COMPUTER GENESIS:
A VISION OF THE ’70’s
Joe and Emily Lowe Art Gallery
Sims Hall, Syracuse University
Syracuse, New York 13210
March 31 through May 3, 1977
"Computer Genesis: A Vision of the '70's" was organized by the second year graduate students in Museology at Syracuse University as partial fulfillment for the Master of Fine Arts degree. Although the exhibit is a realization of effort, the following persons were responsible for the success and completion of specific assignments.

- S. Gail Fuller
- J. Brad Benson
- Karen Lowengart
- Madeline Neary
- Lynne A. Reizis
- Lynn A. Rebbeor

Acknowledgements

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- The IBM Corporation
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- New York State Council on the Arts
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- The Syracuse University Art Collections

Production Assistance: Dick Sheaff, Cathy Chubb, Madeline Neary, Lynne A. Reizis

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They maintain a remarkable speed which gives the artist more time to use creatively. The random chance factor allows the computer to make unpredictable numerical selections arbitrarily and without prior influences, an ability not humanly possible. Computers can show immediate results, an important determinant for responsive editing. Conceptualizing the final artwork, the computer artist can employ a data processor during the planning stage. This enables him/her to graphically visualize the piece and make changes in perspective, shape and size where needed, to remove, distort or alter parts of a design almost instantaneously and thereby avoiding numerous hand-drawn revisions. Artwork done without the computer consumes far more time, sometimes unnecessarily, "in a fashion analogous to carving marble with a sponge."* In addition to basic computer design, artists are able to obtain results applicable to a variety of media. Some artists use a computer to do intricate mathematical calculations in order to acquire certain precise information. Jesse Kalled uses the computer to obtain topographical dimensions and then translates them into sculpture. Sculptors can view their plans from all angles, thus eliminating the need for three-dimensional models. Advantages for printmakers and painters are individualized, depending on the artist's design concept. Ruth Leavitt, for example, employs the computer to reform her initial imagery in order to imply a stretching of design. The computer's qualities of speed, random chance factor and ease of editing are of great value. Computer-aided special effects are of tremendous importance to filmmakers and videocassette artists. This technique can be extremely useful when performing its ancillary; the artist utilizes the predominant design and utilizes the computer to simulate motion and then records the details on film or videotape.

Critics of computer-assisted art have, in the past, attempted to define a "computer-aesthetic" primarily based upon the early experimentation by scientists and engineers. Until several years ago, computer-aided artwork did depend to a great extent on symbols and geometric linearity for content. The Computed Art, created by L.D. Harman and K.C. Knowlton at Bell Telephone Laboratories, Inc. in 1966, typifies this aspect of the medium. 5 A computer-generated image derived from a photograph of a nude reclining woman intentionally imitated the artistic theme of the classic nude female depicted by such artists as Titian, Manet and Modigliani. 6 In generating this image, a special camera scanned a photograph and a computer interpreted the design by incorporating a program which used symbols to produce the appearance of shading. In 1967, A. Michael Noll published computer-generated simulations of original artwork by Piet Mondrian in which the design was interpreted using linear imagery to produce contour patterns. 7 The resulting two-dimensional imagery was an abstract representation of an existing work. This was the type of computer art which was publicized and which created the impression that similar efforts were the most that could be achieved by the artist who chose to employ the computer in his/her artwork; this was the kind of effort which established a critical aesthetic for computer art. This aesthetic does not apply to "Computer Genesis." It does not encompass the variety of adaptation to which the computer has been put by contemporary artists involved in an assortment of media, from the computer-generated printout to the traditional artforms. Because it incorporates a diversity of imagery and media, there is no way to standardize computer-assisted art nor to define it by some narrow aesthetic. The Grasshopper painting series by Colette S. Bungert must necessarily be judged by a different set of criteria than that of Ed Manning's Starburst lithograph or the photographs of Lou Katz. There is an inherent difficulty in classifying sculpture, videocassette film, painting and printmaking together; we have done so in this exhibition in order to heighten awareness of the scope and potential of computer-assistance to the field of fine art.

A rich variety of artwork appears in this exhibition, multitudinous in media, artistic content and computer usage. Carefully selected for its aesthetic appeal, the body of artwork also illustrates the successful union of information processing systems with creative human sensitivity, bringing art and technology a step closer. The ability to combine art and technology is of radical importance; it requires an artist to see beyond the field of art to our entire technological age. Computerization is prevalent in the fields of science, medicine, military, space exploration, architecture, textiles, journalism, advertising, education and others; it is a reflection of our time. It is only natural that the artists of our time will make use of technological innovation to assist in the realization of visions.

