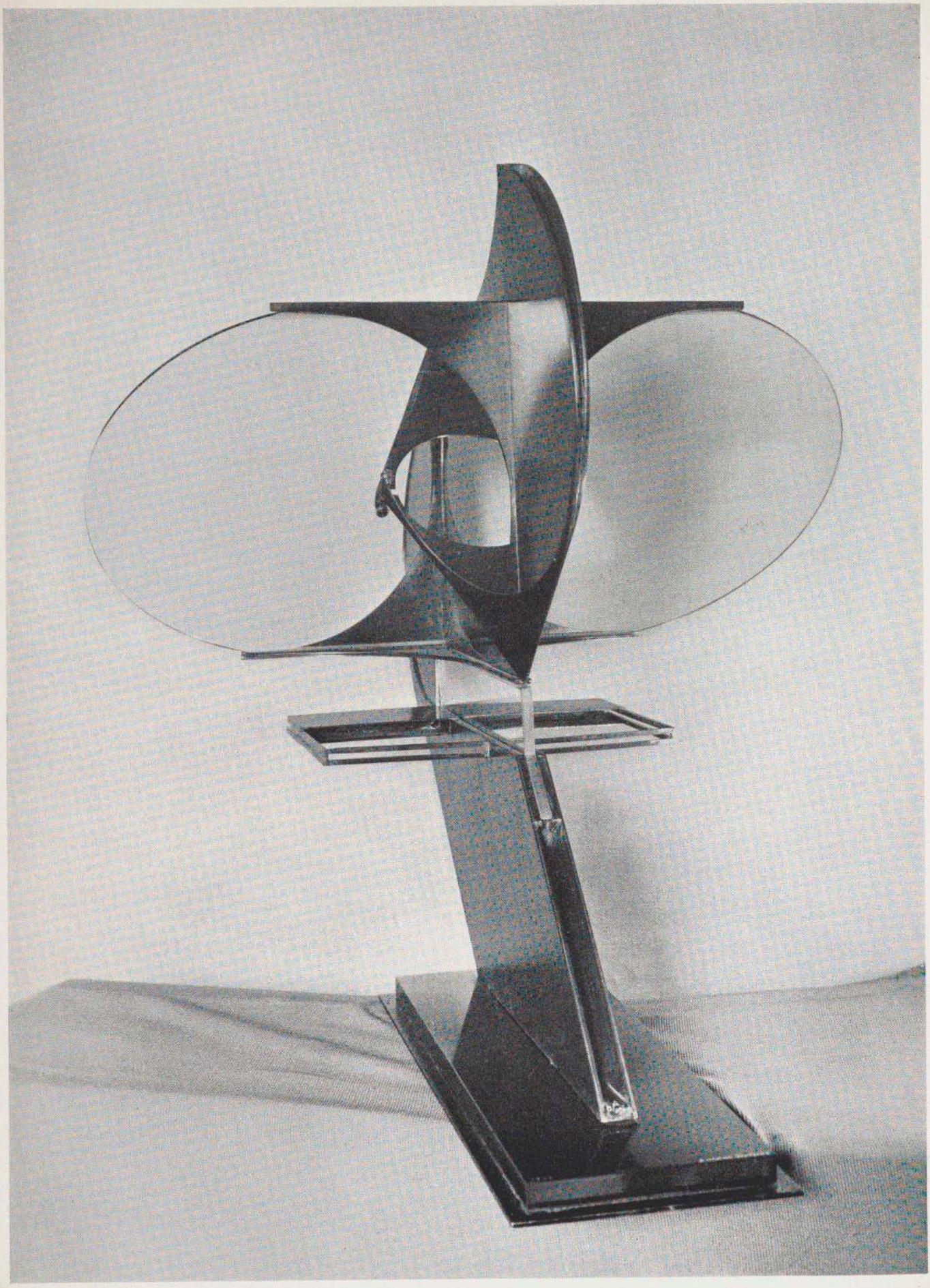


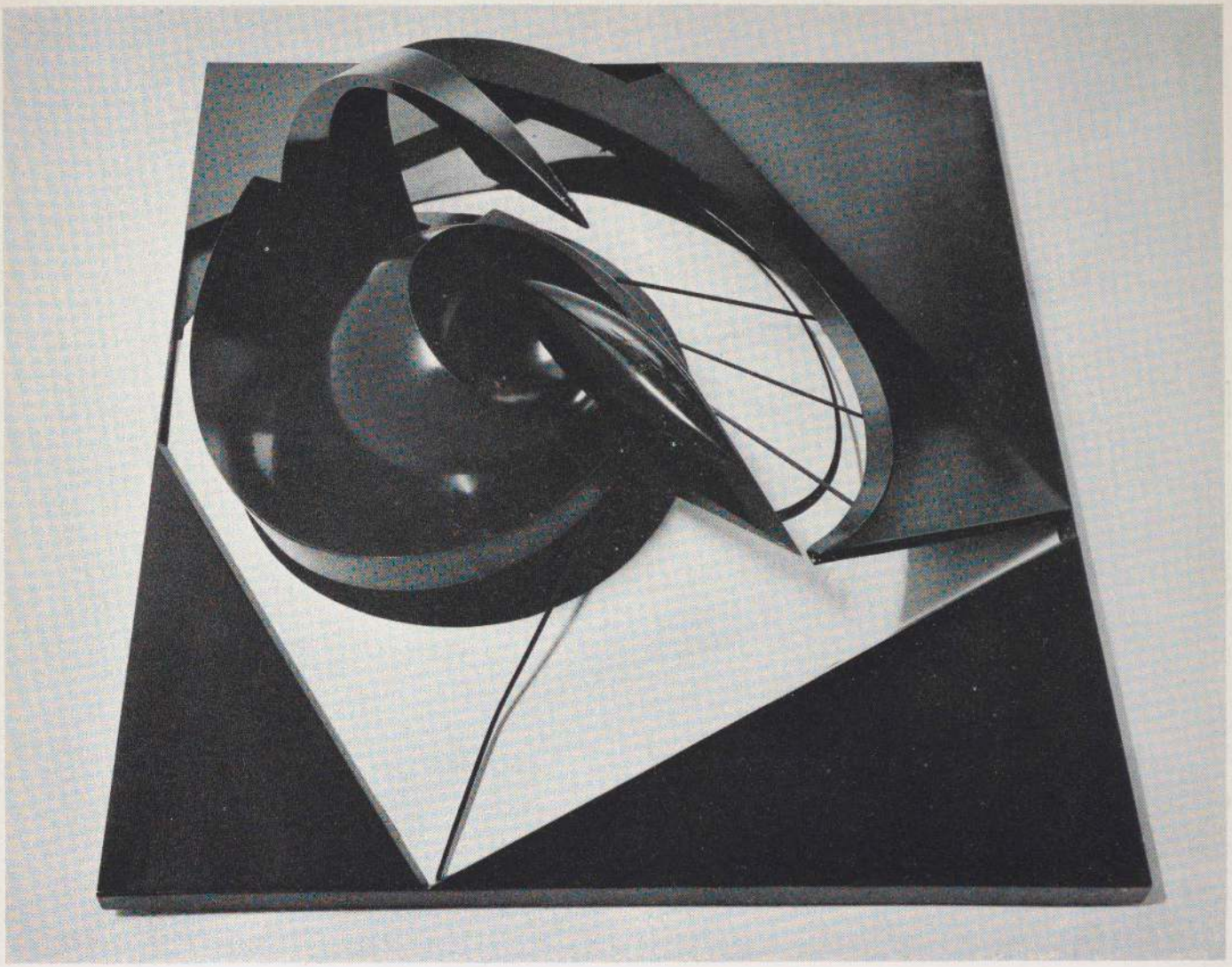
ABSTRACTION. 1927. (Two views.)
Brass, 23¾ x 24⅝".
Washington University, St. Louis.





CONSTRUCTION. 1932.
Tin, oxidized bronze on plastic base, 22 5/8 x 26 1/8".
Owned by the artist.

