Pionners of Computer Art, II

RCM GALERIE

Pioneers of Computer Art

Colette Bangert, Aldo Giorgini, Jean-Pierre Hebert,
Desmond Paul Henry, Hervé Huitric, Ken
Knowlton, Charles Mattox, Manfred Mohr,
Monique Nahas, Jacques Palumbo, Edward Zajec

20 June - 31 July 2019

RCM Galerie

Monique Nahas (b. 1940) and and Hervé Huitric (b. 1945) co-counded the Groupe Art et Informatique de Vincennes and were among the preeminent artists working with computers in France in the late 1960s and 1970s. Their work explores how computer algorithms can be transformed into colored images. They first worked with a CAE 510 and then an IBM 1130 writing programs in Algol and then Fortran that created random variations in constructivist color schemes.

Instead of working on a palette with rules of transition, the duo considered color as a continuous variable, while treating color as a set of percentages of its basic components. Although interested in how the computer changed the rules of art, their works in the early seventies are highly influenced by pontilism, especially Georges Seurat.

The duo's first work used a coded sequence of letters then printed on a plotter. R for Red, B for Blue etc. Each square was then hand painted. The couple then developed a stencil method, using the punch cards and screenprinting artwork using a plotter. The couple exhibited widely in the 1970s, including the New Tendency 5 exhibition in Zagreb.
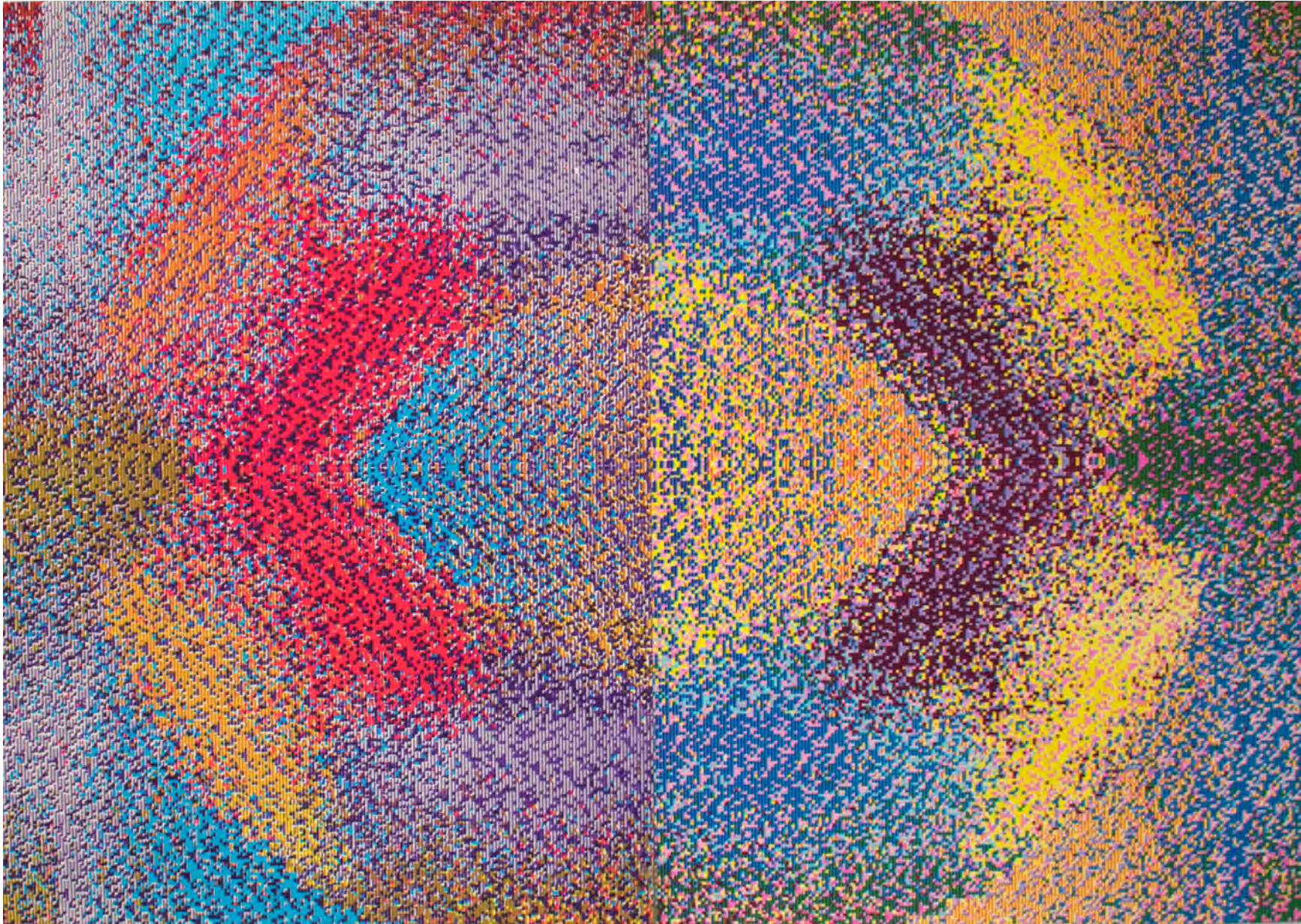
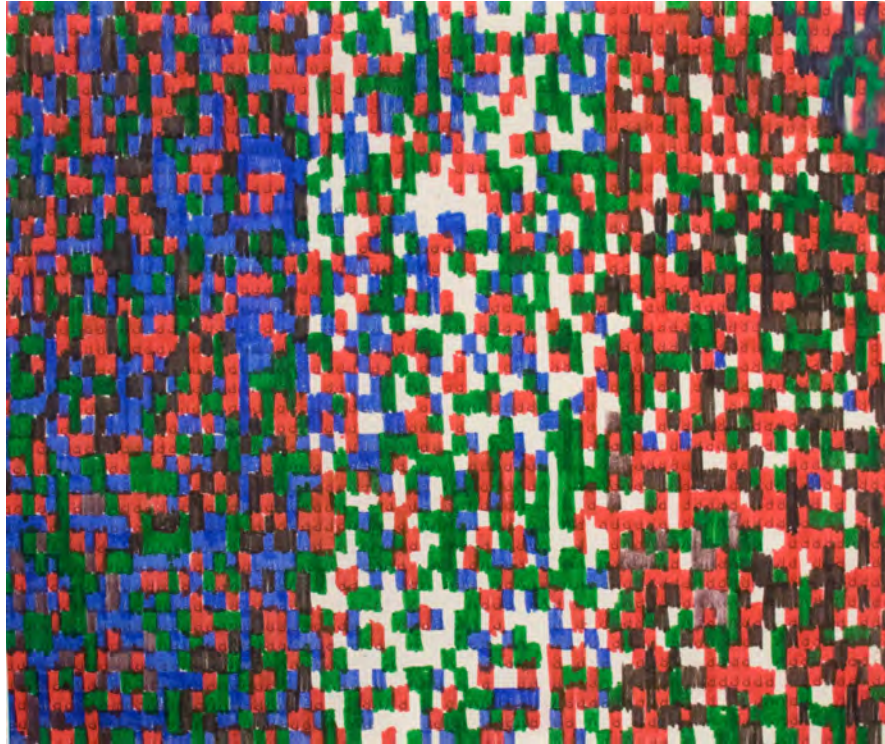Monique Nahas and Hervé Huitric
Cube, 1971
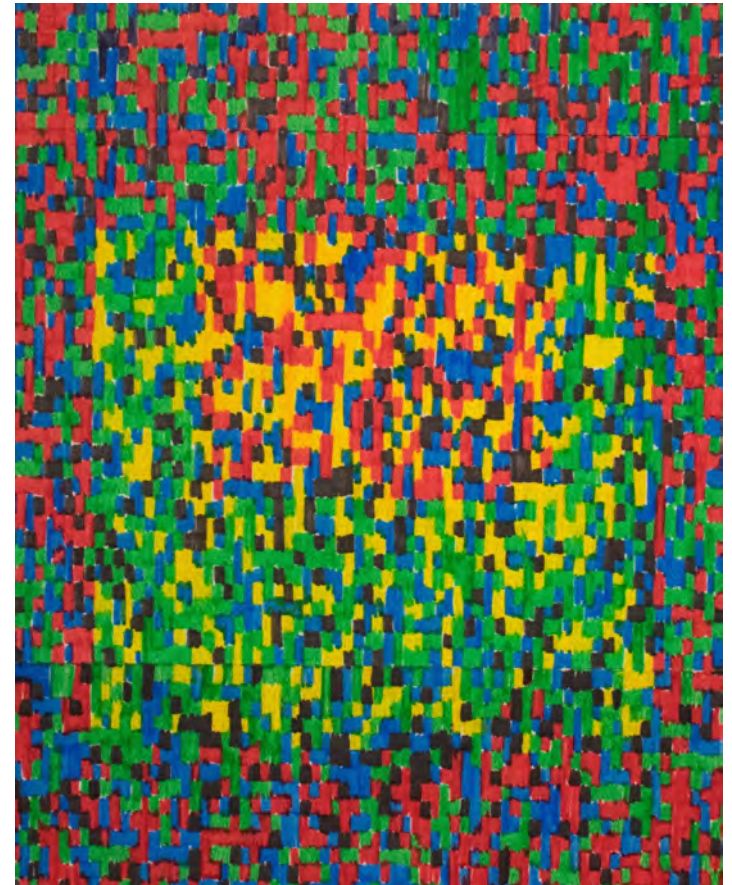Layered perforated program cards, paint, wood, lacquer
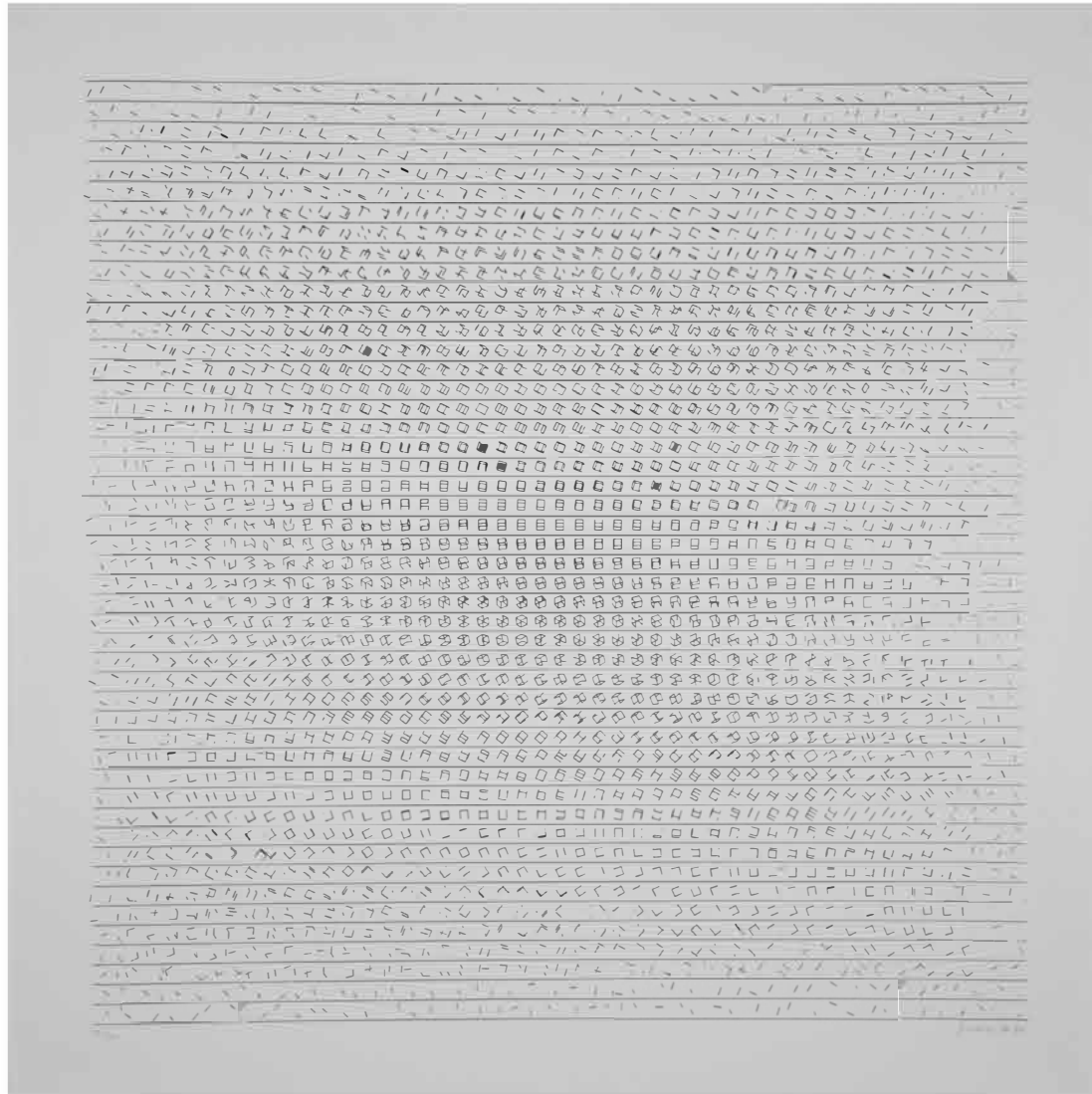12 x 12 x 12 inches
Unique

