

**RICK SILBERMAN** was born in New York, USA, in 1951, has travelled widely and now lives and works in Manhattan, New York.

## EDUCATION

1969-73 State University of New York at Buffalo, New York, USA. Bachelor of Arts Degree.

1980-81 Rhode Island School of Design, Rhode Island, USA. Master of Industrial Design Degree.

## PROFESSIONAL ACTIVITIES

1973 Visiting Lecturer, Minneapolis School of Art and Design, University of Minnesota, USA.

1975-76 Technical consultant, Polaroid Corporation, Boston, Massachusetts, USA.

1975-83 Lecturer in Physics, Brown University, Providence, Rhode Island, USA.

1978-82 Lecturer, Faculty of Industrial Design, Rhode Island School of Design, Rhode Island, USA.

1980-81 Assistant Professor, Massachusetts College of Art, Massachusetts, USA.

1980-82 Visiting Lecturer, Goldsmiths' College, University of London, London, UK.

1983 Design consultant, New Holographic Designs, London, UK.

New Spaces Holographer's Vision, The Franklin Institute, Philadelphia, PA.

1987 President Nine Design, New York' USA.

1987-91 Curriculum consultant, University of London, London, UK.

1991 Executive Director, The Milford Agency, New York, USA.

## EXHIBITIONS

1975 Holography '75: the First Decade, The International Centre of Photography, New York, USA.

1976 Through the Looking Glass, Museum of Holography, New York, USA.

1977 Picture This, Museum of Modern Art, New York, USA.

1978 Reflections of Future Space, Museum of Holography, New York, USA.

1978 Light Years, The permanent collection of the Museum of Holography, New York, USA

1980 The Craft of Art. Critics' Choice' Critic Edward Lucie Smith,

The Walker Art Gallery, Liverpool, UK.

A Century of Photography, C.W. Post Art Gallery, Greenvale, New York

1981 Salon for the South Pole, Performance at the Rachel Weiss Exhibition, Helen Shilen Gallery  
New York, USA

1983 Light Dimensions, The Royal Photographic Society, The Octagon, Bath, UK.

Holographie zwischen Kunst und Technik, Kunstmuseum Hannover, Hannover, Germany.

Sky Art Conference, in cooperation with Massachusetts Institute of Technology

BMW Gallery, Munich Germany

Lensless Photography, IBM Gallery, New York, USA.

1984 Light Dimensions, The Science Museum, London, UK.

Holography (Re) Defined, Innovation Through Tradition, Museum of Holography, NY, USA.

Holographie: Medium für Kunst und Technik, Stadtmuseum - Nordico, Linz, Germany.

Holographie: Medium für Kunst und Technik, Deutsches Museum, Munich, Germany.

International Photoszene, Koln, Germany

1985 BMW Gallery, Stuttgart, Germany.

Holomedia ,86, Fascination in Licht und Ton, Städtische Galerie, Karlsruhe, Germany.

Images in Time and Space, Expotec, Montreal, Canada.

Images in Time and Space, Museum of Science and Technology, Los Angeles, California, USA.

Aarhus Kunst Museum, Aarhus, Denmark

1986 International Triennale der Zeichnung, Kunsthalle Nurnberg, Germany

1991 Holographische Visionen, Gürzenich, Cologne, Germany.

Räume aus Licht, The Fielmann Collection, Akademie Galerie, Berlin, Germany.

## **RETROSPECTIVE EXHIBITION**

1979 Shadowgrams, Museum of Holography, New York, USA.

## **COLLECTIONS**

The Fielmann Collection, Germany.

Von Fürstenberg Collection, USA.

Massachusetts Institute of Technology Gallery, Massachusetts, USA

Museum of Holography, New York, USA.

Museum für Holographie und Neue Visuelle Medien, Pulheim, Germany.

Kunstsammlung Hannover, Hannover, Germany.

Arrhaus Museum, Denmark.

National Museum of Science and Technology, Ottawa, Canada.

Private collections worldwide.

