

dobrović
knifer
richter

juraj dobrović
julijs knifer
vjenceslav richter

yugoslavia

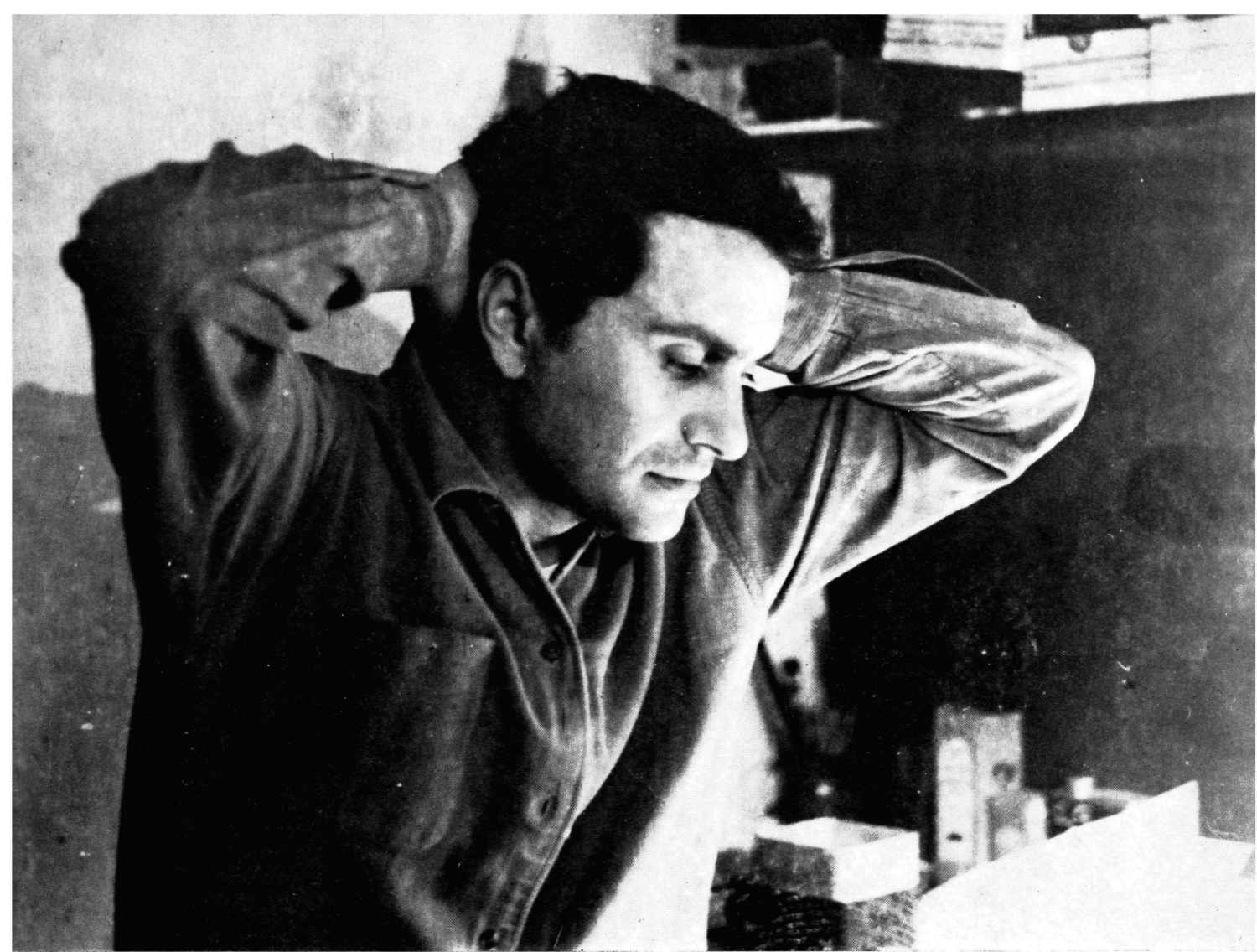
XII bienal de sao paulo
museu de arte moderna
sao paulo
october — november 1973

In 1961 the Gallery of Modern Art in Zagreb assembled the constructive avant-garde of that time from several European countries and the United States, at an exhibition called »New Tendencies«.

This exhibition, including a meeting of all participants, was the first of a number of manifestations organized in Zagreb (in 1961, 1963, 1965, 1968/69 and 1973) where the international movement has been initiated, bearing the name of this exhibition. This movement, later also known as Op-art in the United States, had at that time set a completely new access to the problems of art in a sense of recognizing the artist and his work of art with regard to their place and significance in the modern society. This novelty has been based on the research of objective scientific standpoints about the phenomena of art, thus abolishing the meaning of a work of art as unique, unrepeatable and fixed, and pointing out the completely visual sphere of perception in works of a mainly experimental nature, using modern industrial materials for their creation. These works, with the creative process being more important than the final result, change the relation between spectator and work. Instead of a passive acceptance of the realization in the sphere of emotional experience, there is now the tendency of active participating of the spectator in the creative act, which means, as the first experience shows, the achievement of some more objective indications as to the criteria which evaluate the size of esthetic information obtained from certain problems or plastic systems. Thus, the mythos about art being left to the privileged class disappears, and makes place for mass production accessible to everybody.

Three of the representatives of »New Tendencies«, namely Juraj Dobronić, Julije Knifer and Vjenceslav Richter, all of Zagreb, are just about to work out the mentioned systems of visual exploration in three different directions, pointing to the actuality of the said problem.

juraj dobrović



Dobrović is a creator to whom we shall be less and less able to give the classical name of artist. There are elements in his way of developing the idea of form, in his technology and in the essence of his constructions, which set him apart from art in the old sense of the word. His invention is not so closely linked with tradition as was always the case before; his technology does not rest on principles which were at the same time technical norms and a professional obligation; and the function of his works will less and less be the creation of spiritual capital. For all these reasons, Dobrović's work is not merely a particular aesthetic value nor is it merely a thing of financial value, but rather something which already has and will have more and more — social value. In other words, what Dobrović creates will be less and less individual property and more and more directed cultural action.

However, Dobrović's works are most often intended for individual spiritual and intellectual consumption. Sometimes the satisfaction we feel when contemplating one of his works is due to the fact that form originated in the work, which was preceded by a crystal clear conception or else the presentiment, that is, the incomplete perception, was firmly orientated. Other times our inner eye is pleased by the story of the form's genesis which is reflected in the composition of the construction: as the construction grew from nothing to completeness, it also ripened until it finally became capable of bearing the weight of the message which rises out of a meeting with the form. Other times again, the rhythm of one of his constructions might set our thoughts pulsating about the life of some image or evoke the rhythmic flashes of some cognition.

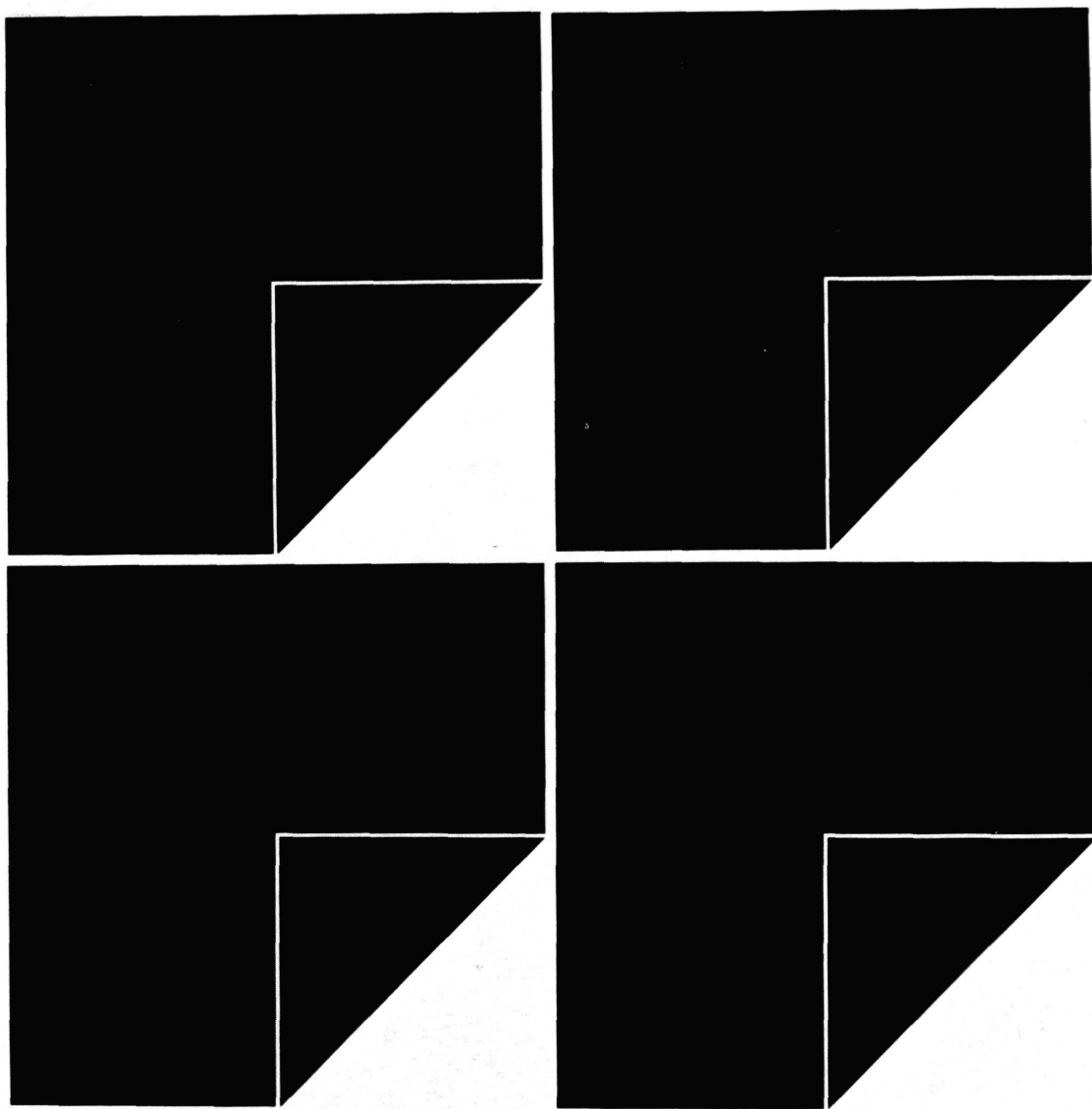
The aesthetic value's consummation, which is manifested in Dobrović's work, has never given rise to a process of destruction in our souls but rather has fertilised our thought, our emotion, our intellectual existence in general. But it must not be thought that Dobrović's works have always arisen out of a sterile, unreal inner situation where existing prevails exclusively. It must not be thought that in the forelives of Dobrović's works there are no unresolved contrasts or fatal conflicts. Either potential or real. But, in the fire of genesis forms are clarified and cleaned of the non-essential, unimportant and merely attendant elements. Because of this, these constructions can finally have effect clearly and genuinely. In the phenomenon of aesthetic existence there exist at least two subjects: the artist and the observer. In an attempt to establish how the majority of

