

**SCOTT SONA SNIBBE**

**Title:** Christian Science Interactive Narratives

**Genre:** Interactive Video Installation

**Applicant's Role in Production:** Artist, Director, Software Engineer

**Production Format:** Installation comprising custom computer program, PC computer, video camera, and video projector

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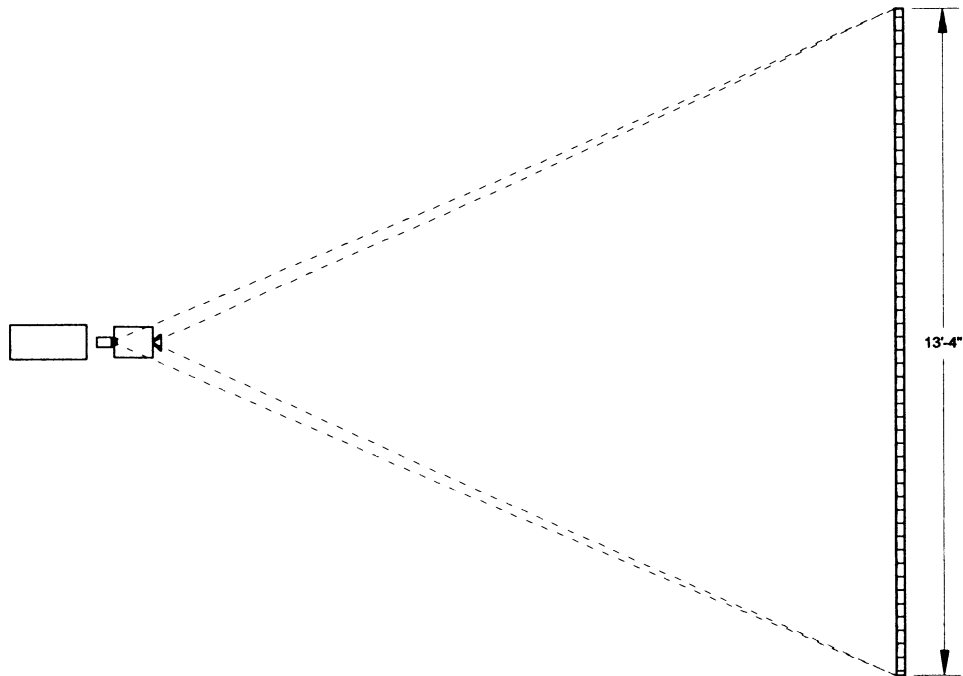
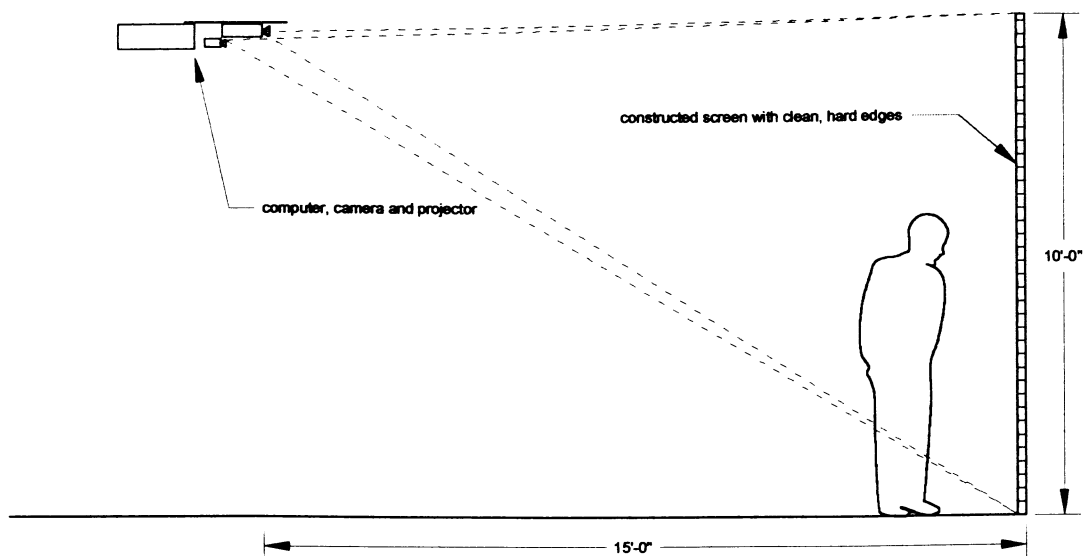
**Brief Project Description** (do not exceed space given below)

I will create two interactive narrative video works comprised of large projections that react to and interact with viewers. Each work presents a silhouette narrative of a prominent Christian Scientist. The first work concerns the events surrounding Mary Baker Eddy's discovering and founding Christian Science in the 1860s. The second presents moments in the life of the American surrealist and Christian Science practitioner Joseph Cornell between 1930 and 1950. The Christian Science faith is best known for its belief in the power of the mind, and the mind's ability to heal the body of illness – a belief that echoes the ideas of interdependence, emergence and *emptiness*, that inform my work.

Both pieces will be synthetically constructed narratives. The projected imagery will be silhouette performances in the tradition of 19<sup>th</sup> century magic lantern and shadow theatre. These performances, however, will be algorithmically generated, so that their specific actions and movements are always slightly different. These movements will be rooted in live recordings made on a soundstage and in animations, but will primarily exist as computer models.

Viewers will interact with a work when they walk between a projector and a projection on the screen. Viewers' own shadows will instantly become an integral part of the projected scene. They will feel an immediate sense of presence at a phenomenal level, through the reaction of snow, rain, and scenery to their shadows. Their movements and actions will also have a narrative effect, advancing each work from scene-to-scene in ways that reflect viewers' physical behavior.