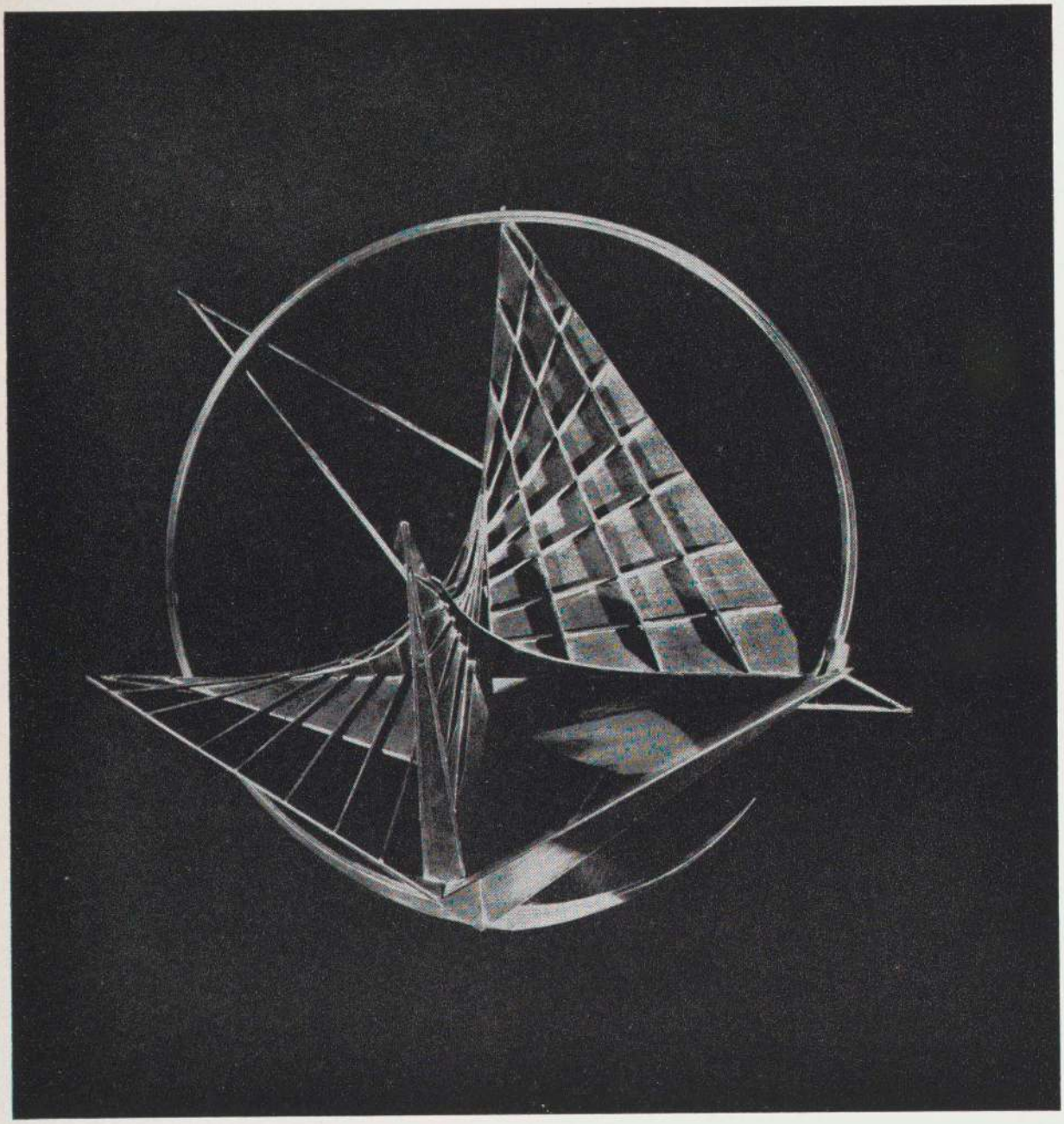


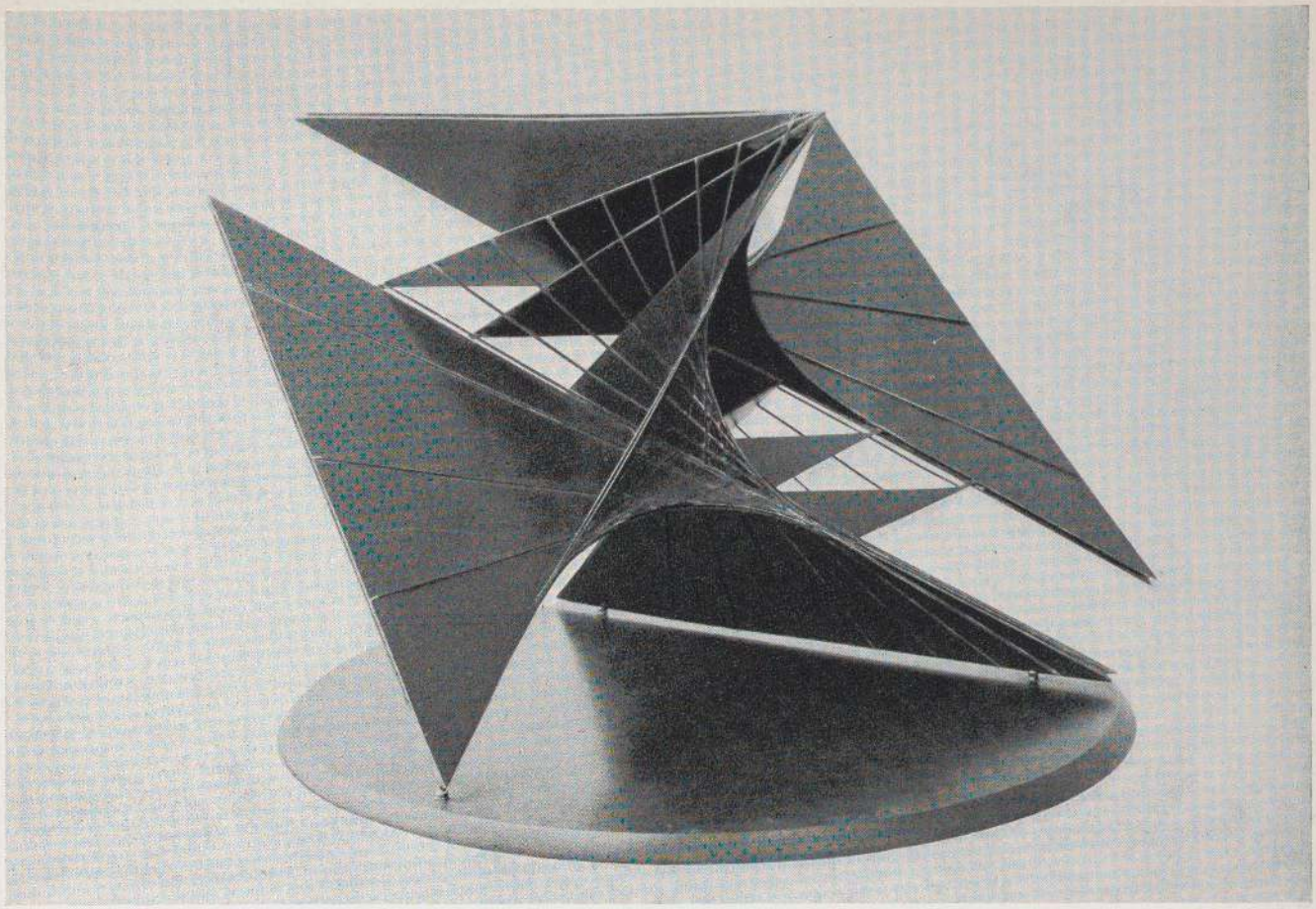


PROJECTION INTO SPACE. 1938.
Tin and oxidized brass on plastic, 27⅞ x 31⅞".
Owned by the artist.

