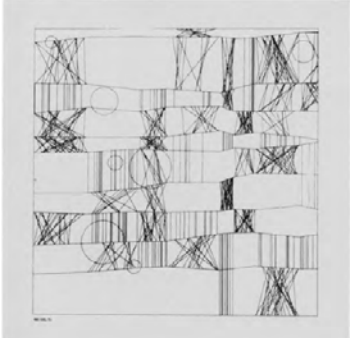


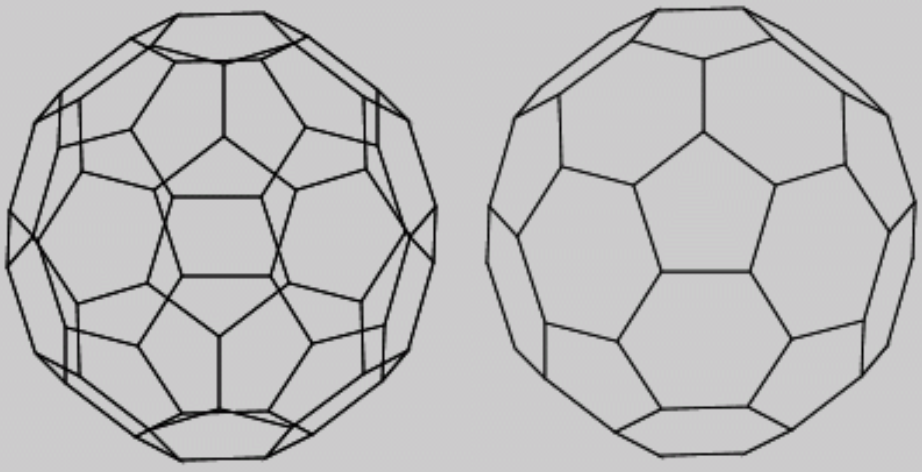


	1963 ▼ Technology L. Roberts develops the first practical hidden-line removal algorithm.	ASCII (American Standard Code for Information Interchange) is established as a standard.
	1964 ▼ Technology John Kemeny and Thomas Kurtz develop BASIC (Beginner's All-Purpose Symbolic Instruction Code) programming language. Douglas Engelbart invents the mouse.	Rand Corporation develops the first positioning tablet. Kenneth Knowlton writes BEFLIX, the first general-purpose programming language for computer animation.
Giloth, Copper Frances/ Pocock-Williams, Lynn: A Selected Chronology of Computer Art: Exhibitions, Publications, and Technology, in: Art Journal, Vol. 49, Nr. 3, Oktober 1990, S. 283- 297; hier: S. 284.	1965 ▼ Exhibitions "Maughan S. Mason, Bela Julesz and Michael Noll," Las Vegas, Nev.: Fall Joint Computer Conference. "Nam June Paik: Electronic Art," New York: Galeria Bonino.* "Georg Nees and Frieder Nake," Stuttgart: Niedlichs Galerie. "World Exhibition of Computer Graphics," New York: Howard Wise Gallery. ▼ Publications Gyorgy Kepes, ed., <i>Structure in Art and Science</i>. Kenneth Knowlton, "Computer-Produced Movies." Marshall McLuhan, <i>Understanding Media: The Extensions of Man</i>. ▼ Technology Sony releases Portapak, the first inexpensive, nonbroadcast-quality, portable black-and-white video camera.	 Frieder Nake, <i>Homage to Paul Klee</i>, 1965, silkscreen on paper, 20 × 20 inches. Private collection.

1963

▼ Technology
L. Roberts develops the first practical hidden-line removal algorithm.

ASCII (American Standard Code for Information Interchange) is established as a standard.



Verdeckte Kanten Problem.

1963

▼ Technology

L. Roberts develops the first practical hidden-line removal algorithm.

ASCII (American Standard Code for Information Interchange) is established as a standard.

ASCII control characters

00	NULL (Null character)
01	SOH (Start of Header)
02	STX (Start of Text)
03	ETX (End of Text)
04	EOT (End of Trans.)
05	ENQ (Enquiry)
06	ACK (Acknowledgement)
07	BEL (Bell)
08	BS (Backspace)
09	HT (Horizontal Tab)
10	LF (Line feed)
11	VT (Vertical Tab)
12	FF (Form feed)
13	CR (Carriage return)
14	SO (Shift Out)
15	SI (Shift In)
16	DLE (Data link escape)
17	DC1 (Device control 1)
18	DC2 (Device control 2)
19	DC3 (Device control 3)
20	DC4 (Device control 4)
21	NAK (Negative acknowl.)
22	SYN (Synchronous idle)
23	ETB (End of trans. block)
24	CAN (Cancel)
25	EM (End of medium)
26	SUB (Substitute)
27	ESC (Escape)
28	FS (File separator)
29	GS (Group separator)
30	RS (Record separator)
31	US (Unit separator)
127	DEL (Delete)

ASCII printable characters

32	space	64	@	96	`
33	!	65	A	97	a
34	"	66	B	98	b
35	#	67	C	99	c
36	\$	68	D	100	d
37	%	69	E	101	e
38	&	70	F	102	f
39	'	71	G	103	g
40	(	72	H	104	h
41	)	73	I	105	i
42	*	74	J	106	j
43	+	75	K	107	k
44	,	76	L	108	l
45	-	77	M	109	m
46	.	78	N	110	n
47	/	79	O	111	o
48	0	80	P	112	p
49	1	81	Q	113	q
50	2	82	R	114	r
51	3	83	S	115	s
52	4	84	T	116	t
53	5	85	U	117	u
54	6	86	V	118	v
55	7	87	W	119	w
56	8	88	X	120	x
57	9	89	Y	121	y
58	:	90	Z	122	z
59	;	91	[	123	{
60	<	92	\	124	
61	=	93	]	125	}
62	>	94	^	126	~
63	?	95	_		

Extended ASCII characters

128	Ç	160	à	192	À	224
129	ü	161	á	193	Á	225
130	ë	162	â	194	Â	226
131	â	163	û	195	Û	227
132	ä	164	ü	196	Ü	228
133	ä	165	ñ	197	Ñ	229
134	ä	166	ª	198	ª	230
135	ç	167	º	199	º	231
136	è	168	¿	200	¿	232
137	é	169	®	201	®	233
138	ê	170	™	202	™	234
139	í	171	½	203	½	235
140	î	172	¾	204	¾	236
141	ï	173	¿	205	¿	237
142	Ä	174	«	206	«	238
143	Å	175	»	207	»	239
144	Æ	176	⌂	208	⌂	240
145	æ	177	⌂	209	⌂	241
146	Æ	178	⌂	210	⌂	242
147	ø	179	⌂	211	⌂	243
148	ö	180	⌂	212	⌂	244
149	ö	181	⌂	213	⌂	245
150	ü	182	⌂	214	⌂	246
151	ü	183	⌂	215	⌂	247
152	y	184	⌂	216	⌂	248
153	Ö	185	⌂	217	⌂	249
154	U	186	⌂	218	⌂	250
155	ø	187	⌂	219	⌂	251
156	£	188	⌂	220	⌂	252
157	Ø	189	⌂	221	⌂	253
158	×	190	⌂	222	⌂	254
159	f	191	⌂	223	⌂	255

ASCII
Code

1963

▼ Technology

L. Roberts develops the first practical hidden-line removal algorithm.

1964

▼ Technology

John Kemeny and Thomas Kurtz develop BASIC (Beginner's All-Purpose Symbolic Instruction Code) programming language.
Douglas Engelbart invents the mouse.

ASCII (American Standard Code for Information Interchange) is established as a standard.

Rand Corporation develops the first positioning tablet.
Kenneth Knowlton writes BEFLIX, the first general-purpose programming language for computer animation.

```
READY
10 FOR X=1 TO 10
20 PRINT "HOLA WIKIPEDIA"
30 NEXT X
RUN
HOLA WIKIPEDIA
HOLA WIKIPEDIA
HOLA WIKIPEDIA
HOLA WIKIPEDIA
HOLA WIKIPEDIA
HOLA WIKIPEDIA
HOLA WIKIPEDIA
HOLA WIKIPEDIA
HOLA WIKIPEDIA
HOLA WIKIPEDIA
READY
```

Screenshot of Atari BASIC, frühe 1980er Jahre. Screenshot.

1963

▼ Technology

L. Roberts develops the first practical hidden-line removal algorithm.

1964

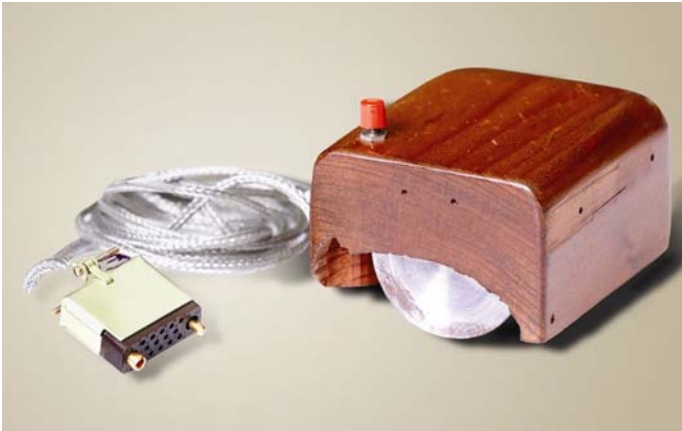
▼ Technology

John Kemeny and Thomas Kurtz develop BASIC (Beginner's All-Purpose Symbolic Instruction Code) programming language.
Douglas Engelbart invents the mouse.

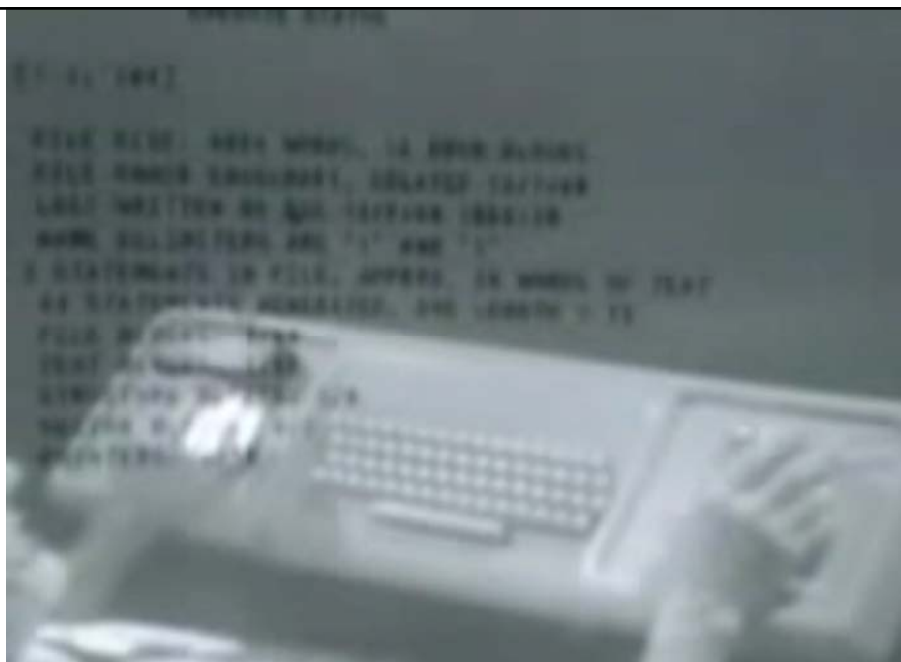
ASCII (American Standard Code for Information Interchange) is established as a standard.

Rand Corporation develops the first positioning tablet.
Kenneth Knowlton writes BEFLIX, the first general-purpose programming language for computer animation.





Douglas Engelbart: Mouse-Interface.



Douglas Engelbart und die «Mutter aller Demos», 9.12.1968.
Online: <https://www.youtube.com/watch?v=JfIgzSoTMOs>

1963

▼ Technology

L. Roberts develops the first practical hidden-line removal algorithm.

ASCII (American Standard Code for Information Interchange) is established as a standard.

1964

▼ Technology

John Kemeny and Thomas Kurtz develop BASIC (Beginner's All-Purpose Symbolic Instruction Code) programming language.
Douglas Engelbart invents the mouse.

Rand Corporation develops the first positioning tablet.
Kenneth Knowlton writes BEFLIX, the first general-purpose programming language for computer animation.

1965

▼ Exhibitions

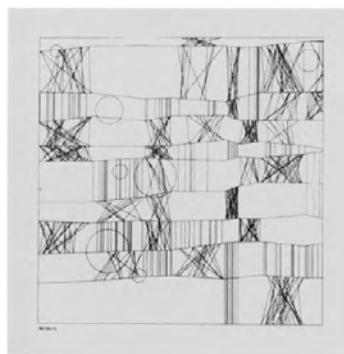
"Maughan S. Mason, Bela Julesz and Michael Noll," Las Vegas, Nev.: Fall Joint Computer Conference.
"Nam June Paik: Electronic Art," New York: Galeria Bonino.
"Georg Nees and Frieder Nake," Stuttgart: Niedlichs Galerie.
"World Exhibition of Computer Graphics," New York: Howard Wise Gallery.

▼ Publications

Gyorgy Kepes, ed., *Structure in Art and Science*.
Kenneth Knowlton, "Computer-Produced Movies."
Marshall McLuhan, *Understanding Media: The Extensions of Man*.

▼ Technology

Sony releases Portapak, the first inexpensive, nonbroadcast-quality, portable black-and-white video camera.



Frieder Nake, *Homage to Paul Klee*, 1965, silkscreen on paper, 20 × 20 inches. Private collection.

Giloth, Copper Frances/
Pocock-Williams, Lynn: A
Selected Chronology of
Computer Art:
Exhibitions, Publications,
and Technology, in: *Art
Journal*, Vol. 49, Nr. 3,
Oktober 1990, S. 283-
297; hier: S. 284.



Portapak

▼ **Technology**

Sony releases Portapak, the first inexpensive, nonbroadcast-quality, portable black-and-white video camera.

1966▼ **Exhibitions**

"P. Herzog, K. Ableben, Frieder Nake and Georg Nees." Frankfurt am Main, Germany: Galerie d.

▼ **Publications**

Allan Schooner, "2066 and ALL That." *EAT News*, newsletter of Experiments in Art and Technology, is founded.

▼ **Technology**

Experiments in Art and Technology (EAT) is founded by Robert Rauschenberg and Billy Klüver (physicist in laser research at Bell Labs) to promote collaborations by artists and scientists. F. Alterio and R. Dunlavy of Teletype Corporation develop Inktronic, the first ink-jet printer.

1967▼ **Publications**

Exakte Ästhetik, special issue on "Art from the Computer." Edmund C. Berkeley, "Computer Art: Turning Point." Michael Noll, "The Digital Computer as a Creative Medium."

▼ **Technology**

Center for Advanced Visual Studies (CAVS) is established at MIT by Gyorgy Kepes to provide collaborative environment for artists and scientists. R. Masters and H. Fretheim of Control Data Corporation develop first touch-sensitive screen.