# Christian Science Interactive Narratives, Scott Snibbe Installation Diagrams





Still image from first scene of Mary Baker Eddy work, Scott Snibbe

**SCOTT SONA SNIBBE**

**Title** Deep Walls

**Year** 2003

**Technical**

**Original Format**

☐ Software  
☐ Web  
☒ Installation  
☐ Other \_\_\_\_\_

**Format Submitted for Viewing**

☐ Software  
☐ Web  
☒ VHS  
☐ Other \_\_\_\_\_

**Preferred OS**

☐ Windows  
☐ Mac  
☐ Unix  
☐ Other \_\_\_\_\_

**Web Information** (answer only if sample work is in Web format)

☐ URL \_\_\_\_\_ (if more than one please list them below)

☐ Browser requirement(s)

☐ Plug-in requirement(s)

☐ This sample requires broadband connection (fast Internet connection)

☐ A local copy of the sample work has been included with the application

**Special Information For Viewing:**

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**Description of Work** (use an additional sheet if necessary)

*Deep Walls* creates a projected cabinet of cinematic memories. Within each of 16 rectangles, the movements of different viewers within the space are projected, played back over-and-over, and reduced into the space of a small cupboard. Initially, when a viewer or viewers move into the larger rectangle of the entire projection, their shadows begin to be invisibly recorded, and one box within the projection (the eventual destination of the current movements) is cleared out. When all of these viewers leave the larger frame, their shadows are re-played within that smaller, single box, looping indefinitely. Thus the work presents records of the space, organized and collected into a flat cinematic projection. By collecting viewers' shadows, the piece destroys the fantasy and illusion of cinema, replacing these with a structured representation of an active audience.

Rhythmically, the work presents a complex temporal relationship between cinematic loops. Each smaller collected shadow-film has the precise duration of its recording. A single item in the collection might anywhere from a few seconds to several hours. The temporal, musical relationship between the sixteen frames becomes extremely complex, like Brian Eno's tape loop experiments, always looping individual recordings, yet presenting a unique whole – the repetition period for the entire work can be on the order of days or even months.

*Deep Walls* is particularly inspired by the surrealist films of Jan Svankmajer and the Quay Brothers and the sculpture of Joseph Cornell. In their films and sculptures, small bodies and obsessive organization of objects into drawers and cabinets symbolically represent interior, psychological and spiritual states. The rational process of organization only serves to bring out an unconscious irrationality. The name of the piece is a design pattern from architect Christopher Alexander's "Pattern Language". His admonition to architects is to build the walls of homes thick, so that cabinets, drawers and windows can perforate the interior space, providing areas to store, display, slice through and ultimately provide more meaning within the home. In the spirit of Alexander, this work gradually absorbs the contents of its environment onto its surface.

**SCOTT SONA SNIBBE**

**Title** Compliant

**Year** 2002

**Technical**

**Original Format**

☐ Software  
☐ Web  
☒ Installation  
☐ Other \_\_\_\_\_

**Format Submitted for Viewing**

☐ Software  
☐ Web  
☒ VHS  
☐ Other \_\_\_\_\_

**Preferred OS**

☐ Windows  
☐ Mac  
☐ Unix  
☐ Other \_\_\_\_\_

**Web Information** (answer only if sample work is in Web format)

☐ URL \_\_\_\_\_ (if more than one please list them below)

☐ Browser requirement(s)

☐ Plug-in requirement(s)

☐ This sample requires broadband connection (fast Internet connection)

☐ A local copy of the sample work has been included with the application

**Special Information For Viewing:**

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**Description of Work** (use an additional sheet if necessary)

The projected screen is historically the mechanism of one-way delivery of narrative information to a passive audience. *Compliant* creates a projected screen that is compliant and soft to the touch, equalizing the relationship between body and screen by allowing the audience to act upon the light projection itself. As visitors walk into the field of the projected screen, physically breaking the beam of projected light, their bodies cause the screen to be distorted and pushed away, off the axis of projection with a distinct posture. The screen becomes a body-sensitive sheet of projected light. This give-and-take relationship with the screen also evokes cinema more directly, by recalling the slapstick comedy of Charlie Chaplin endlessly chasing his hat in *The Tramp*.

**SCOTT SONA SNIBBE**

**Title** Boundary Functions

**Year** 1998

**Technical**

**Original Format**

\_\_\_ Software  
\_\_\_ Web  
\_X\_ Installation  
\_\_\_ Other \_\_\_\_\_

**Format Submitted for Viewing**

\_\_\_ Software  
\_\_\_ Web  
\_X\_ VHS  
\_\_\_ Other \_\_\_\_\_

**Preferred OS**

\_\_\_ Windows  
\_\_\_ Mac  
\_\_\_ Unix  
\_\_\_ Other \_\_\_\_\_

**Web Information** (answer only if sample work is in Web format)

\_\_\_ URL \_\_\_\_\_ (if more than one please list them below)

\_\_\_ Browser requirement(s)

\_\_\_ Plug-in requirement(s)

\_\_\_ This sample requires broadband connection (fast Internet connection)

\_\_\_ A local copy of the sample work has been included with the application

**Special Information For Viewing:**

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**Description of Work** (use an additional sheet if necessary)

*Boundary Functions* is realized as a set of lines projected from overhead onto a floor that divides each person from every other. As people move on the floor below, this diagram dynamically changes, always describing the personal space of each person. The experience of this personal space dynamically displayed, highlights that personal space is defined only by our relation to others, and chances without our control. Thus, we realize that, like many aspects of our supposed individuality, our personal space is entirely constructed by the social environment around us.

**SCOTT SONA SNIBBE**

**Title** It's Out

**Year** 2001

**Technical**

**Original Format**

☐ Software  
☒ Web  
☐ Installation  
☐ Other \_\_\_\_\_

**Format Submitted for Viewing**

☐ Software  
☒ Web  
☒ VHS  
☐ Other \_\_\_\_\_

**Preferred OS**

☒ Windows  
☐ Mac  
☐ Unix  
☐ Other \_\_\_\_\_

**Web Information** (answer only if sample work is in Web format)

☒ URL www.snibbe.com/scott/itsout

☐ Browser requirement(s)

☒ Plug-in requirement(s): Java plug-in, linked from artwork page

☐ This sample requires broadband connection (fast Internet connection)

☒ A local copy of the sample work has been included with the application (on VHS tape)

**Special Information For Viewing:**

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**Description of Work** (use an additional sheet if necessary)

*It's Out* consists of a screen-based representation of a Zen koan that asks how to get a grown duck out of a bottle in which it had been raised since birth. In attempting to create an interactive representation of the koan in this story, I sought to portray the non-duality hinted at by the koan itself. In general, a koan is not answerable, but through contemplating the question, the meditator may clear away his or her own misunderstandings through a realization of the non-duality of all things and, ultimately, obtain enlightenment. To re-present this koan visually, I sought to create an illusion of duality that is shattered through interaction with the viewer.