Karen Leewenart
Curator
March 1977

Footnotes
6. such as Venus of Urbino (c. 1538) by Titian and Nude (1917) by Amedeo Modigliani.
Syracuse University Art Galleries

Laurie Spiegel
65.11-15, 1974

Ruth Leavitt
32. Diamond Variation II, 1975

T.M. Stephens
Installation of Mixed Woven Electronic Gallery, Toronto, June 1974

Paul Sho, Kenneth Dunker
58. Biomorphic Transform: 201 Skull to Bug, 1974
Syracuse University Art Galleries

Colette Bangert 3. Greenland (series) Leaf Circles, 1974


George Chaikin & Caroline Stone 6 (Untitled)

Duane M. Palyka 56. Cattara, 1976
CHECKLIST OF WORKS ON EXHIBIT

In the listing of dimensions, height precedes width; proceeds depth.

COLETTE BANGERT
2. Grassland (series): Circled. Acrylic on canvas. 22 x 30". 1972
4. Grassland (series). Acrylic on canvas. 30 x 80". 1971
5. Grassland (series): Red, Yellow, Blue. Acrylic on canvas. 40 x 30". 1971

GEORGE CHAIKIN
6. (Untitled). In collaboration with Caroline Stone. Intaglio. 20 x 24". 1975

AGNES DENES

LOUISE ETA RA
10. Profile and Cityscape (series). Color xerograph. 8 x 10". 1977
11. Profile and Cityscape (series). Color xerograph. 8 x 10". 1977
12. Profile and Cityscape (series). Color xerograph. 8 x 10". 1977
13. Profile and Cityscape (series). Color xerograph. 8 x 10". 1977
14. Profile and Cityscape (series). Color xerograph. 8 x 10". 1977
15. Profile and Cityscape (series). Color xerograph. 8 x 10". 1977

ALDO GIORGINI

MARTIN B. HANNUM

JESSE KALFEL
23. Synthals. Welded steel. 36 x 84 x 17". 1975

LOU KATZ

WILLIAM KOLOMYJEC
28. Bevez 1. Ink on paper. 12 x 7". 1975
29. Struggle Between Good and Evil. Ink on paper. 13 x 13". 1976
30. Banana Cone. Ink on paper. 6 x 12". 1974

RUTH LEAVITT
31. Diamond Variation I. Serigraph. 23 x 23". 1975
32. Diamond Variation II. Serigraph. 23 x 23". 1975
33. Diamond Variation III. Serigraph. 23 x 23". 1975
34. Diamond Variation IV. Serigraph. 23 x 23". 1975
35. Diamond Variation IV/G. Serigraph. 23 x 23". 1975
36. Diamond Variation V. Serigraph. 23 x 23". 1975

ED MANNING
37. Starburst. Film transparency in light-box. 28 x 24 x 5". 1975
38. Portrait of Pierre Courbet. Photograph. 16 x 12". 1974

AARON MARCUS
39. Portrait of Henry David Thoreau. 8 1/2 x 11" each. 1976
40. Reflective Lookbook. Lithograph. 8 1/2 x 11". 1974
41. Evolving Gravity. Lithograph. 8 1/2 x 11". 1974
42. Urban Nud. Lithograph. 8 1/2 x 11". 1974
43. Shades of Hades. Lithograph. 8 1/2 x 11". 1974

LEONARD MEYERS
44. (Untitled). 1. Plotter line drawing. Ink on paper. 36 x 24". 1974
45. (Untitled). 3 Plotter line drawing. Ink on paper. 36 x 24". 1974
46. (Untitled). 5. Plotter line drawing. Ink on paper. 36 x 24". 1974

DUANE M. PALYKA
47. Self-Portrait. Color photograph. 8 x 10". 1976
48. Clustered Bubbles. Color photograph. 8 x 10". 1976
49. Bubbles I. Color photograph. 8 x 10". 1976
50. Patterned Bubbles. Color photograph. 8 x 10". 1976
51. Out of TV I. Color photograph. 8 x 10". 1976
52. Out of TV II. Color photograph. 8 x 10". 1976
53. Strange Bird. Color photograph. 8 x 10". 1976
54. Face with Gloves. Color photograph. 8 x 10". 1976
55. Spaced Ears. Color photograph. 8 x 10". 1976
56. Cathode. Color photograph. 8 x 10". 1976
JOSEPH SCALA
57. Stilled Time. Light-work: Fluorescent lights, wood, fabric, acrylic; 37 1/2 x 51 1/2 x 5", 1977

VIDEOTAPES
TOM DEFANTI, DAN SANDIN, PHIL MORTON
Spiral/Ryral followed by Peano Boogie. Color: 5 minutes, sound. 1975
Courtesy: Circle Graphics Habitat University of Illinois at Chicago Circle