Monique Nahas and Hervé Huitric
Untitled, 1971
Double serigraph
31.5 x 22 in
One of two copies
Signed on verso

Monique Nahas and Hervé Huitric
Untitled, 1971
Computer print, hand-painted 6.2 x 7.8 in
Unique
Signed on verso

Monique Nahas and Hervé Huitric
Untitled, 1971
Computer print, hand-painted 9.4 x 7.4 in
Unique
Signed on verso

Manfred Mohr, b. 1938
Cubic Limit, 1976
portofolio of 3 serigraphs on paper, 40ex
Editions Media, Neuchatel 27.5 in x 27.5 in
Signed, numbered and dated

Manfred Mohr, b. 1938, is one of the most important pioneers of computer art. During the 1960s, Mohr's practice evolved from abstract expressionism towards a more hard-edged geometric painting. By 1968, in pursuit of a real rational art he had begun to develop a programmed expressionism in which algorithms were used to generate art that formalised his vision in a new, logical way.

In 1969, Mohr gained access to a plotters at the Paris Institute of Meteorology, used at that time by scientists to draw weather patterns. With this plotter, Mohr developed a series of computer program that provided a controlled system through which new visual forms could be explored. Random elements were often incorporated to enable new forms to be generated within the framework of the algorithm. Mohr's exhibition at the Musée d'Art Moderne de la Ville de Paris in 1971 was the first solo presentation in a museum of computer art. Since then he has had major solo exhibitions in the US and Europe.

His work is in major national institutional collections including the Victoria and Albert Museum, London and Centre Pompidou, Paris.
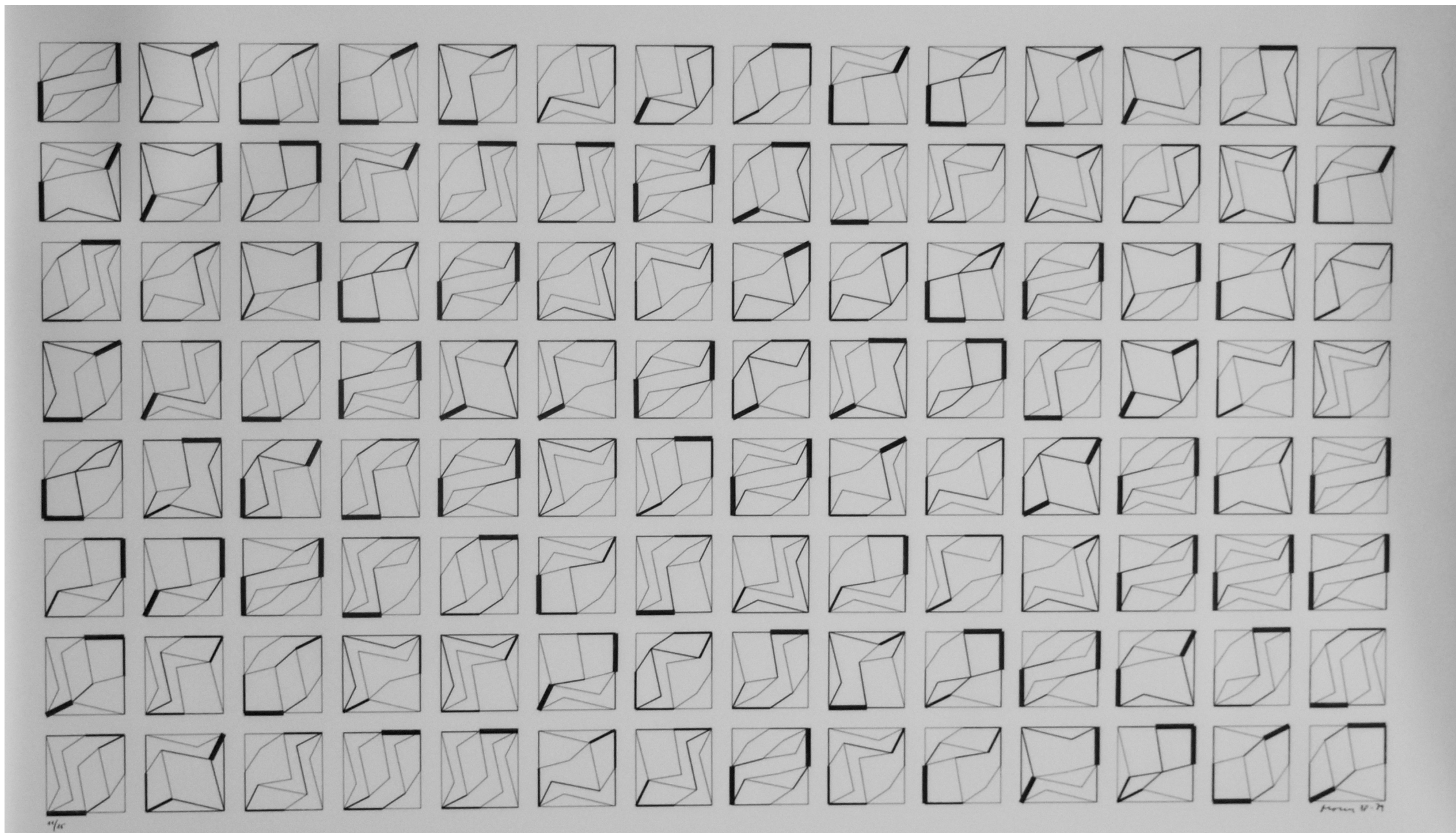
Manfred Mohr, b. 1938
"Dimensions" 1979
Serigraph on paper
29 x 46 inches
Edition of 25 examples, of which this is number 11.
Signed, dated and numbered