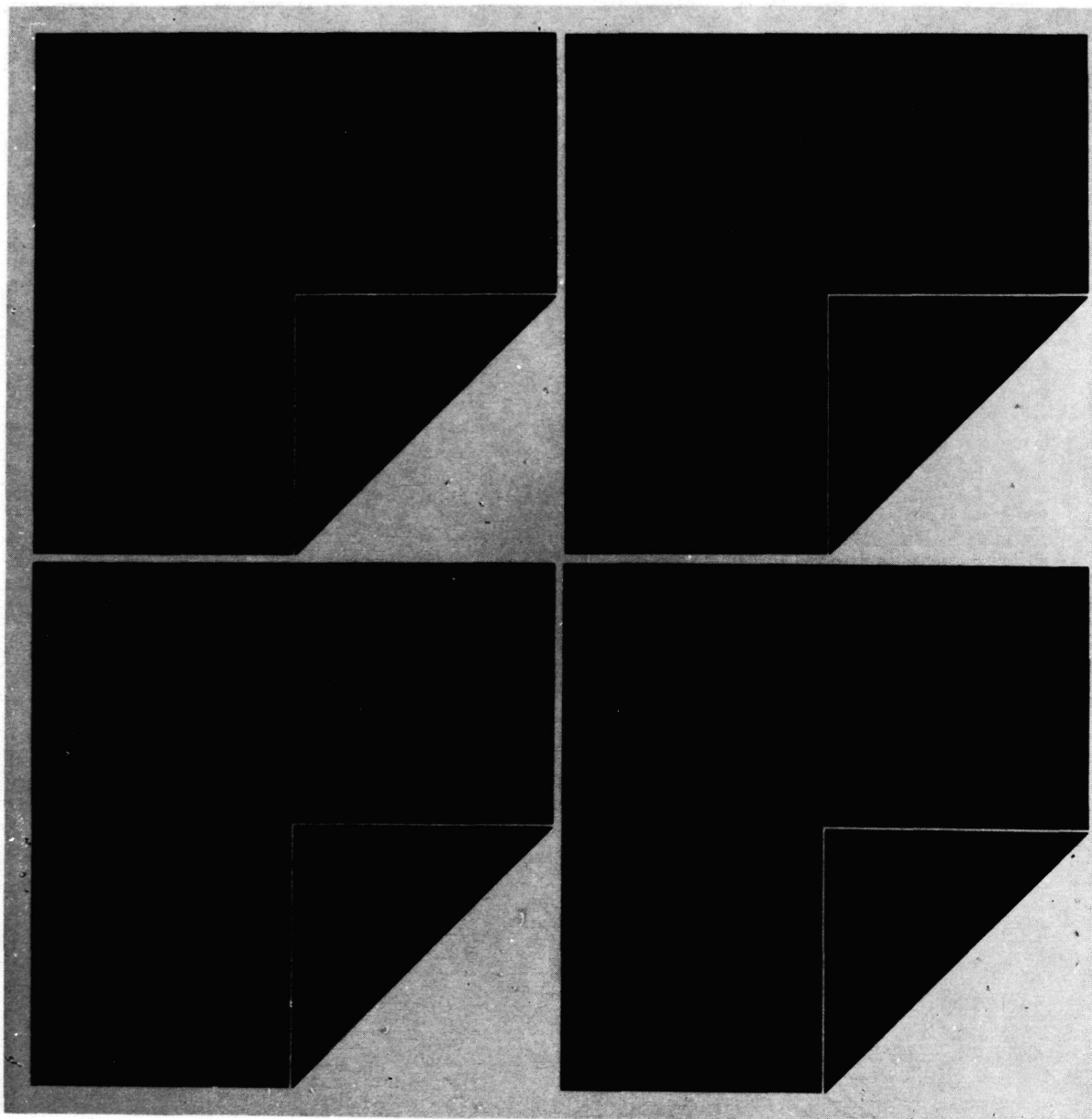
observers will define the potential social value of Dobrović's work, let us try to answer questions such as:

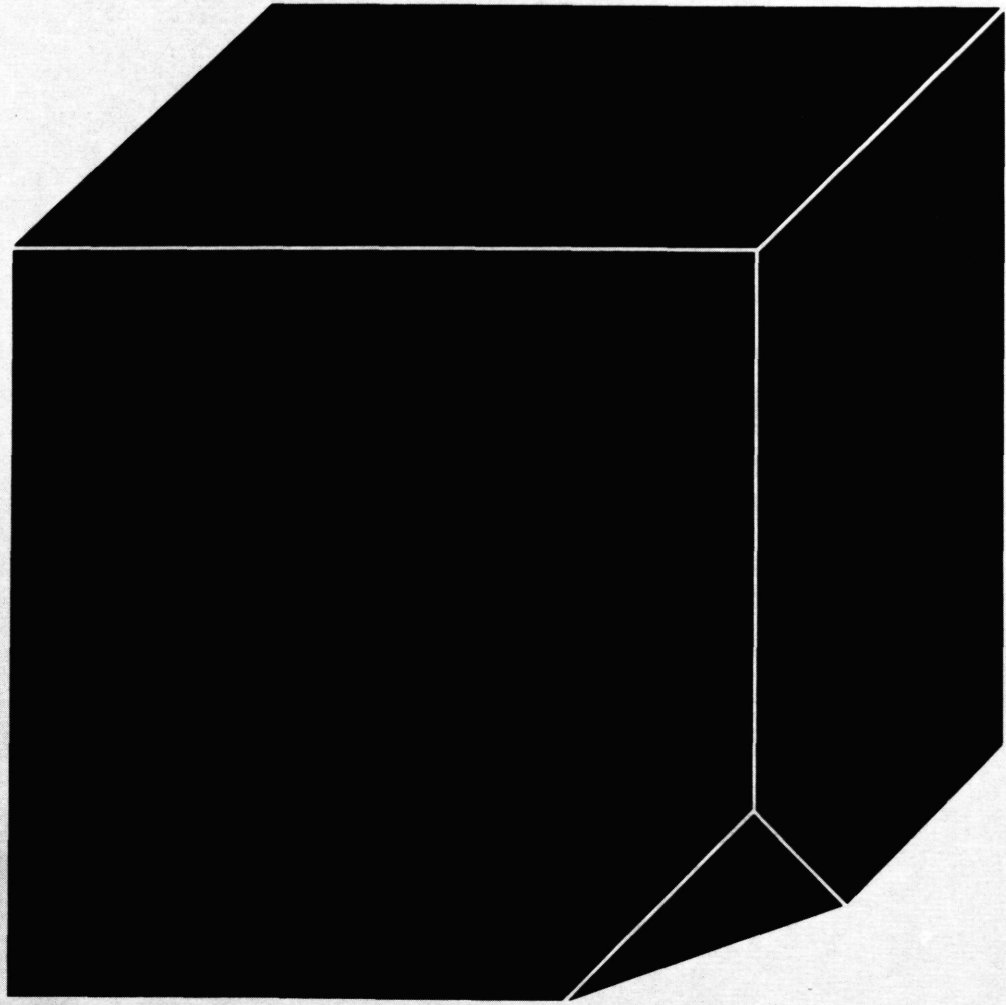
— do we feel attraction or repulsion before Dobrović's works? — what did we see in the artist's work and did we see anything at all in it or not? — if we were offered a Dobrović's work, would we accept it or refuse it? — in which of the following places do we picture Dobrović's works: in a public place, in a public building, in an open space, in a place where we work, in a place where we rest, in a place for recreation, in our home, or where? — how would we define the intention of Dobrović's works: that in a suitable place they would symbolise the technical spirit of our time?, that they should be a monument to something that has been or to something which is yet to be? — should one see in Dobrović's work a sign of man's potential for building or a similarity with the beauty of the tissue of natural materials and creatures? — are the forms of Dobrović's constructions a sign of action or withdrawn reflection? — should Dobrović's works be duplicated and sold cheaply or should one copy be made from precious material and kept in a safe place?

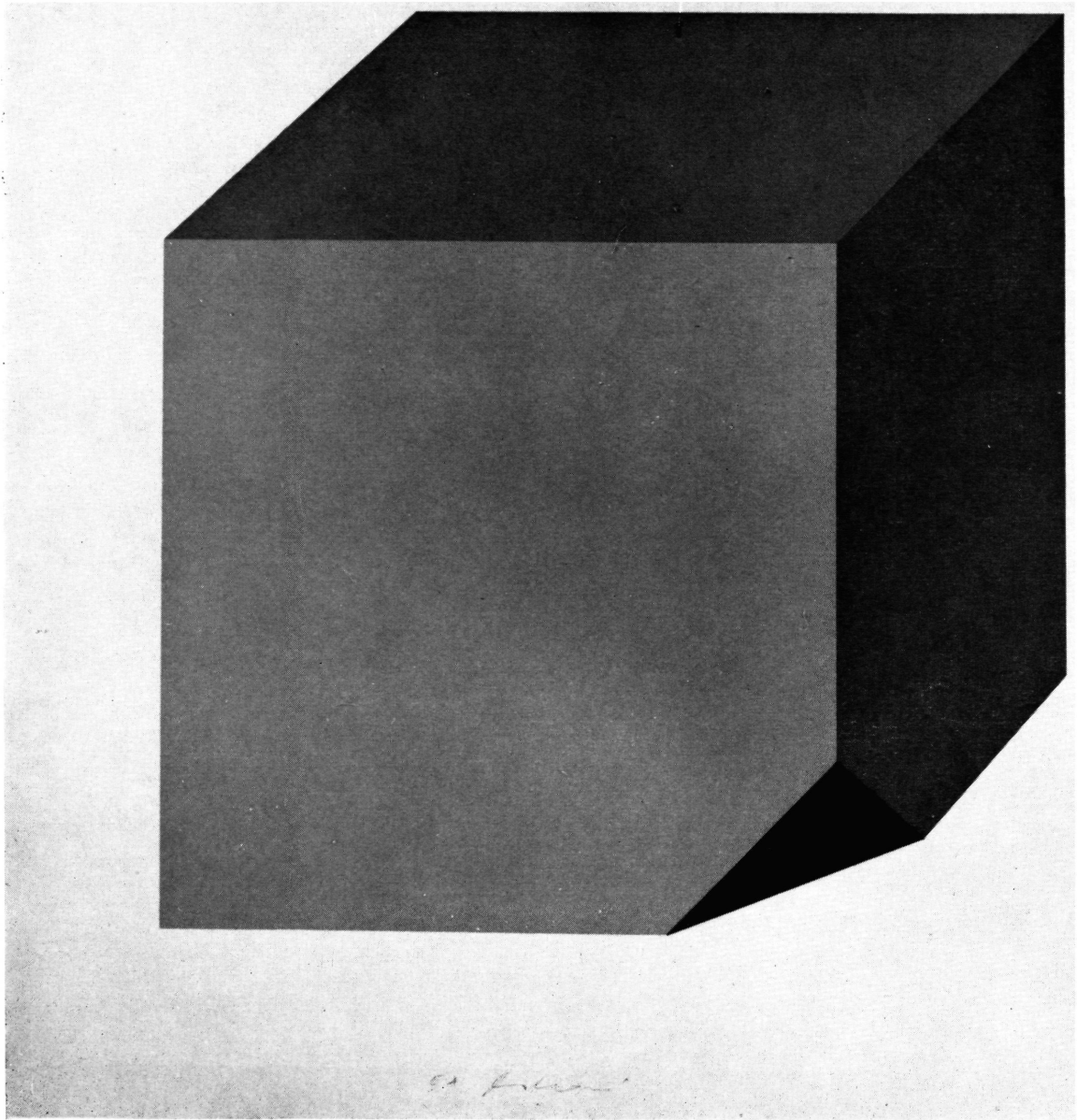
Finally we count all the answers and draw a line which connects all the points of the positions which are reflected in the answers. It could happen that before our eyes appears a picture of our being and the horizon of our existence. But certainly there will appear in their number the power of our weapons or the direction in which they are directed in our fight for survival.