The work begins with a representation of a white goose almost wholly contained in a black bottle. Viewers interact with the work by moving a mouse with their hand. When the viewer clicks and drags within the bottle, the bottle and the goose are revealed to exist only as the contours of a single black object—the outer contour is the bottle and the inner, the goose. This bottle-goose object distorts like soft rubber as the viewer manipulates its surface. The goose and the bottle are no longer distinguishable, nor is it possible to reconstruct their dual existence.

Each time someone runs the program, the work is different, but the overall quality is the same – that of simultaneous unification and disintegration of the form. In this process, some viewers also see a sense of the principle of entropy – the movement of all natural things towards disorder – just as some view Humpty-Dumpty as representing entropy in Lewis Carol's *Alice In Wonderland*.

## **Artist's Statement, Scott Snibbe**

The majority of my work explores how seemingly independent phenomena are, upon analysis, actually interdependent with their environments. Such interdependence may be understood in terms of the Buddhist notion of *emptiness*, which holds that no object, physical or mental, exists in isolation from the rest of reality. For example, humans often think of themselves as embodied individuals that act separately from their surroundings and other people. However, when people examine even the most basic unit of the individual self—the human body—they find it composed entirely of “non-self” physical elements (e.g., parents’ genetic material, food, and water that all, ultimately, originate from ancient stellar explosions), which are in continual exchange with the environment and with others (e.g., through genetic transmission, eating, respiration, immunological processes, etc.). Similarly, human mental structures and processes, including languages, ideas, memories, and preferences, all emerge from our interactions with other individuals and society. Even when alone, the imprints of these interactions drive our mental processes. Such a view of interdependence and emergence has gained widespread contemporary support in the fields of complexity theory, social psychology, and network theory.

In my artwork, I portray this interdependence of individuals with their environments and with each other through bodily interactions. Many of my works do not function unless viewers actively engage with them—by touching, breathing, moving, etc.—so that viewers are essential to the work’s existence as art. Furthermore, although the works involve significant technological infrastructure, viewers’ experiences more typically occur in the realm of human-to-human interactions. The pieces provoke communication among the viewers that, more than a mere reaction to the work, becomes the very essence of it.

Interaction is by nature time-based, and my artistic process is rooted in lessons I learned from the temporal media of experimental film and animation. The frame-by-frame creation of movement is based on an understanding that even a thirtieth of a second can change the



perceptual and emotional impact of a cinematic moment. I apply a similar methodology in creating time-based interactions among humans and technology. My artistic vocabulary is comprised of the subtle changes in timing that unfold as projections or mechanical objects react to viewers. These changes in timing are encoded not as frames of film, but as computer instructions that constantly reinterpret and update the temporal conditions of the work.

Although the ideas that my works attempt to convey are complex, I have adopted a minimalist artistic practice. My working process is subtractive, removing elements until only those necessary for conveying a work's meaning remain. I combine this approach with the principles of phenomenology – the philosophy of how the body “thinks” through unmediated perception, rather than through reason and language. Participants construct the meaning of my works through a process of physical awareness, which, in the words of the philosopher Merleau-Ponty, “gives us at every moment a global, practical, and implicit notion of the relation between our body and things, of our hold on them.” As applied to interactivity, my approach rewards viewers with an immediate, visceral sense of presence, while simultaneously inducing them to understand the conceptual motivation and deeper meaning behind the work.

My interests in phenomenology and minimalism reflect several of my artistic influences. First is the tradition of experimental and abstract film, especially the work of Len Lye, who created *direct cinema* by scratching and marking celluloid film directly with his body. Lye, along with other abstract film pioneers, including Oskar Fischinger, Hans Richter and Moholy-Nagy, revealed that it was possible to create sophisticated, time-based, emotion- and meaning-laden work without resorting to representation. A second direct influence on my work is the minimalist environmental art of the 60's and 70's, most notably that of Robert Irwin and James Turrell, who explored how subtle changes in an environment can make deep impressions on the viewer. My work continues in these traditions by constructing environments that directly and meaningfully react to viewers' presence and engagement.

## **Scott Snibbe, Project Narrative**

The works that I am proposing for the New Media Fellowship construct narrative, cinematic projections in which viewers' bodies become essential, integrated components. I will create two works, each presenting vignettes from the life of a significant Christian Scientist. Christian Scientists are best known for their belief in the individual's ability to heal his or her own body solely through mental processes. This belief is based on the tenet that the material world is a projection of the mental and spiritual ones, and is similar to the ideas of interdependence, emergence, and the Buddhist notion of emptiness—all of which are major themes in my artwork. I have a further personal interest in Christian Science, having been raised in that faith, though no longer a practitioner. The first proposed work depicts scenes from the life of Mary Baker Eddy, Christian Science's founder, and the second portrays moments in the life of the American surrealist Joseph Cornell. Both works will allow viewers to either disturb or catalyze the narrative, and will emphasize transformative moments in the subjects' lives. By allowing viewers to use their bodies to explore the immateriality of narrative and projection, the works echo the Christian Scientist belief in the connectedness of body to mind.

Over the past few years, I have already begun to examine the relationship between bodies and cinema. Through computer mediation, the projections in works such as the *Screen Series* react to the presence of viewers as soon as they step between screen and projector, thus putting the body and projection on equal footing, or even making the body dominant to the projected image. In so doing, they allow viewers to create cinema with their bodies, either through reactive projections that respond to viewers, or through porous projections that record viewers' movements. Although based in the contemporary technologies of computer vision, simulation, and digital projection, these works primarily refer back to the history of cinema and light projection, when silhouettes, rather than exact representations, graced animations, shadow theatre

performances, and magic lantern productions. My works likewise emphasize viewers' shadows, rather than their exact representations. My emphasis on shadows paradoxically creates a stronger integration of viewers' bodies with the projections, since a picture of a viewer's shadow is almost identical to the shadow itself, while a picture of a viewer's body is less similar to their actual three-dimensional form. With such an approach, these works have a similar agenda as structuralist film: the removal of layers of cinematic illusion to reveal the nature of the image itself.