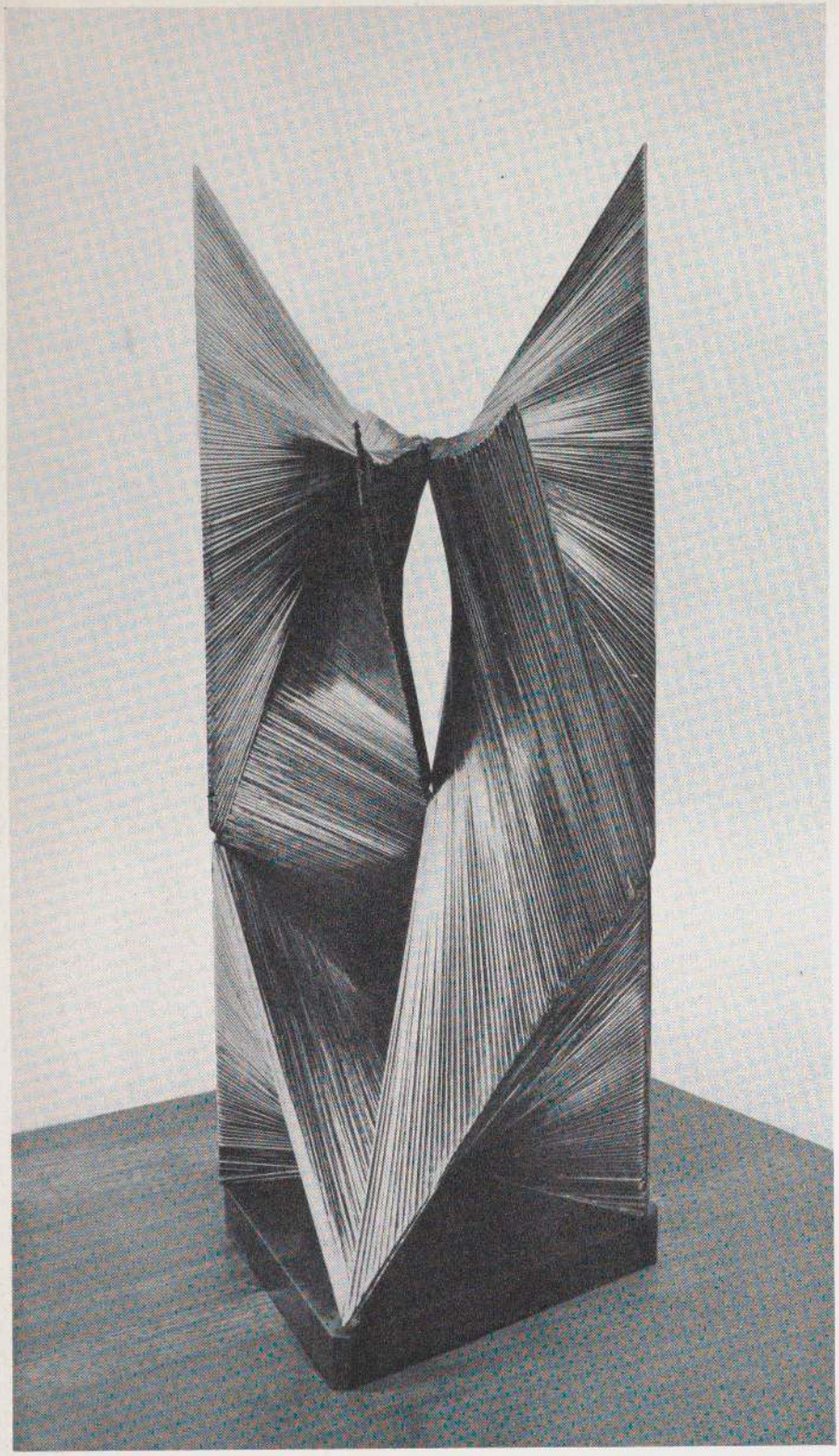
CONSTRUCTION FOR AN AIRPORT. 1934.
Brass and crystal on marble base, 30⅞" high.
Owned by the artist.

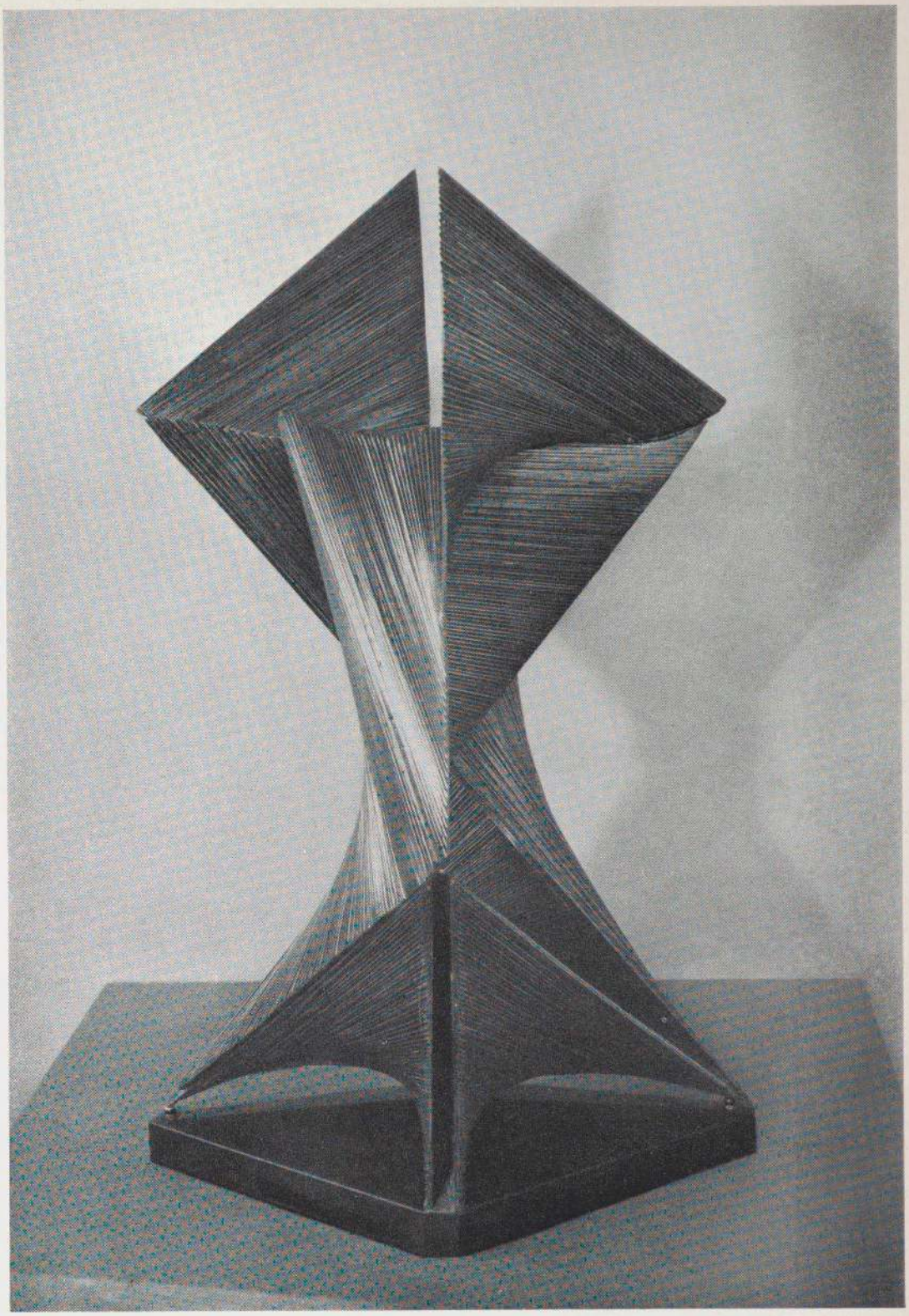
CONSTRUCTION. 1935.
Oxidized brass on plastic, 27⅞ x 25⅛".
Owned by the artist.





