

RUTH LEAVITT

TRANSFORMATIONS OF SPACE AND DESIGN

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April 1 - May 6, 1984

BURCHFIELD ART CENTER State University College at Buffalo 1300 Elmwood Avenue Buffalo, New York 14222

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Ruth Leavitt uses computers as a creative tool for humanistic expression. Her first exhibition of computer-aided art was presented in 1971, just nine years after the first computer art was shown in a New York gallery. Ruth Leavitt is also author of the book, *Artist and Computer, published in 1976 and has become a spokeswoman for this new trend in art partly because she has written of its history and development and partly because she is a pioneer practitioner.*

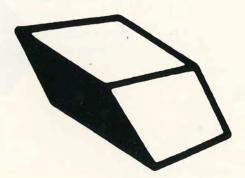
We are deeply grateful to the artist for lending a number of works to the exhibition, for sharing her infectious enthusiasm for the computer as a tool, and for graciously assisting in innumerable ways with this catalog and with the exhibition it accompanies.

We wish to express appreciation to all who have contributed to the exhibition, especially to Randolph Marks, Mr. and Mrs. Robert Reis, and Mr. and Mrs. Stephen Saldanha of Hiross Denco Corporation for the loan of major pieces. Their generous cooperation enables us to present a more comprehensive view of Ruth Leavitt's work. We also wish to thank Computer Stations Incorporated, particularly Carol Stabler, who graciously arranged their generous loan of dithitizing equipment.

Nancy Weekly, Registrar/Assistant Curator; Micheline Lepine, Technical Assistant to the Director; Elizabeth Dann, Administrative Assistant; student interns and volunteers have all generously contributed time and talents to assisting with this catalog, presenting the exhibition, and helping with related events.

Edna M. Lindemann Director

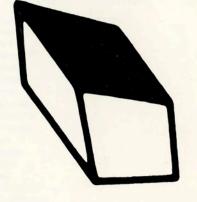
Acknowledgments



Artist's Statement

My work is based on concepts found in nature; but rather than reflecting a mirror-like image of what I see, my intention is to make visible those elements which create change. For example, it is the wind blowing through fields of wheat that fascinates me, not the image of the wheat itself. The force of the wind in varying degrees causes a continuous change in the aspect of what we see. To communicate the idea of change in my artwork, I have been applying the forces of stretching, expansion, contraction, rotation, and transformation to design and color. Imagine a sheet of rubber with a regular grid of cubes drawn on its surface. The edges of the sheet are tacked down, but the surface has freedom of movement. Numerical information describing the physical properties of the rubber sheet, the design on its surface, and the forces I wish to use are put into the computer. The machine allows me to manipulate this information and then record it in various ways. What was once only an idea, becomes reality with the aid of the computer.

Ruth Leavitt



Works in the exhibition

- 1 Diamond Transformations I/S, 1975 serigraph 191/2 x 32"
- 2 Diamond Variation I, 1975 serigraph 321/2 x 321/2"
- 3 Diamond Variation II, 1975 serigraph 321/2 x 321/2"
- 4 Diamond Variation IV, 1976 serigraph 321/2 x 321/2"
- 5 Diamond Variation IV/Gr, 1976 serigraph 321/2 x 321/2"
- 6 Diamond Variation V, 1976 serigraph 321/2 x 321/2"
- 7 From Blue To Yellow, 1979

stills from the animation, 3 series of transformations in 8 steps, photographic blow-up of electron beam drawings onto film by machine each image is 24 x 24"; each transformation is 192" long

8 2 x 2, 1979

a modular painting in 4 sections acrylic on canvas 84 x 84" Collection of Hiross Denco Corporation

9 4 x 4, 1983

a modular painting in 4 sections acrylic on canvas 84 x 84"

10 *Diamond Transmutation II*, 1976 acrylic on Arches 40 x 40"

- 11 *Diamond Transmutation III*, 1976 acrylic on Arches 40 x 40"
- 12 Computer Milled Sculpture, 1977 cast aluminum 5³/₄ x 5³/₄"
- 13 Sculptural Relief I, 1980
 wood and plaster
 72 x 72"
 Collection of Mr. & Mrs. Robert Reis
- 14 Sculptural Relief II, 1981
 wood and plaster
 69 x 69"
 Collection of Mr. Randolph Marks
- 15 Developmental Studies For Sculptural Relief in Bronze mixed media various sizes
- 16 Sculptural Relief Model For Bronze, 1982 wood and plaster 32¹/₂ x 32¹/₂"
- 17 Sculptural Relief in Bronze, 1982 cast bronze 30 x 30"
- 18 Sculptural Construction I, 1982 plexiglas and acrylic paint 42 x 42"
- 19 Sculptural Construction II, 1983 plexiglas and acrylic paint 62 x 62"

