

**CURRICULUM VITAE**  
**Donald K. Thornton, Senior Lecturer HPSS Department**

**Education**

- 1969      B.A., Mathematics (with minors in Physics and Studio Art),  
Hamilton College, Clinton, New York
- 1974      B.F.A., Painting, European Honors Program, Rhode Island School of  
Design, Providence, Rhode Island, (also studied welding)
- 1979      M.S. Vis. S., summa cum laude (equivalent) Holography; Center for  
Advanced Visual Studies, Massachusetts Institute of Technology,  
Cambridge, Massachusetts; Thesis: Multi-color Holographic Art Imaging  
with a Single He-Ne Laser; Studied with Dr. Stephen A. Benton,  
Professor Harriet Casdin-Silver, Dr. Hendrik J. Gerritsen, Professor Otto  
Piene
- 1968      Cooper Union School of Art, New York, New York
- 1973      Rosary College Graduate School of Fine Arts at  
Villa Schifanoia, Florence, Italy

**Professional Employment**

- 1969-1970      Mathematics Department, Lynn Public Schools, Lynn, Massachusetts
- 1978      Teaching Assistant, for Dr. Hendrik J. Gerritsen, Holography course,  
Brown University, Providence, Rhode Island
- 1978      Instructor, Summer Institute on the Media Arts, University Film Study  
Center, Tufts University, Medford, Massachusetts
- 1978-1979      Instructor, Graduate School of Design, Harvard University, and the  
School of Architecture and Planning, Massachusetts Institute of  
Technology, Continuing Education Program, Cambridge, Massachusetts
- 1978-1980      Instructor, Center for Advanced Visual Studies, Massachusetts Institute of  
Technology, Cambridge, Massachusetts
- 1979-1980      Fellow, Center for Advanced Visual Studies, Massachusetts Institute of  
Technology, Cambridge, Massachusetts
- 1980-11/81      Foreign Lecturer, Institute of Art and Design, School of Art,  
University of Tsukuba, Tsukuba Academic New Town, Ibaraki-ken, Japan
- 1982-1985      Visiting Artist and Teaching Associate, Brown University Holography  
Laboratory, Department of Physics, Providence, Rhode Island
- 1984-1989      Holographer, Advanced Environmental Research Group, Cambridge,  
Massachusetts
- 1985-1995      Adjunct Lecturer, Program in the Visual Arts, Brown University; supported  
by the Photography Department, Rhode Island School of Design,

Providence, Rhode Island

- 1985-1989      Research Associate, Department of Physics, Brown University,  
Providence, Rhode Island
- 1987-            Adjunct Lecturer, HPSS Department, Rhode Island School of Design,  
Providence, Rhode Island
- 1989-2001      Visiting Scientist, Department of Physics, Brown University, Providence,  
Rhode Island
- 1989-2003      Senior Research Holographer, Advanced Environmental Research  
Group, Cambridge, Massachusetts
- 2004-            Holographer, Advanced Environmental Research Group, New York, New  
York

### **AWARDS AND HONORS (Selected)**

Owen Root Scholarship Award, Hamilton College, Clinton, New York, 1964-68

Scholarship Award, Rhode Island School of Design, Providence,  
Rhode Island, 1970-74

European Honors Program, Rhode Island School of Design, Rome, Italy, 1973-74

Bob D'Ancona Video class editing award, Center for Advanced Visual Studies,  
Massachusetts Institute of Technology, Cambridge, Massachusetts, 1976

Graduate Student Council Award, Massachusetts Institute of Technology,  
Cambridge, Massachusetts 1978

High Honors, *5.0* (straight A) grade point average, Massachusetts Institute of  
Technology, Cambridge, Massachusetts (1976-)1979

Who's Who Among Graduate Students, 1978-79

Rockefeller Foundation Fellowship Support, Center for Advanced Visual Studies,  
Massachusetts Institute of Technology, Cambridge, Massachusetts, 1979

National Energy Innovation and Technical Transfer Award (Advanced  
Environmental Research Group), Boston, Massachusetts 1986

Centennial Invention Award, Boston Edison Corporation, (Advanced Environmental  
Research Group), Boston, Massachusetts 1986

### **ONE PERSON EXHIBITIONS**

*Imagine That*, Center for Advanced Visual Studies, Massachusetts Institute of  
Technology, Cambridge, Massachusetts, 1979

Turman Art Gallery, Indiana State University, Terre Haute, Indiana, 1980

Institute of Industrial Science, University of Tokyo, Tokyo, Japan, 1980

Tokai University, Research Institute of Arts, Hiratsuka-shi,  
Kanagawa-ken, Japan, 1981

University of Waikato, Hamilton, New Zealand, 1984

Image Engineering Gallery, Somerville, Massachusetts 1986

*Sunlit Art*, New England Solar Energy Association, Faculty Club, Massachusetts  
Institute of Technology, 1986

