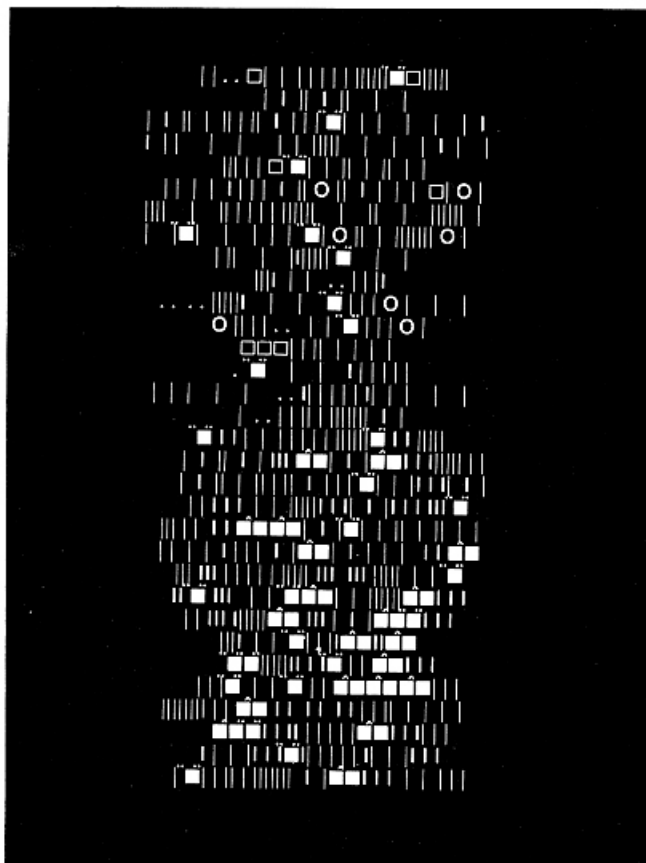


HIEROGLYPHS

by Aaron Marcus
Bezalel Academy of Arts and Design
1 Bezalel Street
Jerusalem, Israel 02-225111

Comments by Aaron Marcus are from varied writings of the artist. Throughout there is an intense interest in the markings or symbolic glyphs of man as graphic patterns.