Both of the proposed works entail the same apparatus: a projector, camera, and computer located at the same point in space. This apparatus will project an 8-16 foot high silhouette narrative on the opposite wall. In the absence of viewers, a single scene from the narrative loops, with small variations occurring at each repetition. The projected scene is not a recording, but rather is a computer-generated, self-contained silhouette reality. When a viewer walks between the projection apparatus and the projection itself, the viewer's shadow immediately becomes a character or a disturbance in the projected scene, and can advance the narrative to other scenes.

For example, consider the first scene from the Mary Baker Eddy piece, which depicts the moment when Christian Science began. In this scene, a Victorian woman's silhouetted figure ice-skates on a snowy New England afternoon. When viewers enter this scene, the snow falling upon their shadows immediately integrates their bodies into the narrative frame. As a consequence of the viewers' movements, Mrs. Eddy slips and falls upon the frozen surface of the lake and the scene advances to Mrs. Eddy convalescing in her bedroom.

Executing these works will involve the core methodologies that I have developed for my prior structural works – computer vision for the integration of human figures with the projections; and synthetic, reactive computer graphics. The narrative aspect of this project will require the creation of source material with actors and animators, marking my return to experimental film.

This source material will be algorithmically transformed into a dynamic representation of the scene. The quality of the characters' movements will be rooted in the original recordings and animations, but the actual imagery will be uniquely different each time it is viewed, since the source movements will be transformed into a synthetic description of characters and scenery.

I will present the works primarily in museums and galleries, while also seeking out public installations where an unsuspecting audience would encounter the works by chance. Ideal locations would be relevant historical sites, such as the Mother Church in Boston, where Mary Baker Eddy established world headquarters, or specific locations in New York City, where Joseph Cornell lived and found his inspirations and obsessions.

Only a few artists, such as Graham Weinbren, have made successful interactive narratives. When such works fail, it is usually due to either too clear a coupling with the narrative, where viewers are simply starting and stopping a pre-recorded narrative; or too unclear a coupling, where viewers are unaware of how they affect the narrative. I believe these proposed works will strike a balance between these extremes, transforming the viewer from observer to actor in unanticipated ways. Furthermore, by having an instantaneous, phenomenal impact on the scene (through interactions with snow, rain, wind, etc.), viewers immediately feel their own narrative presence. Their subsequent effects on the narrative arises from the piece's continuous, dynamic processing of their movements within the scene, rather than through obvious and disconnected jolts to the narrative. Finally, since the imagery is an algorithmically generated reality, rather than a series of recorded vignettes, the work presents a sense of the intimate and unrepeatable, more consistent with the experience of an actor than a viewer.

The total cost of the project is \$35,000. The money will be applied to studio and equipment costs, living expenses during the research and development phase, and film/video pre-production expenses including acting, cinematography, and animation.

# Project Budget, Scott Snibbe

*Christian Science Interactive Narratives Budget*

*Prepared for 2004 New Media Fellowship*

*Scott Snibbe*

*10/6/03*

## **I. Equipment for development and exhibition**

<u>ITEM</u>	<u>NOTES</u>	<u>EST. COST</u>
Video Projector with wide angle lens	2500 lumens or brighter data Projector with wide angle lens to project 13' x 10' image width at minimum 1024x768 resolution	\$ 4,000
Video Camera with controllable iris, zoom, exposure	AFZ-220XC 1/4" auto-zoom color camera	\$ 500
Camera Power supply		\$ 20
Camera mounting bracket		\$ 50
Video digitizing card	Pinnacle capture card or USB Videobus II	\$ 250
VGA Splitter/amplifier box (VOPEX-2V-H)		\$ 250
Video cables	Long VGA, or breakout to 4 BNC Coax, Long BNC to camera	\$ 100
Control cable	Custom made 25-50' control cable for camera	\$ 200
Retroreflective screen - frame & screen material	13.3'x10'	\$ 400
PC computer	Running Windows 2000/XP, 2.5Ghz+ with high end graphics card	\$ 2,000
Monitor	For development and maintenance	\$ 800
Tax and Shipping		\$ 400
<b>Total development and exhibition equipment</b>		<b>\$ 8,970</b>

## **II. Non-equipment expenses**

1 year studio space rental		\$ 6,000
Living expenses to subsidize 1 year of research and development by the artist		\$ 10,000
Actors and cinematography	two video shoots	\$ 6,030
Animator	refining and creating additional narrative elements	\$ 2,000
Research travel to NYC, Boston and Washington, DC	Mother Church, Boston; Cornell Study Center, DC; Cornell Home, Queens	\$ 1,000
Production travel to NYC and Boston	Travel for video shoots arranged at studios and historic locations with cinematographic collaborators based in NYC and Boston	\$ 1,000
<b>Total non-equipment expenses</b>		<b>\$ 26,030</b>
<b>Total expenses</b>		<b>\$ 35,000</b>

SCOTT SNIBBE

*ARTIST'S CURRICULUM VITAE*

October, 2003

www.snibbe.com

BORN: August 20, 1969

EDUCATION: 1992-1994 M.Sc., Computer Science, Brown University.  
1987-1991 Bachelor of Fine Arts, B.A., Computer Science, Brown University.  
1989-1992 Experimental Animation, Rhode Island School of Design.

BRIEF BIOGRAPHY:

Scott Snibbe is an artist whose output consists primarily of electronic media installations that directly engage the body of the viewer in a reactive system. Snibbe's work has been shown internationally at venues including the Whitney Museum of American Art's Artport, Eyebeam, and The Kitchen, New York City; the InterCommunications Center, Tokyo; Ars Electronica, Austria; ICA, London; and New Langton Arts, San Francisco. His works have won a variety of international prizes, including the Prix Ars Electronica.

Snibbe was born in 1969 in New York City. He holds Bachelor's degrees in Computer Science and Fine Art, and a Master's in Computer Science from Brown University. Snibbe studied experimental animation at the Rhode Island School of Design and his films have been widely shown internationally. He has taught media art and experimental film at Brown University, The Rhode Island School of Design and UC Berkeley. Snibbe has held technological research positions at Adobe Systems and Interval Research. His research in computer graphics, computer vision and physical interfaces is documented in a number of academic papers, several patents, and in the special effects program Adobe After Effects. Snibbe lives and works in San Francisco.