## **AWARDS**

1980 Rockefeller Grant for Artist-in-Residence, Goldsmiths' College, University of London, London, UK, under the auspices of the Gulbenkian Foundation, London, UK.

## **SPECIAL PROJECTS**

Developed, worked extensively with, and popularised the reflection hologram technique he terms Shadowgram: a three dimensional recording of the shadow of an object.

1979 Axis, the first theatrical performance including a well crafted stage set consisting of holograms, utilizing a descriptive dimensional language created specifically for holography in theatre and dance.

Silberman was the first artist selected to produce a limited edition hologram for the Museum of Holography, New York, USA

Artifacts from Descartes' Dreams, 1982. An American wide journey placing reflection holograms at preselected locations to be illuminated by sunlight and so produce a continent-wide holographic installation. The largest holographic installation to date.

Rick Silberman worked with Lowery Burgess at the Massachusetts Institute of Technology, Massachusetts, USA, on the production of holograms placed on the Space Shuttle. Produced in connection with NASA's nonmilitary use of space project.

1987 founded Nine Design in New York, a multi-media company supplying electronic design consultancy to the publishing trade.

## ARTIST'S STATEMENT

I began my work in holography in the early '70s in Boston, where I built a small studio and began experimenting with several types of holograms, becoming most interested in reflection holography. I noted that in the very act of taking a hologram of something, that object was transformed, the hologram became a pure illusion.

I began thinking more about this act of transformation. It was in 1975 that I began working with what I came to call "Shadowgrams". I had included a shadow as part of the Gyroscope to create an illusionary atmosphere, and the concept of the shadow itself impressed me greatly. I was immediately taken by the simplicity of the technique' the snapshot-like quality, and how effectively it lent itself to reflection holography. I found shadowgrams gave me a chance to use an almost solid shadow, an additional natural extension of an object.

For me there were two ways to go: look closer and closer at the light itself or stand back and look at the hologram and its image as a part of the world we live in. While to improve upon the invention invited craftsmanship, I wanted to avoid becoming overly charmed by the technology in place of exploring the theoretical and practical aspects of spatial reality.

With Mesh I started taking double exposures, ganging plates together, controlling the real and virtual images simultaneously. In these earlier holograms I was working with volumetric space - the full spatial field in front of and behind the plate. In that way I was free of the picture plane. 'Ball and Jacks' and 'Cat's Cradle' created an almost tactile reality - it pleased me to later see viewers actually reaching to touch the ball in space. For a period I produced holograms of objects I manipulated within the frame... folded, tied, shifted I took the space further and further out till it began interfering with concepts of reality.

I began to think of holograms as parts of things - as objects segmented holographically as "real" juxtaposed with "holographic". When I began considering holograms as smaller parts of larger objects, I began to think of larger objects as parts of a larger environment. That's where the idea of infinity, the plane as infinity, comes in. My concept of infinity is that the hologram - like 'Solid Deception' or 'The Meeting' ... that break, that crevice, that plane - extends through everything, is representational of the total holographic volume that exists.

The plane: a continuous credible illusion that transforms the real and common world into something unexpected, uncommon; an integrated, inseparable ecology of simultaneous illusion and reality. Just as dreams express physically unmanifested psychic relationships, holography can be therapeutic as a medium that meshes the rational and irrational. I could not allow myself to underestimate the value of confronting the viewer with illusions in his own sphere.

My most recent work involves setting the hologram into real environments that both surround and engage the human dimension, developing a natural vocabulary and system of descriptive notation of holographic spatial relationships for theatre, in order to translate the new holographic emotions into holographic space.

"If there's a continuous credible illusion it's holography, simultaneous reality." \* \* Statement originally published in, Rick Silberman "Shadowgrams" exhibition catalogue' Museum of Holography, New York, 1979.

## COMMENTS ABOUT RICK SILBERMAN AND THE ART OF HOLOGRAPHY

'The Meeting', a hologram of the shadow of a wine glass displayed with the broken stem of a real wine glass, was made by Rick Silberman five years ago and is probably the most popular hologram as far as viewers are concerned. It is the most remembered, and for that accolade must contend with the dimensional gimmickry, intense colours and obvious kinetic effects of other holograms - it is none of these, so why should it be so memorable?