1968▼ **Exhibitions**

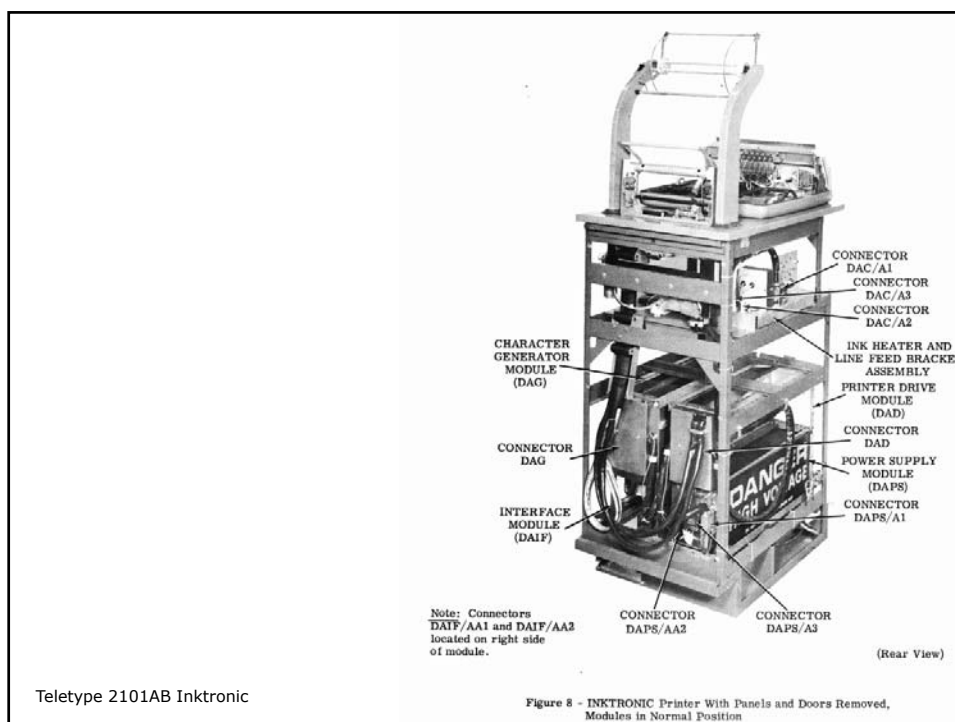
"Cybernetic Serendipity: The Computer and the Arts," London: Institute of Contemporary Art.*
 "On the Path to Computer Art," Berlin: the parallel group in conjunction with a joint conference of MIT and the Technical University, Berlin.
 "Some More Beginnings: An Exhibition of Submitted Works Involving Technical Materials and Processes," New York: Brooklyn Museum.*
 "The Machine, as Seen at the End of the Mechanical Age," New York: Museum of Modern Art.*

▼ **Publications**

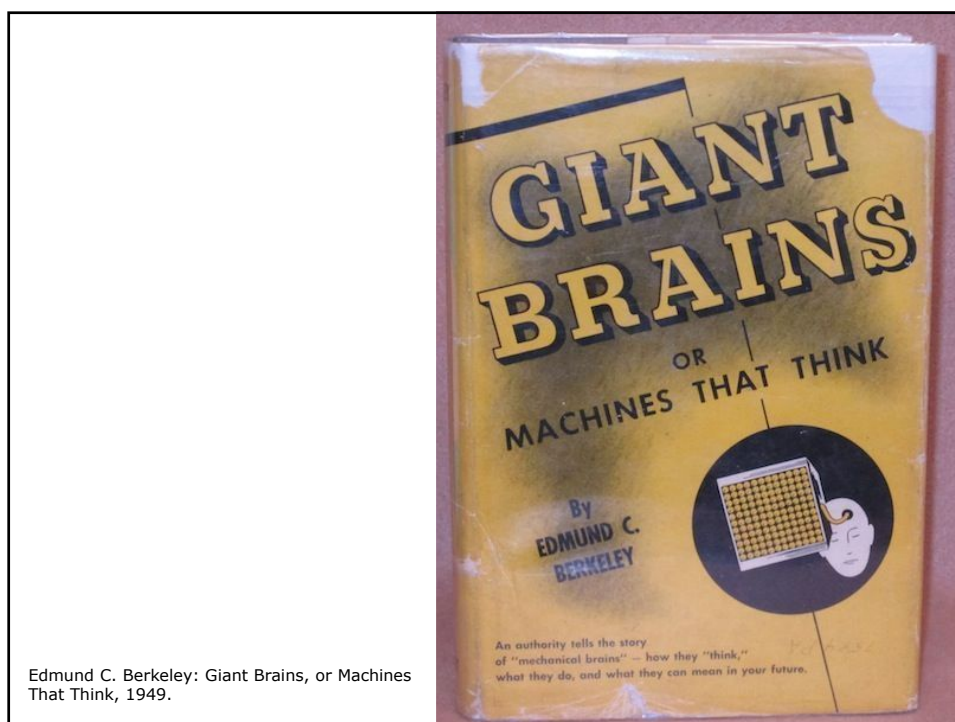
Jack Burnham, *Beyond Modern Sculpture: The Effects of Science and Technology on the Sculpture of This Century*. Kawano Hiroshi, "The Aesthetic for Computer Art." Douglas Davis, "Art and Technology: The New Combine." *Leonardo* begins publication. (Numerous articles on computer art have appeared in this journal, which continues to be published.)



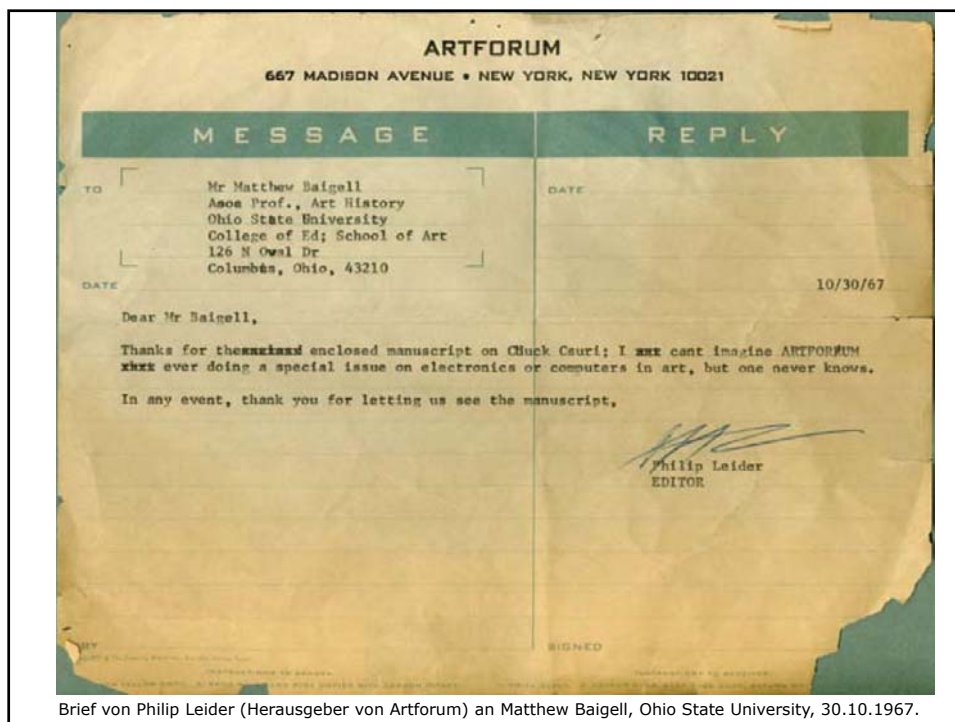
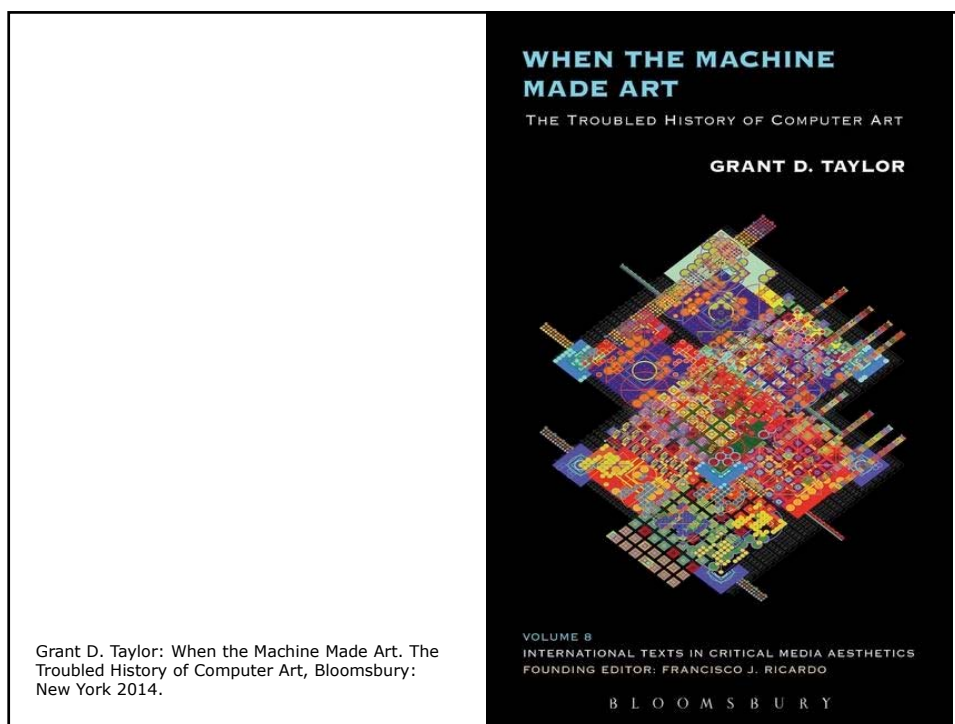
Giloth, Copper Frances/
 Pocock-Williams, Lynn: A
 Selected Chronology of
 Computer Art:
 Exhibitions, Publications,
 and Technology, in: *Art
 Journal*, Vol. 49, Nr. 3,
 Oktober 1990, S. 283-
 297; hier: S. 285.



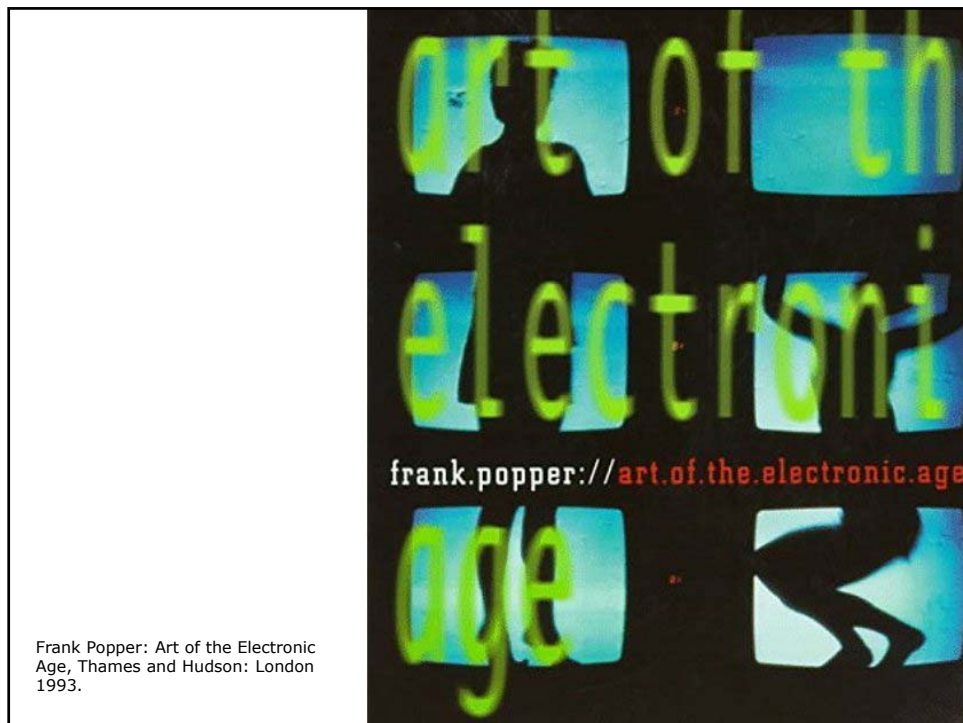
Teletype 2101AB Inktronic



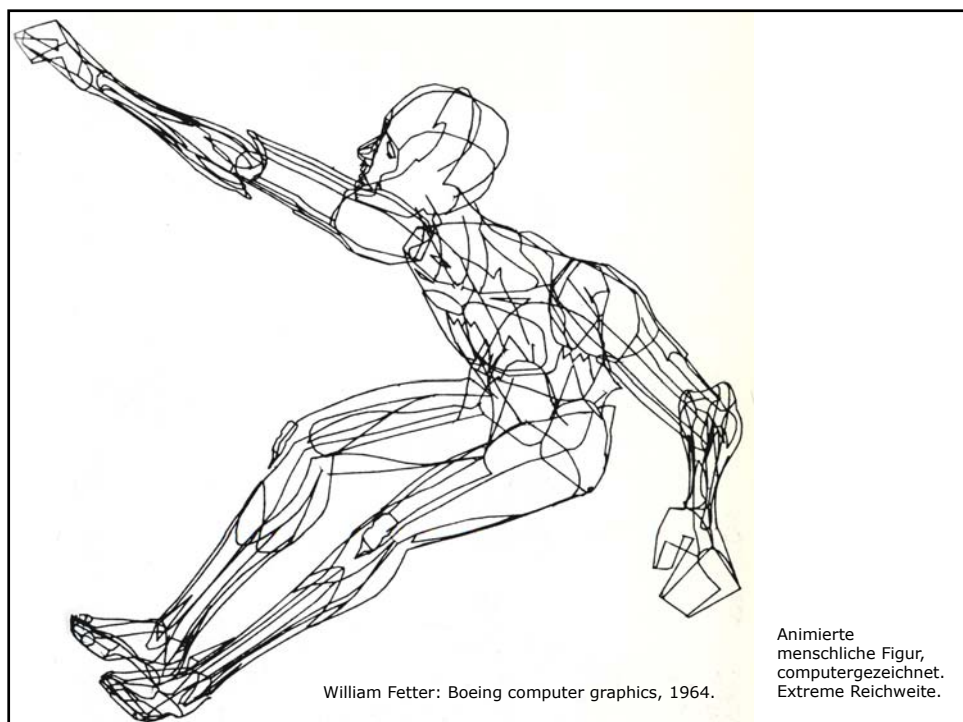
Edmund C. Berkeley: Giant Brains, or Machines That Think, 1949.



Brief von Philip Leider (Herausgeber von Artforum) an Matthew Baigell, Ohio State University, 30.10.1967.

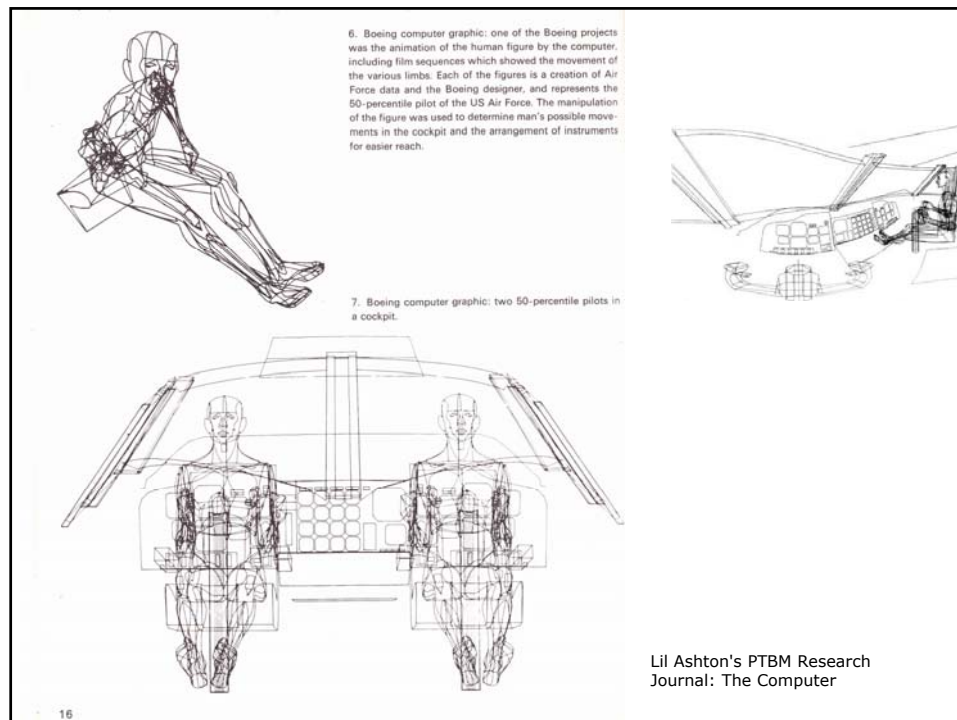


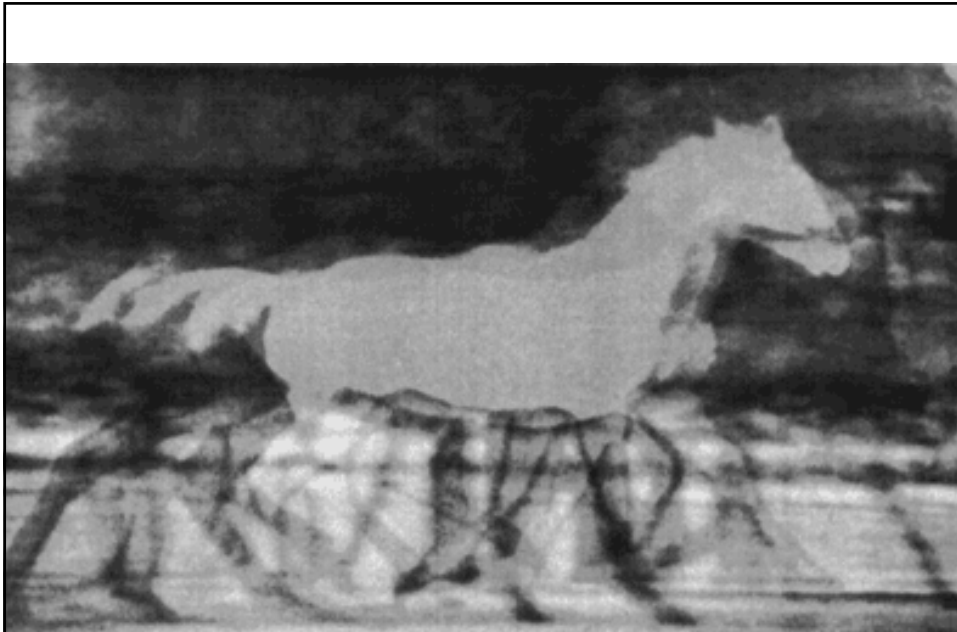
Frank Popper: Art of the Electronic Age, Thames and Hudson: London 1993.