Ruth Leavitt

GRANTS AND AWARDS

National Endowment for the Arts Printmaker Fellowship, 1974 Painting and Printmaking Awards, Minnesota, 1975 Printmaker Award, Octagon Art Center, Ames, Iowa, 1975 University of Minnesota Computer Services Grant, 1977-1978 University of Minnesota Special Interactive Computer Graphics Laboratory, artist in residence, 1977-1978

ARTIST IN RESIDENCE

Salina Arts Commission — for the Town of Salina, Kansas, February-March, 1984

COLLECTIONS

- Public and Private collections in Belgium, Canada, England, France, Holland, Italy, Japan, Scotland and the United States.
- More notably: American Automobile Association; Creative Computing Magazine; Editions Maffioti, Paris, France; Equitable Life Assurance Society of the United States; Hennepin County Library; Hiross-Denco Corporation; Michigan Technological University; The Minneapolis Institute of Art; The Modern Museum of Art, Utrecht, Holland; National Computer Corporation; Prudential Corporation; Slide Collection of the London Science Museum; State University of New York; 3M Corporation; United States Federal Reserve Bank; University of Minnesota.

ONE-WOMAN EXHIBITIONS

- 1969 Drawings, Coffman Gallery, University of Minnesota, Minneapolis, Minnesota
- 1972 *Computer Graphics,* Martin Gallery, Minneapolis, Minnesota
- 1974 Prints, College of St. Catherine, St. Paul, Minnesota
- 1975 Computer Prints, Southern Missionary College, Collegedale, Tennessee
- 1977 Diamond Transformations, Cecil Clarke Davis Gallery, Marion Art Center, Marion, Massachusetts Recent Work, Clarke College Art Center, Dubuque, Iowa

GROUP EXHIBITIONS

1973 *Circuit,* Bloomfield Art Association, Birmingham, Michigan National Computer Show, New York Coliseum, New York, New York

Ordinateur Et Creation Artistique, L'Espace Cardin, Paris, France

Cybernetic Artrip, Tokyo, Japan

1974 International Exhibition of Computer Art, Montreal Museum of Contemporary Art, Montreal, Canada

Computer Art, Bohum Gallery, Oxon, England

Computer Art International, Tokyo, Japan

Color, Minnesota Museum of Art, St. Paul, Minnesota

Women In Focus, Minneapolis College of Art and Design, Minneapolis, Minnesota

Exposition International D'Art A L'Ordinateur, Place Bonaventure, Montreal, Canada

Minnesota 1974, Rochester Art Center, Rochester, Minnesota

ICCH/I, University of Minnesota, Minneapolis, Minnesota

1975 Art and The Skill of People Using Computers, Art Center of New Jersey, Tenafly, New Jersey

> Gallery Artist's Group Show, Kingpitcher Gallery of Contemporary Arts, Pittsburgh, Pennsylvania

> Woman Art, Normandale Community College, Bloomington, Minnesota

> Printout, Watson Gallery, Wheaton College, Norton, Massachusetts

Group Show, Friends Gallery, Minneapolis Institute of Arts, Minneapolis, Minnesota

Clay and Paper Regional, Octagon Art Center, Ames, Iowa

Ninth National Biennial, Second Crossing Gallery, The North Dakota State Arts and Humanities Council, Valley City, North Dakota ICCH/II, University of Southern California, Los Angeles, California

1976 Third International Computer Arts Festival, City University of New York, New York, New York Computer Art, Tokyo, Japan

Prints, C. R. Gallery, Williston, North Dakota

Gallery Artists, Main Street Gallery, Nantucket, Massachusets

- 1977 International Computer Arts Festival, Kushu, Japan Computer Genesis: A Vision of the 1970's, Lowe Art Gallery, Syracuse University, Syracuse, New York Visual Literacy, University of Iowa, Iowa City, Iowa
- 1978 Art and The Computer, Worcester Art Museum, Worcester, Massachusetts

ICCH/III, University of Waterloo, Waterloo, Ontario, Canada

- 1979 Artist: Computer, West Lake Gallery, White Plains, New York
- 1980 International Exhibition of Computer Art, Ukranian Museum of Modern Art, Chicago, Illinois
- 1981 Waves in Space/New Art and Technology, Downey Museum of Art, Downey, California

Computer Culture Art Show '81, Gallery 76, Ontario College of Arts, Toronto, Ontario, Canada