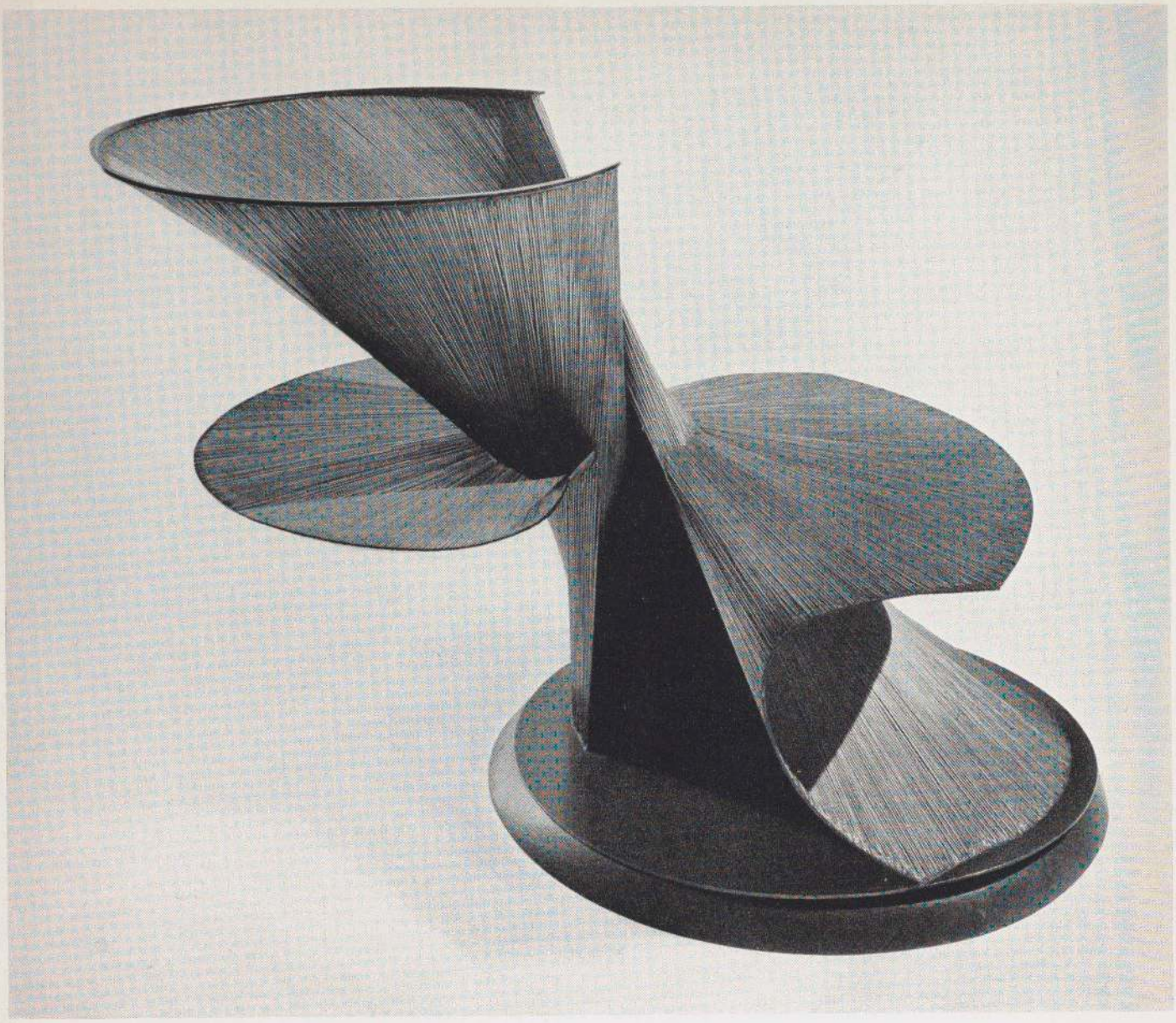
CONSTRUCTION FOR AN AIRPORT. 1937.
Bronze, tin and oxidized brass, 32" wide.
Owned by the artist.



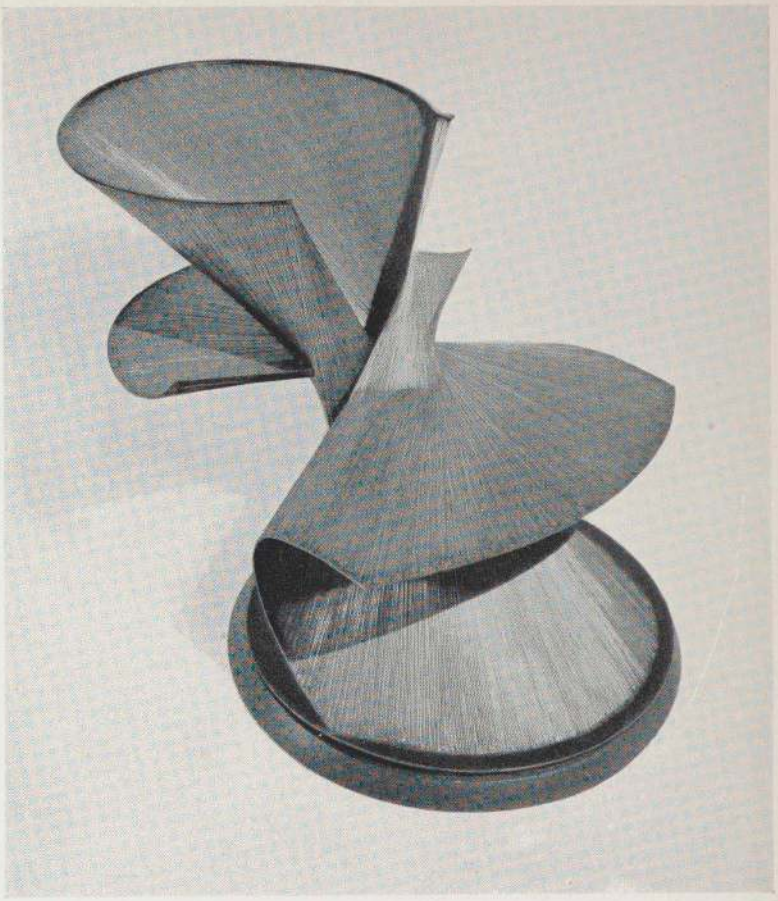


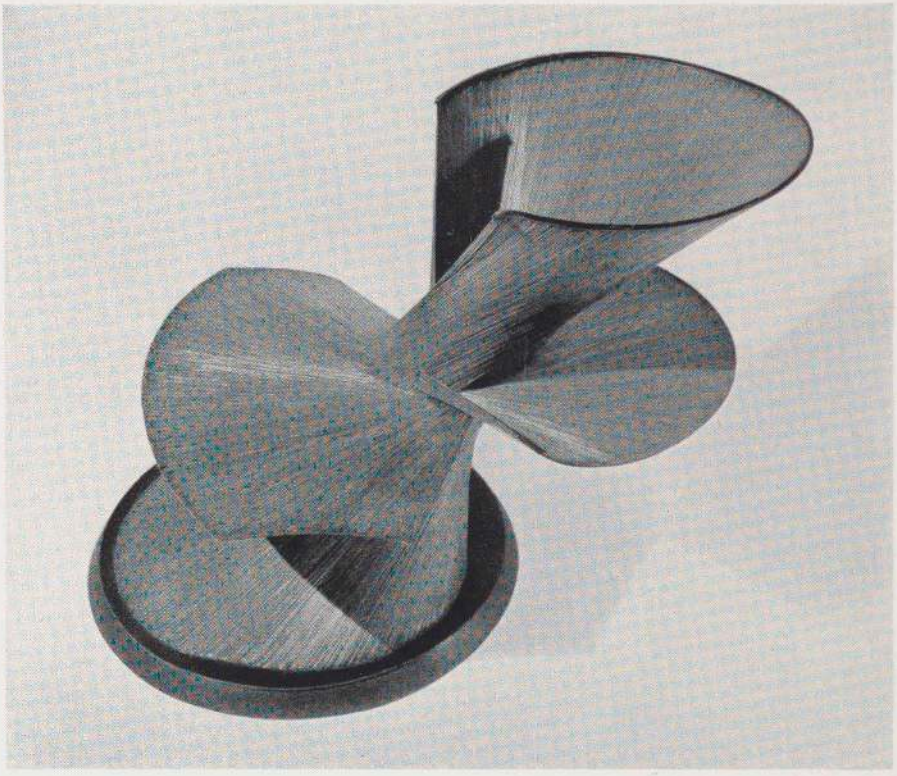
DEVELOPABLE SURFACE. 1938. (Two views.)
Oxidized bronze on slate base, 25½" high.
Owned by the artist.