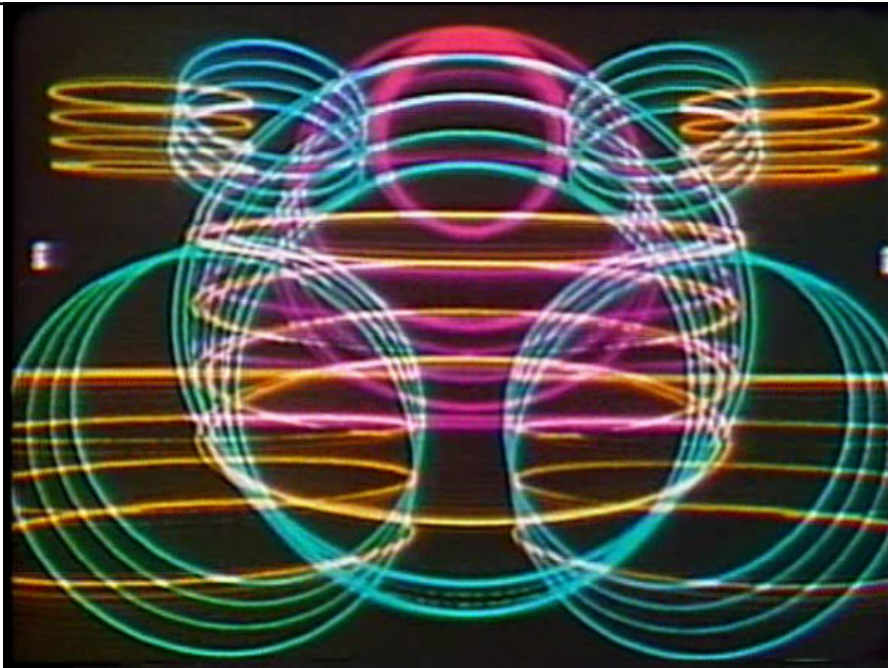
William Fetter: Boeing computer graphics, 1964.

Animierte menschliche Figur, computergezeichnet. Extreme Reichweite.

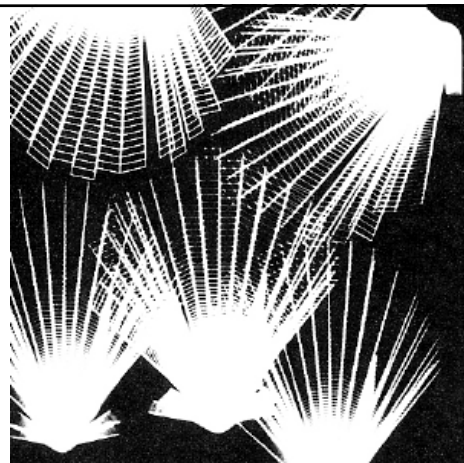
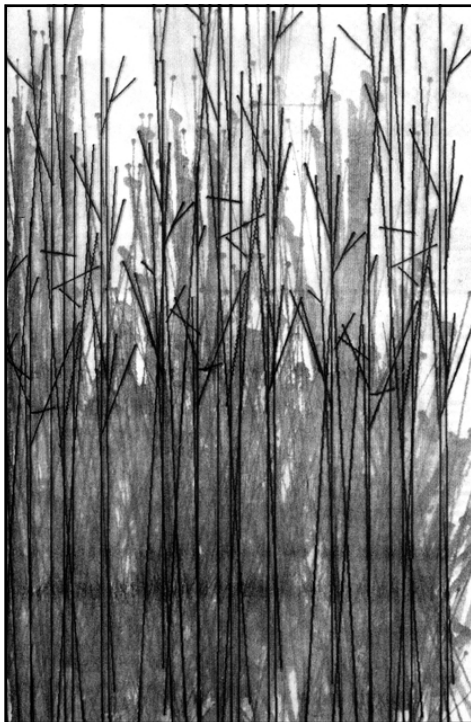
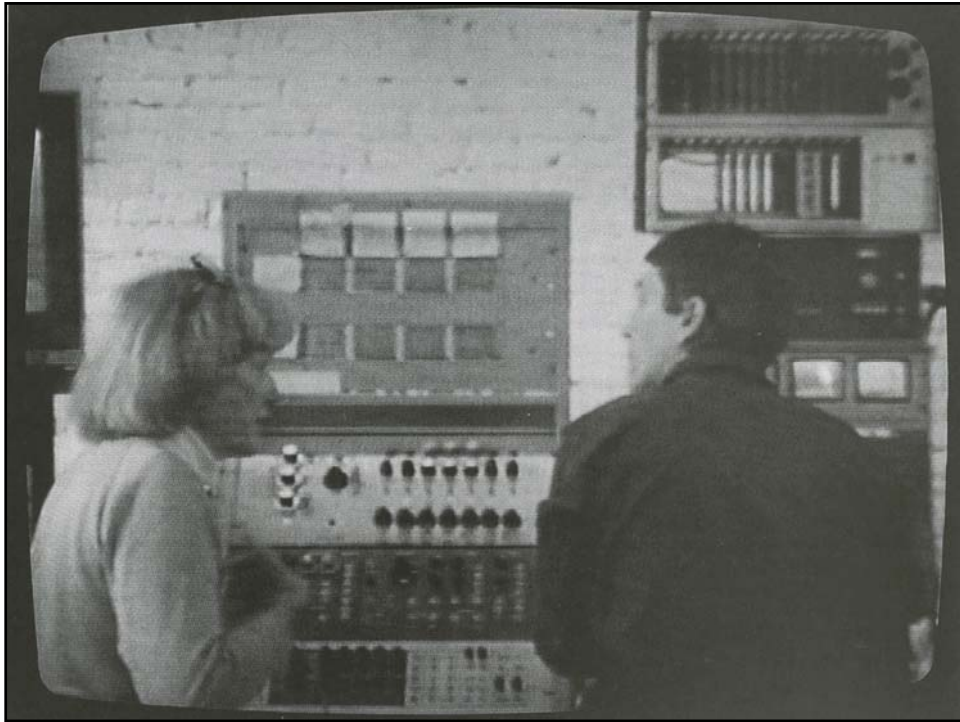




Robert Brown, Frank Olvey: The Tempest, 1967. Film, Farbe, 7 min. Still.

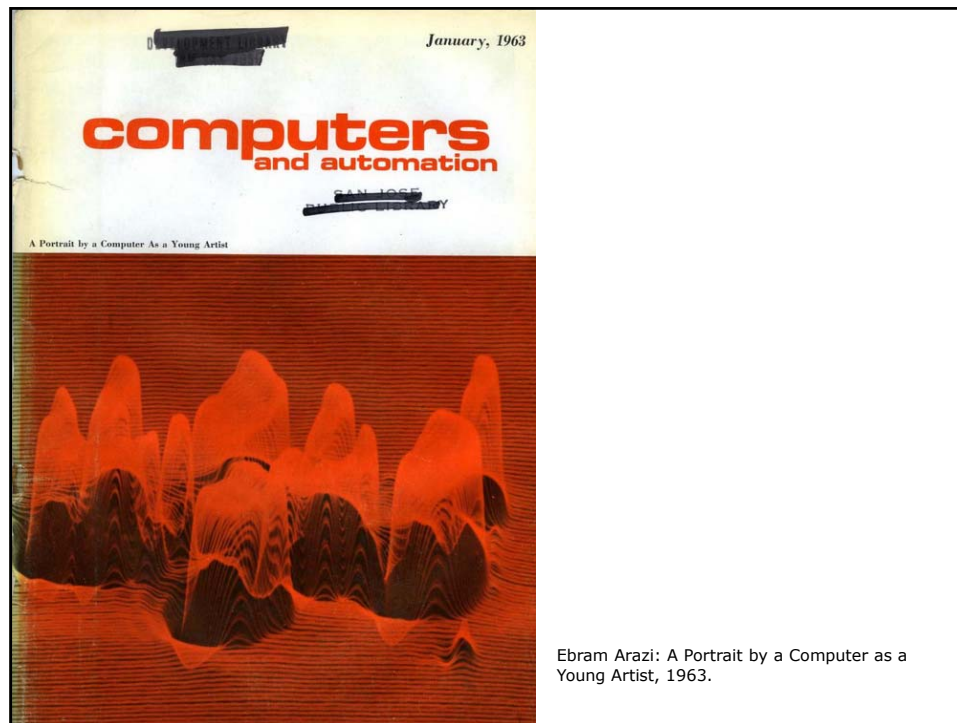


Susan Chase, Robert Brown, Frank Olvey, Morton Subotnik, Robert Tingley: Circle I, 1970. 16mm Film, Farbe, Ton, 6:45 min. Still.



Grace C. Hertlein: Sea Fans, 1976.

Grace C. Hertlein: The Field, 1970. Computergenerierte Grafik, graue Tinte auf Pastellpapier.



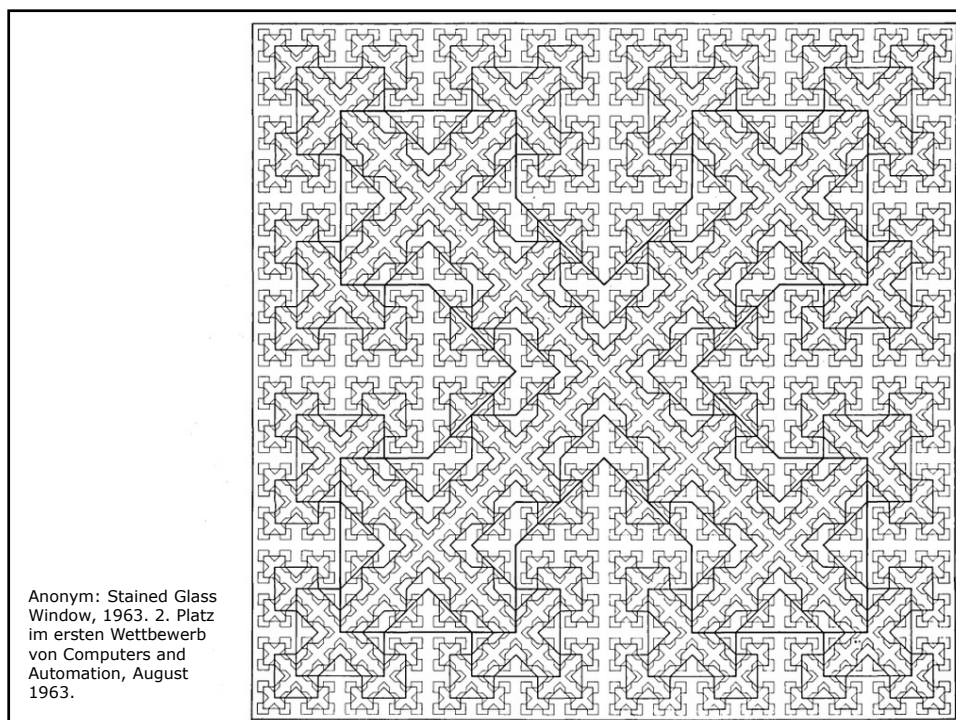
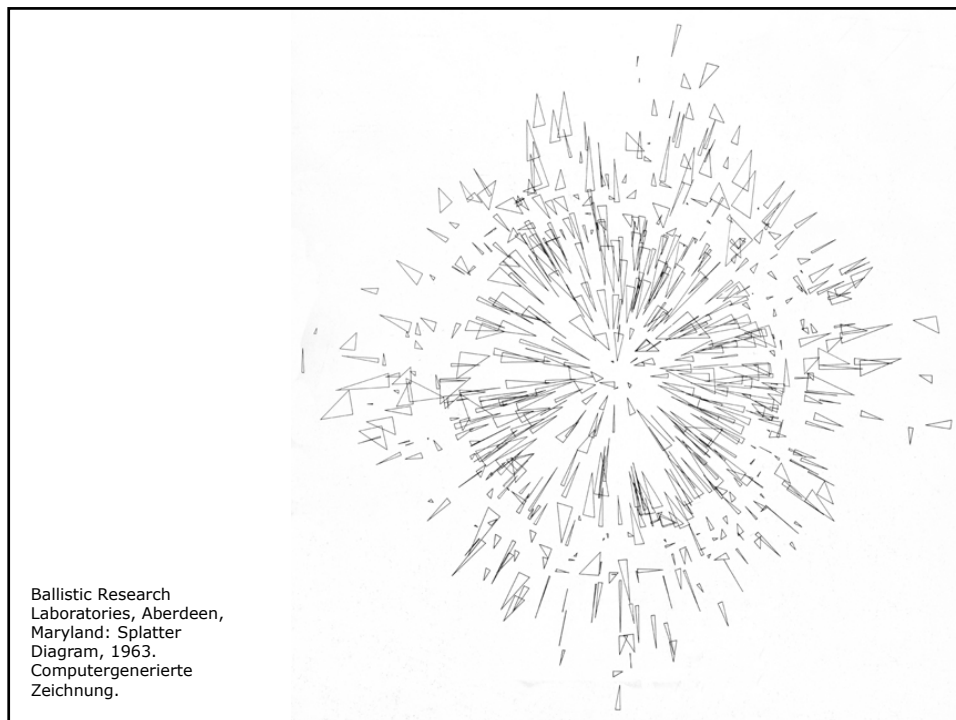
Ebram Arazi: A Portrait by a Computer as a Young Artist, 1963.