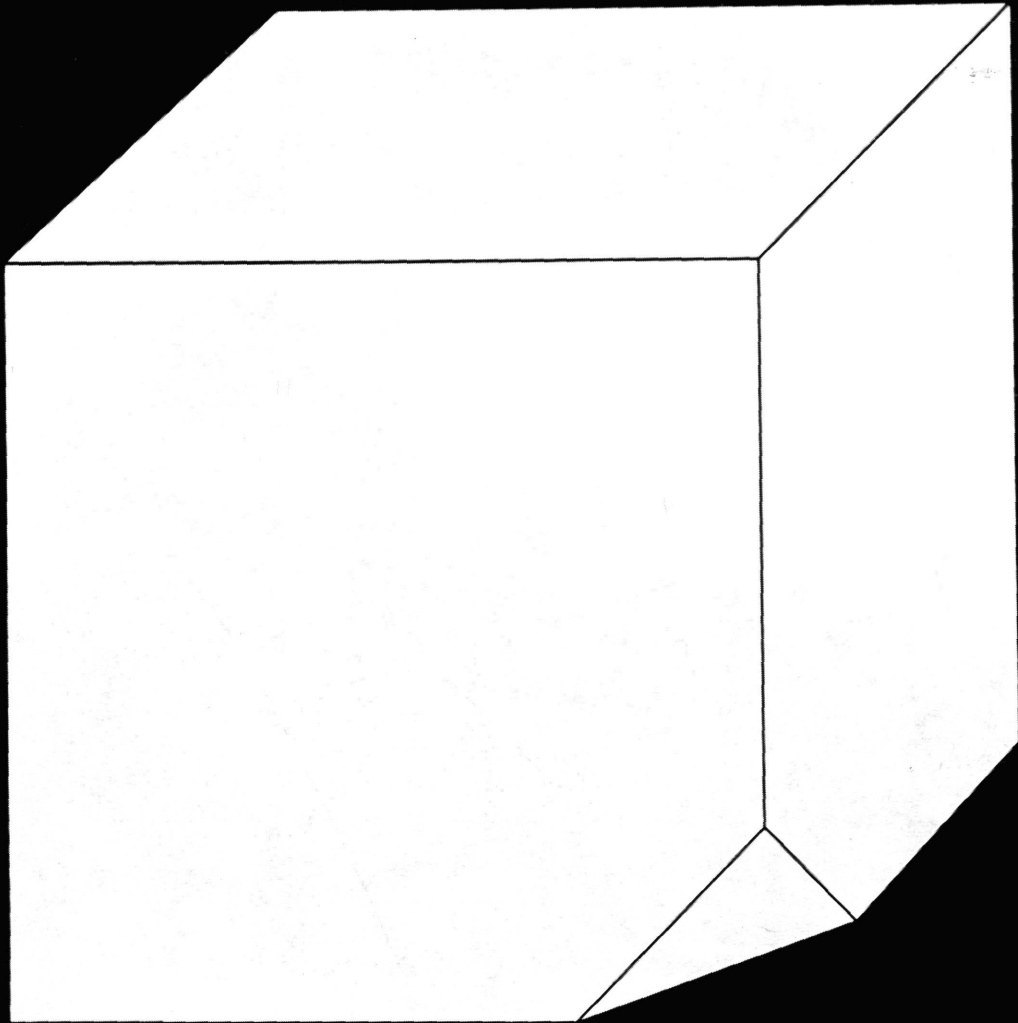
Radoslav Putar

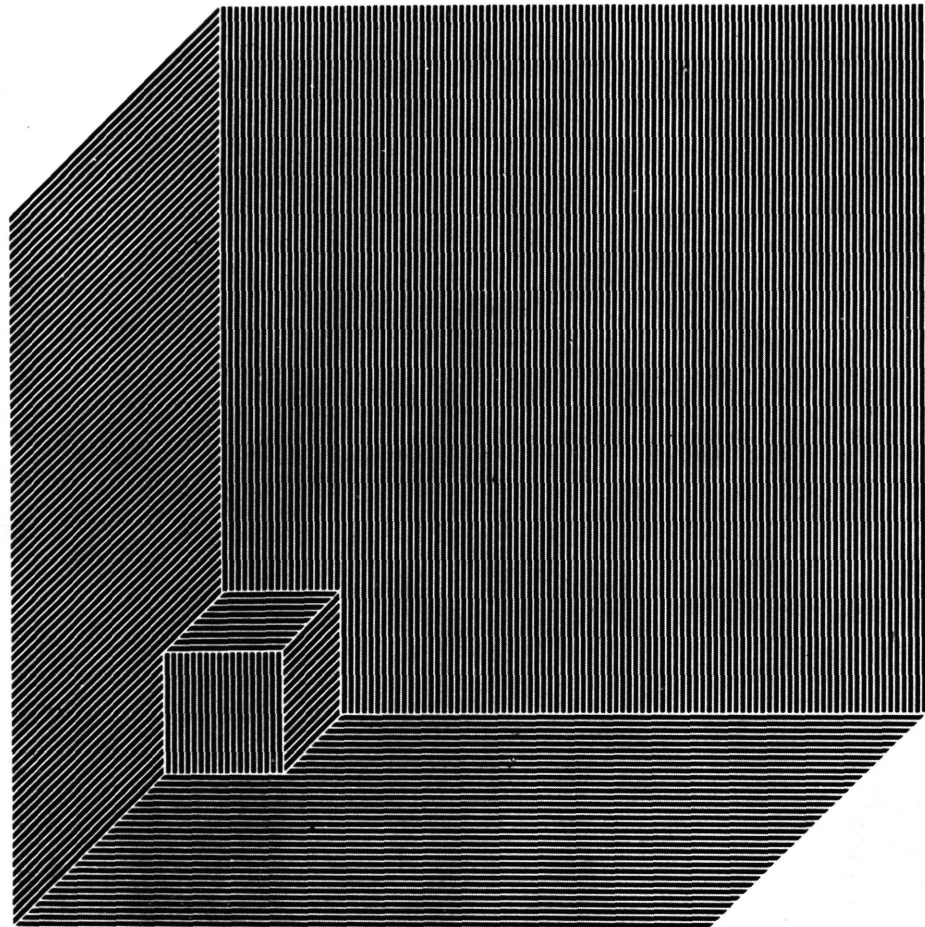












biographie

january 29, 1928, jelsa
studied at the school of economics and the faculty of
arts and sciences in zagreb.

one-man exhibitions

1962 zagreb, društvo arhitekata hrvatske
1965 zagreb, student centre gallery
1965 beograd, galerija kolarčevog univerziteta
1967 graz, forum stadtpark
1969 bergamo, studio 2 b
1969 milan, il parametro
1970 padova, galleria adelphi
1971 zagreb, gallery of contemporary art
1971 novi sad, tribina mladih
1971 rotterdam, boymans museum
1972 haarlem, frans hals museum
1972 split, gallery of art
1972 brescia, galleria sincron
1973 zagreb, galerija teatra gavella
1973 venice, galleria del cavallino
1973 milan, galleria zen

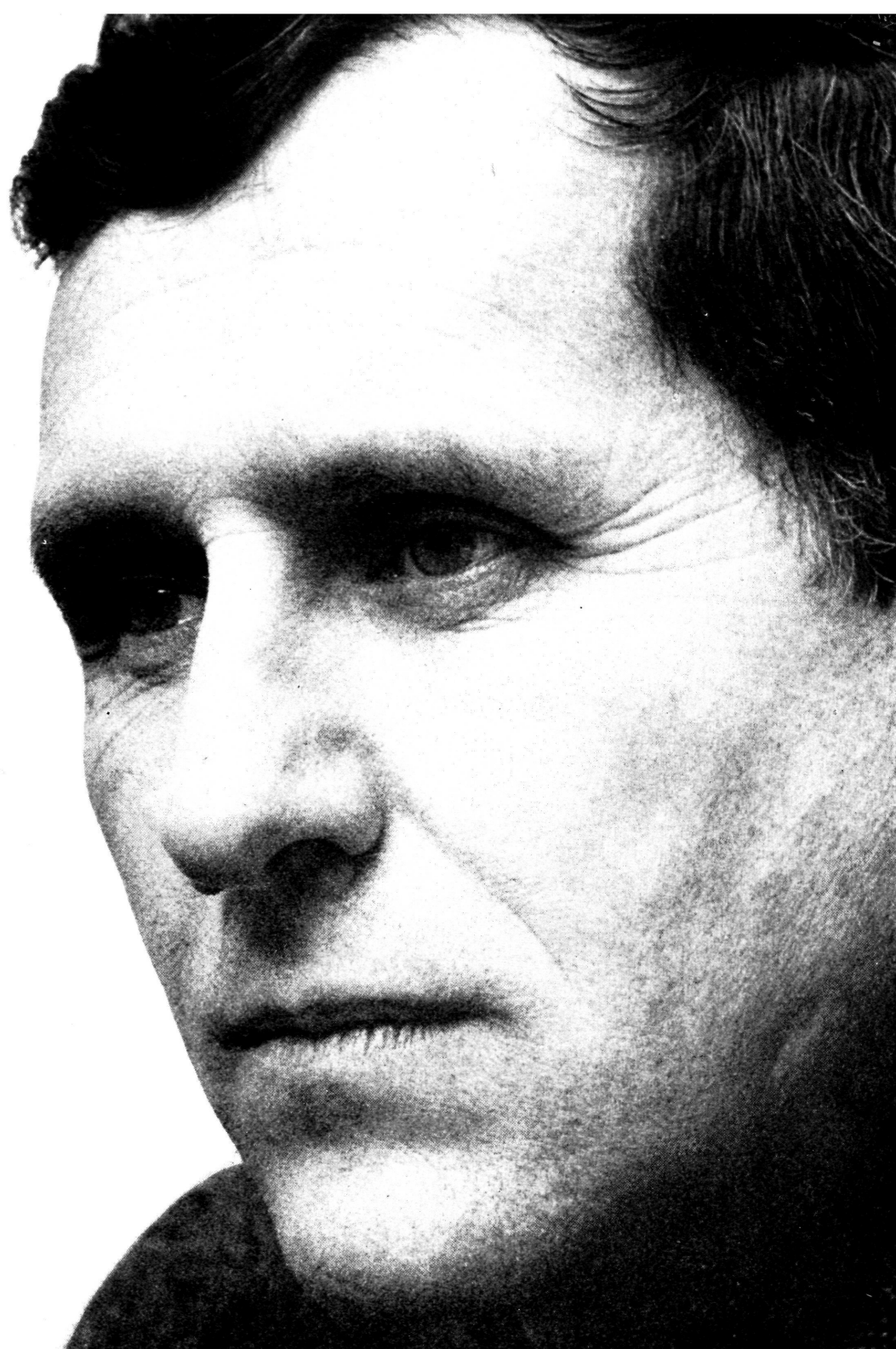
group and collective exhibitions

1963 zagreb (new tendencies 2), beograd
1965 zagreb (new tendencies 3)
1966 frankfurt/m, zagreb, ljubljana, beograd
1967 montreal, beograd, ljubljana (VII biennial)
1968 beograd, amsterdam, rome, milano, montevideo,
santiago, berlin, vienna, warsaw, aquila, bergamo,
zagreb, alassio, kassel
1969 ljubljana (VIII biennial), perth, melbourne, sidney,
zagreb (tendencies 4), civitanova, gelsenkirchen
1970 zagreb, beograd, bergamo, new york, chicago
1971 mainz, ludwigshafen, recklinghausen, oberhausen
1972 helsinør, venice (XXXVI biennial), zagreb
1973 rotterdam, zagreb (tendencies 5)
address: yugoslavia, zagreb, jurjevska 31.

catalogue

- 1 ČK 1, 1971
silk-screen print/paper 700 × 700 mm
- 2 ČK 2, 1971
silk-screen print/paper 700 × 700 mm
- 3 ČK 3, 1971
silk-screen print/paper 700 × 700 mm
- 4 KK, 1972
silk-screen print/paper 700 × 700 mm
- 5 KK 1, 1972
silk-screen print/paper 700 × 700 mm
- 6 KK 2, 1972
silk-screen print/paper 700 × 700 mm
- 7 KK 3, 1972
silk-screen print/paper 680 × 680 mm
- 8 KK 4, 1972
silk-screen print/paper 680 × 680 mm
- 9 KK 5, 1972
silk-screen print/paper 680 × 680 mm
- 10 KK 6, 1972
silk-screen print/paper 680 × 680 mm

julije knifer



Knifer has been constructing his system of meanders for a good thirteen years. Prototypes of their forms can be found even earlier in his artistic work. Perhaps even on those canvasses from the period immediately following his studies at the academy. The right-angular outlines and the interplay of shades of grey and black on a white plane are early signs of the development of a system of meanders. However, the plastic uniformity of Knifer's early painting did not originate merely from experiments with forms, nor was it the real basis of later exploration. The fundamental basis of the system of meanders in Knifer's works is to be found in the elemental constituents of his thinking. This thinking is determined by a selection of alternative decisions, which has always constituted the basis of the artist's constructions. In its upper layer, that which is nearer to the outward surface of the work, a certain hierarchy of decisions evolves, but even here these are the results of diametrically opposed forces, and these forces contain that part of Knifer's crystallised tragedy, the part which forms an essential element of the message which arises from the work as a whole. This binary quality in Knifer's thinking is probably an integral characteristic of his striving towards a finity — which is unobtainable. — Consequently, all his work as an artist conceals the universal tragedy of this kind of contemplative intensity and intellectual orientation, and this tragedy, cold, without pathos and relating only to

the intrinsic, is perceptible to the eye which is able to penetrate to the essence of the art form. At the same time, however, this is a complete and altogether coherent way of thinking which is in many ways relevant today and not only provides material to which we can pleasantly apply our discrimination, but also instigates the development of new ideas and concepts.