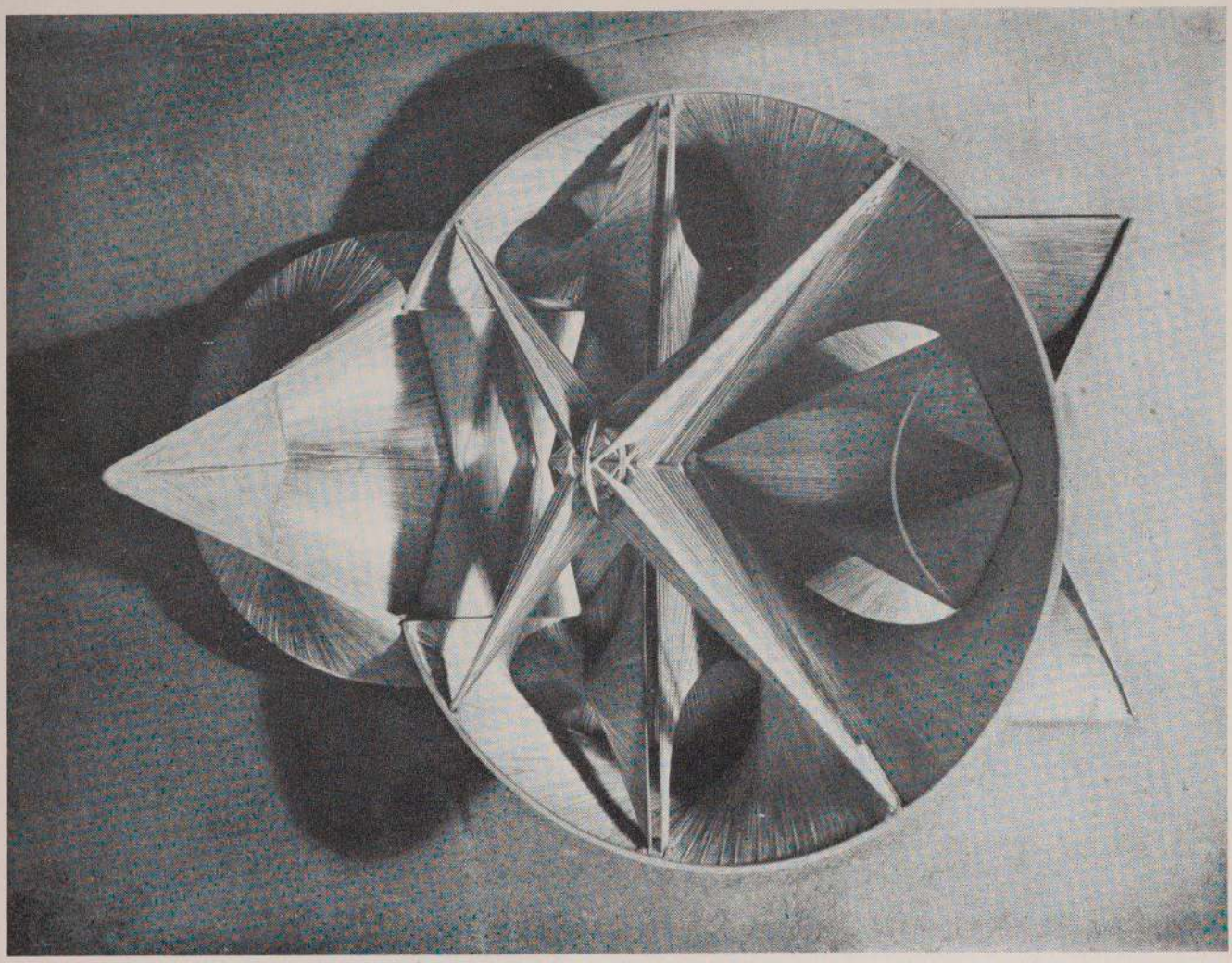
PROJECTION INTO SPACE. 1938-39. (Four views.)
Bronze, oxidized brass and black marble base, 19¼" high.
Owned by the artist.



DEVELOPABLE COLUMN. 1942. (Three views.)
Oxidized tin on brass, 20¾" high.
Owned by the artist.