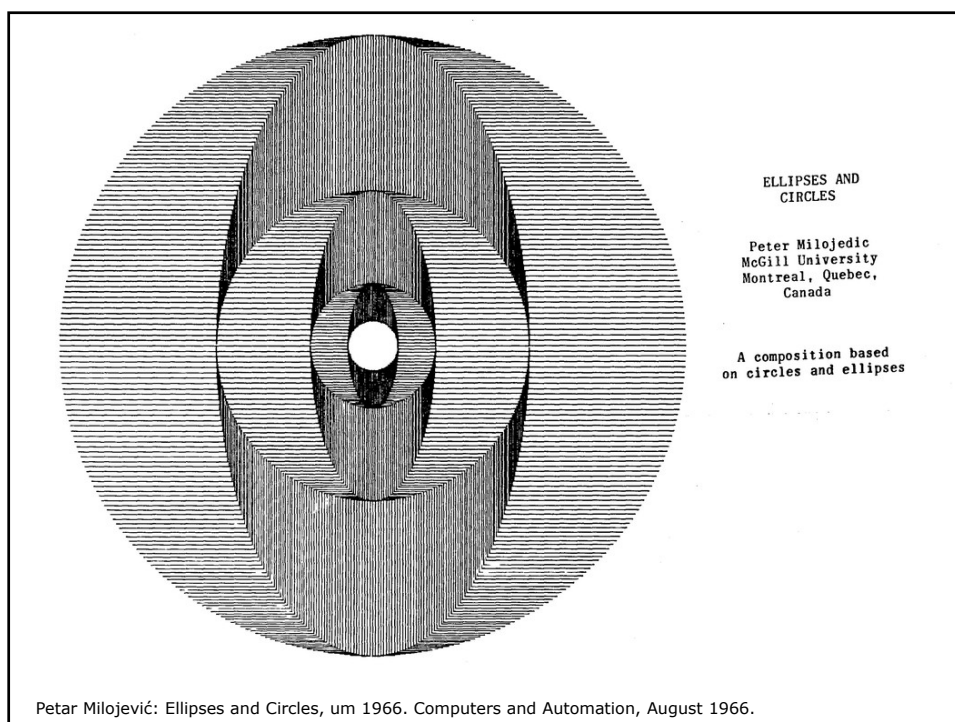
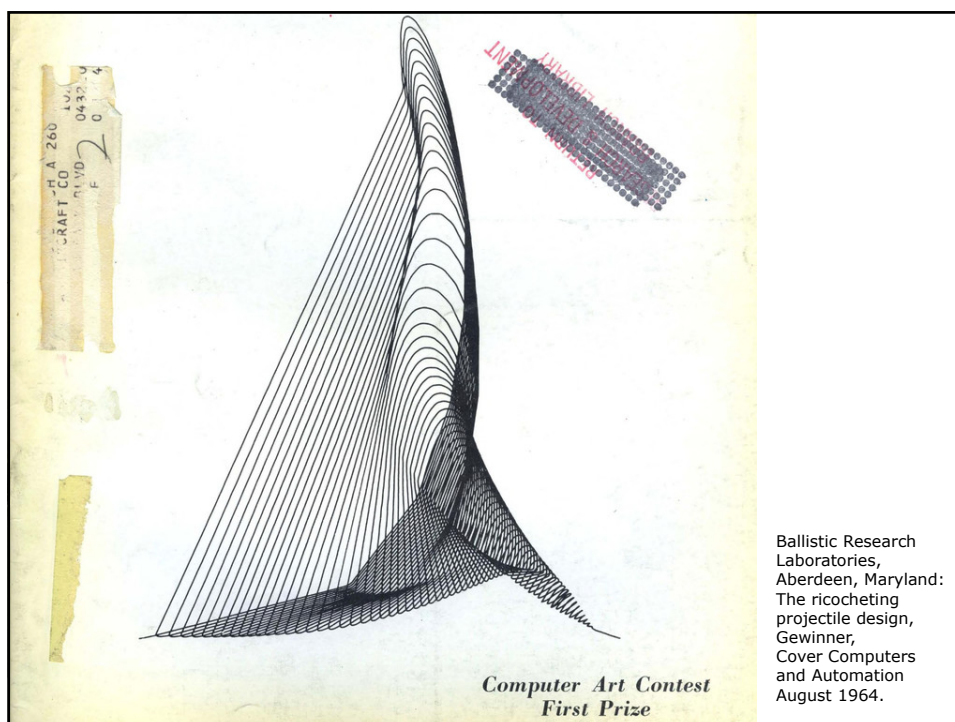
COMPUTER ART CONTEST

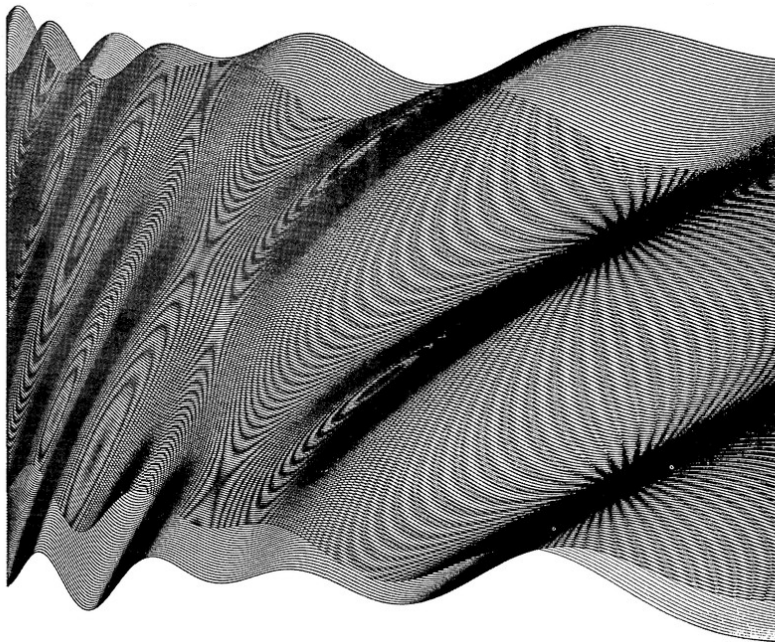
In January the front cover of "Computers and Automation" displayed an example of "computer art," an esthetic form created by the wedding of a computer to other electronic devices. To encourage explorations in this new artistic domain, "Computers and Automation" will hold an informal contest for similar examples of visual creativity in which a computer plays a dominant role. We invite any reader to submit to us examples — which we shall consider for publication in "Computers and Automation." To the best example in the judgment of the editors, we plan to devote the front cover of our August issue.

Entries close on June 30, 1963. For ideas, see the picture on the front cover of the January issue, and the account of it. For more information, please write to Computer Art Contest Editor, Computers and Automation.

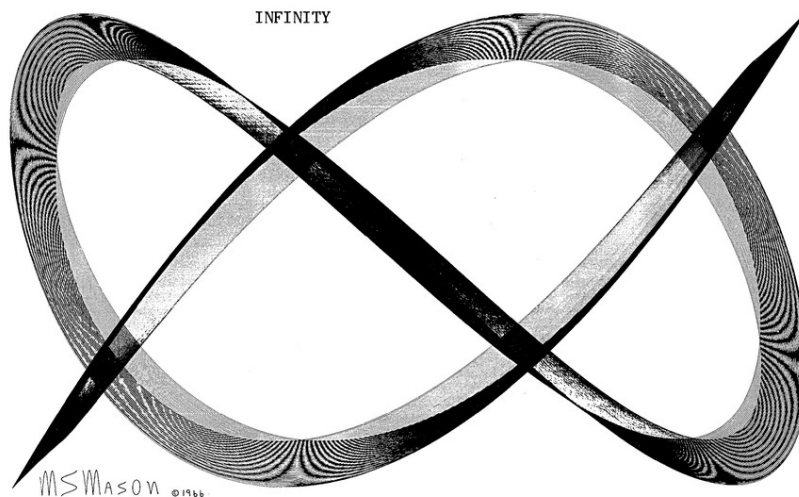
Ankündigung des ersten "Computer Art Contest" in der Februar-Nummer 1963 von „Computers and Automation“.







Maughan S. Mason: Silk Patterns, 1966. Computers and Automation, August 1966.



The sign of infinity, drawn by computer plus man.
- M. S. Mason
4008 Dobbs Drive S.E.
Huntsville, Ala. 35802

Maughan S. Mason: Infinity, 1966. Computers and Automation, August 1967.

August, 1967

computers and automation

Computer Art Contest: First Prize



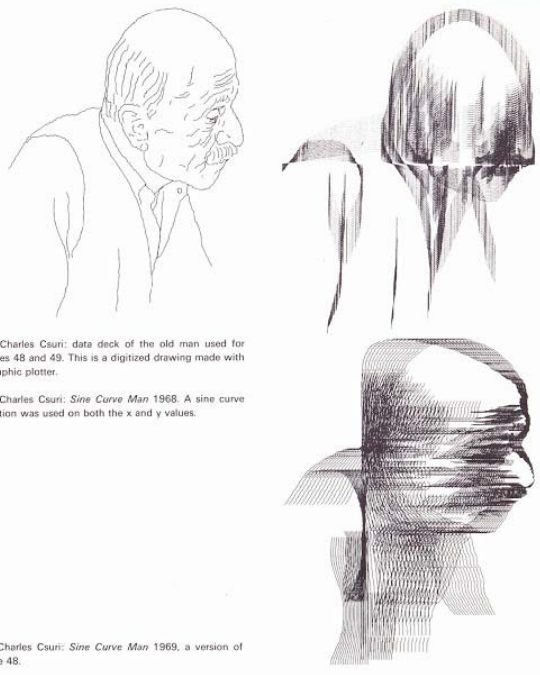
Sine Curve Man, 1967, by Charles Csuri, Artist, and James Shaffer, Programmer

New Masters



Grafik aus: French, Nancy: Early DP Artists Tacket don Title Last, in: Computerworld, 1.8.1977, S. 9.

Computers and automation, August 1967.
5. Kunstwettbewerb.
Gewinner: Charles Csuri und James Shaffer:
Sine curve man, 1967.



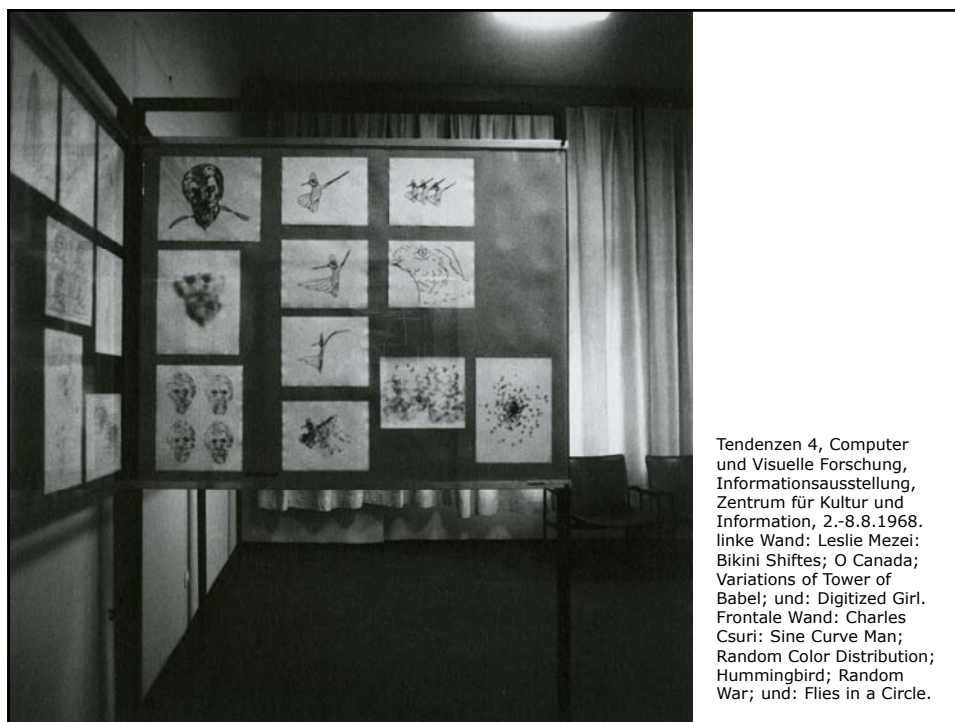
47. Charles Csuri: data deck of the old man used for figures 48 and 49. This is a digitized drawing made with a graphic plotter.

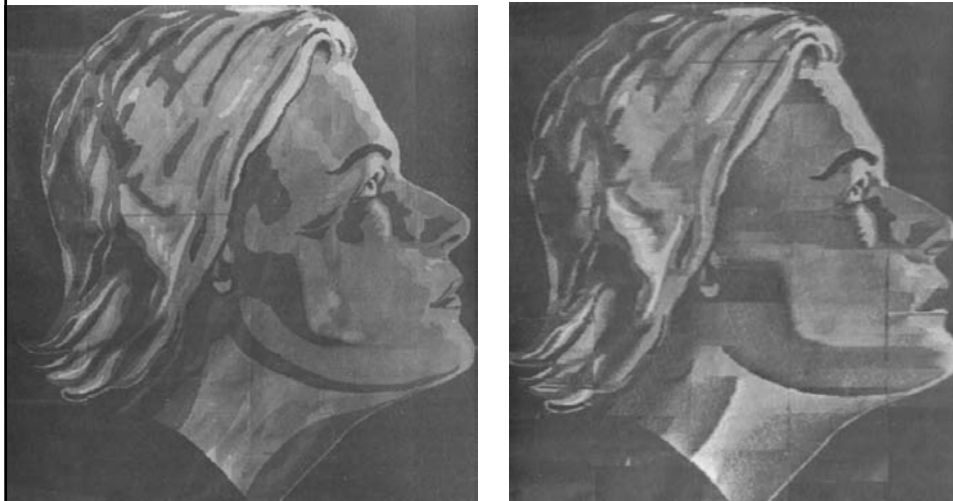
48. Charles Csuri: *Sine Curve Man* 1968. A sine curve function was used on both the x and y values.

49. Charles Csuri: *Sine Curve Man* 1969, a version of figure 48.

Charles Csuri:
l.o.: Plotterzeichnung eines alten Mannes.
r.o.: Sinuskurvenmann, 1968,
r.u.: Sinuskurvenmann, 1969.

43





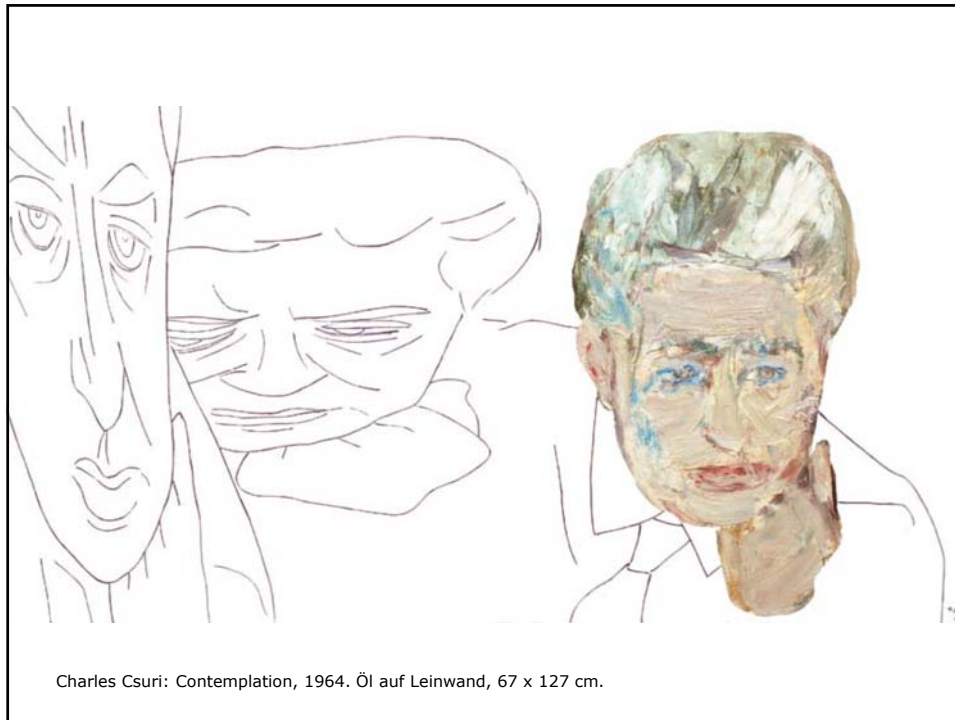
J. G. Raudseps: Profile of a Woman (l.) und Smoothed figure (r.), 1963. Antenna Lab.

CHAOS TO ORDER

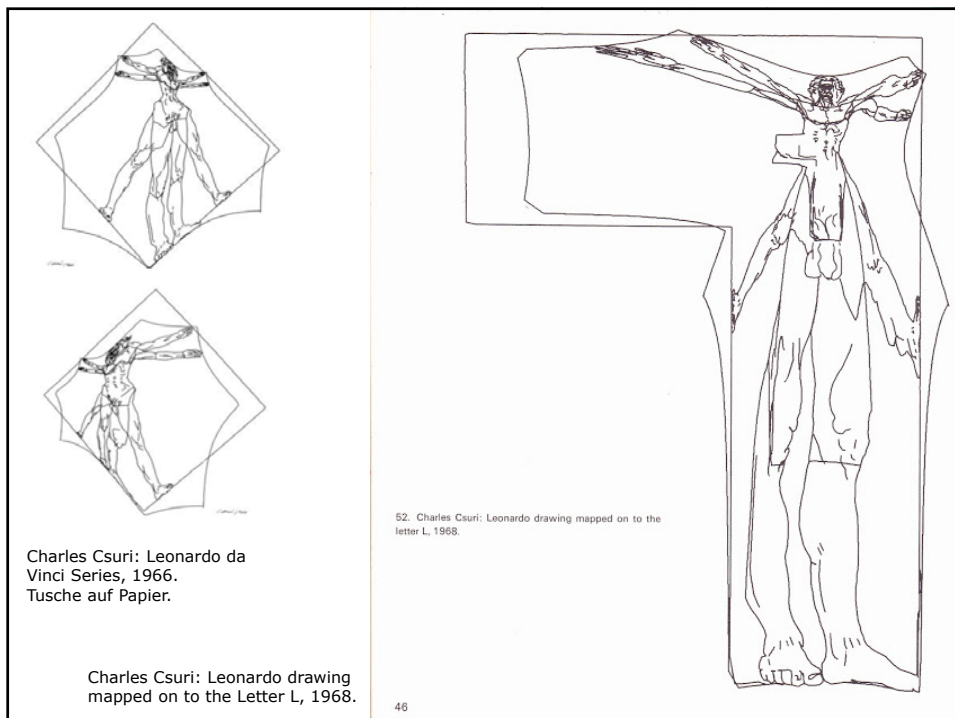


Each line of the bird was distributed at random. The computer drew the chaotic version first, and in progressive stages brought the bird back together.
 - Charles Csuri, Professor, School of Art
 James Shaffer, Programmer
 The Ohio State University
 Columbus, Ohio 43210

Charles Csuri und James Shaffer: Chaos to Order, ca. 1967. Einreichung zu Computers and Automation, August 1967. // auch: "Hummingbird II", 1969.