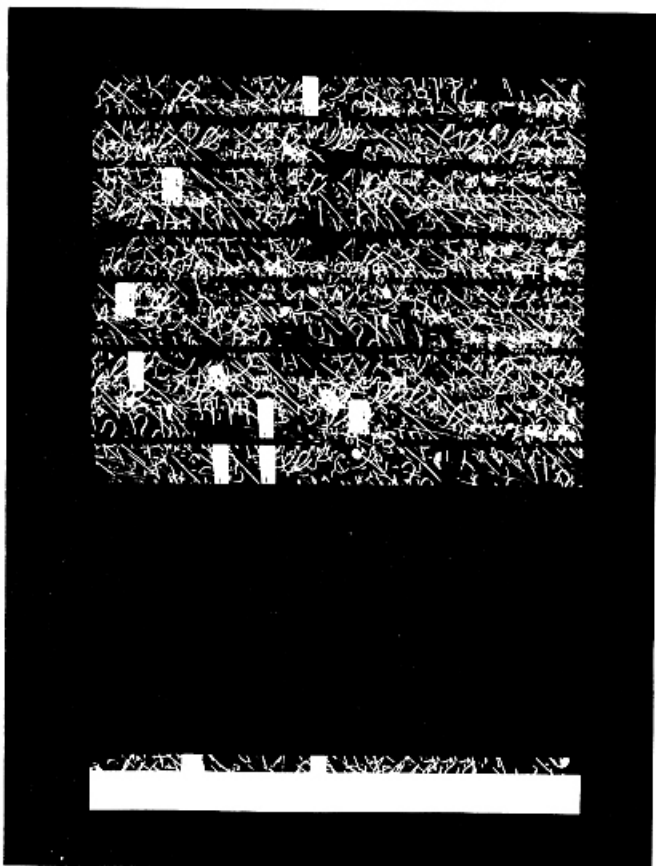


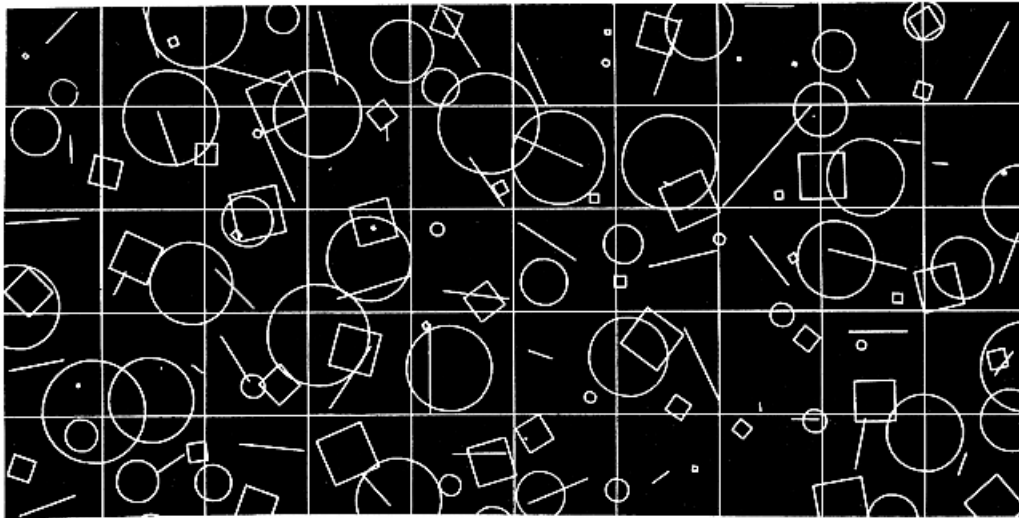
ABOVE: *Untitled photoprint, 15" x 19".*

...from *CYBERNETIC ENVIRONMENTS*: As writing was born, man struggled to find ways to compress his spatial, temporal wraparound experience into abstract, easily reproducible marks on specially prepared flat surfaces. From essentially pictographic images bearing an iconic resemblance to things and actions, abstract forms evolved to provide man with more complex conceptions and a more intricately structured cosmos. After two millenia of relatively stable symbols and 500 years of their mechanical reproduction, the forms of writing, the ideas expressible by them are changing rapidly. At this moment, with the aid of electronic media and computer-assisted displays, the semiotic parameters of verbi-vocovisual communications are revitalizing long unused possibilities and discovering new combinations of elements for restating the inner and outer worlds of man's experience.

