

LILLIAN SCHWARTZ: PIONEER OF COMPUTER ART

MAGENTA

magentaplains.com

917-388-2464

PLAINS

Magenta Plains is proud to present “Lillian Schwartz: Pioneer of Computer Art,” an exhibition of films and artworks made during the years 1968 – 2013 and the artist’s first solo exhibition in New York.

Lillian Schwartz (b. 1927) was an early explorer in the uncharted domain of computer-mediated art, producing her seminal works before the desktop computer revolution made computer hardware and software widely available to artists. As a trailblazer in the field, Schwartz’s personal development unfolded alongside with the emergence of intelligent machines. Schwartz’s discoveries in computer-generated art include graphics, film, video, 2D/3D animation, special effects and computer-aided analysis of art and architecture. The recognition of her role in establishing computers as a valid artistic medium is long overdue, as her success in reshaping the computer into a tool for art making carved a path for generations of artists to come.

As a member of Experiments in Art and Technology (E.A.T.), Schwartz collaborated with engineers in the 1960s. In 1968, she was one of nine winners of an international competition arranged by E.A.T. in connection with the Museum of Modern Art exhibition, “The Machine as Seen at the End of the Mechanical Age.” At the opening her large kinetic sculpture, *Proxima Centauri*, attracted the attention of visual perception researcher Leon Harmon, who invited her to AT&T’s Bell Laboratories.

Schwartz was among the first American artists to employ computer-coding language to create motion graphics-based film and video art while working at Bell Laboratories as an artist from 1968 – 2001. Because of an eye disease that affected how she viewed color and depth, she developed techniques and methods of editing to push saturation to its optimal limits in order to augment her vision. As a result, many of her early films and graphics from the 1970s can be viewed in 2D and 3D without pixel shifting—a technology twenty years ahead of its time. Schwartz collaborated on scores for her films with such luminaries as Max Mathews, the father of digital musical, who deemed her one “of those rare geniuses.” She later worked with Nam June Paik at WNET’s TV Lab.

In 1984, the Museum of Modern Art commissioned Schwartz to create a poster and a public service announcement to celebrate the opening of its newly renovated gallery space. Schwartz worked with a group of programmers led by Richard Voss at IBM’s Thomas J. Watson Research Laboratory to duplicate the aspect ratios of MoMA’s collection and create a 3D model of the museum’s new internal structure. The 30-second advert took two years to create and won an Emmy, the first ever awarded to a computer-generated film. During her time at IBM, Schwartz created Big MoMA, a computer-generated collage that incorporated examples of the museum’s collection in the shape of Gaston Lachaise’s bronze sculpture, *Standing Woman (Heroic Woman)* from 1932. This homage to the museum illustrated many of the techniques Schwartz developed with the computer: palette matching, aspect ratios, and texture mapping.

Schwartz began working with the computer in a time when anti-technology sentiment among artists was prevalent. The computer was misunderstood, seen as a rigid machine designed for commercial use, stifling to creativity, or, conversely, artificially intelligent and therefore demoting the artist to the supporting role as technician. But Schwartz saw the computer as part of the natural evolution of an artist’s storehouse of tools, reasoning that by disregarding the computer, “one would be ignoring a large part of our world today.”

Throughout her career, Lillian Schwartz has demonstrated how to command the technology underlying her medium. Schwartz elucidates, “What [the computer] can do is subject to what we believe it can do for us. Although computers can learn things, they do not have an inner resource that can propel them.” Schwartz has established a massive body of technology-based work. Yet, her philosophy has remained focused on the assertion of human triumph over machine and the sensations of the creative act, which “remains the elusive domain of the artist.”

September 18 – October 30, 2016

Opening reception: September 18, 6–8pm



“What we know as computer art began in December 1968, when Lillian Schwartz grasped a light pen and began to draw.”

- Arno Penzias, winner of the 1978 Nobel Prize for making a discovery that confirmed the Big Bang Theory

Lillian F. Schwartz (b. 1927 Cincinnati, Ohio) was one of the first artists to carve the path for today's use of computer graphics, film, video, and 3D animation, expanding not only the field of art but also influencing the realms of gaming, special effects and virtual reality. Her films and work have been exhibited nationally and internationally at a number of institutions, such as The Metropolitan Museum of Art, New York, NY; The Museum of Modern Art, New York, NY; The Whitney Museum of American Art, New York, NY; The New Museum, New York, NY; The Brooklyn Museum, Brooklyn, NY; Hirshhorn Museum and Sculpture Garden, Washington, D.C.; Carnegie Institute, Pittsburgh, PA; High Museum of Art, Atlanta, GA; Indianapolis Museum of Art, Indianapolis, IN; San Francisco County Museum of Art, San Francisco, CA; Institute of Contemporary Arts, London, UK; Centre Georges Pompidou, Paris, France; Grand Palais, Paris, France; Stedelijk Museum Amsterdam, Netherlands, amongst others.

Schwartz's recent selected exhibitions include *Electronic Superhighway*, Whitechapel Gallery (London); *Digital Revolution*, The Barbican Centre (London); *Shifting Optics II*, Upstream Gallery (Amsterdam); *Visions and Beyond: The 2nd Shenzhen Independent Animation Biennial* (Shenzhen); *The Ghost in the Machine*, The New Museum (New York); *A House Full of Music: Strategies in Music and Art*, Institut Mathildenhöhe (Darmstadt); *A Trip to the Moon*, Bonniers Konsthall (Stockholm); *Fragments of Machines*, Neuer Aachener Kunstverein (Aachen); *Art and Electronic Media*, Bitforms Gallery (New York); *Genesis—The Art of Creation*, Zentrum Paul Klee (Bern); and *Genesis—Life at The End of the Information Age*, Centraal Museum (Utrecht). Lillian Schwartz's films are continually screened in festivals and institutions worldwide.

Over the years, Schwartz's work has received support from the National Endowment for the Arts, WNET Channel 13, the Corporation for Public Broadcasting, the Explorers Club, AT&T and AT&T Bell Labs, Exxon Research & Engineering, Bell Communications Research, IBM, Hitachi, the National Academy of Television Arts & Sciences, the American Film Institute, among many others. Schwartz is a Fellow in The World Academy of Art & Science. Her work was the first in the medium of computer art to be acquired by The Museum of Modern Art in New York, and in 1984 she won an Outstanding Public Service Announcement Award at the 28th Annual New York Emmy Awards for her PSA commissioned by MoMA. Her book published in 1992, “The Computer Artist's Handbook,” has greatly influenced a new generation of computer artists. As the USA's goodwill ambassador, she has lectured worldwide on computer imagery. Most recently, she was awarded the 2015 Distinguished Artist Award for Lifetime Achievement in Digital Art from ACM SIGGRAPH and the 2016 Lifetime Achievement Award from the New Jersey Institute of Technology. Lillian Schwartz lives and works in New York City.

LILLIAN SCHWARTZ: PIONEER OF COMPUTER ART