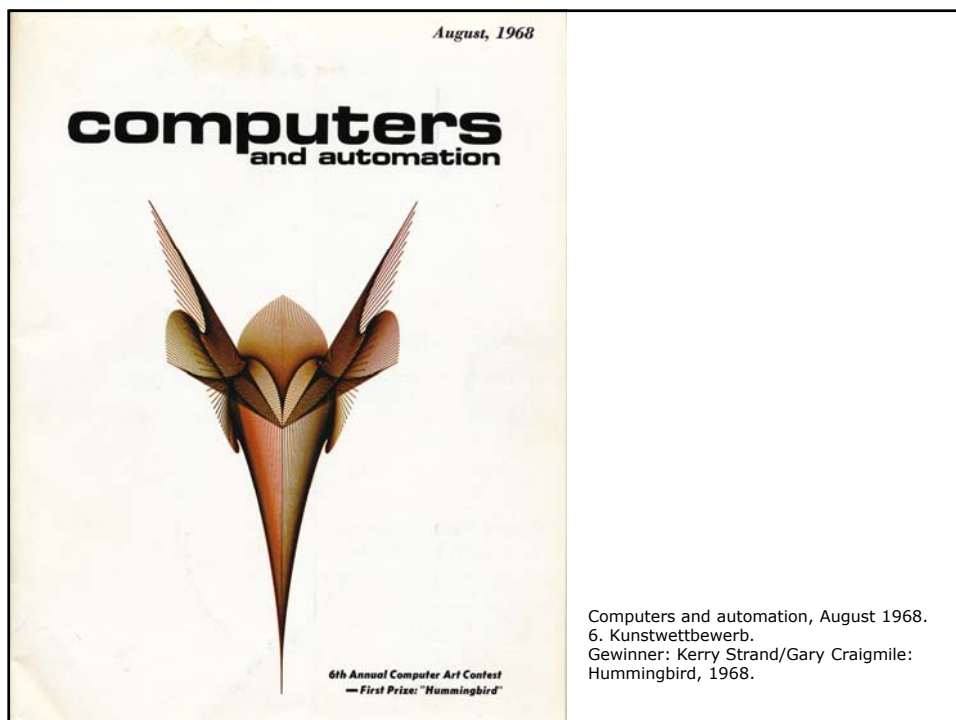
Charles Csuri: Contemplation, 1964. Öl auf Leinwand, 67 x 127 cm.

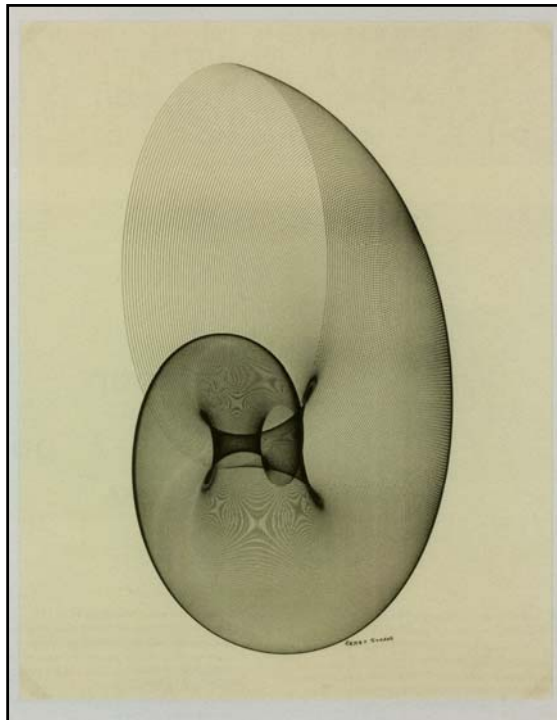


Charles Csuri: Leonardo da Vinci Series, 1966.
Tusche auf Papier.

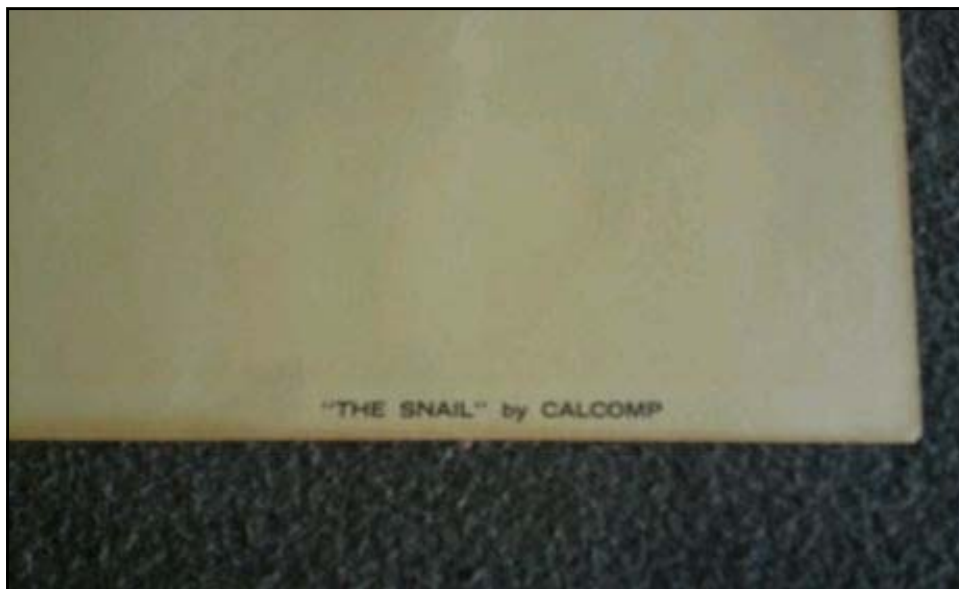
Charles Csuri: Leonardo drawing mapped on to the Letter L, 1968.

52. Charles Csuri: Leonardo drawing mapped on to the letter L, 1968.

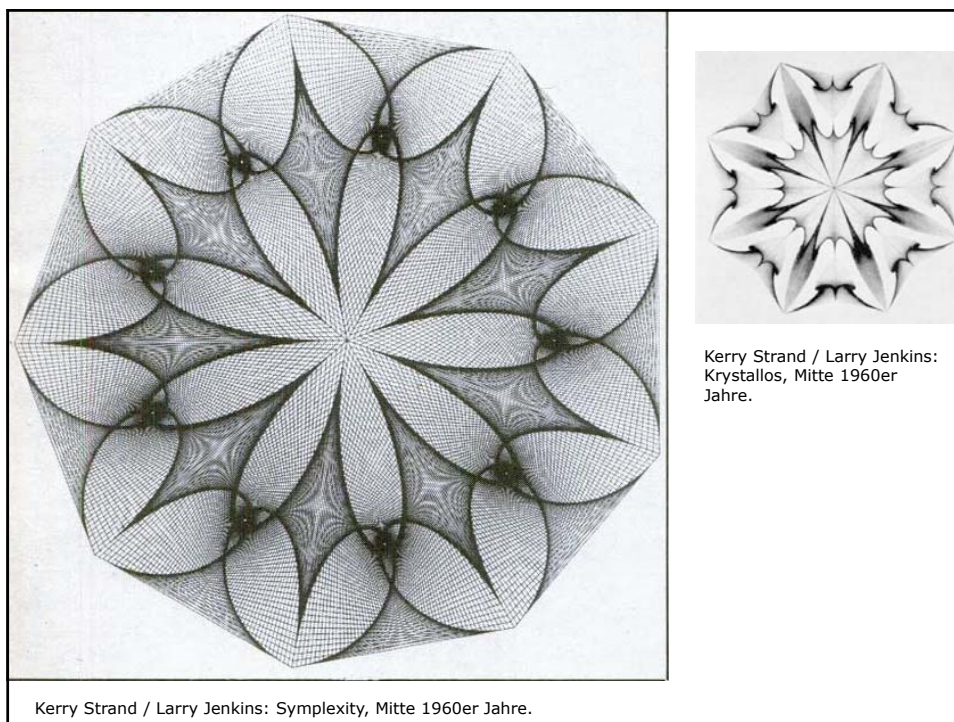




Kerry Strand: Snail, 1968 (1964).
Plotterzeichnung. Computergenerierte
Zeichnung, Schwarze Tusche auf Mylar, 89 x
50,5 cm. GE-425, CalComp 502/760.
Programmiert in FORTRAN.



Kerry Strand: The Snail, 1967. Plotterzeichnung.



CALL FOR ENTRIES

CalComp is looking for the best computer artist.

\$15,000 in Cash Prizes.

To help celebrate our 25th Anniversary, CalComp is holding an International Computer Art Competition! There's \$15,000 in cash prizes to win, along with a lot of fame, and all you need to enter is the use of a CalComp plotter.

To make our competition as fair as possible, we've created two different judging divisions.

The Professional Division, with a Grand Prize of \$15,000, is for pro-

fessional artists, along with engineers, architects and others now employed in the computer graphics field.

The Student Division, with a Grand Prize of \$5,000, is open to anyone enrolled in a college or university during the 1983-84 school year.

Everyone has an equal chance of winning, both cash and fame. So, enter the CalComp International Computer Art Competition and help us find the best computer artist. It could be you.

Prizes For Professional Division:

- \$15,000 Grand Prize
- \$2,000 Second Place Prize
- \$1,000 Third Place Prize
- \$250 honorable mention prizes

Prizes For Student Division:

- \$5,000 Grand Prize
- \$1,500 Second Place Prize
- \$750 Third Place Prize
- \$250 honorable mention prizes

A CalComp Model 184 desktop plotter will be presented to each winner's school, college or university.

CalComp International Computer Art Competition Entry Rules

1. Entries must be for 18 years of age or older.
2. There will be two categories of winners:
 - a. Professional Division: includes entrants currently employed in the computer or computer graphics fields, those who are computer in the job (engineers, architects), and professional artists.
 - b. Student Division: includes entrants enrolled in any college or university during the year in which the submitted work was created. Entry may or may not be part of class projects.
3. Entrants, or members of their families, can not be employed by CalComp, its advertising and public relations agencies, its subsidiaries or its parent company (Sanders Associates, Inc.).

What May Be Entered:

Computer art submitted to the contest must be created on any graphics-producing system, but must have been produced on a CalComp plotter. Dimensions of the work may not exceed 10" x 14" x 1/8". Entrants must supply the following information: CalComp plotter model number, serial number, and an explanation of the ink, color and types of pens used to create the work.

Judges Will Look For:

Flexibility of artistic expression and graphic design in visual communication.

Who Will Judge:

The CalComp Computer Art Jury will consist of:

- Eudney Jucker, chairperson, is an internationally known computer artist, whose designs have been shown at the Museum of Modern Art, Paris.
- Randy Sherris, juror, is a director/designer, Caring Associates, Los Angeles, CA.
- Laurence Gumpert, juror, is a designer, Designing for Microsoft, Amesbury, CA.
- Mary Ann Glantz, M.F.A., juror, is a professor, Fine Arts Department, California State University, Northridge, CA.
- Karen Marxon, juror, designs and graphics communications consultants, Karm Marxon and Associates, San Francisco, CA.

How To Enter:

Contestants may submit from one to eight different pieces of computer art to qualify for either division. Entries must be made in the form of 35mm color slides. Each of slides with entrant's name, title of artwork and an indication of the correct view position. Also, in a separate paper, include the following: name, address, phone, employer or college, plotter model, plotter serial number(s), ink used, colors used, type of pens used, size of actual work, and a description of how the work was created, including what problems were overcome and what techniques were used.

Slides should be placed in plastic sleeves and sent, with a self-addressed, stamped envelope, to:

CalComp Art Competition
2411 W. La Palma Avenue
San Jose, CA 95128

All entries must be postmarked no later than July 2, 1984.

Entrants will be required to submit original work (plotter hard-copy). These entries must be submitted in pen/ink on 8 1/2" x 11" paper and one inch metal frames with white mat. Do not send work framed with glass. Drawings for framed work must not exceed 10" x 14".

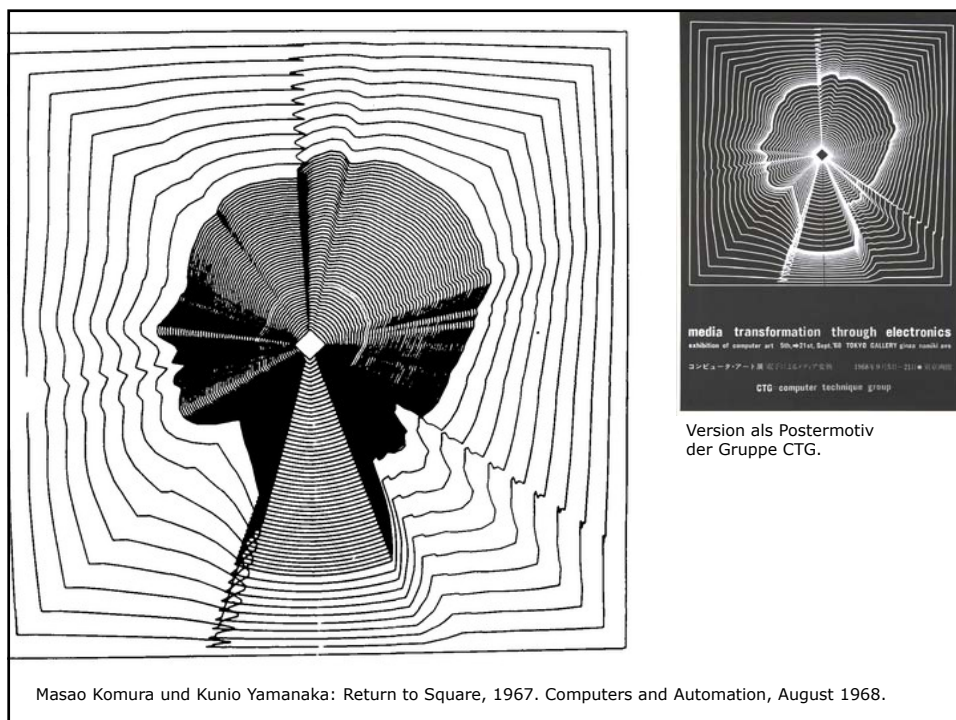
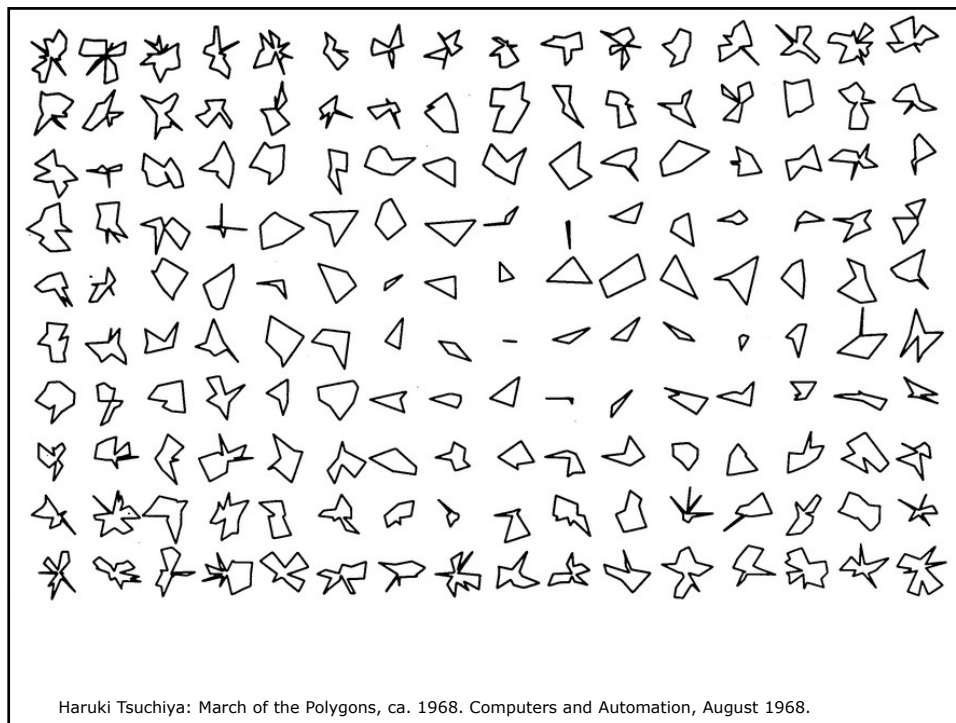
Decisions made by the judges are final. Prizes winning work becomes the property of CalComp.