International Exhibition of Computer Art, The Palais des Beaux-Arts, Brussels, Belgium

1982 *Computer Art Exhibition,* Lehigh University Art Galleries, Bethlehem, Pennsylvania

Computer Art Exhibition, Hanson Gallery of Fine Art, SOHO, New York, New York

Women and Computer Graphics — An Art For The Future, Roanoke College, Salem, Virginia

Art in The Computer Age, Kipp Gallery, Indiana University of Pennsylvania, Indiana, Pennsylvania

1984 Art and Technology, Salina Arts Center, Salina, Kansas

SELECTED BIBLIOGRAPHY

Canadian Data Systems, magazine cover design, March 1975.

Computer, July 1976.

"Computer Art and the Future," *CBS Radio*, telephone interview, 1980.

"Computer Art Exhibition," Arts Magazine, April 1982, p. 13.

Coqart, Roger, editor, in collaboration with the International Center for Structure and Constructivism. *The Use of the Computer in Visual Arts.* Brussels, Belgium: ICSAC, 1981. Exhibition catalogue, Palais des Beaux-Arts, October - November 1981.

Computer World, 1977.

Computing Europe, September 1974.

Creative Computing, magazine cover design, September 1975.

Cultural Information Service, December 1976.

- Franke, H. W. "Computergrafik Galerie: Ruth Leavitt," Angewandte Informatik, February 1978.
- Gerbarg, Darcy & Goodman, Cynthia, editors. Art in the Computer Age. New York: Abrams Books, 1984.
- "Gifted Students in Niagara," *The Buffalo News*, Metropolitan News, Monday, March 28, 1983.
- "High-Tech Art," *Chicago Tribune*, Len Ackland Tomorrow section, Sunday, July 17, 1983.
- Himler, Jeff. "Computer Art," *Tribune-Review*, Sunday November 6, 1983.
- The Inquirer and Mirror, Nantucket, Massachusetts, July 1976.
- Lansdown, John. "Not only Computing Also Art," British Computer Bulletin, September 1977.
- The Minneapolis Star, Arts and Book Section, 1972.
- Mitchell. Computers in the Humanities. Edinburgh: Edinburgh University Press, 1974.
- Peoples Computer Company, July 1974.

Peterson, Dale. Genesis II. New York: Prentice Hall, 1983.

Report, University of Minnesota, September 1973.

Technology, University of Minnesota, January 1973.

Think, IBM, October 1973.

Toronto Star, Art Section, Saturday, November 21, 1981, p. F5.

VIDEOTAPES

- "Computer Art," Ruth Leavitt interviewed by Marian Deutschman on In League With You Show, WUTV, Channel 29 television, Buffalo, New York, March 1983, 30 minutes.
- "Not For Numbers Only," documenting the artwork of Ruth Leavitt, a videotape produced by the Hennepin County Library and the Bloomington Cable Education Center, Minnesota, May 1978.

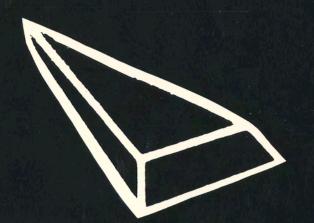
PUBLICATIONS BY RUTH LEAVITT

BOOK

Artist and Computer, New York: Crown Publishers, 1976.

ARTICLES

- "Artificial Realities," a critical review, *Computers and Humanities Journal*, ed. Joseph Raben, Queens College, Flushing, New York, 1984.
- "The Artist and the Computer A Commentary," Futurics, 1977.
- "Computer Aided Sculpture," *Proceedings*, National Computer Graphics Association, ed. Cade Ross, 1983.
- "Computer Art," *Encyclopedia of Computer Science*, ed. Anthony Ralston, New York: Van Nostrand Reinhold Company, 1982, 2nd edition.
- "Designing in Color and Mass," to appear in a new art journal in Belgium, The Museum of Modern Art, Belgium, 1980.
- "Pictures Based on Computer Drawings Made by Deforming an Initial Design," *Leonardo*, Vol. 9, 1976; also *Visual Art, Mathematics and Computers*, ed. Frank Malina, New York: Pergamon Press, 1979.
- "Plastic Deformation of Design," *Tech Report*, Computer Science Department, University of Minnesota, 1975.
- "Ruth Leavitt," *Computing in the Humanities,* ed. Peter Patton, D. C. Heath and Company, 1981.
- In preparation: "Computer Sculpture," *Sculptors International*, ed. Rolly Strauss, Washington, DC: The International Sculpture Center.



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