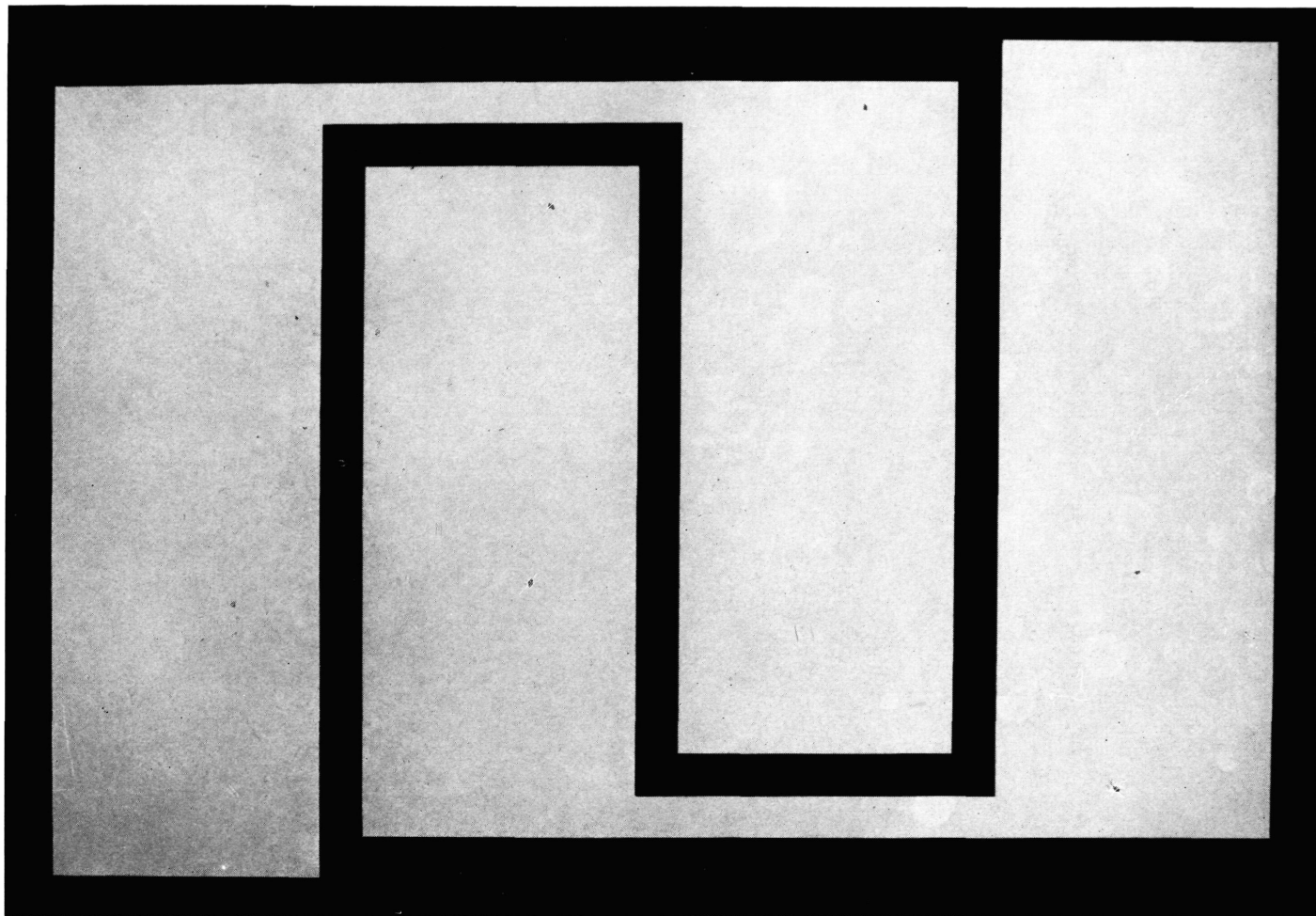
Poetical evocations exist in Knifer's art. It is absurd to maintain that in the world of geometry, with its infinite possibilities for conveying impression, there is no poetry. A poetic way of thinking and feeling is possible even within the framework of classical Euclidean geometry. Knifer's work is no exception to this rule; on the contrary, it presents a shining example of how the digital process of generating form can also be imbued with all this »stuff« which is the power of poetry. The inner eye which is adequately equipped with matrices of the possible forms of ideas will find in these meanders both an apodictic assertion and a sarcastic game; the mind which is not stiff and fettered by tradition will find suggestions of certain psychological atmospheres in

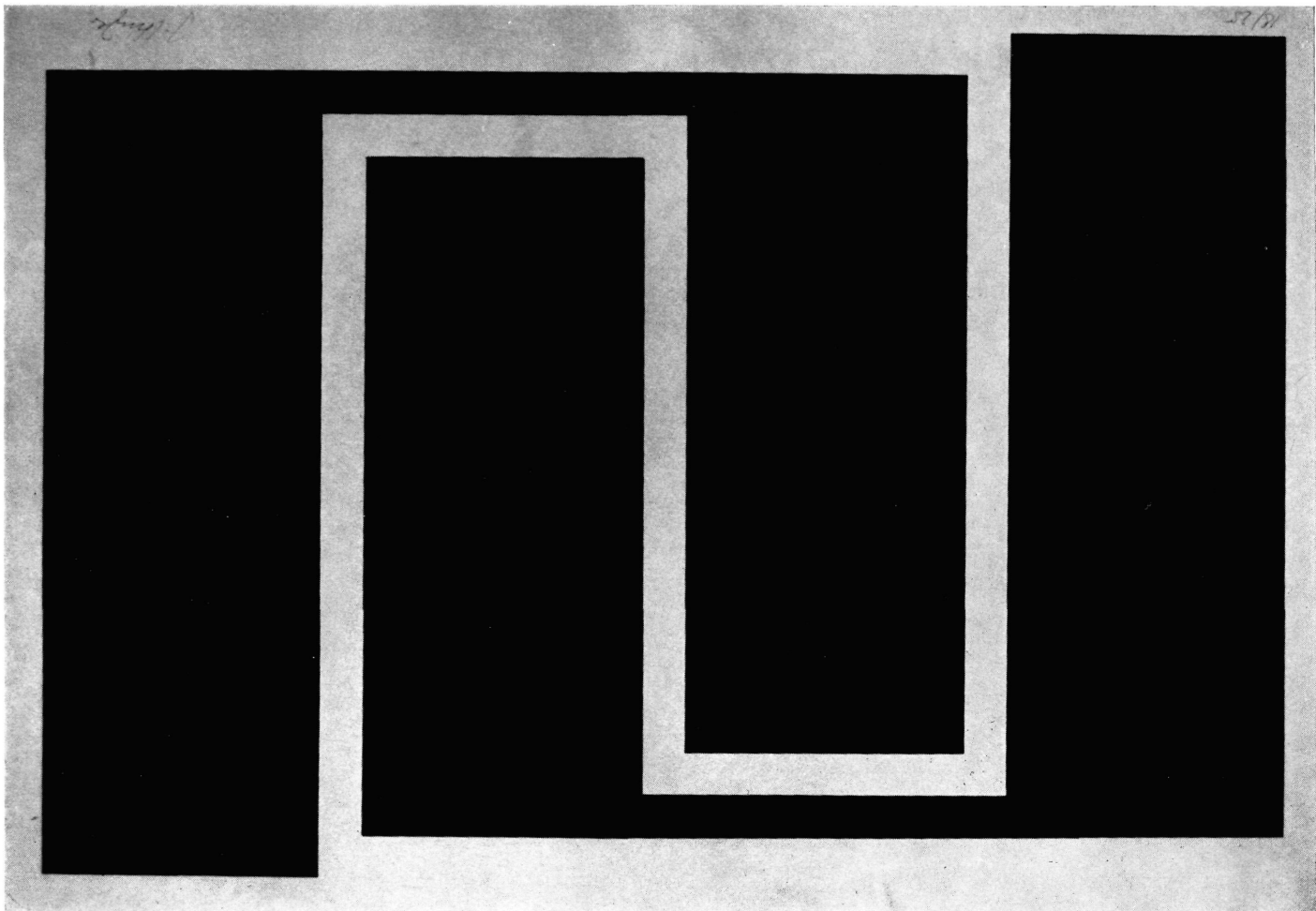
the virtual spaces which Knifer creates. What is more, the artist's very early creations, which show him to be almost a forecaster and precursor of later important trends, may also be thought of as a document of a thought process which itself bears the stamp of artistic creation.

However, experiment has shown how Knifer's meanders, or more exactly, how his system of meanders can take on the function of giving plastic information about some construction, complementing it and determining its boundaries. This proved to be so when the meanders were connected with an architectural element. That was one proof of how digital determination may be maintained and authenticated as a plastic practice. As far back as ten or more years ago that practice enabled the artist to prove by actual example that contemporary painting need not be limited to the one-dimensional plane. In his Zagreb studio G. Knifer exhibited two canvasses with meanders and joined them in a right-angled construction. That was in 1962. In his most recent works Knifer has shown that extreme, that is, diametric contrasts need not always be executed in the black-white relationship: nor need the negation of the colour's matter always be achieved by texture in which the tracks of the process are wiped out.

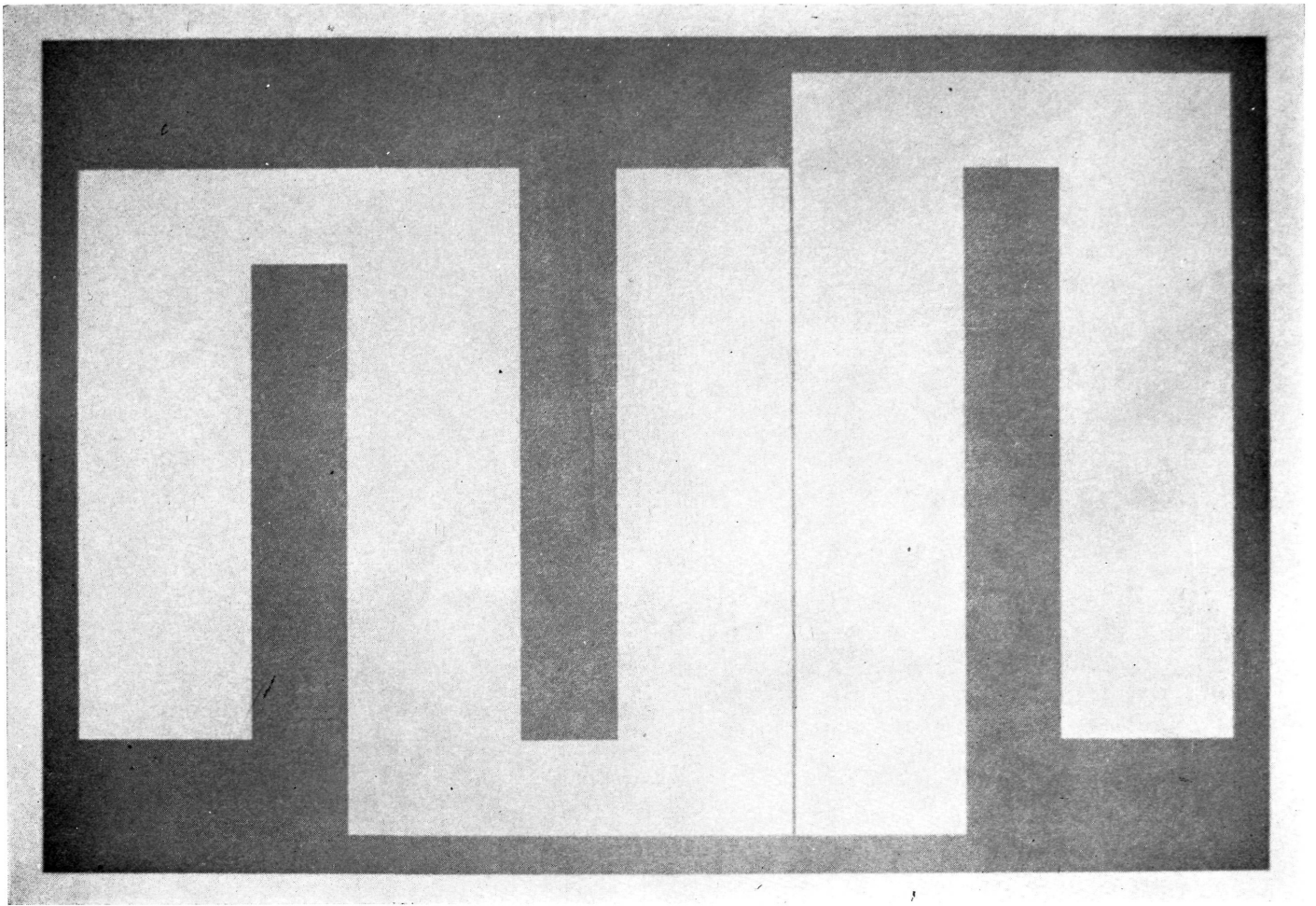
The relevance of Knifer's work, therefore, is obvious. His painting has not lagged behind in the normatives of the painting craft. His projection of the plastic idea is not enslaved by the visual. His methodology is open to all new techniques. His works may be included in our projections of the future. The value of his works is not spiritual capital. It is a thought process. Action.