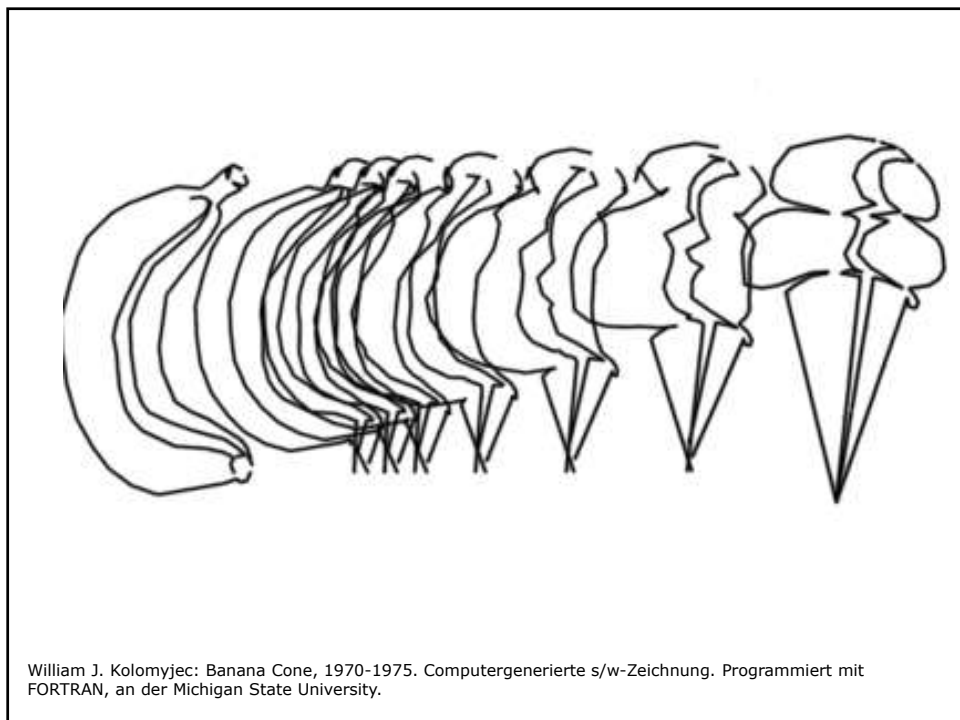
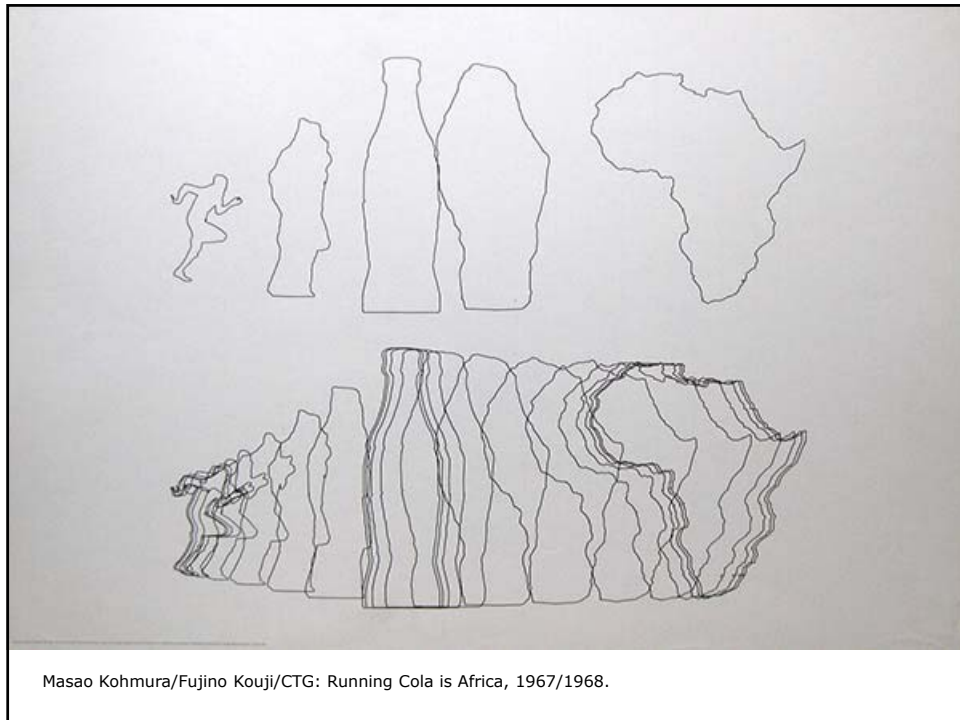
Winners will be notified by mail on or before September 15, 1984. Formal announcements of competition results will be made at a Gala Exhibition of entries at the California Museum of Science and Industry in Los Angeles. Selected work will also be featured on the CalComp 1984 Calendar.

CALCOMP
A Sanders Company

All entries agree to the use of their name, photograph and work in public relations and advertising activities of CalComp. If the prize for the winner is not received, the prize will be given to the next eligible entrant. Entrants who do not appear in the contest will be disqualified and their work will be destroyed. Entries will not be returned. Entrants will be responsible for any damage to their work. Entries accepted 1984.

CalComp: CalComp is looking for the best computer artist, in: IEEE Computer Graphics and Applications, Vol. 4, Nr. 5, Mai 1984, S. 85.





COMPUTER ARTISTS IN THEIR MEDIA

The following is a list of persons whose art is published in this issue as part of the 1988 Annual Computer Art Contest of *Computers and Automation*.

Anderson, L. David, California Computer Products, Inc., 305 N. Muller St., Anaheim, Calif. 92805
 Crisafulli, Gary, California Computer Products, Inc., 305 N. Muller St., Anaheim, Calif. 92805
 Croves, Michael H., 718-S State, Apt. 44, Kent, Wash. 98021
 DeLorenzo, D. J., Westinghouse Electric Corp., Fette Atomic Power Laboratory, Box 75, West Mifflin, Pa. 15122
 Francis, Alan M., International Computers and Telecommunications, Ltd., Bridge House, Putney, London, SW13 1JL, England
 Fujino, Issei, Computer Technique Group, T-26, Ichikawa, Koto-ku, Tokyo, Japan
 Hasegawa, Takashi, Computer Technique Group, T-26, Ichikawa, Kikawa, Koto-ku, Tokyo, Japan
 Hoshikawa, Mutsu, Fujino, Issei Corp., Saitama Bunkyo, Aikawaguchi, N. Hara, 47131
 Jenkins, Larry, California Computer Products, Inc., 305 S. Muller St., Anaheim, Calif. 92805
 Kikuchi, Junichi, Computer Technique Group, T-26, Ichikawa, Kikawa, Koto-ku, Tokyo, Japan
 Konishi, Masao, Computer Technique Group, T-26, Ichikawa, Kikawa, Koto-ku, Tokyo, Japan
 Marx, Douglas B., 18105 Cyril Place, Norridge, Calif. 94069
 Masi, Leslie, Associate Professor, Dept. of Computer Science, University of Toronto, Toronto, Canada
 McElvire, Peter, McGill University Computing Center, Montreal, Quebec, Canada
 Niles, Pjón, Computer Technique Group, T-26, Ichikawa, Koto-ku, Tokyo, Japan
 Niles, Lawrence, 3010 Dallas, Seattle City, WA, 98104
 Okada, Makoto, Computer Technique Group, T-26, Ichikawa, Kikawa, Koto-ku, Tokyo, Japan
 Payne, David, Institute of Computer Science, University of Toronto, Toronto, Canada
 Peterson, R. Philip, Control Data Corp., Northwest Industrial Park, Third Ave., Burlington, Mass. 01804
 Redfern, Donald, Dept. 9433, Smith Corp., Smith House, Alhambra, N. Hara, 47115
 Schultz, John, Polytechnic Institute of Brooklyn, Dept. of Electrical Engineering, 333 Jay St., Brooklyn, N.Y. 11201
 Sobel, Paul R., Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, Calif. 91109
 Stroud, Korry, California Computer Products, Inc., 305 N. Muller St., Anaheim, Calif. 92805
 Sumner, Lloyd, Computer Graphics, P.O. Box 1842, Charlottesville, Va. 22909
 Tsuchiya, Haruki, Computer Technique Group, T-26, Ichikawa, Kikawa, Koto-ku, Tokyo, Japan
 Walker, Dr. Evan Harris, National Aeronautics and Space Administration, Electronics Research Center, 615 Technology Square, Cambridge, Mass. 02139
 Yamada, Kenta, Computer Technique Group, T-26, Ichikawa, Kikawa, Koto-ku, Tokyo, Japan

EDP opportunities in Social Science Research

The BROOKINGS INSTITUTION is a private, independent research organization with national and international reputation for its research. The expanded use of computer applications has created new professional opportunities.

ASSISTANT DIRECTOR, COMPUTER CENTER—

Requires a Ph.D. in computer science or related field with extensive experience in computer programming, statistical analysis and experience in mathematical and statistical tests, and previous experience in the social sciences. In-person or video interview a highly advanced educational work in non-technical areas is highly desirable.

CREATIVE PROGRAMMERS—

Require a degree and background in professional language design and programming. Must have extensive experience in research on computer applications in the social sciences.

APPLICATIONS PROGRAMMERS—

Require creative people with substantial experience in FORTRAN programming and applications in the social sciences. A Ph.D. in computer science or related field is highly desirable. A knowledge of mathematical and statistical analysis is desirable in connection with present and future research.

Our stimulating academic environment offers growth potential, with the opportunity to work on important and challenging projects. We are an equal opportunity employer. Send your resume and references to: The Brookings Institution, 1775 Massachusetts Avenue, N.W., Washington, D.C. 20036. An equal opportunity employer.

The Brookings Institution
 1775 MASSACHUSETTS AVENUE, N.W.
 WASHINGTON, D.C. 20036
 An equal opportunity employer

Designate No. 12 on Reader Service Card

CYBERNETIC SERENDIPITY

An International Exhibition exploring and demonstrating the relationship between technology and creativity.

The exhibition is a unique and innovative exploration of the relationship between technology and creativity. It features a series of interactive exhibits that allow visitors to experience the creative process in a hands-on way. The exhibits are designed to be both educational and entertaining, and they are suitable for all ages.

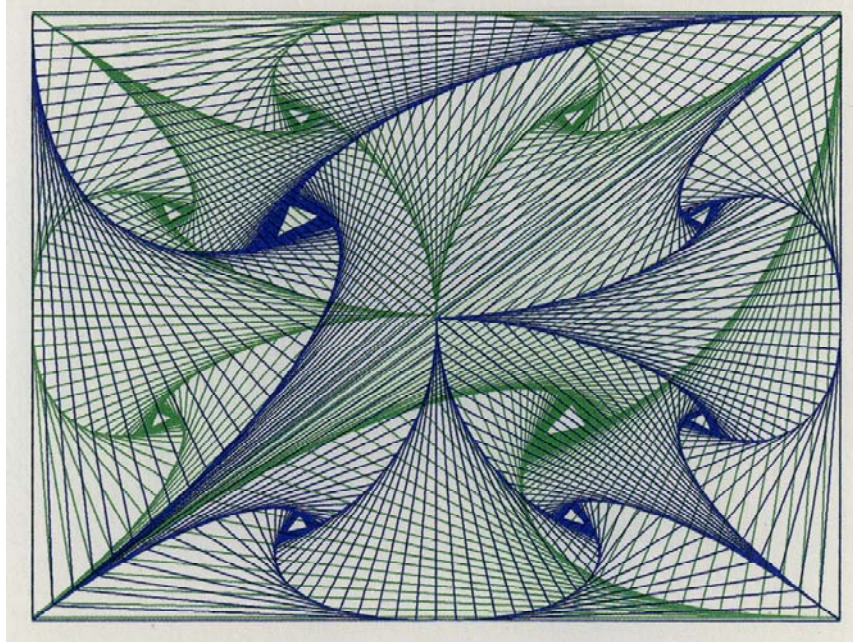
Institute of Contemporary Arts

The Mail London SW1 1JH 01-639 5344

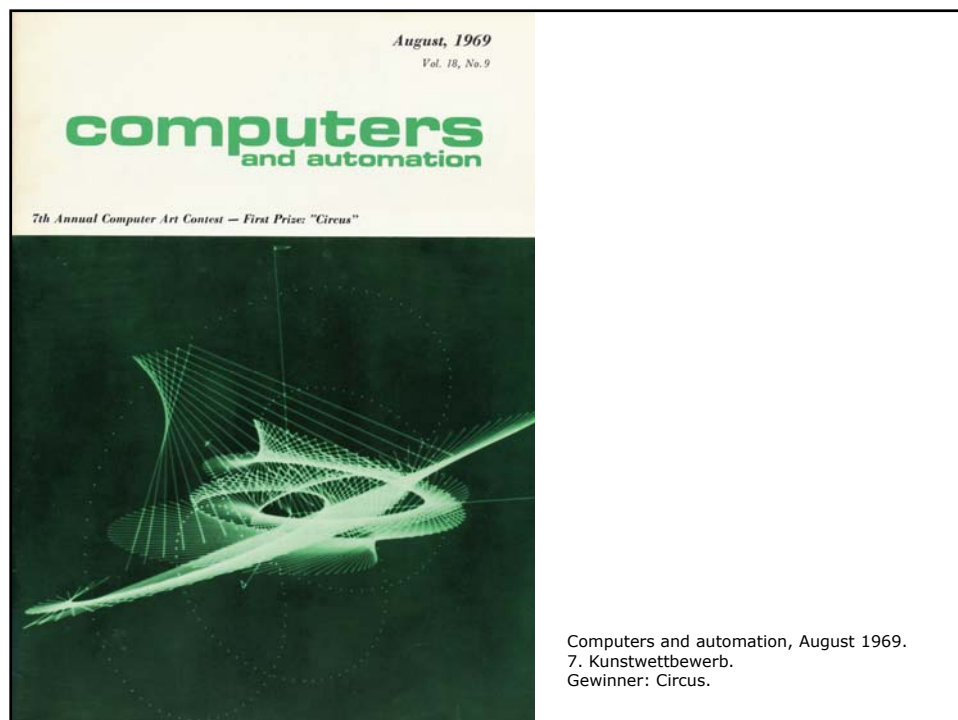
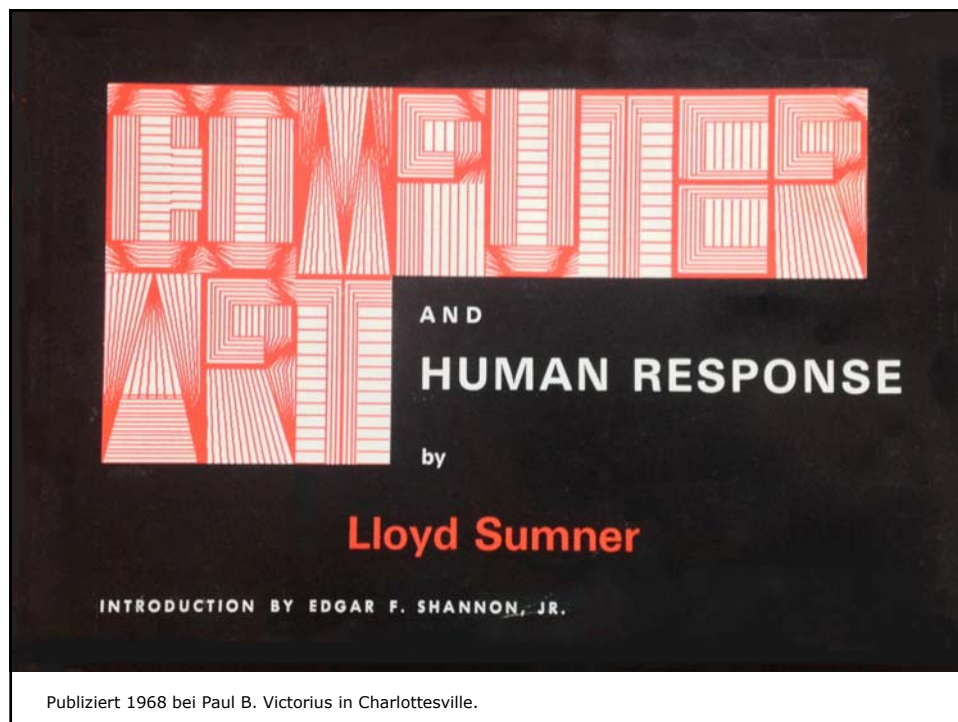
Werbeanzeige ICA: Cybernetic Serendipity
 in: Computers and Automation, August
 1968, S. 27.