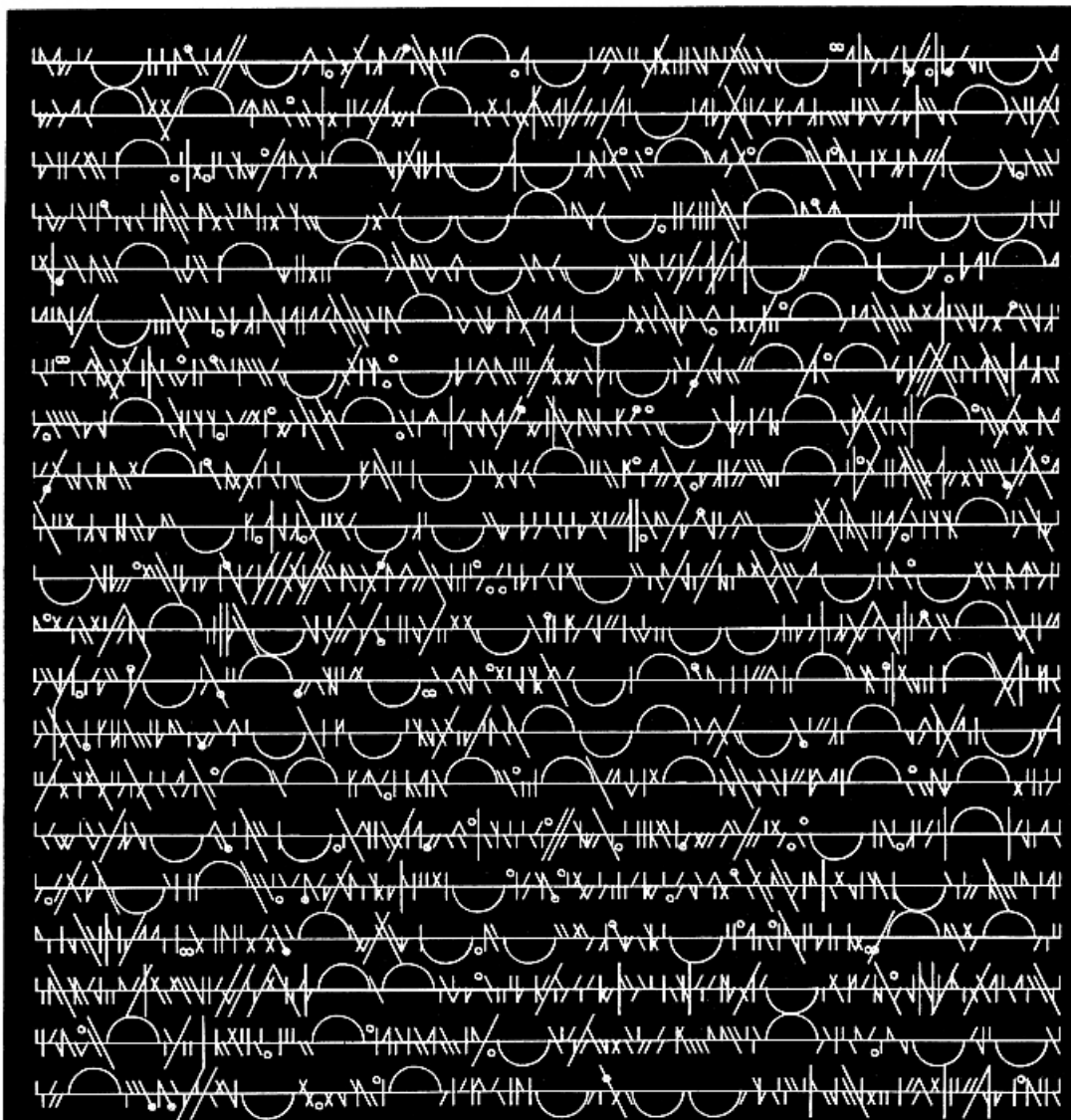
...from *COMPUTER-ASSISTED POEM-DRAWINGS*: As with most of my computer-assisted art works, they are meant to be seen as white symbols against dark fields. Therefore the positive space as well as the negative space is part of the total meaning. I am interested in this kind of computer-assisted image generation as it relates to the use of light/electromagnetic information display, the primary medium for a computerized, bureaucratized society. I am interested in relating the most advanced technological-symbolical achievements to the most archaic experiences of mankind. Hence, I find it appropriate to ponder *Genesis II and II* in considering these images; the creation of order out of chaos, the creation of light out of darkness.

BELOW: "Noise Barrier" silkscreen in two colors, 12" x 17-3/4", 1974. This image is a transformation of the original computer-generated form. Copies of the edition are available through the Pratt Graphic Center, 831 Broadway, New York City, N.Y.





ABOVE: Untitled graphic from the "Hieroglyphs Series", 1978, Jerusalem, Israel.
 NOTE: Only a detail of the graphic is shown above. BELOW: Photographic reversal
 of a second new work from the "Hieroglyphs Series" by Aaron Marcus.



OSCILLONS: ELECTRONIC ABSTRACTIONS

by Ben F. Laposky
301 S. 6th Street
Cherokee, Iowa 51012

The best of computer art should be acknowledged as fine art, even though it is technological in origin. Produced by the selection and control of the apparatus used, the visual results must be judged for their aesthetic value by the artist.