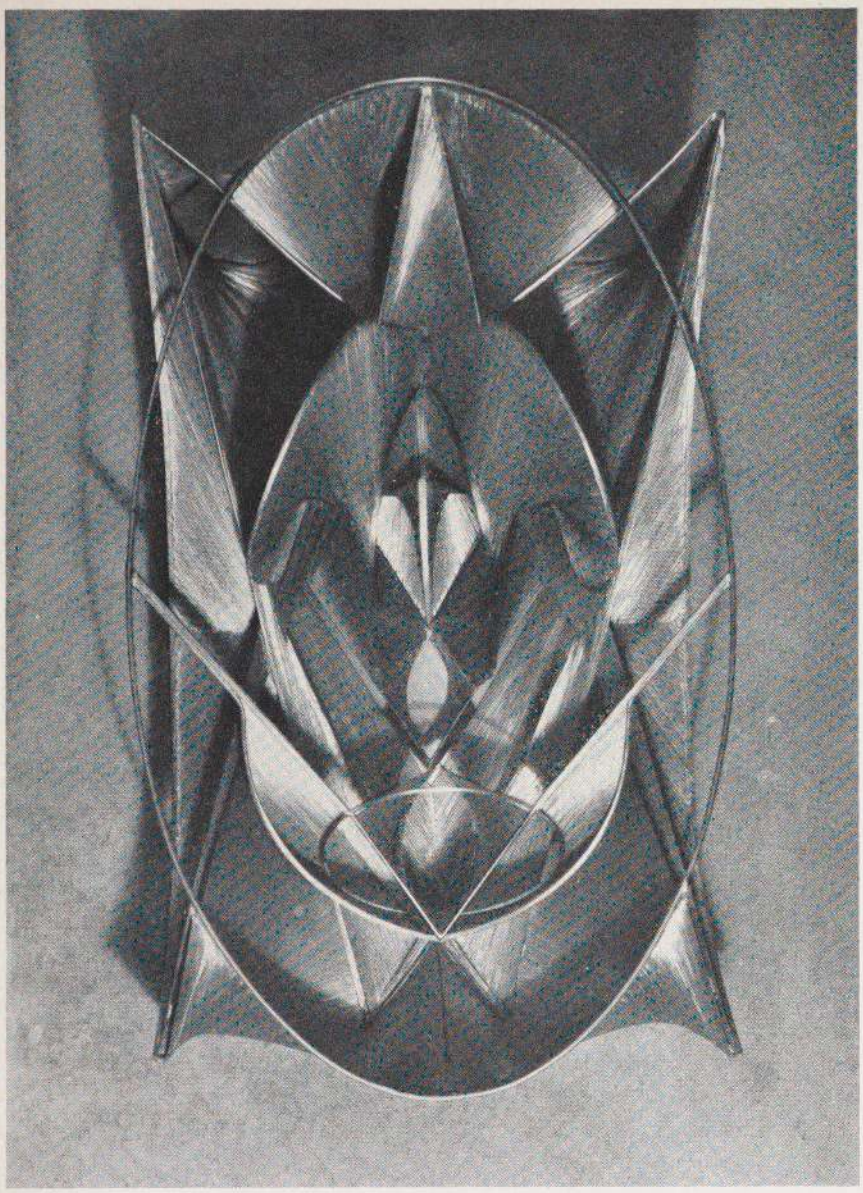




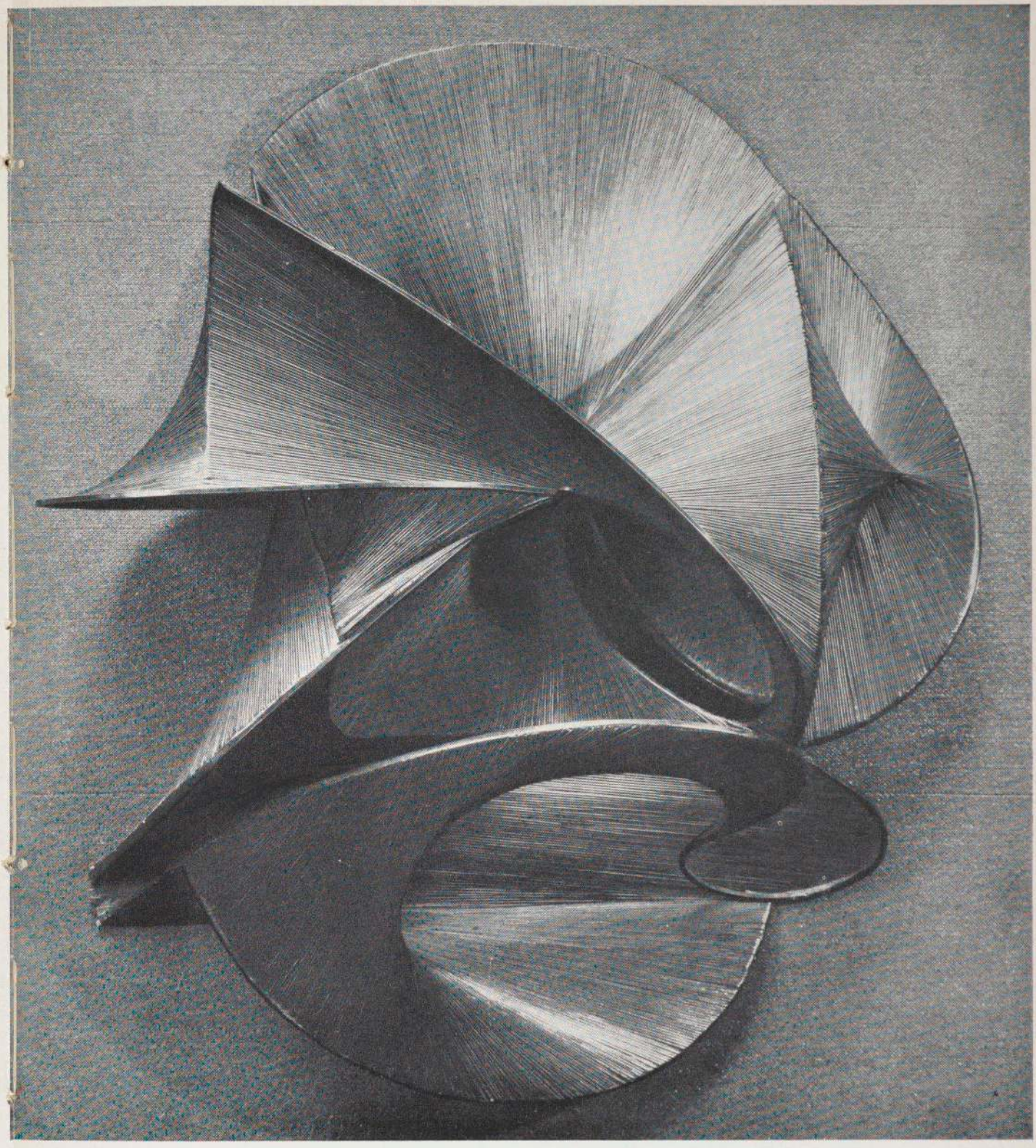


FRESCO. 1944.
Brass and oxidized tin, 20¾ x 28".
Owned by the artist.

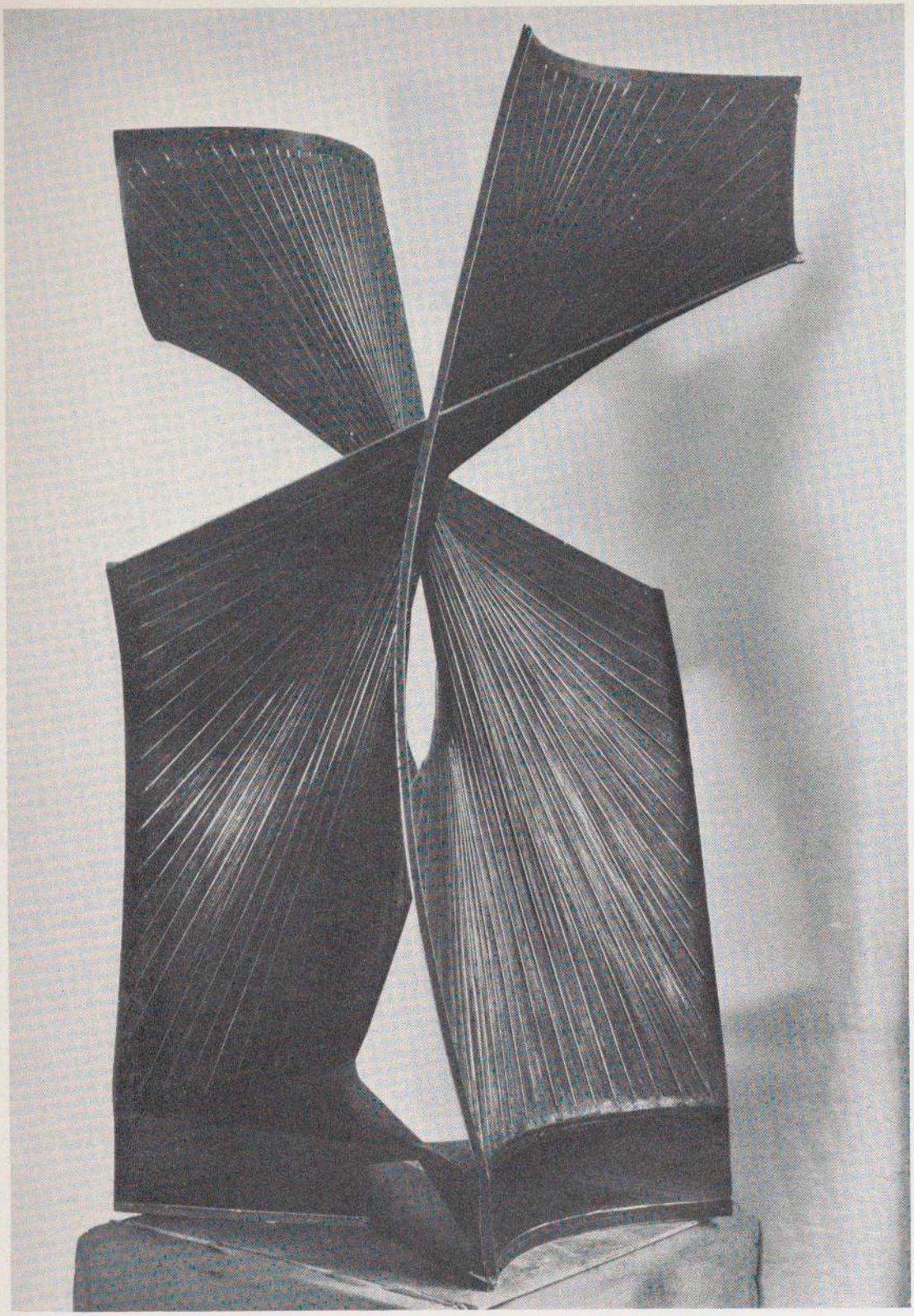
SPIRAL CONSTRUCTION. 1944.
Brass, oxidized tin on tin base, 20½" high.
Owned by the artist. ¶