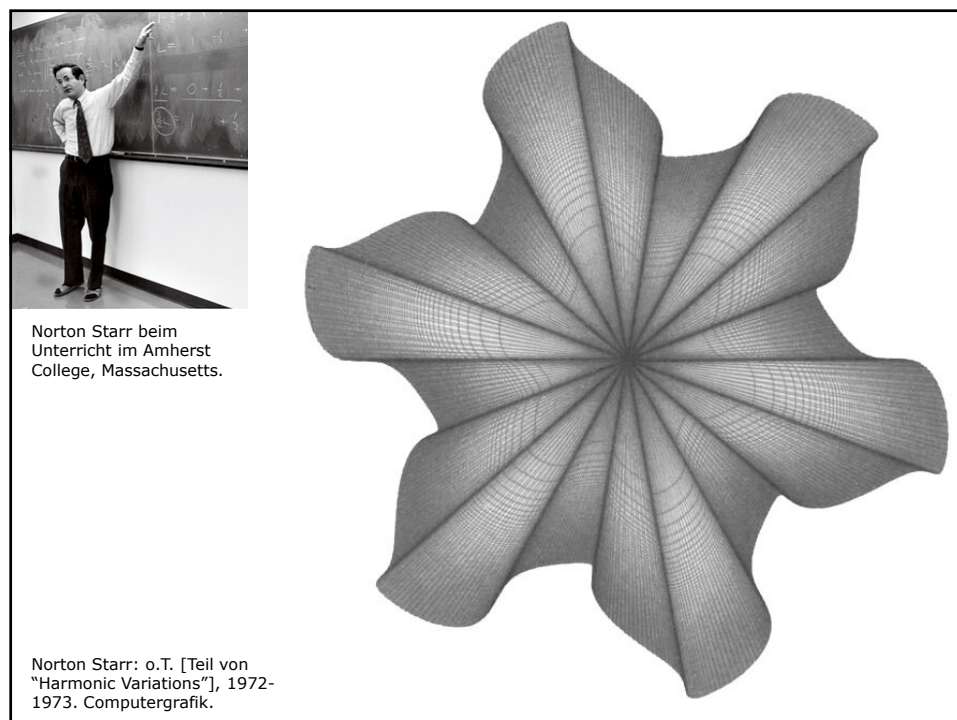
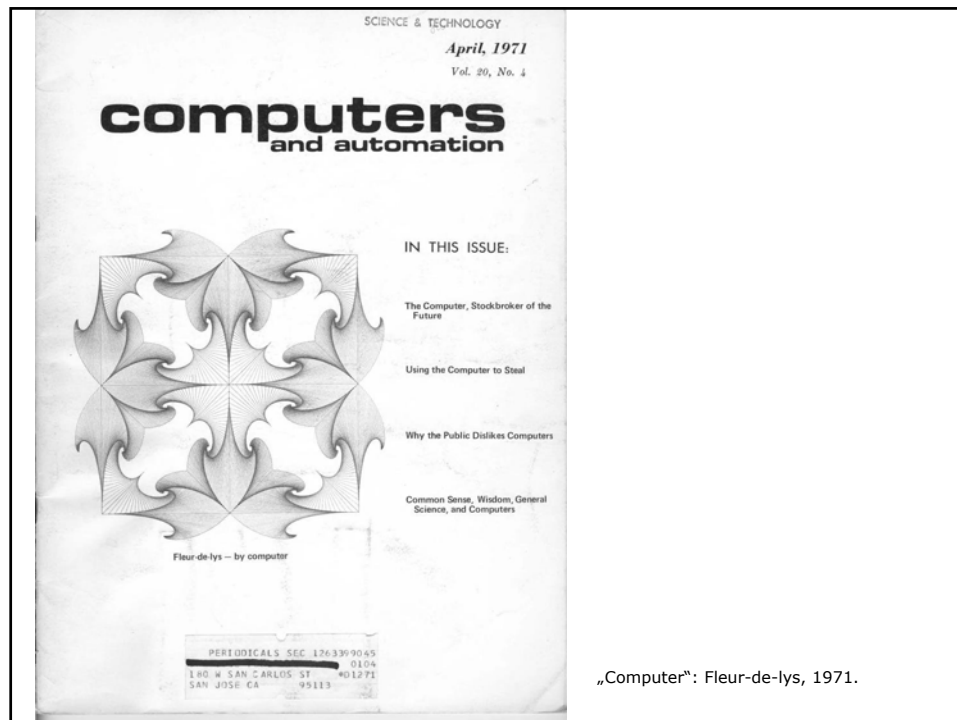
COMPUTERS and AUTOMATION for August, 1968

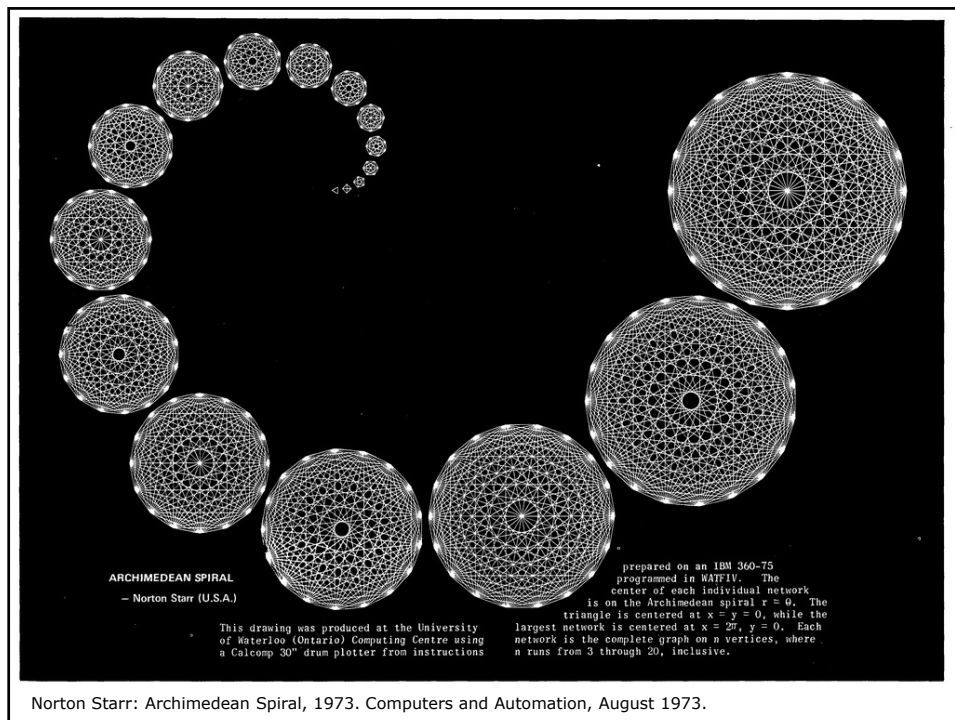
27



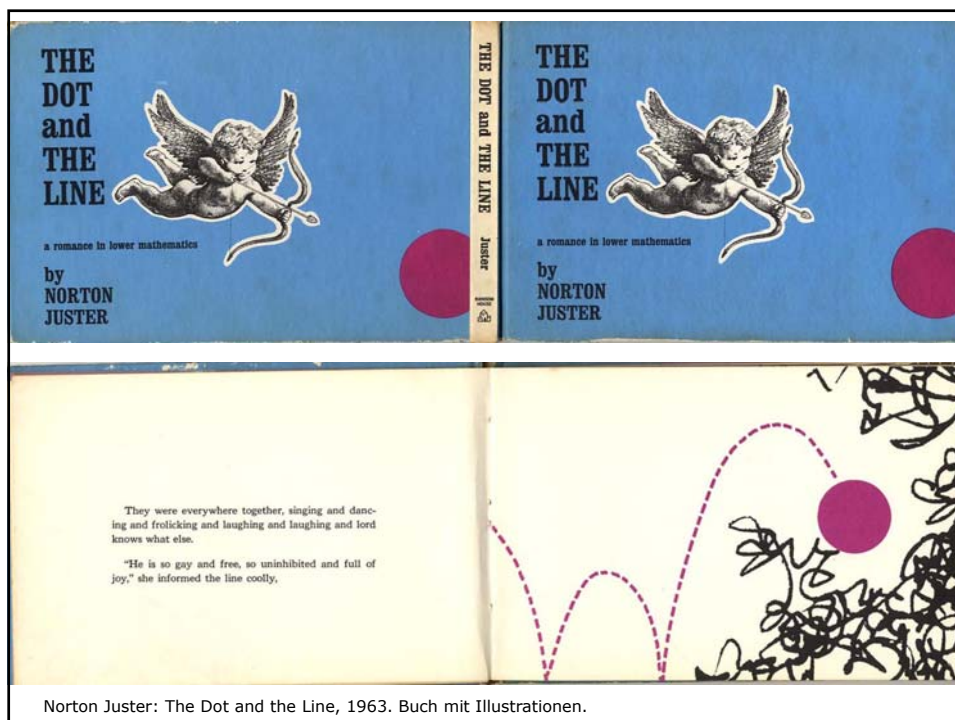
Lloyd Q. Sumner: Spires of Contribution, 1967. Wettbewerb 1968. Computergenerierte Zeichnung, Tusche auf Papier, Burroughs B5500, CalComp 565 plotter. Programmiert in ALGOL, hergestellt an der University of Virginia.



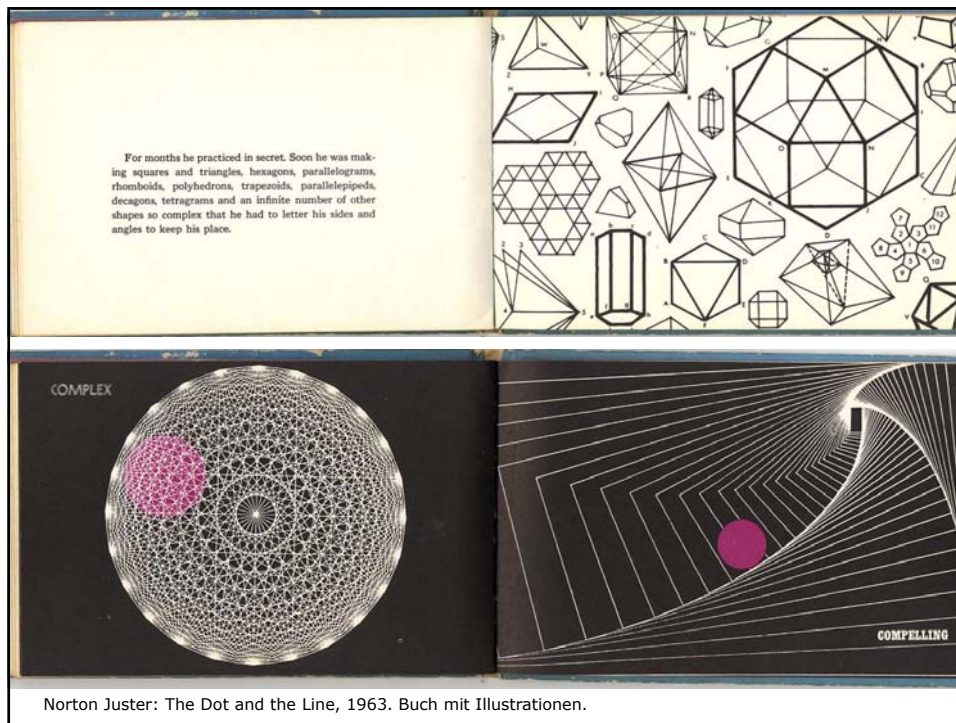


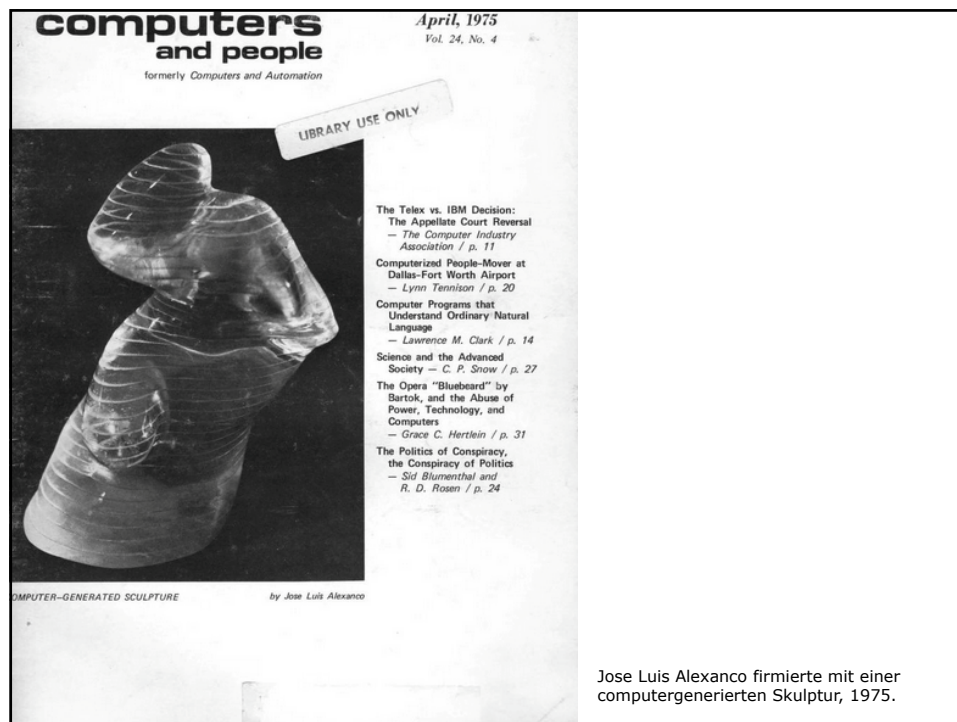


Norton Starr: Archimedean Spiral, 1973. Computers and Automation, August 1973.

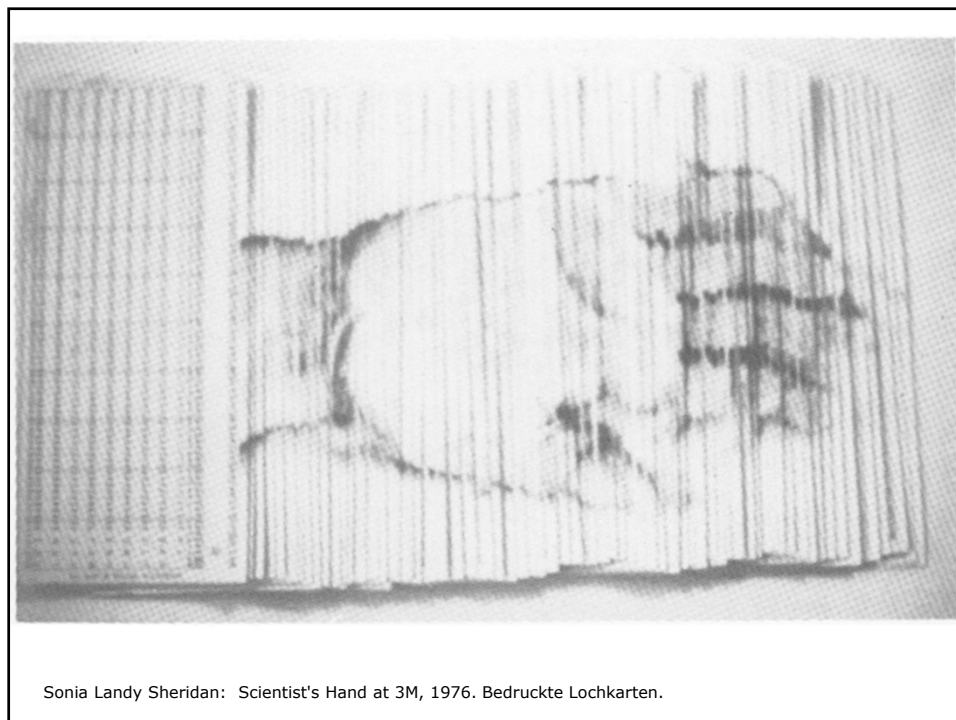


Norton Juster: The Dot and the Line, 1963. Buch mit Illustrationen.