Born in 1934 in Voghera, Italy, Aldo Giorgini trained with the Italian futuristic painter-sculptor Ambrogio Casati.

Giorgini obtained a PhD in mechanical engineering from the Polytechnic School of Turin before moving to the United States, where he obtained a second PhD in civil engineering at Colorado State University.

He accepted a teaching position at the School of Civil Engineering at Purdue University in West Lafayette, Indiana, where he settled permanently in 1968.

His first works were generated on Purdue University's mainframe computer (CDC) and printed on large Mylar sheets using Calcomp printers. He hand-inked the works of art to complement the works he called examples of "computer-assisted art."

His works figure in the permanent collections of the Smithsonian Institution and the Carnegie-Mellon Art Museum. Aldo Giorgini died in Indianapolis in 1994.

Aldo Giorgini (1934-1994)
Untitled, 1974
Computer print on mylar, hand painted
Signed, dated and numbered 1/5
30 x 30 in

In the following, seven-part work, an image of a Polish flag is gradually transformed, pixel by pixel, into a false-colour image of an English phone box, outside the Royal college of Art Computer Studio, London, when Reffin Smith was working there.

The flag image was constructed using computer graphics, the phonebox image captured using an early digitiser and a black and white video camera.

Reffin Smith wrote software that would replace pixels of one image by those of another on a probabilistic basis. The pixles were then drawn using a pen plotter, again using an algorithm that Reffin Smith wrote, to represent each single (large) pixel by cross-hatched lines.

detail

Brian Reffin Smith (b. 1946) is a pioneer in computer-based conceptual art. After studying at Brunel University and the Royal College of Art in London, he became a professor of computer art and design at the Royal College of Art from 1979 to 1984 and then in Paris and Bourges.

Reffin Smith calls himself a Pataphysicist (specialist in imaginary solutions) and a conceptual artist who uses computers and derision in general. He has been working with computers since 1968 to resist technological determinism and advanced technology that could simply produce art at the technological level.

In 1979, Reffin Smith wrote 'Jackson', one of the first digital painting programs for the Research Machines 380Z computer. He was also a member of the board of IRAT, the Institute for Research in Art and Technology based in London, and after exhibiting interactive works of art at the Musée d'art moderne de la Ville de Paris in 1983, the Ministry of Culture asked him to participate in French art education.
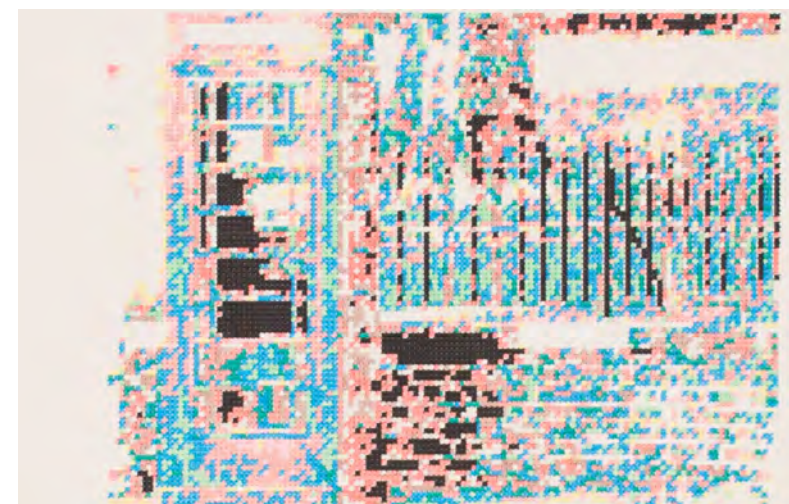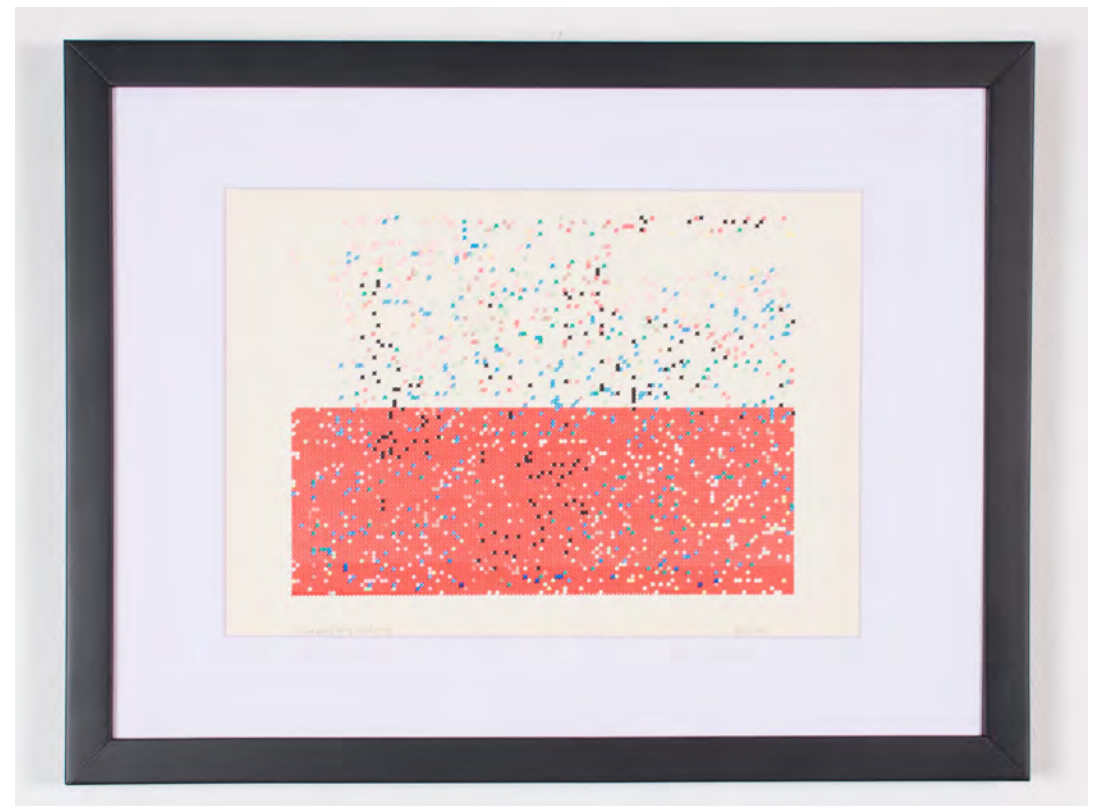
Reffin Smith's research interests include ideas of zombie, pataphysics in art, computer program hijacking, and cognitive psychology, to make it a conceptual art. Reffin Smith has written extensively on art and technology. He is a literary critic and has participated in international conferences on art, design, consciousness studies, media history and digital arts.