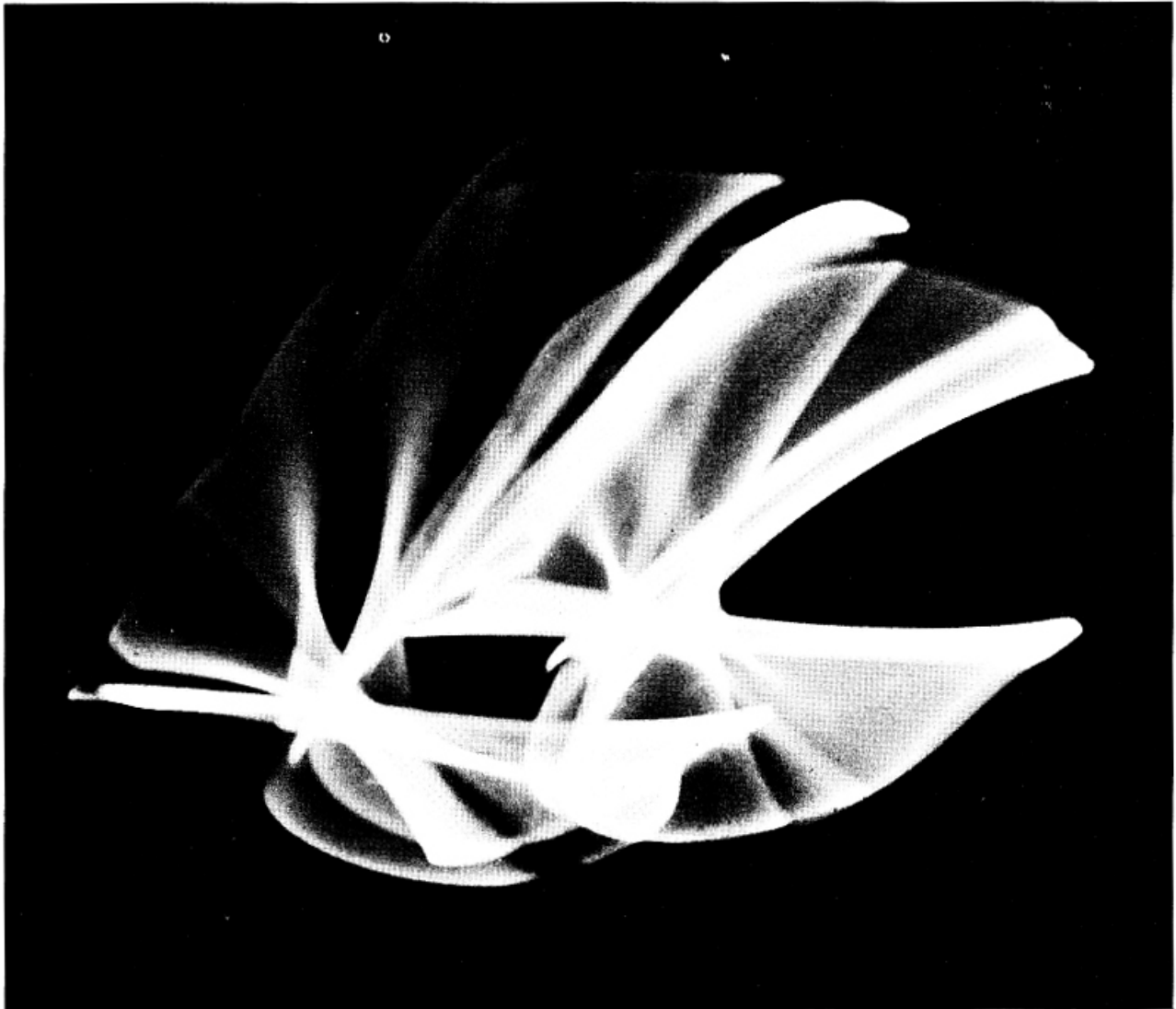
The oscillons or electronic abstractions are considered to be a kind of computer art since they are composed of analogue curves, which are related to the basic functions of the analogue computer. As oscillographic photographs, the electronic abstractions were the first such art to be widely exhibited and published in America and abroad. My work in this area has been exhibited and published beginning in 1952, a forerunner of current computer art.

The electronic abstractions are recorded on photographs, as this is the best way of preserving their intricate lines, planes and often very delicate color shadings. They may also be presented by means of lighted transparencies, motion pictures, direct kinetic displays on television tubes, plottings, drawings or paintings.

Special kinds of oscilloscope circuits, as well as a large number of many types of other output instruments, such as oscillators, amplifiers, modulators, and so on, are required in order to produce the wide range of forms shown in the oscillon technique.

Art forms for the space era, the oscillons represent in their glowing kinetic images the unseen forces of electrostatic and magnetic fields, as well as the vibrant motions of atoms and electrons.