'The Meeting' demonstrates a great deal, comments on much and does it simply. Its content is not cluttered with the spectacular but presented with an economy which contributes to its impact, qualities inherent in all of Rick Silberman's work, which provide the quite unnerving Integrity of his pieces. Holography is ripe for the type of visual incongruity this piece displays and has been used since the process became viable as an imaging medium, but not with such precision. It has since been imitated, quite badly in some cases, yet retains its dominance.

Since starting to experiment with holography in the early 1970's and after examining several techniques. Rick Silberman has worked exclusively with Shadowgrams, a technique for recording the shadow of an object rather than using light reflected from its surface, which he developed in 1975. "While to improve the invention invited craftsmanship, I wanted to avoid becoming overly charmed by the technology in place of exploring the theoretical and practical aspects of spatial reality."\* That exploration has been assisted by using some unique properties of the process, gentle manipulation of the holographic plates (cutting and folding) and the incorporation of holograms with objects.

One of the frustrations of holography is the limit in size which is further aggravated by considering the hologram as a 'thing' limited by the edges of the recording emulsion. By incorporating holograms into real or constructed environments "...that both surround and engage the human dimension..."\*, his holograms become a visual presentation of events which extend beyond the physical and visual limits of the plates. The environments which he can then construct or accentuate uses numerous elements, some of which are holograms. These environments are not specifically about the process of holography or holograms but use them to ease the viewer into broader and more important concepts. During summer 1982 these concepts were further emphasized by placing holograms directly into the somewhat large environment of North America. Sunlight reconstructed the image which extended out of each plate to intersect, theoretically, at a distant high point. Through this piece the implication of space has extended from the cosy partial acceptability of individual reflection holograms to the more physical and less desirable realities of the 'real' world.

Dr. Andrew Pepper, Shearwater Foundation

## Press from the R. J. Reynolds Project: the "Holograph Visions Exhibition"

Born in Brooklyn, New York, in 1951, Rick Silberman studied at the "State University of New York at Buffalo and The Rhode Island School of Design". In the early 1970s, he began working with holography in Boston, where he set up a small holography laboratory for himself and experimented with various types of holography. Of these, he found reflection holograms to be the most interesting. In 1975, as a part of his "Gyroscope", he first began experimenting with what later became known as "Shadowgrams", in which he utilized the structural possibilities of shadows. His goal is to create an atmosphere of illusion. With "Mesh", he began his series of double compositions. Layers located directly over one another give rise to real and imaginary images that mutually supplement each other. Skillfully combined holograms such as "Ball & Jacks" and "Cat's Cradle" are phantoms of reality that again and again incite viewers to touch the object.

In 1979, he first considered the idea of the segmental completion of objects by means of holography. The most well-known hologram of this type is "Meeting". As the title tells us, illusion and reality meet in this hologram. A broken glass is completed by means of the holography. The image is an attempt to achieve an approximate representation of reality composed of an illusion and a real object. Rick Silberman is a guest lecturer in the "physics department of Brown University", Rhode Island, USA. His holograms have been shown in many international exhibitions as well as in several exhibitions devoted exclusively to his work.

"For just a couple of decades now, physical experiments have enabled an aesthetic miracle to become reality: with the aid of holography, our gaze can wander through the three-dimensional space of images. We look into the sculptured light and are actually fooled by it. "If there is such a thing as a never-ending, plausible illusion, it is holography: it is simultaneous reality." This statement by the American master holographer Rick Silberman brings reality and illusion together. All of this builds castles of light before the eyes of us enraptured laymen, and we would like to enter or at least touch them - Rick Silberman's wineglass, for example, a hologram entitled "Meeting." Illusion and reality, the object and its shadow, meet one another. The wineglass has long since become a classic of holography: the broken glass is transformed back to its unbroken state by the shadowy illusion of the missing piece..."