SELECTED SOLO EXHIBITIONS:

- 2005 *Blow Up*. Yerba Buena Center for the Arts. San Francisco, CA. January, 2005
- 2004 *Interdependence*. Arizona State University. January, 2004
- 2003 *Screen Series*. Beall Center for Art & Technology. Irvine, CA. November, 2003

SELECTED GROUP EXHIBITIONS:

- 2004 *Social Construction*. Spanganga. San Francisco, CA. May 2004 (curator)  
Art Rock 2004. Brittany, France. April, 2004  
Beursschouwburg. Brussels, Belgium. February, 2004
- 2003 *Uijeongbu International Digital Art Festival*. Seoul, South Korea. October, 2003  
*Ars Electronica 2003*. Linz, Austria. September, 2003  
*House of Tomorrow*. Experimenta. Victorian Arts Centre, Australia. September 2003

- Dialogue with Light and Shadow*. Toki Messe. Nigata, Japan. April 2003
- Reactive Art*, San Francisco Media Arts Coalition, San Francisco Museum of Modern Art. January 2003
- 2002 *Legends of Interactivity*, The Kitchen, New York City. November 2002
- Carnivore*, Eyebeam, New York City. October, 2002
- NewFangle*, GenArtSF, San Francisco. October – December, 2002
- Time Share*, Art Interactive, Cambridge, Massachusetts. September, 2002
- 911+1: The Perplexities of Security*, Watson Institute for International Studies. Providence, RI. September, 2002
- Ars Electronica 2002*, NetArt 2002 exhibition. Linz, Austria. September, 2002
- CODEDOC*, Whitney Museum Artport. September, 2002
- Arte Digital IV*, Havana, Cuba. June – July 2002
- Innaugural Exhibition*, Shizuoka Arts Center, Tokyo, Japan. March, 2002
- Refresh*. Institute of Contemporary Art, London. February – March, 2002
- New Frontiers*. Art Association Gallery, Jackson Hole, WY. January, 2002
- 2001 *bienalle.net*. Jeffrey Deitch Projects, Brooklyn, NY. November 5-7, 2001
- Mathematica*. The Exploratorium, San Francisco, California. October 6, 2001 - May 5, 2002
- Tirana Biennale*. Tirana, Albania. September 1 - October 15, 2001
- Only The Lonely*. Foro Artistico, Hanover, Germany. August 31 - September 23, 2001
- LifeLike*. New Langton Arts, San Francisco. June 27 - July 28, 2001.
- 2000 *Refresh: The Art of the Screen Saver*. Cantor Center for the Visual Arts, Stanford University. October 12 – November 26, 2000
- Transmediale 2000*. In conjunction with the Berliner Filmfestspiele. February, 2000. Berlin, Germany.
- 1999 *Adding Media / Subtracting Signs*. NTT Intercommunications Center (ICC). Tokyo, Japan. 22 June - 20 July, 1999
- Organic Information: Work from the Aesthetics and Computation Program at the MIT Media Laboratory*. Art Directors Club Gallery. New York City. May 6-27, 1999

*Interaction '99*. International Academy of Media Arts and Sciences (IAMAS). Ogaki City, Gifu, Japan. March 5-14, 1999

1998 *Inaugural Exhibition*. Center of the Edge Gallery. The Tech Museum. San Jose, California. October 98 - April 99

*Ars Electronica 98*. Cyberarts 98 exhibition. Linz, Austria. September, 1998

*Motion Phone Urban Installation*. Stuttgart Filmwinter 98. Germany. March, 1998

1997 *WRO '97*. Wroclaw, Poland. March, 1997

*Vienna Global Village '97*. Vienna, Austria. April, 1997

1996 *Ars Electronica 96*. Cyberarts 96 exhibition. Linz, Austria. September, 1996

1995 *SIGGRAPH 95 Interactive Communities*. Los Angeles, CA. August 1995

#### COMMISSIONS:

2005 "Blow Up", for Yerba Buena Center for the Arts. San Francisco, CA

2004 "Overhead", for New York Academy of Sciences. New York City.  
"Near", for New York Academy of Sciences. New York City.

2003 TBD, for Computerfinearts.com, Doron Golan. New York City.

2002 "Shadow", for *Art Interactive*. Boston, MA.  
"Fuel", for *Carnivore* as part of the Radical Software Group. New York City.  
"Tripolar", for *CODEDOC*, The Whitney Museum of American Art. New York City.

2001 "It's Out", for *Tirana Biennial*. Tirana, Albania.

2000 "Emptiness is Form", for *Refresh: The Art of the Screensaver*. Stanford, California.

#### BOOKS:

*Digital Art*. Christane Paul. Thames and Hudson, 2003

*CyberArts 2003: International Compendium Prix Ars Electronica*. Leopoldseder & Schöpf, ed., Springer-Verlag, 2003

*Information Arts*. Stephen Wilson. MIT Press, 2001

*The Computer In the Visual Arts*. Anne Morgan-Spalter. Addison-Wesley, 1999

*Cyberarts 98: International Compendium Prix Ars Electronica*. Stocker & Schöpf, ed., Springer-Verlag, 1998.

*Prix Ars Electronica 96: International Compendium of the Computer Arts*. Leopoldseder & Schöpf, ed. Springer-Verlag, 1996

#### PRESS:

*Body, Screen and Shadow*. San Francisco Media Arts Council (SMAC) Journal. January, 2003

*Getting Into the Art*. Boston Phoenix. November 28, 2002

*Technology Sparks Interactive Exhibit*. Boston Herald, November 24, 2002



*Secrets of Digital Creativity Revealed in Miniatures*. New York Times, September 16, 2002  
*It's Out, web art per la mente estetica*. Neural Online. June 2002  
*Who Let the Ducks Out?* Net Art News. Marisa Olson. June 2002  
*Hotlist*. John Ippolito. Artforum. Summer 2002  
*New Frontiers*. Byron Clercx, Splash Magazine. Winter, 2002  
*Better Living through Chemistry*, San Francisco Examiner, November 8, 2001  
*Screen Savers as Artists' Medium*, New York Times, November 23, 2000  
*Portrait of Artist as Businessman*, Wired News, November 3, 2000  
*Ones to Watch*, Interview Magazine, April 2000  
*Interaction '99*. NHK National News Broadcast. Tokyo, Japan. March 12, 1999  
*Bored, Broken, and Beautiful*. The Stranger. Seattle, WA. February 14, 1996  
*Declaring Their Independence*. Washington Free Press. Feb – March 1996