BELOW: "Oscillon 1049" by Ben F. Laposky. MEDIUM: Photography. The work shown in the ART OF THE SPACE ERA EXHIBITION is in color, illustrated here in black and white, and also displayed horizontally.



by Roger Coqart
Avenue A. Depage 29/1
B 1050 Brussels, Belgium

The space age revolutionized every aspect of our way of living. The fabulous adventure of the exploration of outer space stimulates the creative genius of man in every field of human activity.

New materials are constantly evolving, and technological progress rushes ahead. New knowledge is gained in every domain, and to the layman it would seem that technology moves faster than the human intellect.

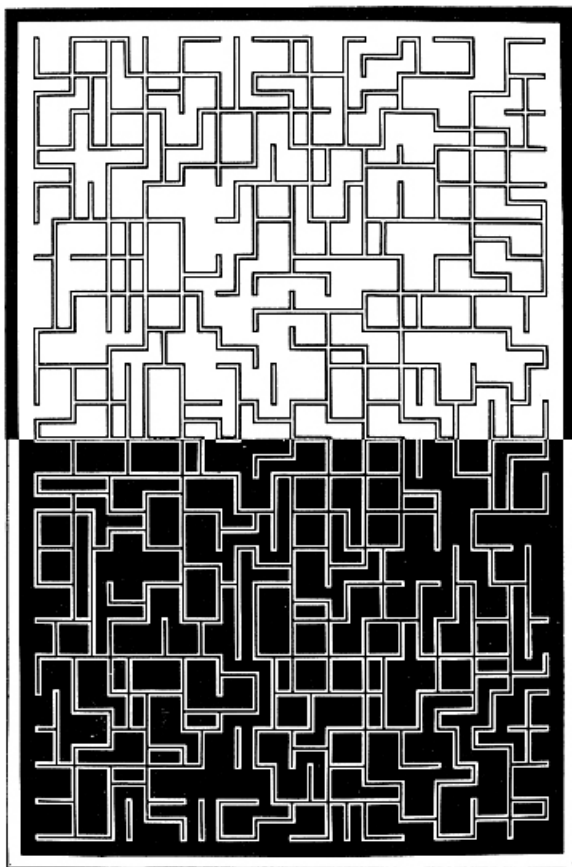
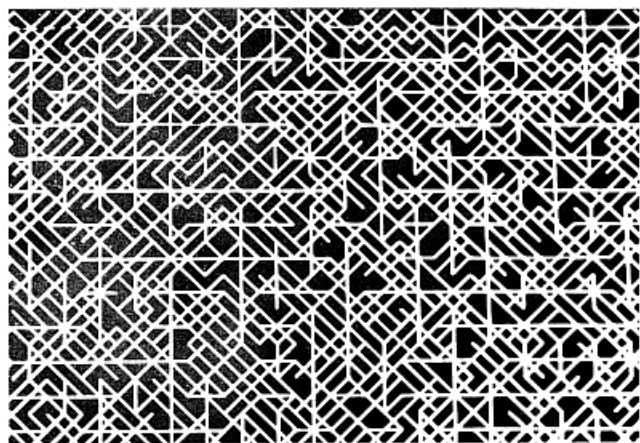
Man has to adapt himself to this spiraling movement, in order not to become enslaved and annihilated spiritually and physically by misusing the new riches of technology. On the other hand, man needs to take advantage of each new invention and each new idea, to liberate himself in every possible way.

As art is an image of its era, we can observe in the different tendencies (or directions) of art (or anti-art) how mankind adjusts to its own epoch.