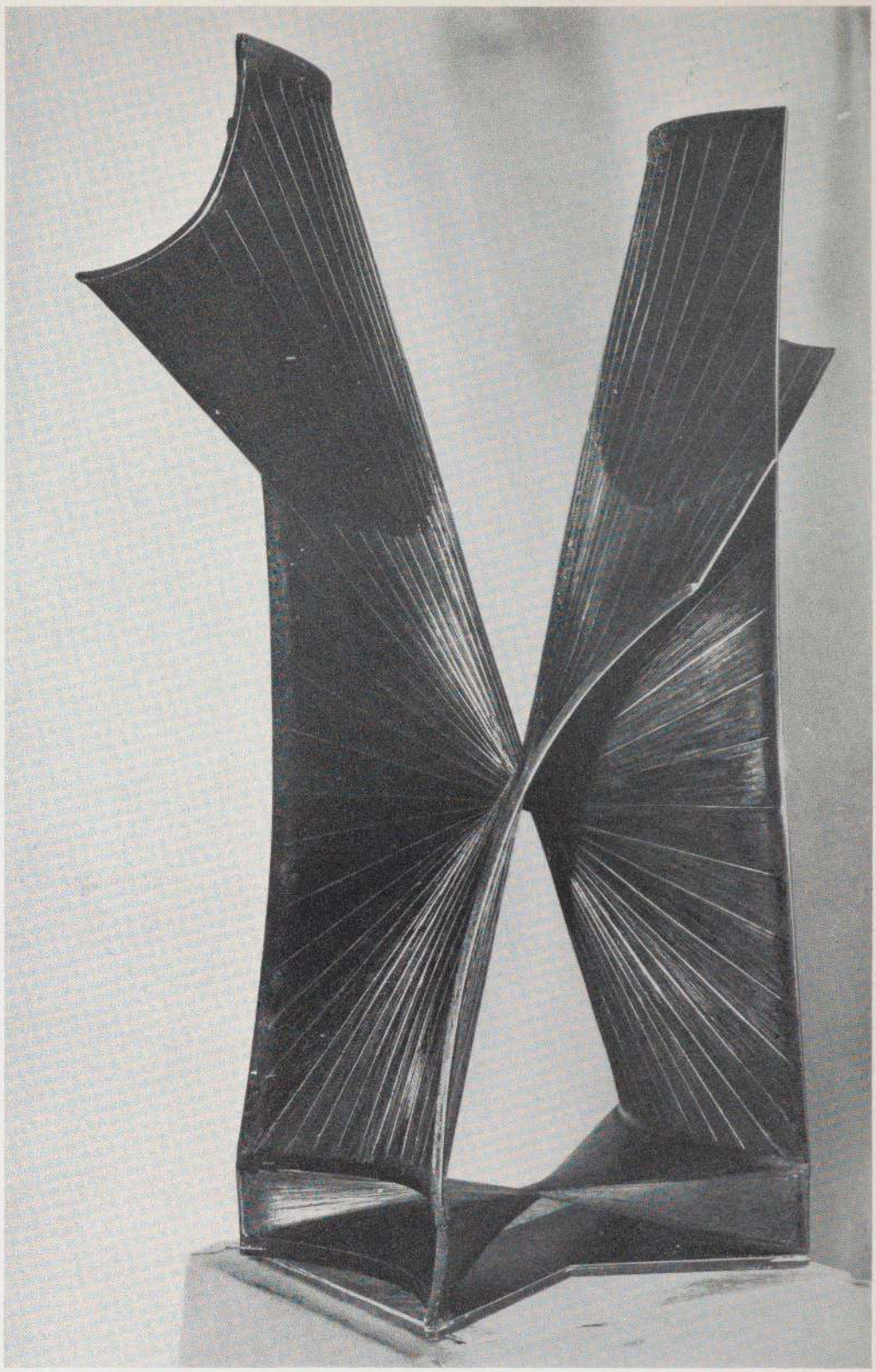


OVAL FRESCO. 1945.
Bronze and oxidized tin, 31½ x 18¼".
Owned by the artist.

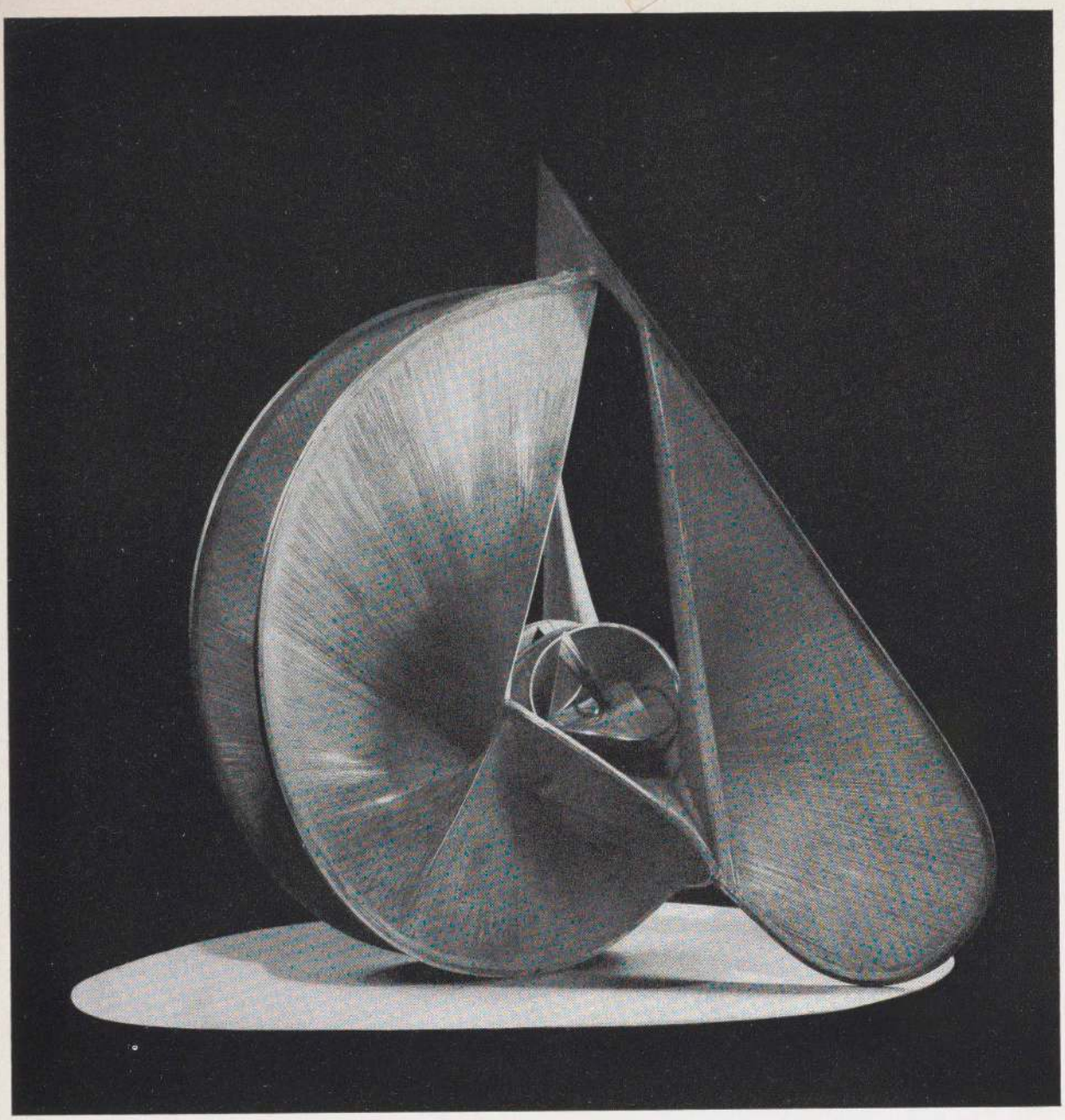


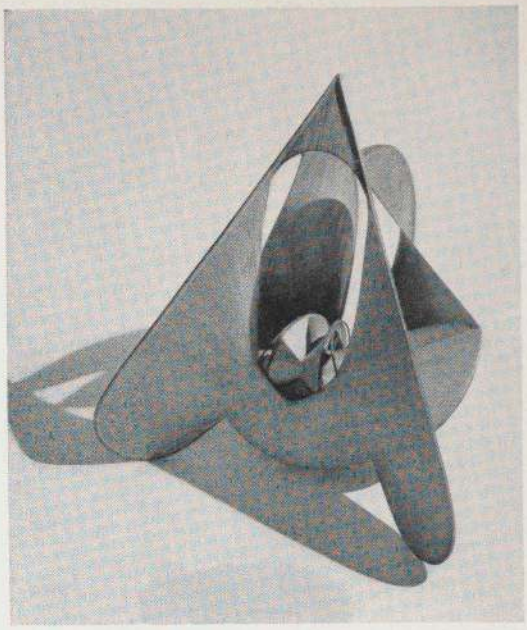
DYNAMIC CONSTRUCTION. 1947.
Oxidized tin on masonite base, 38 x 34¼".
Owned by the artist.

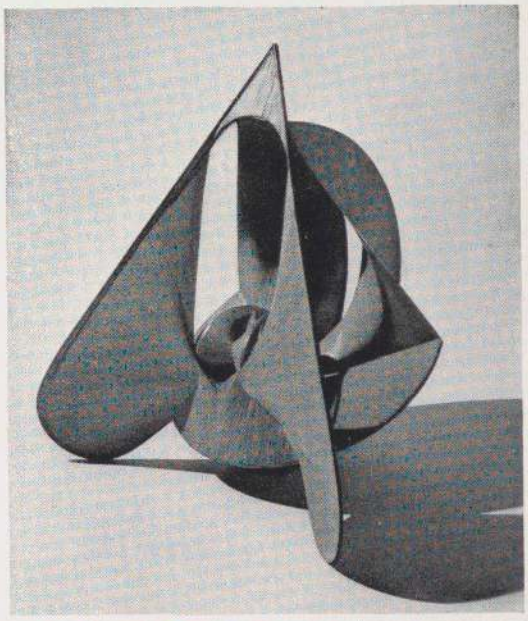


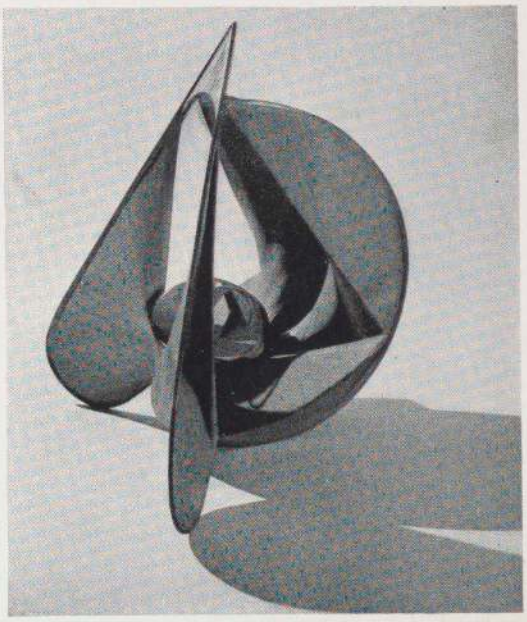


DEVELOPABLE COLUMN OF VICTORY. 1946. (Two views.)
Brass and oxidized tin, 41" high.
Owned by the artist.