#### INVITED TALKS AND LECTURES:

University of Oregon. *Body, Space and Cinema*. April, 2003.  
 UC Santa Barbara. *Body, Space and Cinema*. February, 2003.  
 Reactive Art. San Francisco Museum of Modern Art. January, 2003.  
 TV Dinner. The Kitchen, New York. December, 2002.  
 Collision Collective. Boston, MA. September, 2002.  
 Stanford University Art Department. April, 2002.  
 University of California at Berkeley. *Bodies and Perception*. February 2002.  
 Stanford University. *Haptic Control of Media*. October 2001.  
 Banff New Media Institute. *Human Generosity Project*. August 2001.  
 IDEO San Francisco. *Bodies Think with Light and Motors* July 2001.  
 The Exploratorium. July 2001.  
 Banff New Media Institute. *Living Architectures*. September 2000.  
 University of California at Berkeley. *Human-Centered Computing Seminar Series*. February 2000.  
 Brown University. *Engaging your Body with the Mouse, Screen, Motor and Room*. October 1999.  
 NTT Intercommunications Center (ICC). *The Synesthesia of Art and Technology*. June 1999.  
 NYU Interactive Telecommunications Program. *Dynamic Abstraction*. April 1999.  
 MIT Media Lab. *Dynamic Abstraction*. Colloquium lecture. December 1998.  
 Stanford Seminar on People, Computers and Design. *Dynamic Abstraction*. November 1998.  
 Evergreen State University. *Visual Instruments and Interactive Geometry*. February 1998.  
 Pratt Institute. *Personal Expression in the Computer Graphics Industry*. Fall 1997.  
 MIT Media Lab. *Motion Phone*. Spring 1997.  
 Ars Electronica 96. *Motion Phone*. September 1996.  
 ASIFA Northwest. *Emotion in Animation & Interactive Graphics*. Portland, Oregon. October 1996.  
 Brown University. *Storytelling with Computer Animation*. Fall 1994.  
 Brown University. *The Evolution of Input Devices*. Fall 1994.

#### GRANTS AND AWARDS:

Honorable Mention for Interactive Art. *Prix Ars Electronica*, 2003.  
 Golden Nica, *Prix Ars Electronica*, 2002. (As part of the Radical Software Group's Carnivore)  
 Honorable Mention for Interactive Art. *Prix Ars Electronica*, 1998.  
 Honorable Mention. *FANTOCHE Animation Festival*, 1998.  
 Award of Distinction for Interactive Art. *Prix Ars Electronica*, 1996.  
 Official Selection, *Stuttgart Trickfilm-Festival*, 1996.  
 Bronze Animation Award, *New York Expo of Short Film & Video*, 1995.  
 Director's Citation, *Black Maria Film Festival*, 1995.  
 Graduate Research Fellowship. *Brown University*. Providence, RI. 1993, 1994.

Regional Finalist, *Student Academy Awards*, 1991.  
 Artists Project Grant, *NEA/Rhode Island State Council on the Arts*, 1992.  
 Best student film award, *ASIFA EAST*, New York, 1990.  
 Student Film Award. *Stuttgart Trickfilm-Festival*, 1992.  
 Best Drawn Animation, *U Festival of Student Film*, 1991.  
 Undergraduate Research Fellowship, *Microsoft Corporation*. Seattle, WA, 1988-90.

#### FILMOGRAPHY:

<i>Three Eyes</i>	35mm, Hand/Computer animation, narrative, in production.
<i>Just Mom and Me</i>	Video, 6 animated segments for a documentary on single mothers, 1998.
<i>Lost Momentum</i>	35mm, 6:20, Hand-drawn, narrative. 1995.
<i>Motion Sketch</i>	Video, 7:00, Abstract improvised computer animation, 1994.
<i>Brothers</i>	16mm, 3:30, Hand-drawn, narrative. 1990.
<i>Ashes</i>	Video, 2:30, Computer animation, experimental. 1989.
<i>Milo's Flight</i>	16mm, 2:00, Hand-drawn, narrative. 1988.

#### SELECTED SCREENINGS:

##### 1995-2003

San Francisco Cameraworks; FANTOCHE (Switzerland); Oberhausen Festival of Short Film (Germany); Charlotte Film and Video Festival (North Carolina). Taos Talking Pictures (New Mexico); Seattle International Film Festival; Mill Valley Film Festival (California); International Trickfilm-Festival Stuttgart (Germany), Official Competition; Hiroshima International Animation Festival (Japan), Best of the World Program; Filmfest Dresden (Germany), Competition Program; Wellington Film Festival (New Zealand); Black Maria Film Festival, Director's Citation.

##### 1990-1995

New York Expo of Short Film & Video, Bronze Animation Award; Shanghai Animation Festival; Wellington Film Festival (New Zealand); Seattle International Film Festival; Holland Animation Festival; Stuttgart Trickfilm-Festival (Germany); Sinking Creek Film Festival (Tennessee); Athens Film Festival (Ohio); Big Muddy Film Festival (Illinois); San Francisco Golden Gate Awards; Student Academy Awards Finalist; Black Maria Film Festival, Director's Choice.

#### PROFESSIONAL EXPERIENCE:

*Visiting Artist*, University of Oregon, Eugene, OR. April 2002.  
*Artist In Residence*, The Art Interactive, Cambridge, MA. August-September 2002.  
*Lecturer*, Art Department, UC Berkeley. Summer 2002.  
*Member, Research Staff*, Interval Research Corporation. Palo Alto, CA, 1996-1999.  
*Computer Scientist*, Adobe Systems. Seattle, WA, 1994-1996.  
*Research Programmer*, Computer Graphics Group, Brown University. Providence, RI, 1990-92.  
*Guest Lecturer*, Brown University. 1989-94.  
*Teaching Assistant*, Rhode Island School of Design, 1990-94.