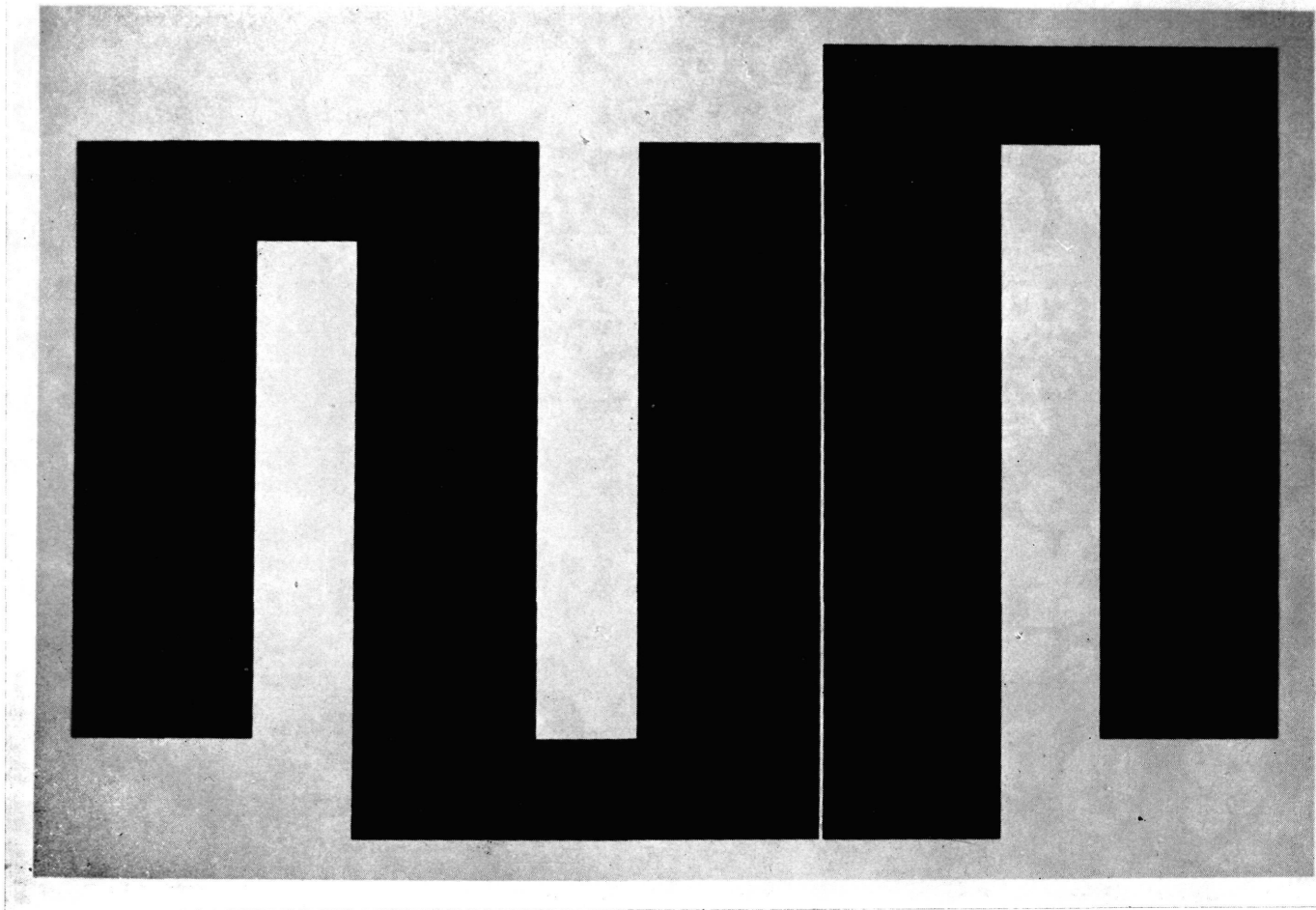
Radoslav Putar

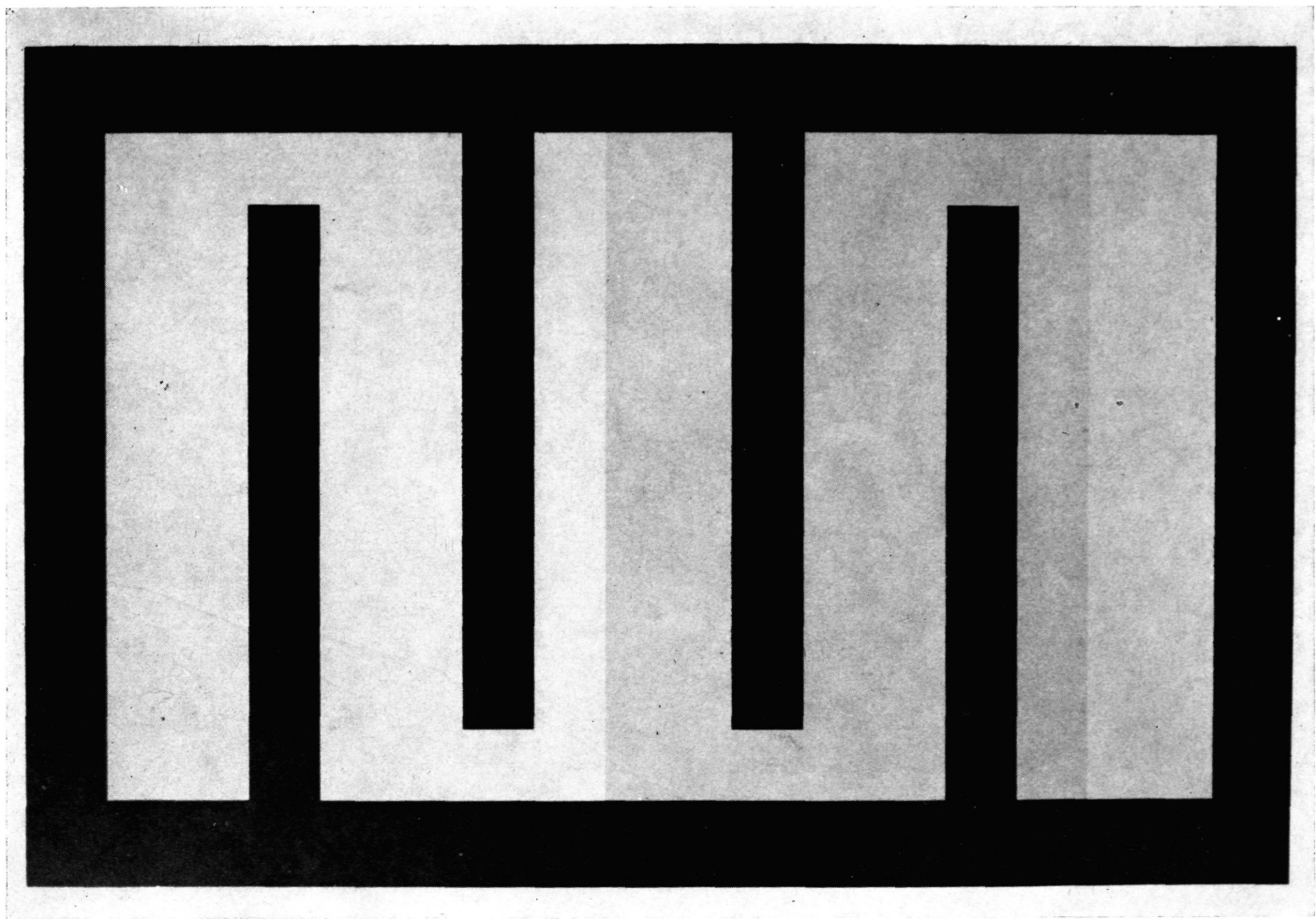


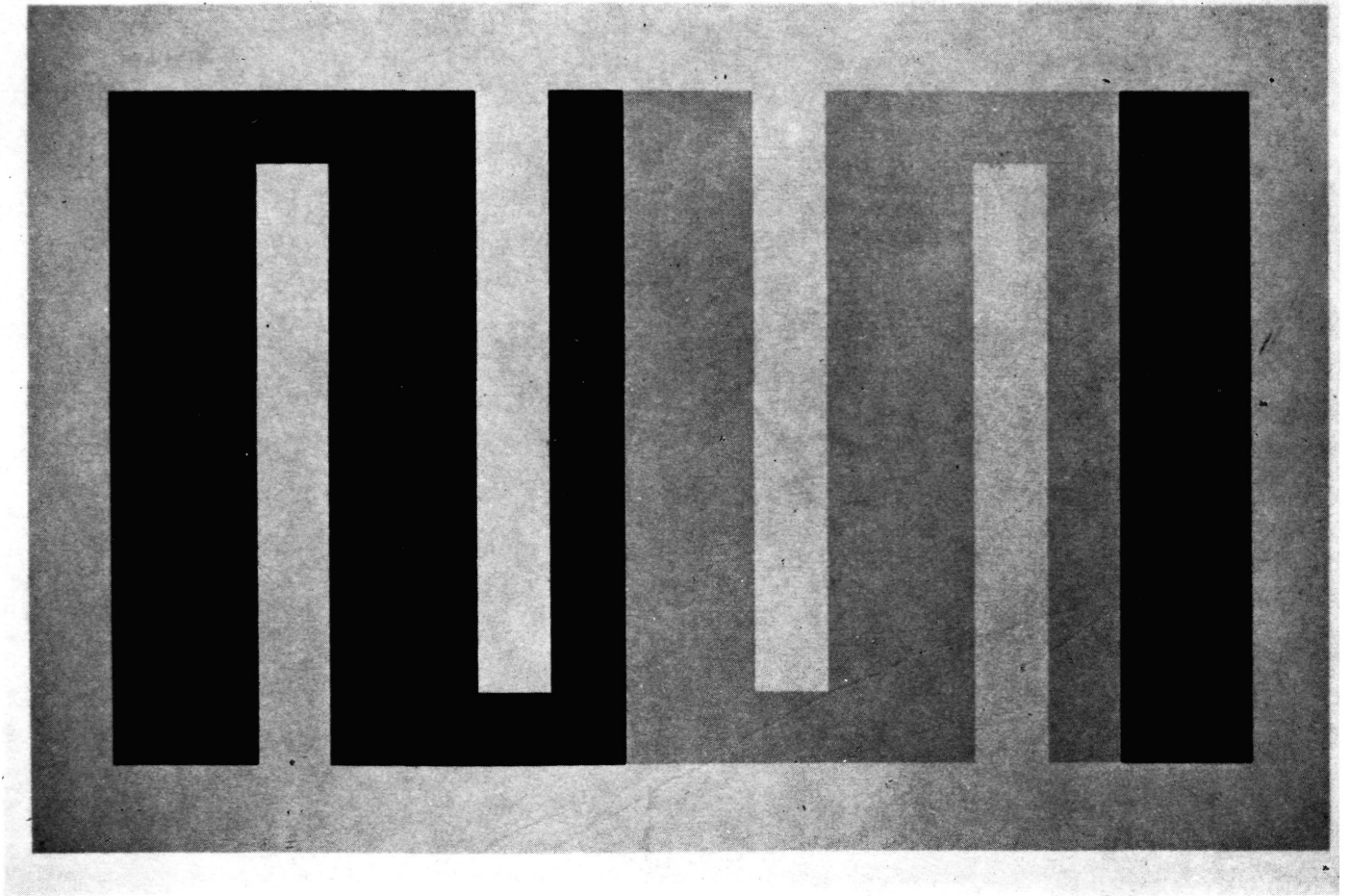


Mmp, 1971.