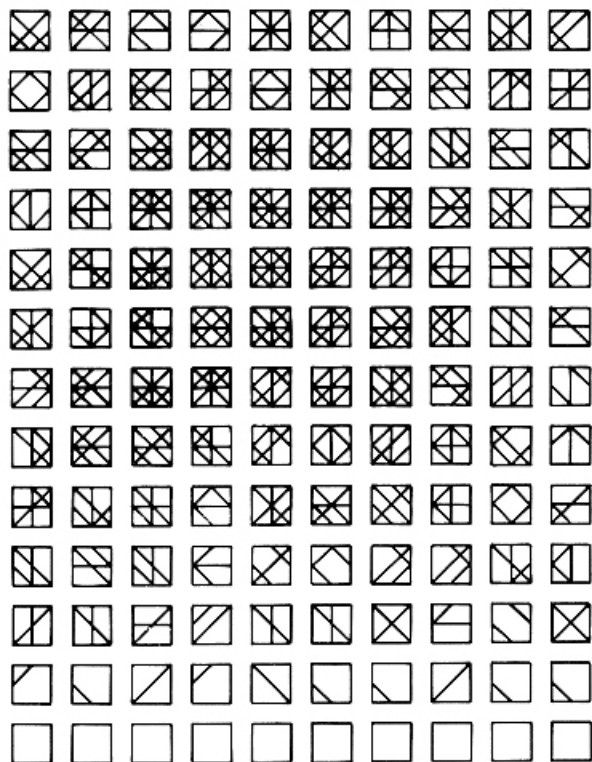
Throughout the history of art, new technological resources and devices have been applied in the varied art media of their time. One of the most significant instruments of our time is the computer, which has been used in diverse ways in the creative stages of artworks during the past dozen years.

In my case, the computer is used as a means to create geometric constructions in which a few elements are arranged in a statistically valid manner, in order to obtain a great variety of objective examples of growth structures. These can be used in paintings, mosaics, sculptures, and so on. It is my belief that, in using the computer to create art, I gain a better insight into the work of Nature, the base of our existence.

BELOW: Detail of a plexiglas painting, white on black "From the Square Series" by Roger Coqart. (See the November, 1977 covers of CG&A.) *AT RIGHT:* Detail from the Structured Square Series by Coqart.

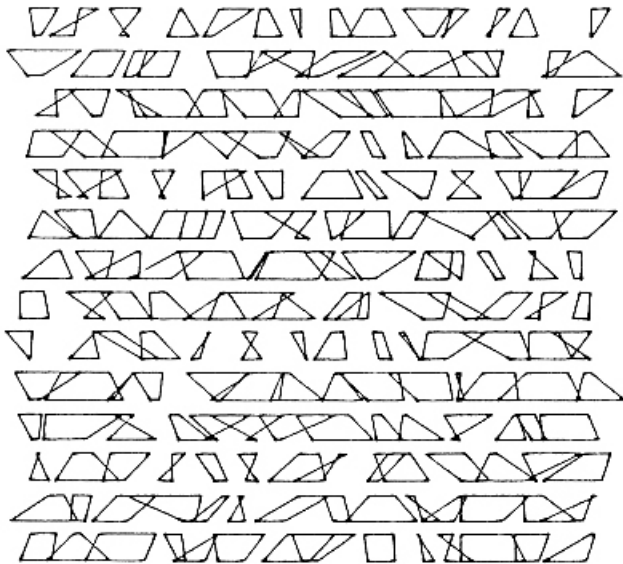


ABOVE: "Positive-Negative Grid with Perpendicular Elements" by Roger Coqart. *MEDIUM:* Painting on Plexiglas, 80 x 120 cm.



UNIMAGINABLE IMAGES

by vera molnar
54, Rue Halle
75014 Paris, FRANCE



ABOVE: From the "196 Trapeziums Series" by Vera Molnar, variation 75.137/12.19.38. MEDIUM: Ink on paper.

The task of a painter is to create forms, combinations of forms which correspond to certain combinations according to criteria called "plastic" by estheticians.