#### RESEARCH PUBLICATIONS:

Snibbe, S. Maclean, K., Shaw, R., Roderick, J., Verplank, W., Scheeff, M. *Haptic Techniques for Media Control*. In Proceedings of the 14th Annual ACM Symposium on User Interface Software and Technology (UIST 2001), Orlando, Florida, November 2001

Snibbe, S. and Levin, G., *Interactive Dynamic Abstraction*. Proceedings of the Symposium on Nonphotorealistic Animation and Rendering, June 2000.

Maclean, K. and Snibbe, S., *Tagged Handles: Merging Discrete and Continuous Control*. ACM CHI Proceedings April 2000.

Maclean, K. and Snibbe, S., *An Architecture for Haptic Control of Media*. Eighth Annual Symposium on Haptic Interfaces For Virtual Environment And Teleoperator Systems. The Winter Annual Meeting of the ASME. November 1999.

Snibbe, S., Scheeff, M. and Rahardja, K., *A Layered Architecture for Lifelike Robotic Motion*. Proceedings of The 9th International Conference on Advanced Robotics ('99 ICAR), October 1999.

Snibbe, S., Anderson, S. and Verplank, B., *Springs and Constraints for Haptic Sculpting*. Proceedings of the Third PHANToM Users Group Workshop, AI Lab Technical Report No.1643, MIT, December 1998.

Snibbe, S. *A Direct Manipulation Interface for 3D Computer Animation*. Computer Graphics Forum, Proceedings of EUROGRAPHICS 95, pp. 271-283.

Snibbe, S. *Gestural Controls for Computer Animation*. Master's Thesis. Brown University 1994.

Sarkar, M., Snibbe, S.S., Tversky, O. and Reiss, S., *Stretching the rubber sheet: A metaphor for viewing large layouts on small screens*. Proceedings of UIST '93, ACM SIGGRAPH, November, 1993, pp. 81-92.

Oren J. Tversky, Scott S. Snibbe and Robert Zeleznik, *Cone Trees in the UGA Graphics Systems: Suggestions for a More Robust Visualization Tool*. Brown University Technical Report CS-93-07. 1993.

Snibbe, S.S., Herndon, K.P., Robbins, D.C., Conner, D.B. and van Dam, A., *Using deformations to explore 3D widget design*. Computer Graphics (Proceedings of SIGGRAPH '92), 26(2), ACM SIGGRAPH, July, 1992, pp. 351-352.

Herndon, K.P., Zeleznik, R.C., Robbins, D.C., Conner, D.B., Snibbe, S.S. and van Dam, A., *Interactive shadows*. Proceedings of UIST '92, ACM SIGGRAPH, November, 1992, pp. 1-6.

Conner, D.B., Snibbe, S.S., Herndon, K.P., Robbins, D.C., Zeleznik, R.C. and van Dam, A., *Three-dimensional widgets*. Computer Graphics (Proceedings of the 1992 Symposium on Interactive 3D Graphics), 25(2), ACM SIGGRAPH, March, 1992, pp. 183-188.

Zeleznik, R.C. et al., *An Object-Oriented Framework for the Integration of Interactive Animation Techniques*. SIGGRAPH 91 paper presentation videotape. Applications of the UGA system for interactive animation and simulation.

Foley, Van Dam et al. *Computer Graphics: Principles and Practice* (Addison-Wesley, 1990). Technical illustrations for chapters on raster graphics and 3D view transformations.

#### PATENTS:

K. Maclean, G. Levin, S. Snibbe, et al., *US6529183: Manual interface combining continuous and discrete capabilities*. Issued Mar. 4, 2003, filed Sep. 13, 1999. A method for combining tangible objects and haptic control. Interval Research.

R. Shaw, S. Snibbe, et al., *US6525711: Haptic interface including clutch control*. Issued Feb. 25, 2003, filed June 24, 1999. An interactive method for selectively and continuously engaging a dynamic model with a haptic interface. Interval Research.

S. Snibbe, K. Maclean, et al., *US6496200: Flexible variation of haptic interface resolution*. Issued Dec. 17, 2002, filed Nov. 2, 1999. An interactive method for continuously varying haptic resolution. Interval Research.

D. Simons, S. Snibbe, *US6115051: Arc-length reparameterization*. Issued Sept. 5, 2000, filed Aug. 7, 1996. A method for numerically reparameterizing a parametric curve according to arc-length, where the new parametrization is analytically differentiable. Adobe Systems.

D. Herbstman, D. Simons, S. Snibbe, *US592986: Floating Keyframes*. Issued July 27, 1999, filed Aug. 7, 1996. A method for decoupling space and time in parametric animation. Adobe Systems.

D. Simons, S. Snibbe, D. Wilk, *US5917549: Transforming images with different pixel aspect ratios*. Issued June 29, 1999, filed Aug. 7, 1996. A method for compositing material with different source aspect ratios in a digital composition. Adobe Systems.

S. Snibbe, D. Wilk, D. Simons, *US5872564: Controlling time in digital compositions*. Issued Feb. 16, 1999, filed Aug. 7, 1996. A method for continuously varying playback speed in digital video and animation systems. Adobe Systems.

S. Snibbe, *US5872564: Defining a time-variable property in digital compositions*. Issued March 23, 1999, filed Aug. 7, 1996. A method for two-dimensional real-time motion capture in computer animation systems. Adobe Systems.

Scott Snibbe  
Selected works  
October, 2003

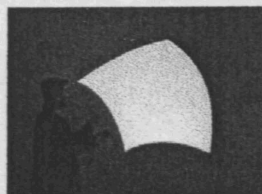
Installations

*Shy, 2003*

computer, projector, video camera, video capture card, retroreflective screen, custom software

Dimensions: 6' x 12' x 20' (variable)

Exhibition history: Beall Center (Los Angeles), 2003



*Depletion, 2003*

computer, projector, video camera, video capture card, retroreflective screen, custom software

Dimensions: 80" x 60" x 15' (variable)

Exhibition history: Beall Center (Los Angeles), 2003



*Embracing, 2003*

computer, projector, video camera, video capture card, retroreflective screen, custom software

Dimensions: 80" x 60" x 15' (variable)

Exhibition history: Beall Center (Los Angeles), 2003

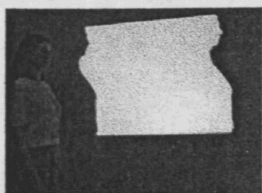


*Impression, 2003*

computer, projector, video camera, video capture card, retroreflective screen, custom software