Jurgen Freund, Chairman of the Board RJ Reynolds

"...From Cambridge my introductory tour took me to Brown University in Rhode Island. Rick Silberman taught there. Rick had by this time already completed his entire holographic work. With unrivaled perseverance, he studied and documented the phenomenology of this medium between virtuality and materiality. I still consider his "Meeting," "Rough Cut," and "Light Duty" as classics of holography..."

Matthias Lauk, Director, Museum of Holography and New Media, Pulheim Koln

"...Artists taking up new media can only do so with any success if they violate the rules for their use. But this not only entails a conflict with technology and its inherent logic, but also with its functioning in society in as much as society's cultural and economic needs have been instilled in the logic of technological functions. The purpose that provided the impetus for inventing the New Media is inherent to the way it functions. Artistic application of the New Media thus primarily requires an

emancipation from these purposes by foiling the technical rules. If artistic photography, using this backdrop, has begun not depicting reality, but creating new pictorial reality by whatever means, a very similar process can be observed in artistic holography. One of the most unusual holograms in this context is surely Rick Silberman's "Rough Cut," which uses a three dimensional medium to depict a two-dimensional object. This is done purposely, as it is precisely this renunciation of the customary true-to-life three-dimensionality that opens the eyes for what Rick Silberman is interested in showing. His work makes the holograph principle visible, i.e., that every part of the holograph plate, be it ever so small, contains all the information. Thus, as an object, his picture is a shadow, because when confronted by this simple object, we inevitably start looking for the content of the picture. The initial disappointment thus ends up in surprise, as Holography is certainly the only art capable of demonstrating the philosophy of "all is one" so simply and convincingly..."

Reihnhold Mifielbeck, Writer

Shadowgrams, Rick Silberman's exhibition, is a complex visual record of his development as a conceptual artist, a development that has become evident with the bringing together, for the first time, of these diverse pieces.

Silberman's early work in holography was with single plates which developed the pictorial content of this specially chosen "shadowgram" technique. Already he was exploring and manipulating the dichotomy of positive and negative masses as they intersect through the magic of holographic superimposition. To this he added the colliding perspectives of defined planes and disparate viewpoints...the polarity of solid and insubstantial form (a contradiction inherent in the medium of holography.)

His experimentation with these elements of visual incongruity became an increasingly more deliberate visualization of certain planned interrelationships of form and space as he moved towards a definition of a conceptual plane forming a larger whole than either hologram or object or sliced-through axis of space—binding all three within a sculptural volume. It is a universe modulated by time and space and thought, but not bound by normal perceptual tenets, deliberately set in balanced opposition through the holographic technique of simultaneous visualization. Through axonometric projections Silberman has enabled us to experience this conceptual slice as it effects each element of this construct. The exhibition goes beyond the gallery and the art beyond the work with the addition of "Six Evenings," a series of performance pieces during the course of the exhibition which will explore, in human terms, that which has been stated in plastic ones. Concept becomes experience as the final extended plane of the assemblages. Silberman's art is, above all, an art of interaction and involvement: volume with place, sculpture with environment, idea with construct. It is an art which can be manifested only through the unique qualities of holography, yet the holograms have been wisely used as perceptual tools, fully integrated and supportive aspects of the more important whole.

This is not simply the work of a holographer. This is the work of a conceptual artist who works with holography. It is an important distinction to be made for both the growth of the medium and the development of the artist.

ROSEMARY JACKSON, Director, Museum of Holography

Rick Silberman and I first met in 1975. From that time on it was clear that his approach to holography extended to ideas and works which pushed at the edges of holographic art. His search in holography always resonated between the entrancing magic of illusions and the formation of structural relationships within the holographic space.

In the years since, he has amplified this primal resonance to include even larger and more complex problems. Beginning with holograms filled with illusions of recognizable things related to definable

spatial structures, he went on to reverse these relationships by having objects contain holographic fragments. Most recently, he has extended the holographic plane into a virtually flat domain containing elements of a larger holographically activated reality. This larger plane or field employs a basic grammar of spatial relationships: ascending and descending, weight and pressure, connecting and stitching, fencing and hooking...all forming a wide array of bridges, linkages, hinges and separations in which are reflected a more deeply rooted participation among things and ourselves.