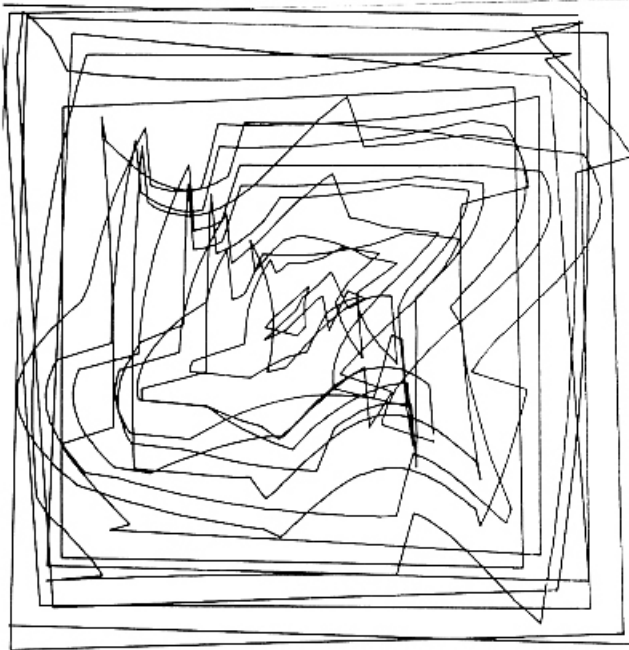
Let us stress that nobody knows exactly what this epithet "plastic" means. For my purpose, just as for Matisse and some other classics, plastic means a "feast for the eyes". A feast, which must have sensorial bases -- painting which is not done for the eyes is not a painting.

We maintain, we have to maintain, that all these "feasts" are not as rich as they could be. We maintain, we have to maintain, a relative poverty of the repertory of forms and their combinations if we compare them to the infinite number of possible forms. Imagination is set in motion only by elements seen in nature, or as far as a painter is concerned, in museums (as it has been shown by Malraux). The imaginary museum is full of real and not of imaginary works.

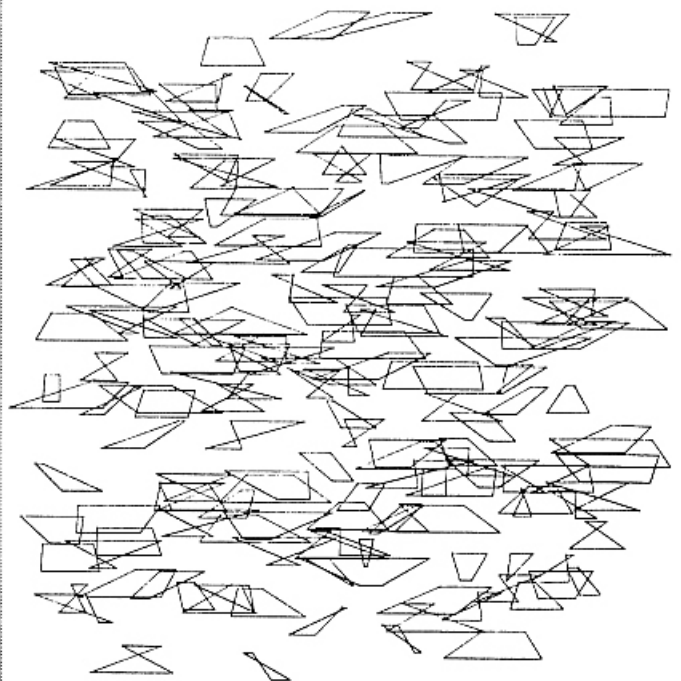
The computer is the only instrument up to the present which permits us to go beyond the bounds of learning, cultural heritage, environment -- in short, of the social thing which we must consider to be our second nature.

Because of its huge capacity of combinations, the computer permits systematic investigation of the field of possibles of the visual world permits clearing the brain of the painter of mental "ready-mades" of culture and allows the artist to produce combinations of forms never seen before either in nature or in museums -- images one would never imagine, that is to say, unimaginable images, an art of the SPACE ERA.

BELOW: A second variation from the "196 Trapeziums Series" from the ART OF THE SPACE ERA EXHIBITION. MEDIUM: Ink on paper.



ABOVE: "Hypertransformations" by Vera Molnar. System: IBM 360, CRT Screen 2250, Benson Plotter.



VARIED ATTITUDES HELD TOWARD COMPUTER ART

by Paul Shao and Ken Dunker
Department of Architecture
Iowa State University
Ames, Iowa 50011