His work (conceptual art, installation and performance) has been exhibited in numerous institutions such as the Whitechapel Gallery in London in 1979, the Musée d'Art Moderne de la Ville de Paris in 1983 and the Fondation Cartier in Paris.

Phonebox/ 99 Polish Flag

Phonebox/ 85 Polish Flag

Brian Reffin Smith, b.1946
Polish Sequence, 1986
Computer print on thick paper, unique
9 x 12 in, each (seven sheets in total)
Signed, titled and dated

Phonebox / 71.5 Polish Flag

Phonebox / 57 Polish Flag

Phonebox 43/ Polish Flag

Phonebox: 29 / Polish Flag

Desmond Paul Henry (1921-2004) ranks among one of the few early British pioneers of Computer Arts Graphics of the 1960's. During this period he constructed three mechanical drawing machines (in 1960, '63 and '67) based around the components of analogue bomb-sight computers.

Henry's second drawing machine and its effects were included in the major Art and Technology exhibition of 1968: Cybernetic Serendipity (I.C.A, London).

Henry's life-long passion for all things mechanical inspired him to purchase an army surplus analogue bomb-sight computer in the early 1950s. For years he would gaze transfixed at the   peerless parabolas   of its inner working parts when in motion. Then in the early sixties he decided to try and capture these mechanical motions on paper and so was born the first of a series of three drawing machines based around the components of the bomb-sight computer itself.

Such images were rare at that time. Computers had been reserved for military use until the 1950s, when they were introduced to scientific laboratories and universities. Many of Henry's fellow tinkerers were scientists and mathematicians who added mechanical arms to computers to guide pens across the screen or sheets of paper. Like him, they were fascinated to discover what sort of images a machine would produce when left to its own devices.

Henry's chosen machine was analogue, rather than digital. This meant that it could not store data or be preprogrammed, but was controlled by Henry himself, who could intervene at any moment during the drawing process.

Desmond Paul Henry (1921-2004)
Untitled, 1964
Computer drawing
Ink on paper
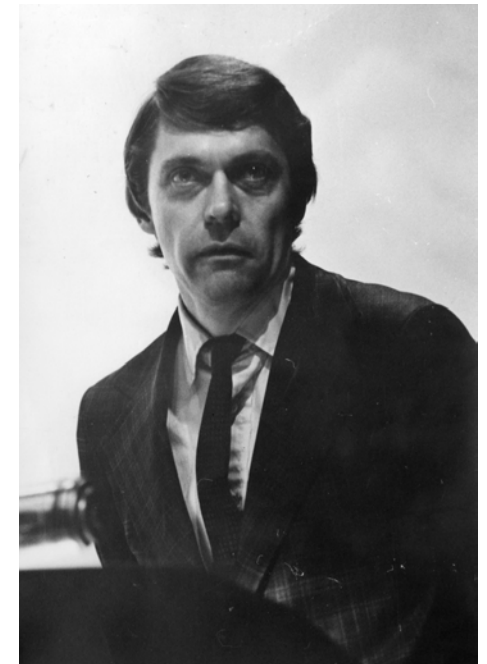15 x 20 in
Unique
Signed and dated

Desmond Paul Henry (1921-2004)
Untitled, 1964
Computer drawing
Ink on paper
30 x 20 in
Unique

Desmond Paul Henry (1921-2004)
Untitled, 1964
Computer drawing
Ink on paper
30 x 20 in
Unique

Ken Knowlton, b. 1931
Untitled, 1970
Silkscreen
Unique color trail proof for Art Ex Machina portfolio
27.5 x 22.5 in
Signed and dated

Kenneth C. Knowlton began working at Bell Labs after earning a Ph.D. in computer science from MIT (Massachusetts Institute of Technology) in 1962.

As a member of Bell's Computer Techniques Research Department, he developed BEFLIX, most likely the first specialized computer animation language, which was used by artists to make experimental films. At times this let to collaborations between those artists and Knowlton. Perhaps the best known of those artists is Stan Van der Beek.

In collaboration with Leon Harmon, he developed electronic scanning technologies that were explored in the series of "Studies in Perception".