biographie

april 23, 1924, osijek
studied at the academy of fine arts in zagreb

one-man exhibitions

1958 zagreb, salon uluh
1960 zagreb, salon uluh
1962 zagreb, studio g
1966 zagreb, gallery of contemporary art
1970 zagreb, gallery of contemporary art
1973 tbingen, gallery izt

group and collective exhibitions

1959 zagreb
1960 zagreb, beograd
1961 ulm, torino, rijeka, paris, zagreb (new tendencies 1)
1962 leverkusen, sombor
1963 zagreb (new tendencies 2), san marino (IV biennial)
1964 leverkusen, beograd
1965 zagreb, basel
1967 zagreb, montreal, beograd
1968 zagreb
1969 new york, bologna, zagreb (new tendencies 4),
gelsenkirchen
1970 beograd, hofheim
1971 mainz, ludwigshafen, recklinghausen, oberhausen,
ljubljana (IX biennial)
1972 helsingr
1973 rotterdam, tokio, ljubljana (X biennial), zagreb
(tendencies 5)

address: yugoslavia, zagreb, odvojak n. demonje 14

catalogue

- 1 Mmc, 1971
silk-screen print/paper 450 × 630 mm
- 2 Mmp, 1971
silk-screen print/paper 450 × 630 mm
- 3 Mmb, 1971
silk-screen print/paper 450 × 630 mm
- 4 Mms, 1971
silk-screen print/paper 450 × 630 mm
- 5 Mmpl, 1971
silk-screen print/paper 450 × 630 mm
- 6 Mss, 1972
silk-screen print/paper 503 × 702 mm
- 7 Msb, 1972
silk-screen print/paper 503 × 702 mm
- 8 Msp, 1972
silk-screen print/paper 500 × 700 mm
- 9 Mvc, 1973
silk-screen print/papre 630 × 850 mm
- 10 Mvs, 1973
silk-screen print/papre 630 × 850 mm

vjenceslav richter



SYSTEMIC GRAPHICS is a continuation of the systemic approach to the Arts that began in 1963 with Systemic Plastics. At that time, the "Centrijas" cycles and the "Reliefometer" demonstrated the mutual relation between the rational and the intuitive in a spatial structure. Systemic Graphics continues this approach within this two-dimensional media. The basic element of Systemic Graphics is a square 1×1 cm. The entire network is composed of 3600 of these elements in a square field 60 cm. by 60 cm. — and therefore sixty elements wide and sixty elements long. Within this total network there are sub-networks defined by the combination of four elements in a 2×2 cm. square unit. The elements act as the quadrants of each of these network units, and in each unit are labeled "a", "b", "c", or "d". There are 900 such units in the network field (30 units wide and 30 units long). The sum of all the "a" elements throughout the total field describes a secondary field called Matrix "A". Similarly the total of the "b", "c", or "d" elements each define a matrix field "B", "C", and "D". Each matrix field then is composed of one fourth of the total network — 900 elements — and, because of the arrangement of the units, is equally distributed throughout the entire graphic.

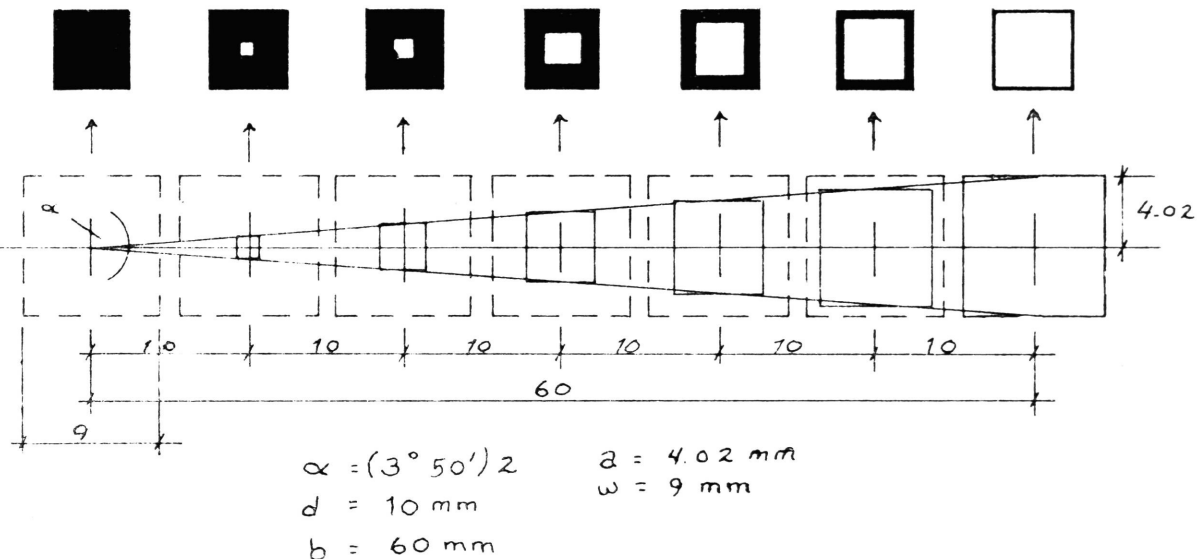
In addition to the internal structure of the graphic, each of the matrices and the network itself is axially oriented by defining each of the edges of the fields as "N", "E", "S" or "W". This provision allows for the definition of one matrix in relation to another as well as the total network, and the description of all the axial combinations

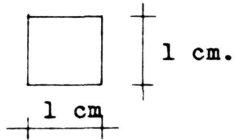
of matrices as they rotate, one, then another, through their four ninety degree orientations — a potential of 1120 mutual positions.

The matrix-program is the definition of the variants within each matrix field. In addition to setting the axial orientation of the matrix and defining which of the quadrants in each unit is its domain, the program determines which symbol is used; how many elements in its field will have symbols (and therefore reciprocally the negative space); the chromatic and formal changes of the symbols; and the number of each symbol variation and their location in the matrix field. The Graphic Program consists of the combinations of the four matrix-programs. Its domain is the total network, and in addition to the variants within each matrix, it also defines the repetition or absence of a matrix, combinations of repeated matrices, and introduction of a new matrix-program whether in combination with the original ones or completely supplanting them.

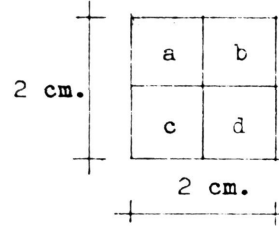
The first graphic created was based on four matrix programs each using the symbol of a square. The symbol varied from contour to solid figure within a 9×9 mm. dimension. Seven steps of variation were introduced from outline to full square based on a linear change determined in the following manner:

Each matrix-program had a different distribution of the seven symbol variations both in number and location, and chromatic distinction was used to make the individual program more easily readable while





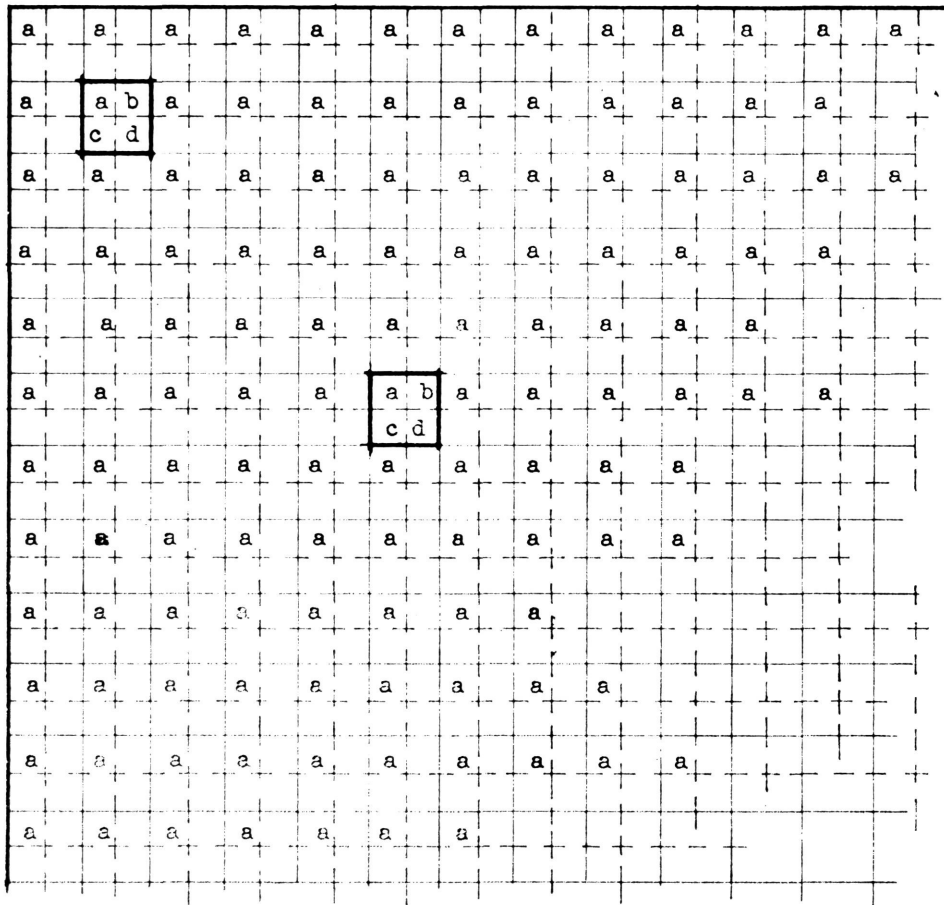
ONE ELEMENT



ONE UNIT

"N"

"W"



Matrix "A" = \sum "a" elements

maintaining the simultaneous information of the entire graphic. All of these were determined holistically and became the base for the mathematical analysis. Subsequent to these first graphics, the parameters of the development of new graphics were set. First, in addition to the original symbol of a 9×9 mm. square whose shaded area varied from perimeter to the entire surface, three other symbols were chosen. They were: a square whose size increased from a 2×2 mm. initial size to 9×9 mm. final stage, all solidly shaded; a circle with fixed diameter 9×9 mm. whose area of shading varied from contour to full; and a circle whose diameter varied from 2×2 mm. to 9×9 mm., again fully shaded. Each symbol again varied in seven linear steps according to the same progression as described above, though in two cases size change reflected the intensity change — i. e. the increase in shaded area. (pg. 14)

The first mathematical descriptions were based on the original matrix-programs with each program defined by a different one of these formal symbols. This allowed the investigation of intensity change without the problems of chromatic prejudice. The first graphs and tables then defined (pgs. 13 and 15), described and compared this original set in terms of the numbers of each symbol variation in each matrix, both in its autonomous expression, and rectified to its mutual relationships. From this delineation, a description of equal distribution of magnitudes (function zero) and the actual distribution of one of the holistic graphics (function VII) were chosen as the limits in the graph on page seventeen. Next, an internal distribution of six other functions (I through VI) was interpolated to establish that number of possibilities between the limits. The eight functions were then tabulated in relation to the per-cent of each symbol — pg. 18.

The functions I through VII were thus described generically according to a mathematical formula for the extent of participation of each symbol. The formula however contained two unknown constants which could be expressed as a quotient. The next phase then correlated the range of the quotients for these. The resultant diagram and the individual values for each function is given on page 19.