Rick Silberman's work is a prodigious gathering of illusions and ideas in a dense display. But this richness is chilled by an icy shadow, a shadow of separation and fear. This interchange of play and fear throws us into a deep questioning concerning the nature of illusions and even further to the contemplation of the peculiar essences that these holographic images and their relationships raise before us: the essences embodied in the "simple" objects, and their functions, which he has chosen to illuminate.

Silberman's fossils and shards of light seem at once taken from the world and our imaginations. They are peculiar entrapments reflexively blooming in the holographic vortex opening in their wedge-like action a critical distance between us and the objective illusions they signify. In this "potential" space the possibility of emergence is engendered, and a poetry of paradoxical relationships between idea and substance, illusion and structure, placement, scale and distance can be seen.

LOWERY BURGESS, Dean, College of Fine Arts, Carnegie Mellon University

## **The Artist's Guide Series**

The Artist's Guide series provides a delightful insightful meditation on select subjects, a compilation of intriguing photos and graphics accompanied by a sensitive commentary delivered with a wit and thoughtfulness that offer a unique insight. into the complexities of spiritual understanding.

## RICK SILBERMAN

Rick Silberman has been active in the areas of corporate and industrial design, marketing, and media development with both public and private sector clients. Among his many innovative involvements are his work with Lowrey Burgess in designing a hologram for the Space Shuttle Project for NASA, and consultation with the Peabody Museum at Harvard University on the development of a new cataloguing system using holography to document artifacts. His designs include a collapsible hologram viewer for New Holographic Design Company in London. He prepared a marketing campaign for Stalkner, Faulkner and Klenk, an industrial advertising company. He has worked as a design consultant with Polaroid Corporation on the Polaris Computer Project and also on graphic presentation techniques for holography. Silberman designed programmed instruction for medical personnel as media consultant for the Department of Health Education and Welfare.

Silberman's experience in the fields of public speaking, course development, and teaching is extensive. While a lecturer at The Rhode Island School of Design, he developed a theory and course for designing with holography and experimental technology. At Brown University he designed and taught a curriculum for the study of holography. At London University he assisting in the development of an art curriculum including his unique approach to designing with experimental technology. Silberman developed and popularized the holographic technique known as "Shadowgrams" for artists and designers.

Silberman has taught courses and given seminars with many institutions, including: The Boston Museum School; Massachusetts College of Art; Hanover School of Art; The Minneapolis School of Art and Design; Harvard University, Massachusetts Institute of Technology, Rhode Island College, Museum of Holography, New York; Museum of Holography and New Media, Cologne; and Danish Museum Arrhaus

He holds a Master's of Industrial Design from the Rhode Island School of Design and a Bachelor's of Media Studies from the State University of New York at Buffalo, where he graduated Summa cum laude and Phi Beta Kappa.

Silberman has sold his limited edition art holograms to numerous public and private collectors and has been featured extensively in one-man and group exhibitions. He has shown his work at The Museum of Modern Art, The International Center of Photography and The IBM Corporate Gallery in New York, and The Hanover Museum, Documenta and Photokina, and The BMW Corporate Gallery in Germany. He was awarded a Rockefeller Grant for his Artist-in-Residency with Goldsmith's College under the auspices of the Guelbenkian Foundation, London.

He has been instrumental in the transition to the electronic frontier in the world of publishing. His expertise and experience in the areas of graphic arts, computer pre-press, and media production allow him to effectively and creatively coordinate these areas in the instruction and implementation of electronic publishing and media design. He has worked as an advisor to Apple Computer in the area of Electronic Color Pre-press and Graphic Presentation.

His corporate clients include: Polaroid Corporation, The City of New York, Con Edison, Mastercard International, Citibank, American Express, Reader's Digest, Random House, Times Magazine Group, Time Life Books Constitution Magazine, Weight Watchers, The New York Times, The Toy Book, The Irish News, and Unitron Graphics, Microcomputer Publishing Center, as well as publishers of various other trade books and magazines.

He is currently the Executive Director of the Milford Agency, a New York based advertising agency.