Famous became the large Nude that Leon Harmon and Ken Knowlton did together in 1966. The image appeared in the New York Times (of October 11, 1967) as their first nude ever. It was included in the show "The machine as seen at the end of the mechanical age" (MoMA 1968). The procedure for this style of image was quite simple: Scan a photographic image, thus generating a grid of grey values. Now replace the grey valued pixels by elementary characters chosen from a type font such that the replacing characters approximate the grey values of the scanned pixel. Print the resulting image on a line printer!

The same technique was used for several other images, none of which reached the level of popularity as the nude girl did. Knowlton commented on this: "We did make similar pictures — of a gargoyle, of seagulls, of people sitting at computers — which have appeared here and there. But it was our Nude who would dolphin again and again into public view in dozens of books and magazines."
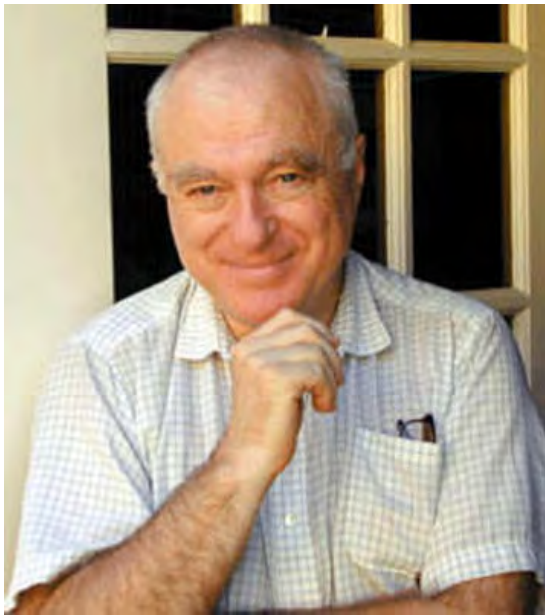
Jean-Pierre Hébert is an important algorithmic artist born in 1939 in Calais, France.

After thirty years of experience in drawing and watercolor, he began creating digital conceptual algorithmic art in 1974 and became a pioneer in the field of computer art, merging traditional art techniques and media, personal software, plotters and custom-made devices to create an original set of works. He co-founded the Algorists in 1995 with Roman Verostko.

Hébert produces works on paper, including ink and pencil drawings, paintings, prints and drypoints from polymer and copper plates and, more recently, digital prints. He also creates sand, water and sound installations, algorithmic visual music, works for wall screens, physics-based algorithmic pieces, etc.

He is an artist in residence at the Kavli Institute for Theoretical Physics at the University of California at Santa Barbara in 2003 and received an award from the Pollock-Krasner Foundation in 2006 and a scholarship from the David Bermant Foundation in 2008. In 2012, he received the Siggraph Distinguished Artist Award for Lifetime Achievement in Digital Art.

Hébert has exhibited his work internationally in institutions such as the Centre Pompidou (Paris, France), the Victoria and Albert Museum (London, United Kingdom), the Brooklyn Museum (New York), the Kiasma Museum (Helsinki, Finland), the Block at Northwestern University (Chicago), and the Tweed Museum at the University of Minnesota (Duluth).
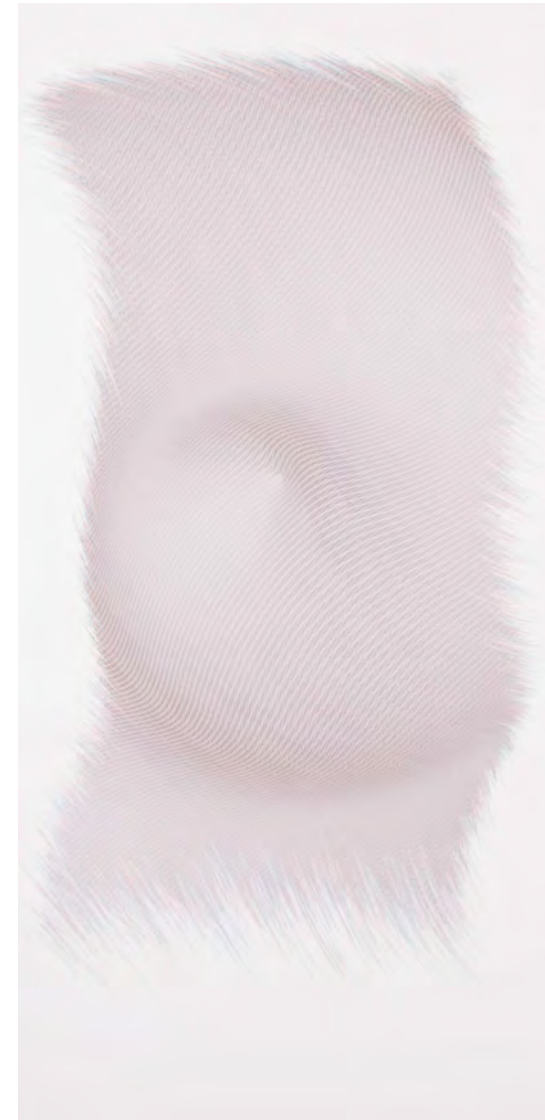
Jean-Pierre Hébert, b. 1939
Nautilus, bleu, ocre et marron, 2010-2017
Digital drawing, pigment inks on heavy art paper
35 x 17 in
Signed, titled and dated on verso
Unique
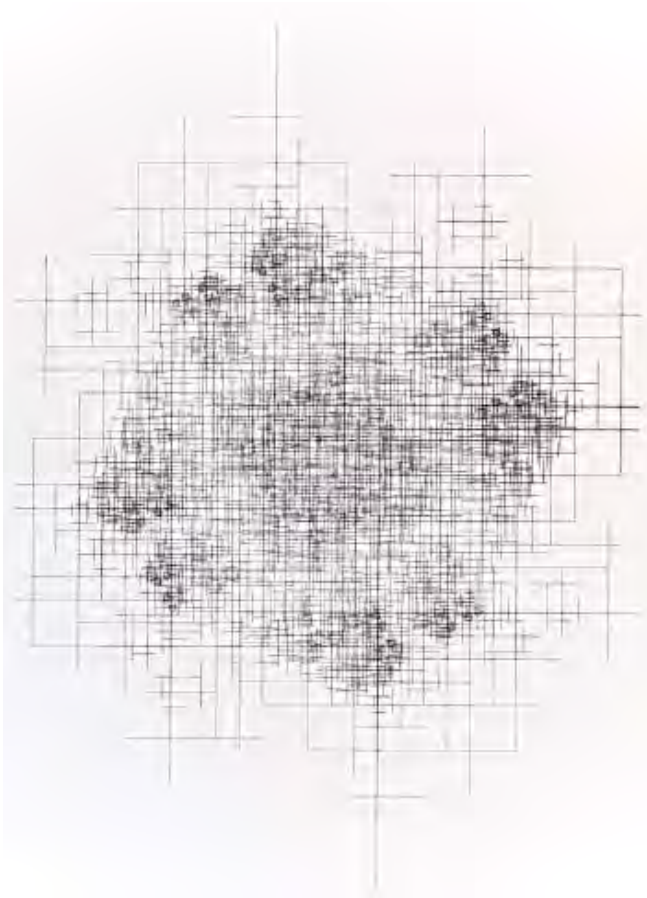
Jean-Pierre Hébert, *b. 1939*
Divertissement 15, noir, 1976-1977
Plotter drawing in a single continuous line
28 x 43 cm
Signed, titled and dated on verso
Unique