Dimensions: 12' x 6' x 20' (variable)

Exhibition history: Beall Center (Los Angeles), 2003



*Deep Walls, 2003*

computer, projector, video camera, video capture card, retroreflective screen, custom software

Dimensions: 80" x 60" x 15' (variable)

Exhibition history: San Francisco Museum of Modern Art, 2003; Ars Electronica (Austria), 2003

Awards: Prix Ars Electronica, Honorable Mention, 1998

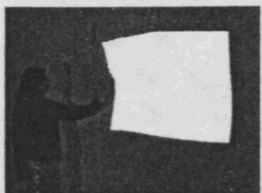


*Compliant, 2002*

computer, projector, video camera, video capture card, retroreflective screen, custom software

Dimensions: 12' x 6' x 20' (variable)

Exhibition history: Gen Art's New Fangle (San Francisco), 2002; Toki Messe (Japan), 2003; Art Center Nabi (Korea), 2003; Beall Center (Los Angeles), 2003; Arizona State University (2004)



### *Shadow, 2002*

computer, projector, video camera, video capture card, retroreflective screen, custom software

Dimensions: 80" x 60" x 15' (variable)

Exhibition history: Art Interactive (Boston), 2002; Beall Center (Los Angeles), 2003

Commissioned by: Chuck Lewin, Art Interactive



### *Boundary Functions, 1998*

projector, video camera, pc computer, retro-reflective floor, custom software

Dimensions: 12' x 12' x 20' (variable)

Exhibition history: Ars Electronica (Austria), 1998; The Tech Museum (California), 1999; Interaction (Japan), 1999; NTT ICC (Japan), 1999; Transmediale (Germany), 2000; Foro Artistico (Germany), 2001; The Exploratorium (California), 2001; Shizuoka Arts Center (Japan), 2002; The Kitchen (New York), 2002; Toki Messe (Japan), 2003; Art Center Nabi (Korea), 2003

Awards: Prix Ars Electronica, Honorable Mention, 1998



### *Motion Phone, 1991-1996*

Silicon Graphics workstations, video projector, custom software

Dimensions: 15' x 12' x 4' (variable)

Exhibition history: SIGGRAPH (Los Angeles), 1995; Ars Electronica (Austria), 1996; Vienna Global Village (Austria), 1997; WRO (Poland), 1997; Stuttgart Filmwinter (Germany), 1998

Awards: Prix Ars Electronica, Distinction, 1996



## Works for the screen

### *Tripolar, 2002*

Java Applet

Dimensions: variable

Exhibition history: The Whitney Museum of American Art (New York), 2002; Ars Electronica (Austria), 2003

Commissioned by: The Whitney Museum of American Art



### *Fuel (part of RSG's Carnivore), 2002*

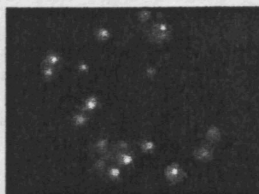
Java Application

Dimensions: variable

Exhibition history: Eyebeam (New York), 2002; Ars Electronica (Austria), 2002; Watson Institute for International Studies (Rhode Island), 2002;

Awards: Golden Nica, Prix Ars Electronica

Commissioned by: Alex Galloway



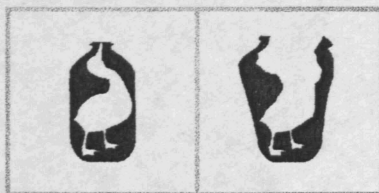
### *It's Out, 2000*

Java Web Applet

Dimensions: variable

Exhibition history: Tirana Biennial (Albania), 2001; Jeffrey Deitch Projects (New York), 2001; Arizona State University, 2004

Commissioned by: Miltos Manetas, Flash Art



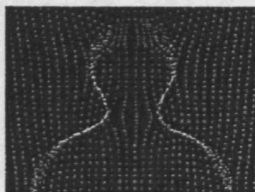
### *Myrmegraph, 2000*

PC Screensaver, commission

Dimensions: variable

Exhibition history: Stanford University (California), 2000; ICA (London), 2002

Commissioned by: James Buckhouse, Stanford University





### *Myrmegraph*, 1999

Custom PC software

Dimensions: variable

Exhibition history: NTT ICC (Tokyo), 1999; Art Association Gallery (Wyoming), 2002; Arte Digital IV (Cuba), 2002



### *Gravilux*, 1999

Custom PC software

Dimensions: variable

Exhibition history: NTT ICC (Tokyo), 1999; Art Association Gallery (Wyoming), 2002; Arte Digital IV (Cuba), 2002



### *Bubble Harp*, 1998

Custom PC software

Dimensions: variable

Exhibition history: NTT ICC (Tokyo), 1999; Art Association Gallery (Wyoming), 2002; Arte Digital IV (Cuba), 2002



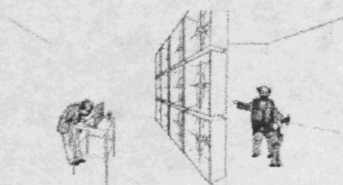
## Interactive Sculpture

### *Blow Up*, 2005

Dimensions: 16' x 12' x 4'

Exhibition history: Yerba Buena Center for the Arts (San Francisco), 2005

Commissioned by: Yerba Buena Center for the Arts (San Francisco), 2005



### *Circular Breathing*, 2002

aluminum, steel, custom electronics, impeller, motor, motor driver, custom software

Dimensions: 10" x 8" x 12"

Exhibition history: Art Interactive (Boston), 2002

Commissioned by: Chuck Lewin, Art Interactive



### *Mirror*, 2001

vintage fan parts, custom electronics, impeller, motor, motor driver

Dimensions: 14" x 14" x 20"

Exhibition history: New Langton Arts (San Francisco), 2001



## Filmography

### *Just Mom and Me*

Video, 6 animated segments for a documentary on single mothers, 1998.

35mm, 6:20, Hand-drawn, narrative. 1995.

### *Motion Sketch*

Video, 7:00, Abstract improvised computer animation, 1994.

16mm, 3:30, Hand-drawn, narrative. 1990.

Video, 2:30, Computer animation, experimental. 1989.

16mm, 2:00, Hand-drawn, narrative. 1988.