Jose Luis Alexanco firmierte mit einer computergenerierten Skulptur, 1975.



Sonia Landy Sheridan: Scientist's Hand at 3M, 1976. Bedruckte Lochkarten.



Sonia Landy Sheridan auf der Fotokopiermaschine, School of the Art Institute of Chicago, 1973.



Treffen im Rahmen von Generative Systems, School of the Art Institute of Chicago, ca. 1976.



Daniel J. Sandin, Thomas A. DeFanti, Mimi Shevitz : Spiral PTL, 1980. 6.41 min, Video, Still.
Online: <https://www.youtube.com/watch?v=hw9kY85DkFE>

Canaday, John: Less Art, More Computer, Please, in: New York Times, 30.8.1970, Sektion D, S. 19. [oder S. 87], in: <https://www.nytimes.com/1970/08/30/archives/art-less-art-more-computer-please.html> (27.4.2018).

← → ↻ 🏠 <https://www.nytimes.com/1970/08/30/archives/art-less-art-more-computer-please.html>

SECTIONS HOME SEARCH The New York Times

1. North and South Korea Set Bold Goals: A Final Peace and No Nuclear Arms
2. Lawyer Who Was Said to Have Dirt on Clinton Had Closer Ties to Kremlin...
3. How a Genealogy Site Led to the Front Door of the Golden State Killer Suspect
- 4.

By JOHN CANADAY AUG. 30, 1970



Less Art, More Computer, Please

Details: Office Space Preparation and Layout: Aerial View of Urban Planning

VIEW PAGE IN TIMESHINE

August 30, 1970, Page 87
The New York Times Archives

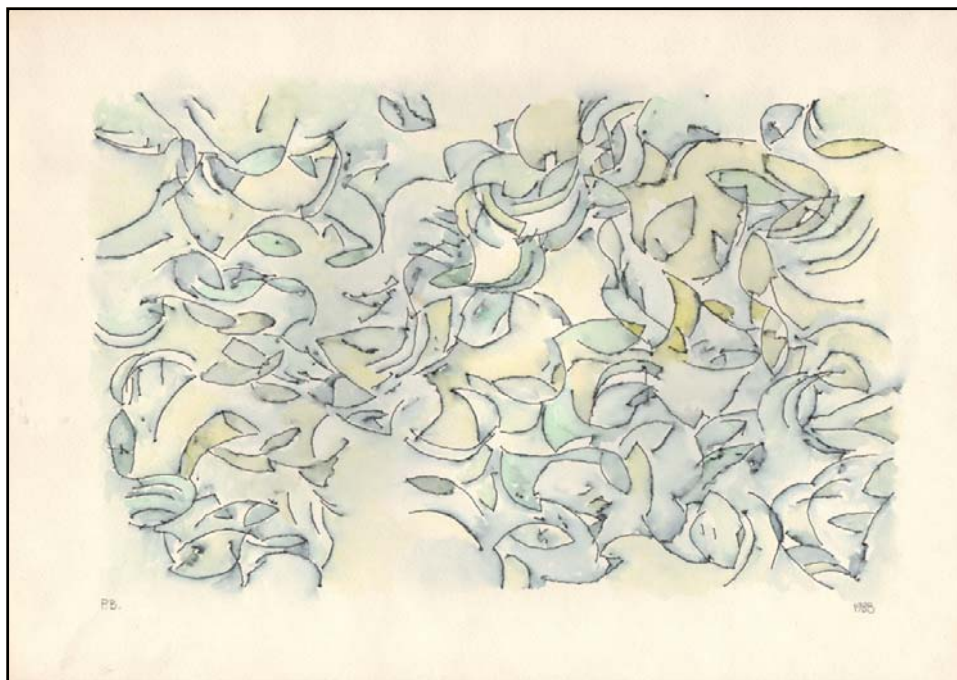
THE exaggerated esteem in which art is held today is indicated by a phrase that occurs in a publicity release from ACM—the Association for Computing Machinery, which is holding its 25th national conference Sept. 1-3 at the New York Hilton Hotel. "Computers are creating art which is indistinguishable from the man-made product," the release states. That's a recommendation?

Exhibitions of computer art have been popular sideshows for several years now, and about 40 examples have been assembled as part of the convention's program, which has as its over-all goal "to interface the computer industry with the problems of society and the world." The least of these problems, it seems to me, is to teach computers how to give us more of what artists are already giving us too much of. If the computer is going to be used as an art tool, it should be used to produce art peculiar to its peculiar nature, art which—like the pattern illustrated to the left—is literally impossible of execution by hand.

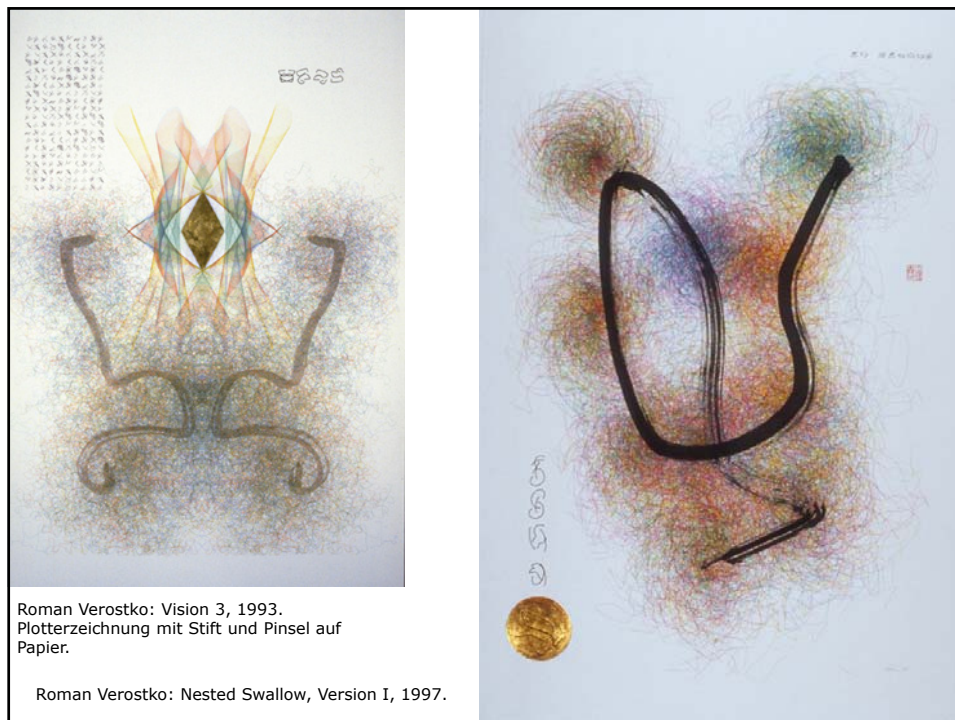
Called "The Snail," the black and white drawing, 36 inches high, is one continuous line of uniform width that, if unrolled and stretched out



"The American Algorists: Linear Sublime", August-November 2013. Ausstellungsansicht, Suzanne H. Arnold Art Gallery am Lebanon Valley College, Annville, Pennsylvania // Westside Gallery New York City. Katalog online: <http://www.nydigitalsalon.org/american-algorithms/AmericanAlgoristHiRes.pdf>



Peter Beyls: Untitled algorithmic pen plotter drawing tinted with watercolor, 1988.



```

if (creation && object of art && algorithm && one's own algorithm) {
include * an algorist *
} elseif (!creation || !object of art || !algorithm || !one's own algorithm) {
exclude * not an algorist *
}

```

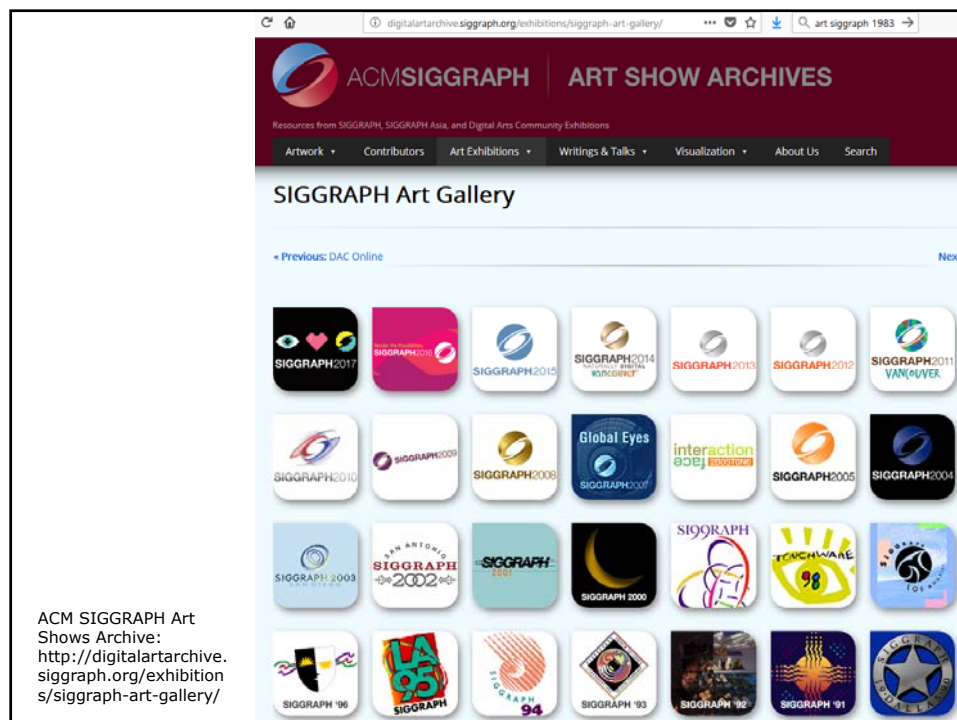
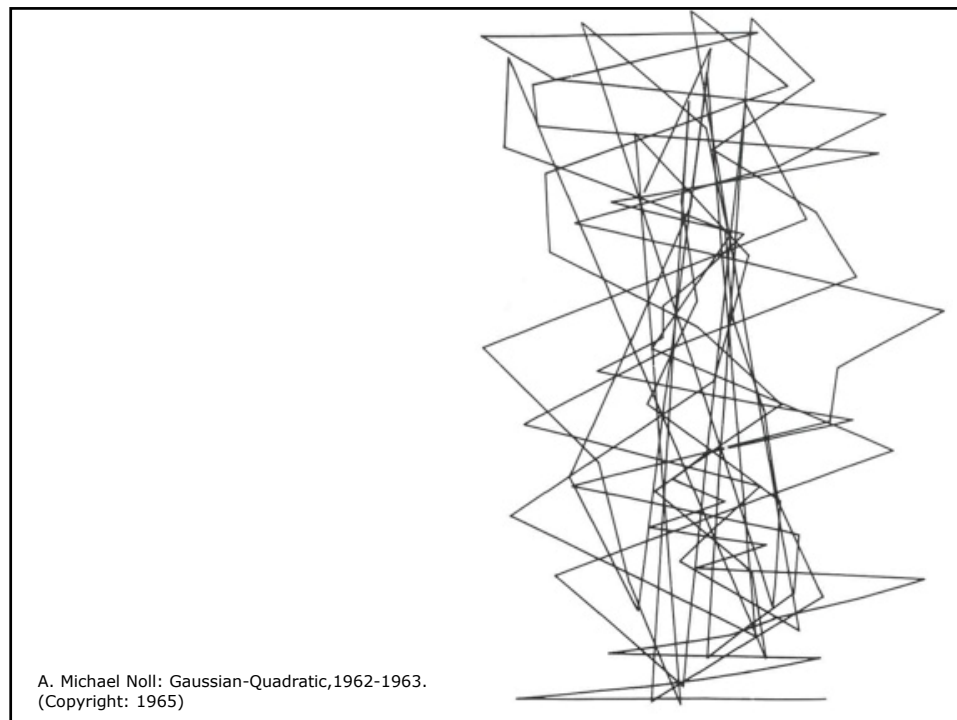
Jean-Pierre Hébert: The Algorist Manifesto, 1995. (präsentiert auf der SIGGRAPH Konferenz 1995).



Jean-Pierre Hébert: Olive Bark, 1990.



Gregorius Reisch: Margarita Philosophica, Freiburg 1503.
Algorist (links) versus Abakus-Mathematiker (rechts).



← → <https://www.siggraph.org/participate/awards>  rtist Award for Lifet →

The Distinguished Artist Award for Lifetime Achievement in Digital Art

The Distinguished Artist Award is presented annually to an artist who has created a substantial and important body of work that significantly advances aesthetic content in the field of digital art. ACM SIGGRAPH members are invited to nominate individuals for the Distinguished Artist Award by contacting the [Artist Award Chair](#) by December 15 each year. Nominations should include as much information about the nominee as possible, specifically:

- Name(s) of the individual(s) being nominated (address and/or phone number and/or email address are also appreciated).
- References to web sites showing the artist's works and texts when applicable (multiple references are welcome).
- Nominator's name, address, telephone number, and email address.
- A statement describing the significance of the artist's contributions according to the criteria below.

Criteria for the Distinguished Artist Award:

- The artist has been contributing internationally to the digital arts for more than 20 years.
- The artist has produced important work(s) referenced in digital art history/theory papers/books.
- The artist has established an unexplored area in the field of digital art/media art.
- The artist has been advancing the use of digital technologies in creative expression.
- The artist has contributed to the history and/or theory and/or practice of digital art through writing and presentations at conferences and symposia.

Art Award Committee

- Sue Gollifer, Chair
- Peter Anders
- Francesoa Franco
- Irini Papadimitriou
- Eddie Shanken
- Paul Thomas

[HIDE AWARD RECIPIENTS](#)

2017 Ernest A. Edmonds

2016 Steina Vasulka

2015 Lillian Schwartz

2014 Harold Cohen

2013 Manfred Mohr

2012 Jean-Pierre Hébert

2011 Charles Csuri

2010 Yoichiro Kawaguchi

2009 Lynn Hershman Leeson

2008 Roman Verostko

The Distinguished Artist Award for Lifetime Achievement in Digital Art, in:
<https://www.siggraph.org/participate/awards> (13.5.2018).



Manfred Mohr beobachtet einen Plotter, Paris 11.5.1971.

Mark Wilson tauscht den Stift beim IBM 7585 Pen Plotter aus. Studio des Künstlers, West Cornwall 1987.



Literatur (Auswahl):

Berkeley, Edmund C.: Computer Art: Turning Point in: Computers and Automation, August 1967, in: <https://steemit.com/art/@voronoi/a-turning-point-the-early-days-of-computer-art-1960s> (13.5.2018).

Failing, Patricia: Doris Chase: Artist in Motion. From Painting and Sculpture to Video Art, University of Washington Press: Washington 1991.

Giloth, Copper Frances/Pocock-Williams, Lynn: A Selected Chronology of Computer Art: Exhibitions, Publications, and Technology, in: Art Journal, Vol. 49, Nr. 3, Oktober 1990, S. 283-297.

Gowski, Janice M. (Hg.): Charles A. Csuri. Beyond Boundaries, 1963 – present, Ausst.Kat. SIGGRAPH 2006, 30.7.-3.8.2006, College of the Arts, Ohio State University 2006.

Goodman, Cynthia: Digital Visions: Computers and Art, Harry N Abrams, Inc.: New York 1987.

Mezei, Leslie/Rockmann, Arnold: The Electronic Computer as an Artist, in: Canadian Art Magazine, vol. 21, Nr. 6, 1964, S. 365-367.

Pouska, Maxim: Computer – Werbung. 1935→2010. Grafik-Design und Kunst, Books on Demand GmbH: Norderstedt 2011.

Oppenheimer, Robin: William Fetter, E.A.T., and 1960s Computer Graphics Collaborations in Seattle, 12.4.2018, in: <http://historylink.org/File/20542> (15.5.2018).

Taylor, Grant D.: When the Machine Made Art. The Troubled History of Computer Art, Bloomsbury: New York 2014.

The American Algorists: Linear Sublime, Ausst.kat. Suzanne H. Arnold Art Gallery am Lebanon Valley College, Annville, Pennsylvania /Westside Gallery New York City, August-November 2013. Online: <http://www.nydigitalsalon.org/american-algorithms/AmericanAlgoristHiRes.pdf>