WORLD CONSTRUCTION. 1947. (Four views.)
Brass and oxidized tin, 28" high.
Owned by the artist.

Catalog of the Pevsner Exhibition

A star preceding the title indicates that the work is illustrated. In the case of free-standing sculpture, the largest dimension is given; in other cases, height precedes width.

*Abstract Forms. 1913. Encaustic, 17¼ x 13½". The Museum of Modern Art, New York, gift of the artist. *Ill. p. 53.*

*Bust. 1924-25? Metal and celluloid, 20⅞ x 23⅜". The Museum of Modern Art, New York. *Ill. p. 60.*

*Portrait of Marcel Duchamp. 1926. Celluloid on zinc, 37⅛ x 25⅝". Lent by the Société Anonyme, Yale University. *Ill. p. 59.*

*Abstraction, 1927. Brass, 23¾ x 24⅝". Lent by Washington University, St. Louis. Mo. *Ill. p. 62.*

*Dancer. 1927-29. Brass and celluloid, 31¼" high. Lent by the Société Anonyme, Yale University. *Ill. p. 61.*

*Construction. 1932. Tin, oxidized bronze on plastic base, 22⅝ x 26⅛". Lent by the artist. *Ill. p. 63.*

Construction. 1933. Brass, oxidized tin and baccarat crystal on plastic base, 24¾" high. Lent by the artist.

Construction. 1935. Oxidized tin, silver, ivory and plastic, 23¾ x 15¾". Lent by the artist.

*Construction. 1935. Oxidized brass on plastic, 27⅞ x 25⅛". Lent by the artist. *Ill. p. 66.*

*Construction for an Airport. 1937. Bronze, tin and oxidized brass, 32" wide. Lent by the artist. *Ill. p. 67.*

*Projection into Space. 1938. Tin and oxidized brass on plastic, 27⅞ x 31⅞". Lent by the artist. *Ill. p. 65.*

*Developable Surface. 1938. Oxidized bronze on slate base, 25½" high. Lent by the artist. *Ill. pp. 68, 69.*

*Projection into Space. 1938-39. Bronze, oxidized brass and black marble base, 19¼" high. Lent by the artist *Ill. pp. 70, 71.*

*Developable Column. 1942. Oxidized tin on brass, 20¾" high. Lent by the artist. *Ill. pp. 72, 73.*

Fresco. 1933-44. Tin and brass, 45½ x 35½". Lent by the artist.

*Fresco. 1944. Brass and oxidized tin, 20¾ x 28". Lent by the artist. *Ill. p. 74.*

Construction. 1944. Oxidized tin and brass, 16⅛ x 28¾". Lent by the artist.

*Spiral Construction. 1944. Brass, oxidized tin on tin base, 20½" high. Lent by the artist. *Ill. p. 75.*

*Oval Fresco. 1945. Bronze and oxidized tin, 31½ x 18¼". Lent by the artist. *Ill. p. 76.*

*Developable Column of Victory. 1946. Brass and oxidized tin, 41" high. Lent by the artist. *Ill. pp. 78, 79.*

*World Construction. 1947. Brass and oxidized tin, 28" high. Lent by the artist. *Ill. pp. 80, 81.*

*Dynamic Construction. 1947. Oxidized tin on masonite base, 38 x 34¼". Lent by the artist. *Ill. p. 77.*

For explanations, and key to abbreviations used, see Gabo bibliography, p 48.

WRITINGS BY PEVSNER

† 1. Realistic Manifesto. (Written in collaboration with Naum Gabo) Moscow, 1920.
Printed as handbill for distribution at exhibition of 1920. No other publication of the complete text is known. An excerpt, translated into French, appears
* in Abstraction-Création, art non figuratif no1:27
* 1932; translated into English in Robert Goldwater and Marco Treves. Artists on art. p454-5 New York, Pantheon Books, 1945, and in bibl. 6; translated into German in Gabo bibl. 27. Briefer versions of the same excerpt are published in
* D'Aci i d'Alla 22:28 D 1934, and in Gabo bibl. 35. Other formulations of the same principles appear in bibl. 4,5,11,12 and in Gabo bibl. 29.

* 2. [Statement] il Abstraction-Création, art non figuratif no2:34-5 1933.

* 3. To Katherine S. Dreier. *In* Academy of Allied Arts, New York. Recollections on the art of Katherine S. Dreier. p10 New York, 1933.

* 4. Auszug aus einem Brief von Gabo und Pevsner. il Das Werk (Basel) 25no8:255 Ag 1938.

* 5. Extraits d'une Lettre de Gabo et Anton Pevsner. il Réalités Nouvelles no1:63-4 1947.

See also 12.

WRITINGS ABOUT PEVSNER

* 6. Art of This Century, New York. [Catalog] ed. by Peggy Guggenheim, p89,90,138 il por New York, 1942.
Exhibition catalog listing 3 works by Pevsner.

* 7. Basel. Kunsthalle. Konstruktivisten. 20p il 1937.
Exhibition catalog listing 7 works by Pevsner.

* 8. Beaumont, Cyril W. Complete book of ballets. il p972-3 London, Putnam, 1937.
Description of scenery designed by Gabo and Pevsner for *La Chatte.*

* 9. Bill, Max. Anton Pevsner zum 60. Geburtstag. il Werk 34hftl:sup3-4 Ja 1947.

10. Dreier, Katherine S. Modern Art. p70,74-5 il por New York, Société Anonyme, Museum of Modern Art, 1926.
Issued in connection with International Exhibition of Modern Art held at the Brooklyn Museum, N-D 1926.

*11. Drouin, René, Galerie, Paris. "Art concret." [16]p il 1945.
Exhibition catalog listing 3 works by Pevsner p[12], biographical note on Pevsner, p[16] and quotations from Realistic Manifesto, p[6-7]

*12. ——— Antoine Pevsner. [10]p plus 24 plates Paris, 1947.
Issued in connection with exhibition held Je 19-Jy 12, 1947. Extra leaf inserted listing 28 works by Pevsner. Tributes by Dreier, Duchamp, Le Corbusier, C. Giedion-Welcker, René Drouin; statement by Pevsner, and reformulation of principles of the Realistic Manifesto.

*13. Giedion-Welcker, Carola. Modern plastic art. p14,134-5,157 il Zürich, Girsberger, 1937.

*14. Hamilton, George Heard. Yale essays directions in modern sculpture. il Art News 45:32-3 Ap 1946.
Pevsner, p33.

*15. Jakovski, Anatole. Arp, Calder, Hélion, Pevsner, Séligmann. p33-40 Paris, J. Povolzky [n.d.]

16. Little Review Gallery, New York. [Exhibition of works by Gabo and Pevsner] 1926.
Exhibition catalog listing 7 works by Pevsner.

*17. New York. Museum of Modern Art. Cubism and abstract art [ed. by Alfred H. Barr, Jr.] passim il New York, 1936.
Lists 10 works by Pevsner. Includes bibliographical references and biographical notes.

*18. New York University. Museum of Living Art. A. E. Gallatin collection. p[40] New York, 1940.
Lists 1 drawing by Pevsner. The Gallatin collection is now in the Philadelphia Museum of Art.

*19. Propert, W. A. The Russian ballet, 1921-1929. p54-5 il London, John Lane, 1931.
Description of scenery designed by Gabo and Pevsner for *La Chatte.*

See also 23,26,31,34 of Gabo bibliography.

Nine thousand five hundred copies of this book have been printed in February, 1948, for the Trustees of The Museum of Modern Art by The Plantin Press, New York.