WILLIAM ETRA
Abstractions on a Bedsheet (P001-10) Black and white, sound, 1973

WILLIAM and LOUISE ETRA
Video Wallpaper-Gold. Color, sound, 1973
Video Wallpaper-Mir Mutter. Color, sound, 1973
Lady of the Lake. Color. 1974
Narcissism. Color, sound. 1973

PATSY SCALA
Wipepoem, Scope II, Mergings, in Red and Black. Color 1975-1976

YALKUT

H. NORRIS
Lineosong. Color, 8 minutes. 1976

JOSEPH SCALA
Our Father. Color, 6 minutes. 1976

FATSY SCALA
Wipeem, Scope II, Mergings, Study in Red and Black. Color 1975-1976

JUD YALKUT

MUSIC
DIMENSIONS IN TIME AND SPACE
Tom Sawyer, Dennis Drew
Compositions.

CHARLES DODGE
Earth’s Magnetic Field, Speech Songs.

LAURIE SPIEGEL
Patchwork, The Unquestioned Answer.

PAUL SHAO
KENNETH DUNKER
59. Say Sab Go 12. Plotter line drawing: Ink on paper, 10 x 10". 1973
60. Sup Tee Yi. Plotter line drawing. Ink on paper, 18 x 10". 1973

Laurie Spiegel
61. 1-6. Color xerox: Reproduction of a video image, 8 1/2 x 11", 1974
62. 7-12. Color xerox: Reproduction of a video image, 8 1/2 x 11", 1974
64. 19-24. Color xerox: Reproduction of a video image, 8 1/2 x 11", 1974
66. 31-36. Color xerox: Reproduction of a video image, 8 1/2 x 11", 1974

T.M. STEPHENS
67. 40 Units Overlap Section of Warped Planes, 2 Modules Negative & Positive Reversing. Xerox vellum print, 17 1/2 x 41", 1975
68. 40 Units 3 Overlap Section of Warped Planes, 2 Modules Negative & Positive Reversing. Xerox vellum print, 17 1/2 x 41", 1975
69. 3 Warped Plane Overlap Negative Print, 2 Modules Beneath 3 Warped Plane Overlap Negative Transparency with 2 Modules. Velvet print, 11 x 14", 1977
70. 23 Warped Planes Linear Luminal. PMT print from polaroid photograph, 8 x 10", 1977
73. 3 Warped Plane Overlap Section, Cylinder. Luminal construction: Acrylic light: 27 x 15"dia., 1977

FILM
MAGI (Mathematical Applications Group, Inc.)
Emsford, New York
Client: CRM Educational Films, Los Angeles

ED MANNING
Experiments Two. 16mm, sound
Biocom, Part II. 16mm, sound

JUDSON ROSEBUSH
Colette S. Bangert

Tom DeFanti & Dan Sandin: Circle Graphics Habitat

Agnes Denes

Louise R. Etra

William Etra
Syracuse University Art Galleries

A Photo-Invitational "Terre Studied: New York"


Lou Katz


William John Kolomiyec


Ruth Leavitt

Syracuse University Art Galleries

North


Edward T. Manning

Born: Orange, New Jersey (1933).


H. Norris

Born: Baltimore, Maryland (1951).


Judson Rosebush

Born: Wooster, Ohio (1947).


Duane M. Palyka

Born: Pittsburgh, Pennsylvania (1944).

Syracuse University Art Galleries

Museum; Ward-Nasse
Galleria D’ Arte Moderna, Ferrara, Italy; Lincoln “Inter-
Art,” Artist and (1976); edited by Ruth Leavitt; AFIPS
Proceedings: “National Computer
Conference,” 1970. Who’s Who in
American Art of “Best Art Shows in N.Y.C.
1976” Born: Tennessee (1941).
Studied: Currently, Ph.D. Call01rd.ate,
S.L Newhouse School of Commun­
ications, Syracuse
Shows: 9th, 10th, 11th and
12th “Annual New York Festival of
the Avant Garde;” “International
Video “ Galleria D’Ane
Moderna, Italy; “Inter-
national Video Exposition,” Buenos
Aires; “W oodstock Video
Everson Museum, New York.
Publications: “How I Became In­
volved in Computer-Assisted Art; A
in and ImpatIence,
Artist and Computer
edited
Ruth Leavitt. SHAO Born: China (1940).
Studied: China Art College,
1966; University of Massachusetts,
MFA, 1970. Taught: Maple Woods Community
College, Kansas City, Missouri.
One-Man Shows: “Mined Warps,”
Electric Toronto, 1974; “The Perfect Image
Gallery, Kansas City, 1975; “Mined
Warps II,” Lawrence Whittington
Gallery, Kansas City, 1976. Group
Shows: “Art Research Center Ex­
hibition 2, Kansas City, 1967; “New
Tendencies 4,” Zagreb, Yugoslavia,
1973; “International Exhibition of
Computer Art” France Bournemouth,
Montreal, 1974. “MATRIX International
Exhibition,” Art Research Center
Exhibition Hall, 1972-73: “Art Re­
search Center 10th Anniversary
Exhibition Series,” 1976-77. Publica­
tions: Art Research Center Magazine (1966-79); MATRIX Exhibition Cata­
logue (1973); Kansas City Star, art and news columns (1964-74, 1976)