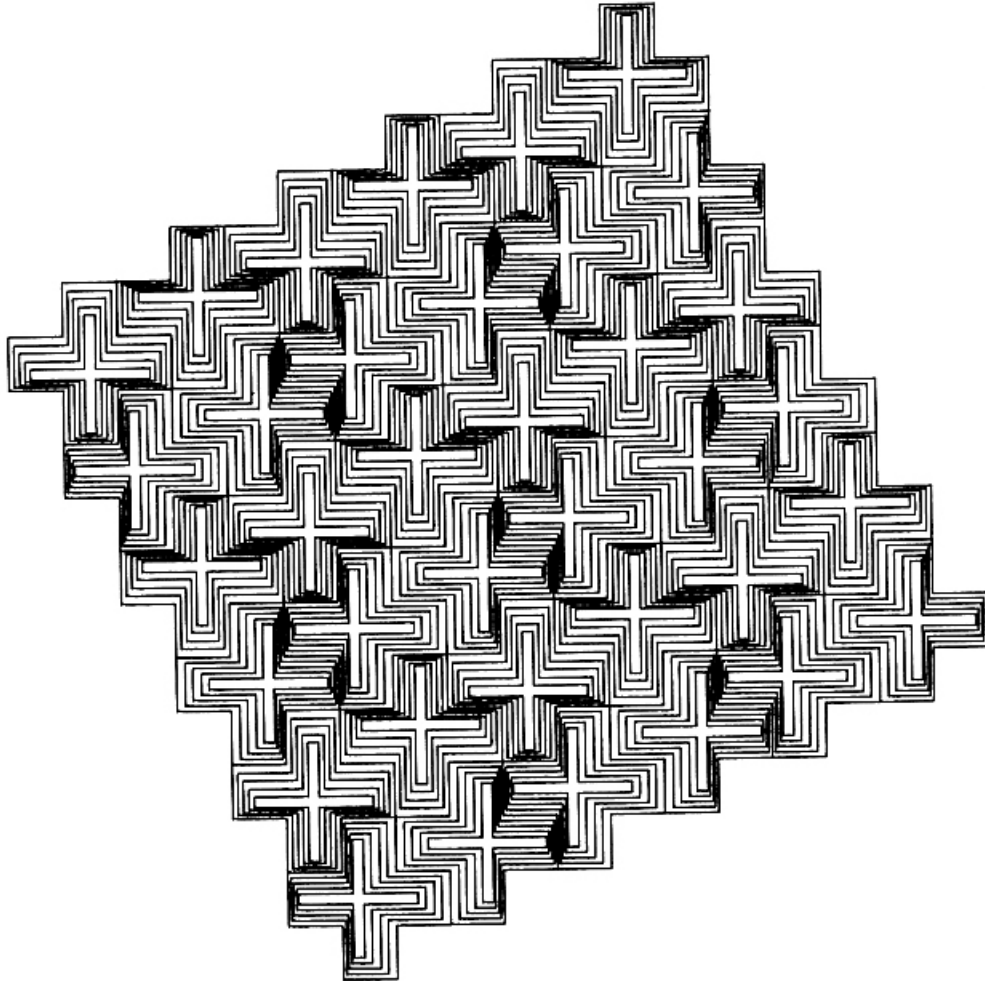
We have observed a variety of attitudes or approaches toward computer art. These attitudes are conflicting. They are not always rational.

1. Any art form associated with the computer is junk.
2. The computer is such a supernatural medium that it becomes the sole message of computer art.
3. Computer art, due to its normally abstract nature, is a relatively low form of art and is relatively unappealing.
4. The computer is an information processing tool which can assist the artist.

Basically we hold the fourth view. We see the computer as a powerful tool which can assist the artist or designer in conceiving, visualizing and solving an esthetic problem by providing a richer array of alternatives for optimization.

Due to hardware and software constraints, our work so far has been confined generally to linear projections of a modular nature. The drawing displayed here is from a series in which we aim to study tonalities or values, visual vibration, ambiguous figure-ground relationships, permutation of total configuration through juxtaposition of modular parts at regularly varied intervals -- and the impact of directional and densified change in the perception of pictorial protrusion and recession. In ZUP TZE 30, we have taken a series of five crosses, nested them eccentrically and placed the total cross-shaped module in a six by six array, with 180° rotations between modules in rows and 90° rotations between modules in columns.

In generating ZUP TZE 30, we have utilized PICS, a FORTRAN program which we have developed for perspective drawing on flat, cylindrical and spherical-projected-to-flat picture surfaces.



ABOVE: "ZUP TZE 30" by Paul Shao and Ken Dunker. MEDIUM: Ink on paper.