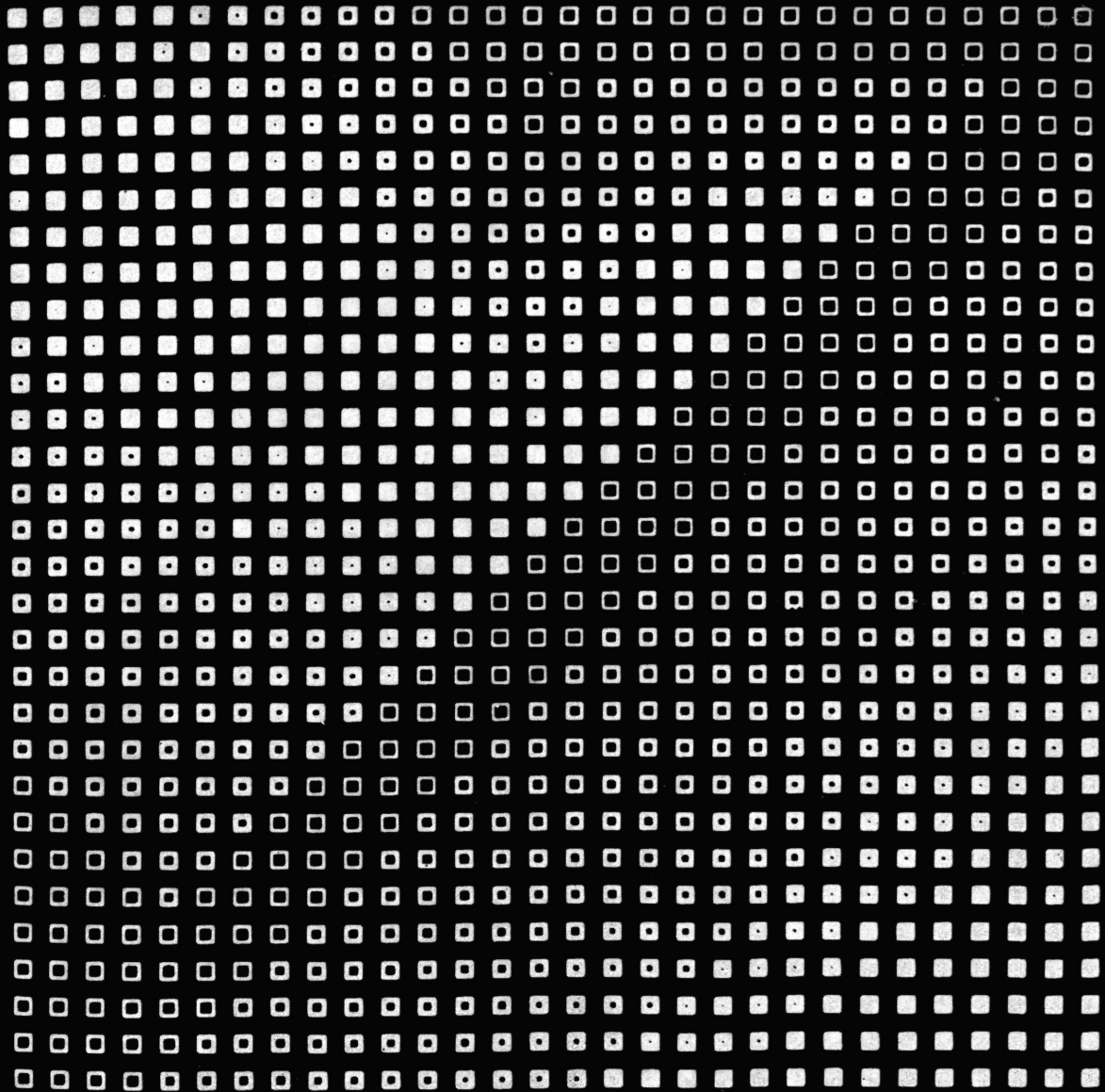
Continuing the mathematical investigation, the participation of each of the seven symbol variations, in per-cent, for each of the seven functions was graphed and tabulated on pages 20 and 21. Finally the standard difference for each symbol (1—7) in the range of

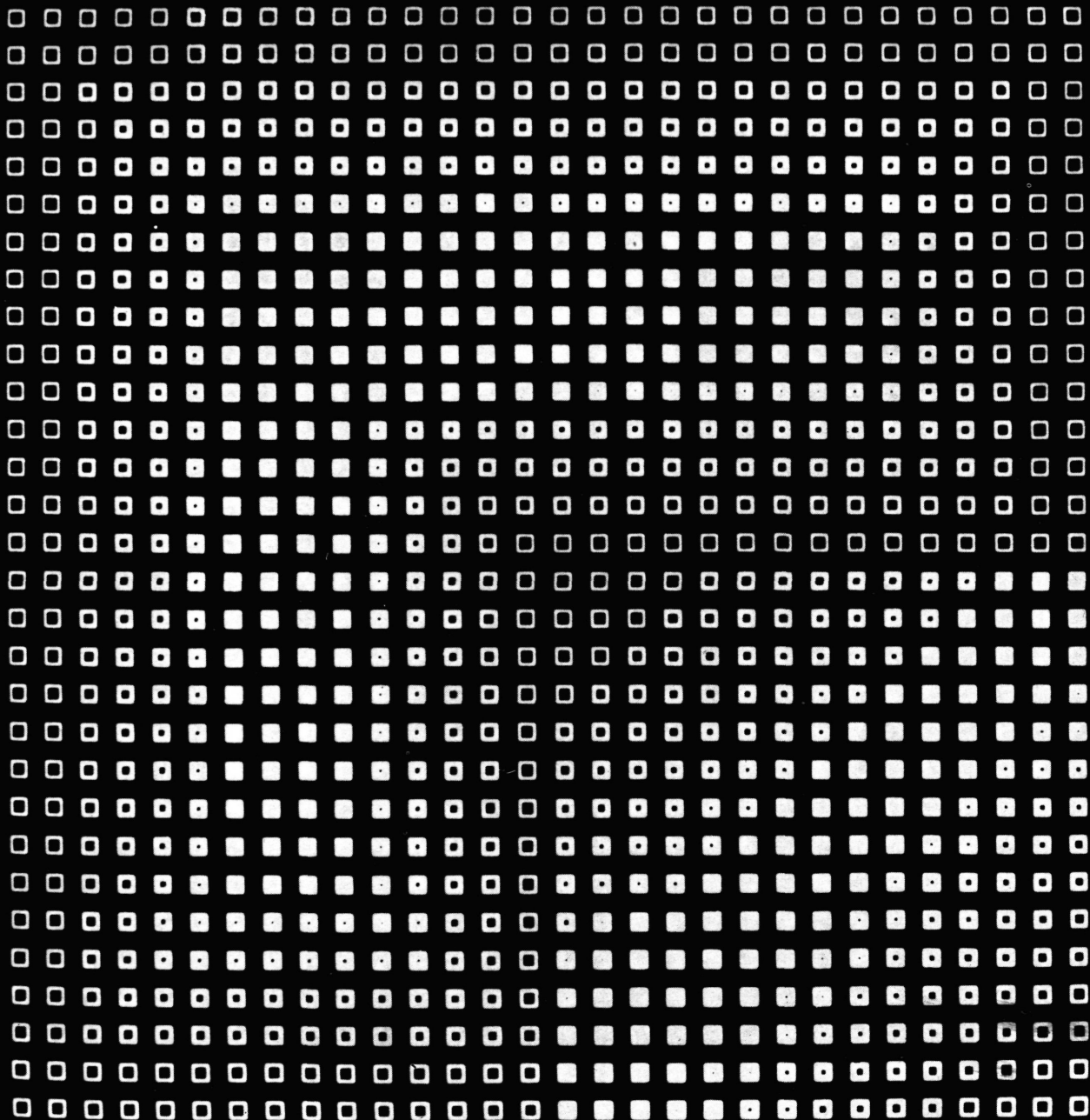
functions (I—VII) was determined, graphed, and tabulated. This concluded the descriptive phase of the mathematics for this particular graphic and the family of interpolated integral functions.

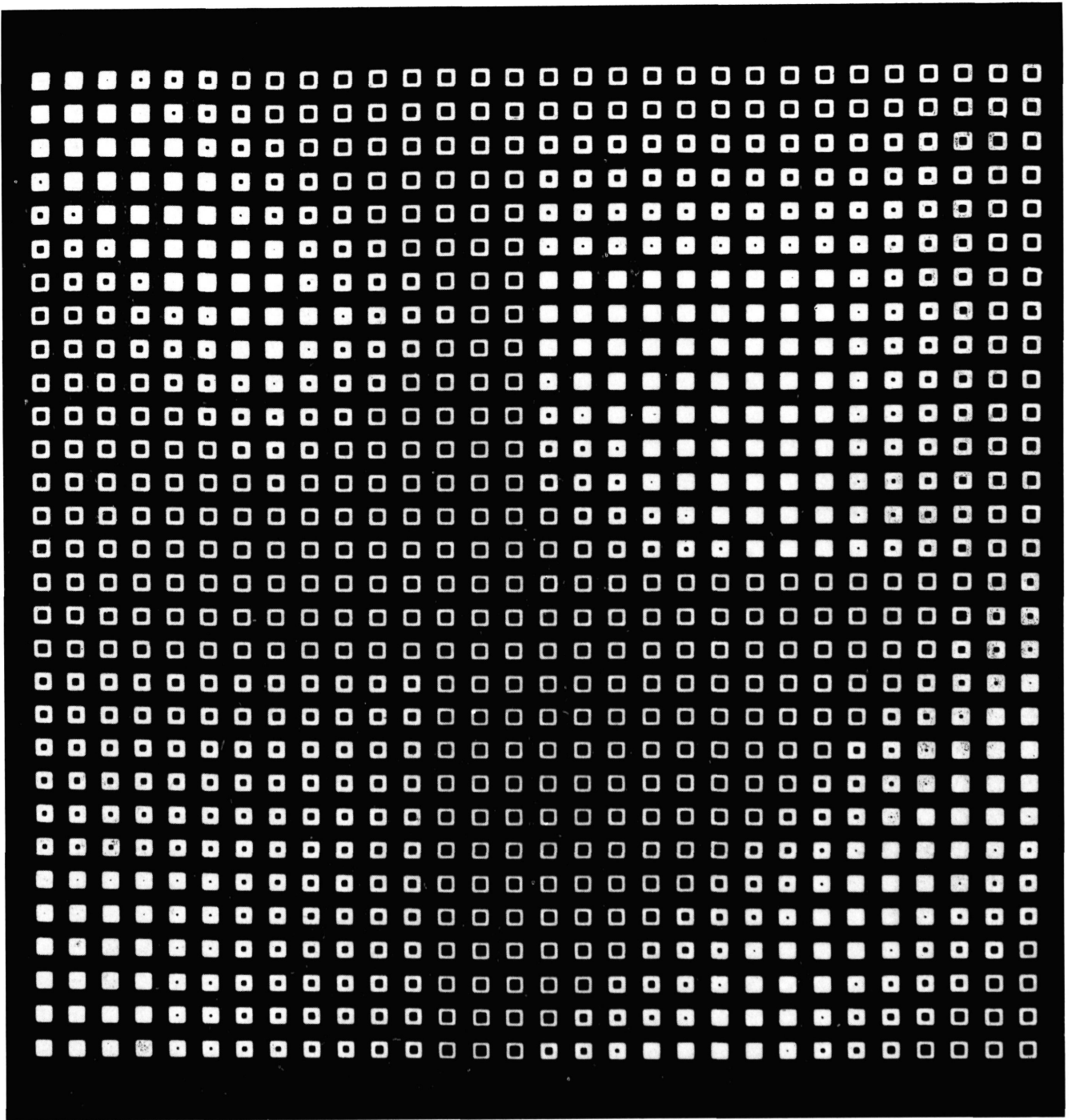
The second phase of the overall approach was to describe a distributive system to which the previously developed delineations of magnitude might be applied. The curve of the tangent of an angle was chosen. The graph of this curve is demonstrated on page 23. The values associated with the chosen angles are listed on the right of the same page. The use of the tangent is twofold. First, the angles themselves can be used as lines of distribution for intensity, i. e. the more intense (having more shaded area) symbols would be located along the line and variations to the least would radiate out from there. The locational lines associated to the angles are demonstrated on page 24. Secondly, the values related to the angles according to the tangent can be used to establish systematic proportions of distribution: 1 : 2, 1 : 1, 2 : 1, and 0. The number of variations of just the angles chosen in combinations of two through the seven steps established is catalogues at the end of the text.