Image Engineering Gallery, Somerville, Massachusetts 1987

Pawtucket Arts Council Exhibition, Old Slater Mill, Pawtucket, Rhode Island 1987

Image Engineering Gallery, Somerville, Massachusetts 1988

Image Engineering Gallery, Somerville, Massachusetts 1989

*Exhibit of Holograms by Donald Thornton*, Ladd Observatory, Brown University,  
Providence, Rhode Island, 1991

*Holography*, Benson Hall Gallery, Rhode Island School of Design, Providence,  
Rhode Island, 1995

## **GROUP EXHIBITIONS**

Root Art Center, Hamilton College, Clinton, New York, 1968

Fine Arts Club Installation, Nickerson Hall, Rhode Island School of Design,  
Providence, Rhode Island 1971

Woods-Gerry Gallery, Rhode Island School of Design, Providence, Rhode Island,  
1972

Temple University in Rome / Rhode Island School of Design European Honors  
Program Group Show, Tyler School of Art, Rome, Italy, 1973

Palazzo Cenci, European Honors Program Group Show, Rome, Italy, 1973

What Cheer Gallery, Providence, Rhode Island, 1975

*An Autumn Equinox Celebration*, Environmental Installation and Video Production,  
Plum Island, Massachusetts, 1976

Center for Advanced Visual Studies, Massachusetts Institute of Technology,  
Cambridge, Massachusetts 1977

*Space Window*, David Winton Bell Gallery, Brown University, Providence, Rhode  
Island (and Woods-Gerry Gallery, Rhode Island School of Design) 1977  
Summer Institute for the Media Arts, Tufts University, Medford, Massachusetts,  
1978

"CENTERBEAM, D.C.", CAVS at the Mall, Washington, DC, 1978

*A Choice Of Reality*, Bristol Art Museum, Bristol, Rhode Island 1978

*Alice in the Light World*, Holography Exhibition, Isetan Museum, Tokyo, Japan, 1978

Environmental Hologram Installation, New York Avante Garde Festival, and the Cambridge River Festival, Hyatt Regency Hotel, Cambridge, Massachusetts, 1978

*New Spaces*, The Franklin Institute, Science Museum and Planetarium, Philadelphia, Pennsylvania, 1979-80

Faculty Exhibition, Tsukuba University, Tsukuba-shi, Ibaraki-ken, Japan, 1980

National Taiwan Institute of Technology, Taipei, Taiwan, 1981

Faculty Exhibition, Tsukuba University, Tsukuba-shi, Ibaraki-ken, Japan, 1981

Odakyu Exhibition Hall, Kawasaki, Japan, 1981

Gallery Yoei, Tokyo, Japan, 1981

Chikyudo Gallery, Tokyo, Japan, 1981

Holography Studio *Exhibit Space* Gallery, Brown University, Providence, Rhode Island, 1982

Commonwealth University of Virginia, (With B. Biggs), 1982

Holography Studio *Exhibit Space* Gallery, Brown University, Providence, Rhode Island, 1983

University of Waikato, Hamilton, New Zealand, 1984

Holography Studio *Exhibit Space* Gallery, Brown University, Providence, Rhode Island, 1984

Waterman Building, Rhode Island School of Design, Providence, Rhode Island, 1985

Brown University, List Art Center, Providence, Rhode Island, 1985

Red Eye Gallery, Rhode Island School of Design, Providence, Rhode Island, 1985

Holography Studio *Exhibit Space* Gallery, Brown University, Providence, Rhode Island, 1985

*Den Holografiske Verden*, Copenhagen, Denmark, 1985-86

*Holography in Tivoli*, the Tivoli Gardens, Copenhagen, Denmark, 1986

Woods-Gerry Gallery, Rhode Island School of Design, Providence,  
Rhode Island, 1986

*The Arts and Technology*, Connecticut College, New London, Connecticut, 1986

New Dimensions LS Gallery, Copenhagen, Denmark, 1986

Technical University of Denmark, Lyngby, Copenhagen, Denmark, 1986

European Honors Program 25th Anniversary Juried EHP Alumni Exhibition,  
Woods-Gerry Gallery, Rhode Island School of Design, Providence,  
Rhode Island, 1986

Holography Studio *Exhibit Space* Gallery, Brown University, Providence, Rhode  
Island, 1986

*Projections dans le Temps et l'Espace*, Montreal, Quebec, Canada, 1987

Holography Studio *Exhibit Space* Gallery, Brown University, Providence, Rhode  
Island, 1987

*Images in Time and Space*, Toronto, Ontario, Canada, 1987

RISD Faculty *Exhibition*, Museum of Art, Rhode Island School of Design, Providence, Rhode Island,  
1988

Facets of Light, Somerville Museum, Somerville, Massachusetts, 1988

*Images in Time and Space*, Toronto, Ontario, Canada, 1988

12 x 12, Rhode Island School of Design Alumni Exhibition, Woods Gerry Gallery, Rhode Island  
School of Design, Providence, Rhode Island, 1988

Images in Time and Space, San Jose, California, 1989

International Exhibition World of Holography, Nagoya, Japan, 1989

Images in Time and Space, Toronto, Ontario, Canada, 1989

*In a Different Light*, Gallery 7, Providence, Rhode Island, 1990

*Informed Images*, Program in the Visual Arts Faculty Exhibition, David Winton Bell  
Gallery, Brown University, Providence, Rhode Island, 1990