Jean-Pierre Hebert, *b. 1939*
Plus sérieusement, noir,1976-77
Plotter drawing in a single continuous line
43 x 28 cm
Signed, titled and dated on verso
Unique

Jacques Palumbo, born in 1939 in Philippeville, Algeria, is considered the father of generative art in Quebec.

He studied art at the Ecole nationale d'Architecture et des Beaux-Arts d'Alger, then obtained a Diploma of Higher Education in Drawing and Plastic Arts, in Paris. He lived in Paris from 1960 to 1965 and moved to Montreal in 1965.

His work has been related to cybernetics since 1970 and has been the subject of frequent exhibitions in Canada (Montreal Museum of Fine Arts, Canadian Museum of Fine Arts), the United States (Museum of Modern Art in San Francisco), Europe (Espace Cardin in Paris, Computer of Central London in London, Palais des Beaux-Arts in Brussels, etc) and Japan.

His works are part of the collection of the Canada Council for the Arts and the National Gallery of Canada in Ottawa; the National Gallery of Canada and the Musée d'Art contemporain de Montréal; various museums in the Province of Quebec; private and public collections in the United States, France, Italy, Spain, Germany, Holland, Belgium and Japan.

Jacques Palumbo, (1939-2018)
Untitled, Nov. 1971
Computer-generated print
11 x 8 in
Printed signature and date
Unique
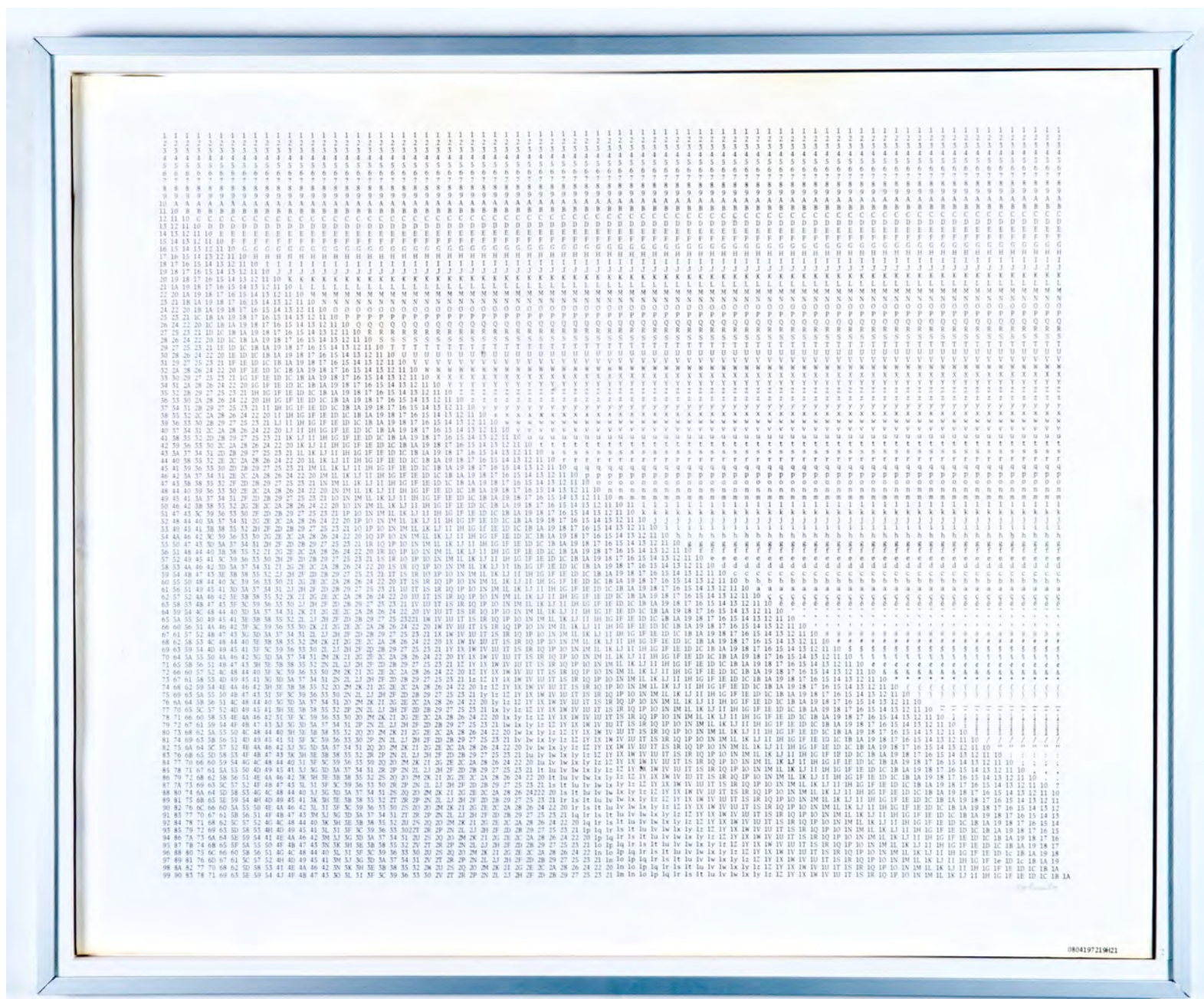
Jacques PALUMBO, (1939-2018)
0804197219H21, circa 1973
Computer print on paper
19.5 x 23.5 in
Signed and titled
9 ex.