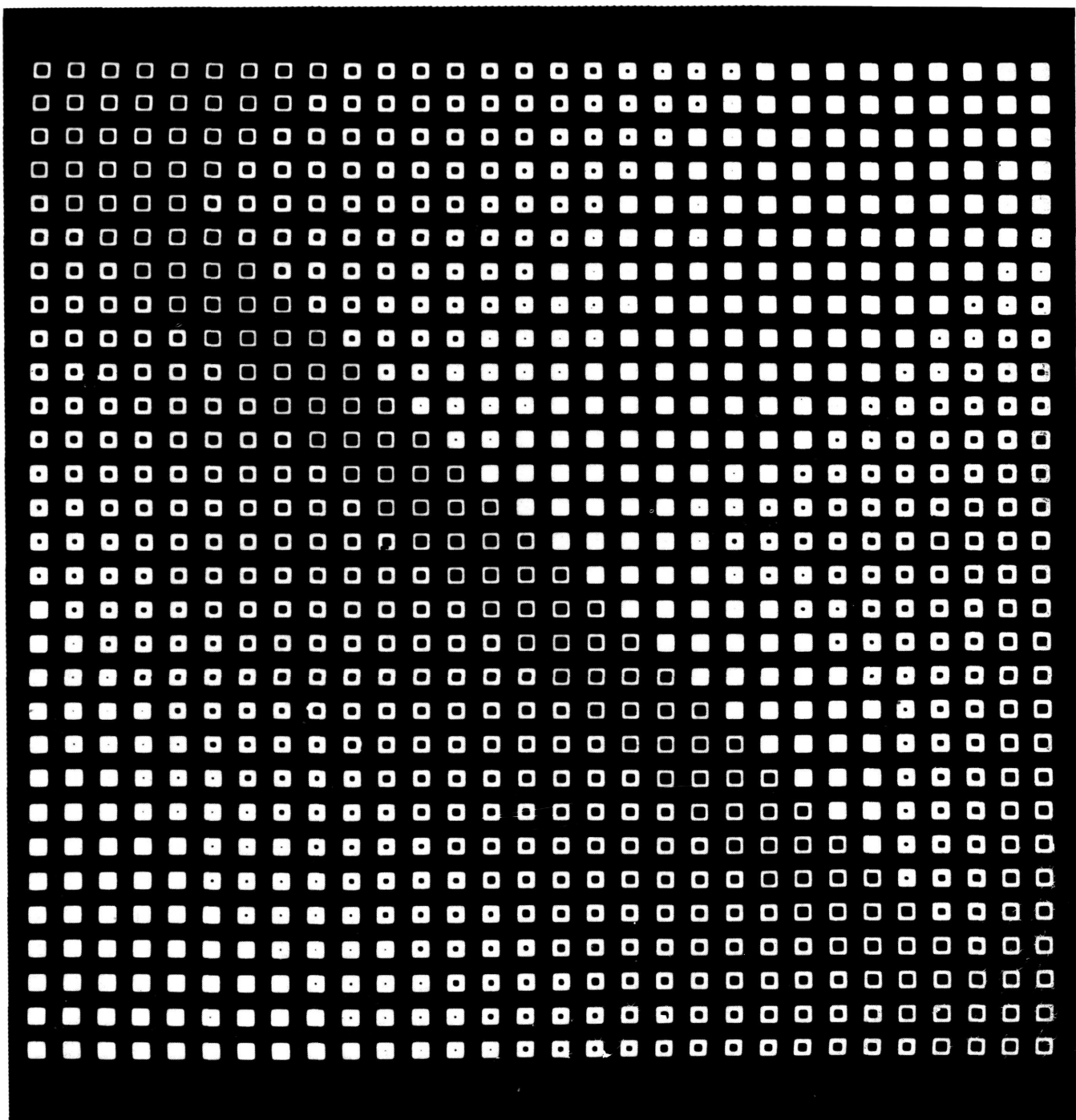
It is important to repeat that all the variations possible in the system described are based on locational patterns and numbers of formal change only. Further, that it is only one of many alternative approaches possible, and, finally, that it is increased in variation almost infinitely by introduction of chromatic changes on the finite number of symbols defined and their variants.

The intent of this systemic approach is to demonstrate how a graphic determined holistically can be described mathematically, and how through the use of that logical approach a strategy for development of the graphic can be determined. The great advantage of the systemic is not just the change potential, but the control of the artist in refining a graphic maintaining the elements he wishes while varying the precise area — formal, chromatic, etc. — he desires to study. The main forte of systemic graphics is this control in a field so complex that without the approach variations are more chance than intent. This does not disavow the intuitive, indeed, the relation between the intuitive and the rational is the base of the systemic. The emphasis is rather on how with such an approach — in terms of strategies, and systematic variations — the possibilities of an original work can be complimented and explored through the use of the rational.

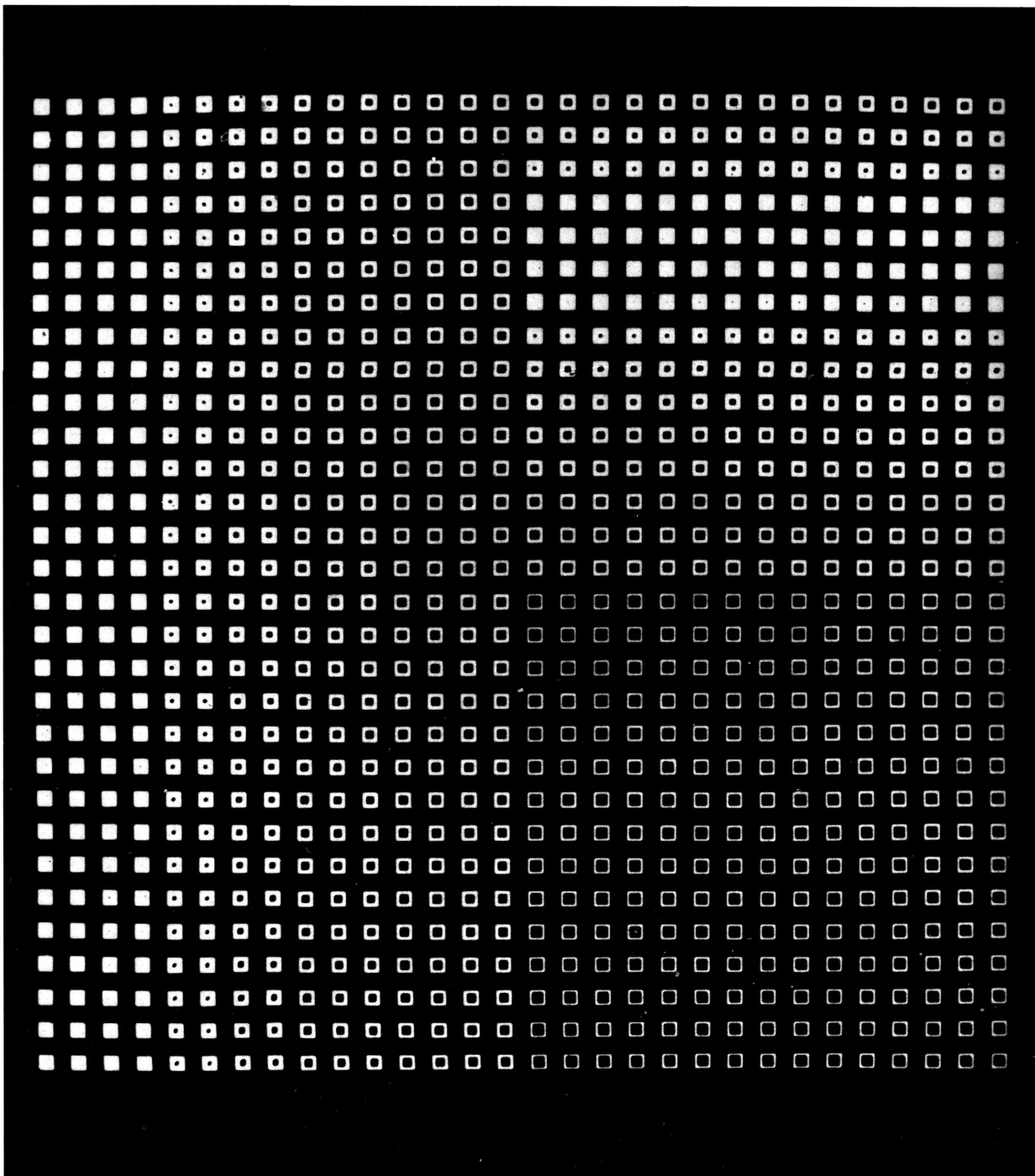












biographie

april 8, 1917, drenova
studied at the school of architecture in zagreb.

one-man exhibitions

- 1964 designs, stage designs, posters, synthurbanism, centriads, reliefometer, multiplier, systems sculpture — museum of art and craft, zagreb
- 1966 museum of architectural designs — museum documentation centre, archaeological museum, zagreb
- 1968 systems sculpture — gallery of contemporary art, zagreb
- 1968 systems sculpture — staempfli gallery, new york
- 1969 spatial grids (with architect a. mutnjaković) — student centre gallery, zagreb
- 1969 systems sculpture — salon of the museum of contemporary art, beograd
- 1969 systems sculpture — gallerie semiha huber, zürich
- 1969 systems sculpture — small gallery, ljubljana
- 1972 neue galerie am landesmuseum joanneum, graz
- 1972 steendrukkerij de jong & co, hilversum
- 1972 galerie 58, rapperswill
- 1973 galleria del naviglio, milan
- 1973 il centro galleria d'arte, naples

group and collective exhibitions

- 1955 zagreb
- 1959 zagreb
- 1962 zagreb
- 1963 zagreb (new tendencies 2), venice, naples, zagreb
- 1964 leverkusen, paris
- 1965 zagreb (new tendencies 3), rome, kostanjevica, sao paulo (VIII biennial)
- 1966 zagreb, bochum, palić
- 1967 beograd, new york (guggenheim international exhibition sculpture from twenty nations)
- 1968 buggalo, toronto, ottawa, montevideo, aquila, zagreb, vienna, brno
- 1969 zagreb (new tendencies 4), new york, nürnberg, buffalo, prague, brno, oslo, gelsenkirchen, beograd
- 1970 zagreb, beograd
- 1971 sao paulo (XI biennial), paris, sarajevo
- 1972 helsingør, venice (XXXVI biennial)
- 1973 rotterdam, zagreb (tendencies 5)

prizes: 1954, 1955, 1956, 1957, 1959, 1960, 1961, 1962, 1964, 1966, 1968, 1969, 1970.

address: yugoslavia, zagreb, vrhovac 38 a

catalogue

- 1 Cacca, 1972
silk-screen print/paper 690 × 690 mm
- 2 Ccccb, 1972
silk-screen print/paper 690 × 690 mm
- 3 AnBsCnDs, 1972
silk-screen print/paper 690 × 690 mm
- 4 AnBnCnDs, 1972
silk-screen print/paper 690 × 690 mm
- 5 AnBnCnDn, 1972
silk-screen print/paper 690 × 690 mm
- 6 AsBsCsDs, 1972
silk-screen print/paper 690 × 690 mm
- 7 AsBnCnDn, 1972
silk-screen print/paper 690 × 690 mm
- 8 AnBsCsDn, 1972
silk-screen print/paper 690 × 690 mm
- 9 Bdbbd, 1972
silk-screen print/paper 690 × 690 mm
- 10 Bdbbd, 1972
silk-screen print/paper 690 × 690 mm

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božo bek, the curator of the gallery of contemporary art
at zagreb

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radoslav putar, the director of the galleries of the city
of zagreb

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