*Still Images / Moving Pictures*, Department of Visual Art (and Center for Modern  
Culture and Media) Faculty Exhibition, David Winton Bell Gallery, Brown  
University, Providence, Rhode Island, 1993-94

*RISD Faculty Exhibition*, Museum of Art, Rhode Island School of Design,  
Providence, Rhode Island, 1995

Light Exhibition, Bristol Art Museum, Bristol, Rhode Island, 1995

*RISD Faculty Exhibition*, Bristol Art Museum, Bristol, Rhode Island School of Design, Providence, Rhode Island, 2001

## **COMMITTEE APPOINTMENTS, SOCIETY MEMBERSHIPS**

Fraternity Presidents council, Hamilton College, 1967-68

Graduate Student Council, Visual Arts Representative, Massachusetts Institute of Technology, 1977-79

Committee on the Visual Arts, Massachusetts Institute of Technology, 1977-79

Museum of Holography; Holosphere, 1978

College Art Association, 1978-

International Conference of Human Values, Panelist, Tsukuba University, Tsukubashi, Ibaraki-ken, Japan 1980

Holographic Display Artists and Engineers Association (HODIC), 1980

UNESCO Art Education League/Japan International Artists Club, 1981

Northwest coast Holography Society, 1985-88

L.A.S.E.R. [Laser Arts Society for Engineering and Research], 1985-89

S.P.I.E., the International Optical Society, 1986-1995

Museum of Holography; Holosphere, 1988-1995

## **PUBLICATIONS, PAPERS, PATENTS**

"Video Teaching at the C.A.V.S. [Center for Advanced Visual Studies] and the C.A.E.S. [Center for Advanced Engineering Studies] Video Studios," President's Report, Massachusetts Institute of Technology, 1976

"Educational Study; the Teaching of Art," Division for Study and Research in Education, Massachusetts Institute of Technology. (unpublished), 1978

"Exploring the Electronic Image: Art in Technological Society," *The Graduate*, Spring, 1979

"Holographic Art Imaging, the Space Between Science and Art," (excerpts), *HODIC Bulletin*, No. 1, January, 1981

"Art Research Techniques," *Bulletin of the Institute of Art and Design*, University of Tsukuba. (with S. Mitamura), No.3, March, 1982

"Holographic Diffractive Structures for Daylighting," (Advanced Environmental Research Group) Final Report, Phase I FY85 U.S. Department of Energy,

1985

"Theoretical Model and Verification of Experimental HDSs for Passive Solar Daylighting," (Advanced Environmental Research Group) Proceedings of the Solar Buildings Conference, U.S. Department of Energy, DOE/CONF850388, 1985

"Designing for Specific Diffraction Criteria by Accounting for Non-Ideal Aspects in Holographic Recording Materials," with Dr. Stephen A. Benton, SPIE International Symposium on Optics, (August) 1986

Diffraction Grating Structures, (Advanced Environmental Research Group), United States Patent, Patent Number 4,850,682, July 25, 1989

"Liquid-Crystal-Filled, Holographic Solar Concentrator," (with H. Gerritsen and R. Ian-Frese), Proceedings of Building Retrofit Innovative Concepts Fair, Department of Energy, (October) 1989

Diffraction Gratings Having High Efficiencies, (Advanced Environmental Research Group), United States Patent, Patent Number 5,009,484, April 23, 1991

"Highly Efficient, Deep Photoresist Gratings Interpreted by Kogelnik's Two Wave Theory," (with S. R. Bolton and H. J. Gerritsen), *Journal of Applied Optics*. 30,807, 1991

Quasi Volume Diffracting Structures, United States Patent, Patent Number 5,048,925, September 17, 1991

#### **PROJECTS AND EVENTS (Partial list)**

Fresco Project, Fine Arts Club, Rhode Island School of Design, Providence, Rhode Island, 1971

"An Autumn Equinox Celebration," Plum Island, Massachusetts, 1976

Imaging through opal barriers with gated reference beam sub-picosecond pulsed holograms, (with H. J. Gerritsen), Department of Physics, Brown University, Providence, Rhode Island, 1979-80

"Holographic Window", (Advanced Environmental Research Group) Inventors Association of New England, and the Boston Museum of Science, Inventors Weekend, Boston, Massachusetts, 1984

Imaging through opal barriers with gated reference beam sub-picosecond pulsed holograms, (with H. J. Gerritsen), Department of Physics, Brown University, Providence, Rhode Island, 1982-84

"Scale, Sunlight, and Holography," (with S. Weber) Second International Conference on Display Holography, Lake Forest, Illinois, 1985

"Holographic Greenhousing and Aquaculture," (Advanced Environmental Research Group) Inventors Association of New England and the Boston

Museum of Science, Inventors Weekend, Boston, Massachusetts, 1986

Sigma Xi lecture (with H. J. Gerritsen), Alumni Hall, Brown University,  
Providence, Rhode Island, 1986