Edward Zajec (1938-2018)
Untitled, 1969
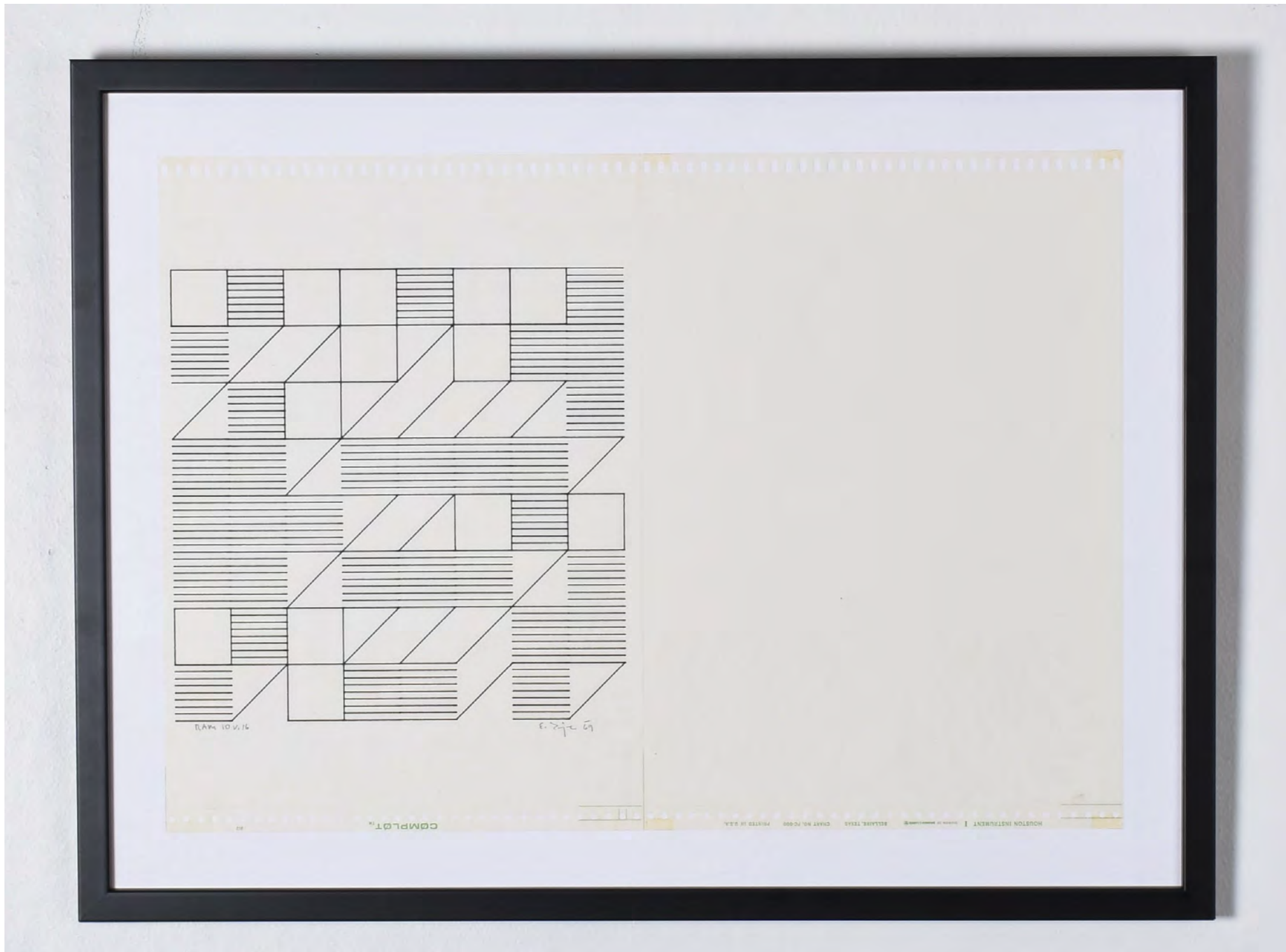Computer print on paper
16 x 11 in
Unique

Edward Zajec (1938-2018) was an important pioneer of computer art. In 1966 he studied painting at the School of Fine Arts in Ljubljana, Slovenia, and in 1968 obtained a Master of Fine Arts in painting and engraving at the University of Ohio in the United States.

Zajec began working with computers in the mid 1960s. Most of his work produced during this decade, was realized at the Computer Center of the University of Trieste.

Zajec returned the United States and joined Syracuse University in 1980, where he redesigned the Computer Graphics Program, wrote the curriculum and set up the computer graphics laboratory. He was granted the emeritus status in 2008.

Zajec was among the pioneers in the 1960s, and more recently is professor of computer graphics at the School of Art and Design at Syracuse University. His focus has been real-time artworks originating in his paintings, which used repetition and redundancy, then developed with the use of computers from 1968. While his films have some aspirations in common with those of John Whitney Sr., his point of departure is the use of the computer in real time, and a different algorithmic or rule-based approach.

Zajec's work has found its way into collections and symposia spanning many decades. His work has been exhibited at the Cleveland Museum of Art, the Museum of Modern Art in New York, the Centre Georges Pompidou in Paris, among others.

Edward Zajec (1938-2018)
Ram 10 v.16, 1969
Computer print on paper
17 x 12.5in
Signed, titled, dated
Unique