Patsy Scala
Born: Knoxville, Tennessee (1941).
Studied: Currently, Ph.D. candidate.
S.I. Newhouse School of Commun-
ications, Syracuse University.
Group Shows: 9th, 10th, 11th and 12th “Annual New York Festival of
the Avant Garde;” “International
Video Exposition,” Galleria D’Arte Moderna, Ferrara, Italy; “Inter-
national Video Exposition,” Buenos Aires; “Woodstock Video Festival,”
volved in Computer-Assisted Art; A
Study in Poverty and Impatience,”
Artist and Computer (1976), edited by Ruth Leavitt.

Paul P. Shao and Kenneth F. Dunker
SHAO Born: Canton, China (1940).
Studied: China Art College, BFA,
1966; University of Massachusetts,
DUNKER Born: Madison, Wisconsin (1942). Studied: Univer-

Jacob Druckman, and Emmanuel
Ghant; Brooklyn College, CUNY,
Music Festival; The Kitchen, New
York; Experimental Intermedia
Foundation; Soloio Center for the
Arts; Museum of Modern Art, New
York; Open Mind, 2nd, 3rd and 4th “International Computer Art Expo-
sition,” Buenos Aires; “Woodstock Video
Everson Museum, New York.
Publications: “How I Became In­
volved in Computer-Assisted Art; A
in and ImpatIence,
Artist and Computer
edited
Ruth Leavitt.

Laurie Spiegel
Studied: Stinner College, Illinois,
AR, 1967; Lake Forest College,
Illinois; University of Illinois at
Chicago Circle; Oxford University,
England; private study under
IW, Duarte, London, England;
Juilliard School, New York; private
study under Michael Caszkowski,

Jud Yalkut
Studied: CCNY; McGill University,
Montreal. One-Man Shows: Film Retrospec-
tive, Everson Museum, Syracuse,
1972; “CinemaScope,” Museum of Modern
Art, New York, 1972. The Kitchen, New
York, 1972-74; “From Film to Video,”
Anthology Film Archives, New York,
1974; “Filmmakers Cinematheque,” New
York; “Coney Island Cinematheque,” San
Francisco; “Video, Projected Images and
Movie Machines,” Heidental Art
Gallery, Manni University, Oxford,
Ohio, 1976; Edinboro State College,
1976. Group Shows: “Symposium of
Kinetic Art,” University of California,
Berkeley, 1966; “Fourth International
Experimental Film Competition,”
Belgium, 1967-68; “Vision and Tele-
cision,” Rose Art Museum, Brandeis
University, 1970; “New American Film-
makers” series, Whitney Museum of
American Art, New York, 1971-74;
“Circuit,” Everson Museum, 1973-74;
“Open Circuit,” Museum of Modern
Art, New York, 1974; “Tokyo-
New York Video Express,” Under-
ground Cinematheque, 1975; “Luminous
Realities,” Wright State University
Art Gallery, Dayton, Ohio, 1975. Publica-
tions: Critique writer, Art Magazine (1966-1969); critic, West Side News
and New York Free Press (1967-1969); film and video columnists, East Village
Other (1969-1970); Video Art (New York,
1970), edited by Konst and Schneider.

"Computed, Constructed & Probing," Tokyo Globe (July 6, 1974); "Art
Research Center 10th Anniversary
Exhibition Series" Catalogue (Feb. 1977)
BIBLIOGRAPHY

BOOKS
Reichardt, Jasia. Cybernetics, Art and Ideas. (Greenwich, Conn.: New York Graphic Society, 1971)
‘1968: A Studio International special issue, published to coincide with the exhibition Cybernetic Serendipity at the Institute of Contemporary Arts, London (August 2-October 20, 1968)

PERIODICALS

CATALOGUES
“Printout: An Exhibition of Computer-Generated Graphics.” Watson Gallery, Wheelock College, Massachusetts (March 31-April 27, 1975)