

New Media Fellowships
2005 Project Cover Form

David Karam & Gigi Obrecht

Title Visual Linguistics for a Multipurpose Toolkit

Genre Interactive web research and subject development

Applicant's Role in

Production Applicants will research, design and produce all aspects of their proposal

Production Format Web site, CD-rom and a publication. It is our intention that the three Formats speak to each other and are seen as a modular unit

Brief Project Description (do not exceed space given below)

We propose to study the nature of the computer controlled real-time interactive audio visual presentation system. We want to create a multipurpose toolkit and interface for this medium by developing a symbolic graphic language and notational system for it. Our goal is to create a visual language that will drive the toolkit, and allow a non-programmer to design computer controlled audio visual presentations. The outcome of this toolkit will be a software application accessible to anyone. A music teacher will be able to link the position of her hand to a relative audio frequency and color. A performer might use the software to control lighting based on the loudness of his voice. The creative possibilities for an accessible multipurpose software are limitless.

In order to identify what the specific needs of these users are and how to best achieve these needs, we will dedicate the first phase of this project to inquiry. Through understanding the audience we will be able to model the tool to the needs of the makers.

We will create a website that charts the evolution of this project and that invites specific as well as general participants to interact with online testing. There will be a survey/registration page that will ask users how they would ideally like to play/work with sound and image in a variety of contexts. Registered users will be asked to participate in specific tests. We will create a series of mini tests each focusing on specific actions and how best to graphically represent these actions.

As functions and relationships are tested we will begin to evolve a model of the toolkit as well as begin to develop a symbolic graphic language to communicate relational functions. Once a graphical system has begun to take form we will return to an online testing forum to test the success or failure of the graphical system. The goal is to create graphical symbols that intuit meaning; ex.) this symbol means that the Volume of a selected sound will effect the tone of a selected Color.

The project will culminate in the form of a publication that includes a CD-rom. The web site will be revisited to include the interpreted research material that is included in the book and CD-rom. The publication, CD-rom and web site will chart the evolution of this project from the outset, describing the ambition of the project and the challenges inherent in it, and it will illustrate how the process of inquiry served to navigate the process of developing a model of and a symbolic graphic language for a real-time, interactive audio/visual software.

David Karam & Gigi Obrecht

If you are sending more than one sample, please copy this page. Sample(s) must be cued: indicate how long each sample should be viewed for a COMBINED viewing time of no more than 15 minutes.
If slides are included in this application, please list the title and year of the work on this form.

Title Listen

Year 1998

Technical Information

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

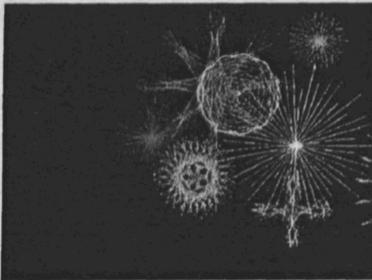
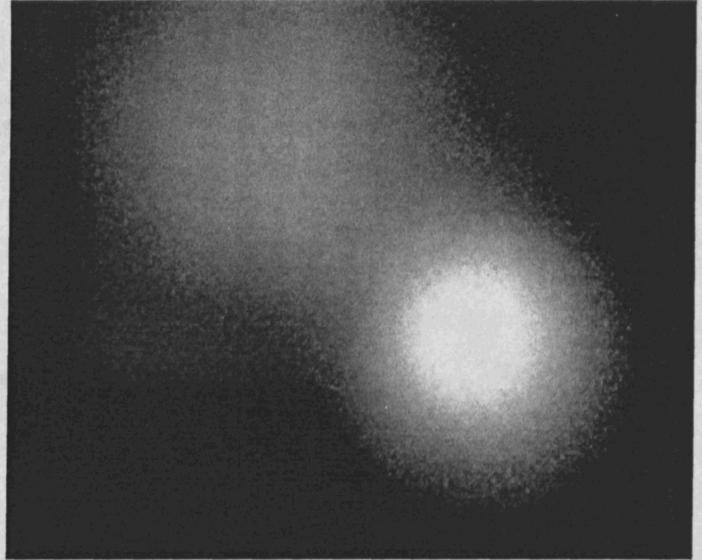
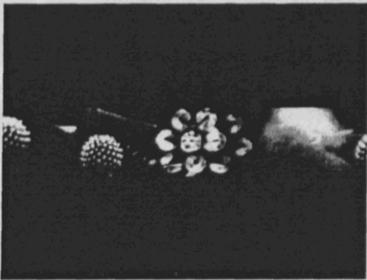
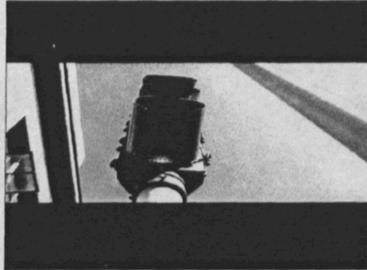
Special Information for Viewing:

Description of Work (use an additional sheet if necessary)

Listen

Listen poses the question, "What can we learn from chaos, the infinite stimuli rippling past us throughout our lives?" The omnipresent sights and sounds of the world around us from which we are always navigating? What emerges is the understanding that every experience is unique and that authentic communication requires tuning in.

'Listen', a dual platform CD-Rom, was commissioned by Bodyshop International to speak to its myriad franchisees around the world. The goal was to present the company's perspective that global commerce is a dialogue among unique cultures, and that it is only through cultural sensitivity and active listening to the customer that an authentic experience can take place. Five stories are told in 20 different languages; the user must navigate the interface in order to find their language base and to filter meaning from chaos.



The world is awash with infinite stimuli that we must continuously navigate if we are to find connections with others. "Listen" is an interactive CD-rom designed to promote listening as a message to BodyShop Franchisees.

The interactive experience uses an array of imagery and sounds that compels the user to focus their attention in order to follow the narrative within.

BodyShop International, 1998

David Karam & Gigi Obrecht

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If slides are included in this application, please list the title and year of the work on this form.

Title Skipping

Year 2002

Technical Information

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)

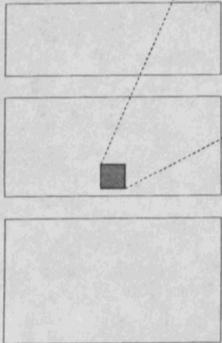
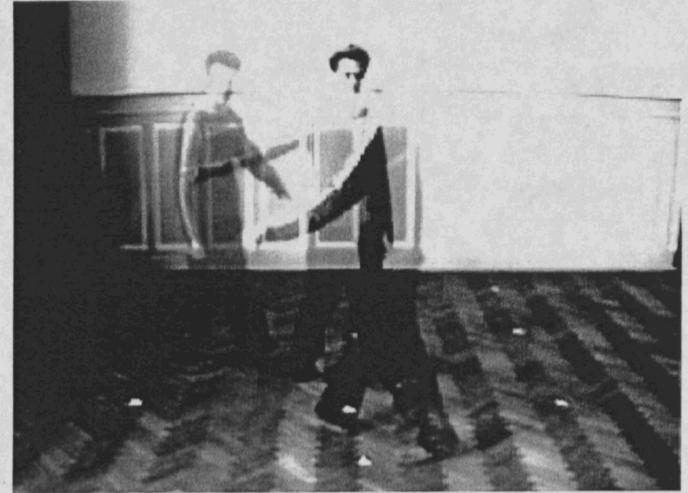
A local copy of the sample work has been included with the application

Special Information for Viewing:

Description of Work (use an additional sheet if necessary)

Skipping

This software was designed for dancers from the modern dance school P. A. R.T. S. in Brussels, Belgium. "Skipping" was developed in collaboration with a dancer from the school who is interested in developing rules for creating improvisational choreography. The software records a dancer's movements using a video camera and reprojects the image onto the stage. The reprojected image is edited by the computer-interrupted, staggered, looped-based on parameters of motion controlled by the dancer's body. The camera and computer become a type of non-linear feedback mechanism, and the result is a visual dialog between the dancer and his or her own digital image.



"Skipping" is software designed for dancers. "Skipping" was developed in collaboration with a dancer who is interested in creating rules for improvisational choreography. The software records a dancer's movements using a video camera and reprojects the image onto a screen. The reprojected image is based on parameters determined by the dancer. The result is a visual dialog between the dancer and the dancer's image.

P.A.R.T.S. Brussels, Belgium 2002

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If slides are included in this application, please list the title and year of the work on this form.

Title Variations

Year 2001

Technical Information

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)

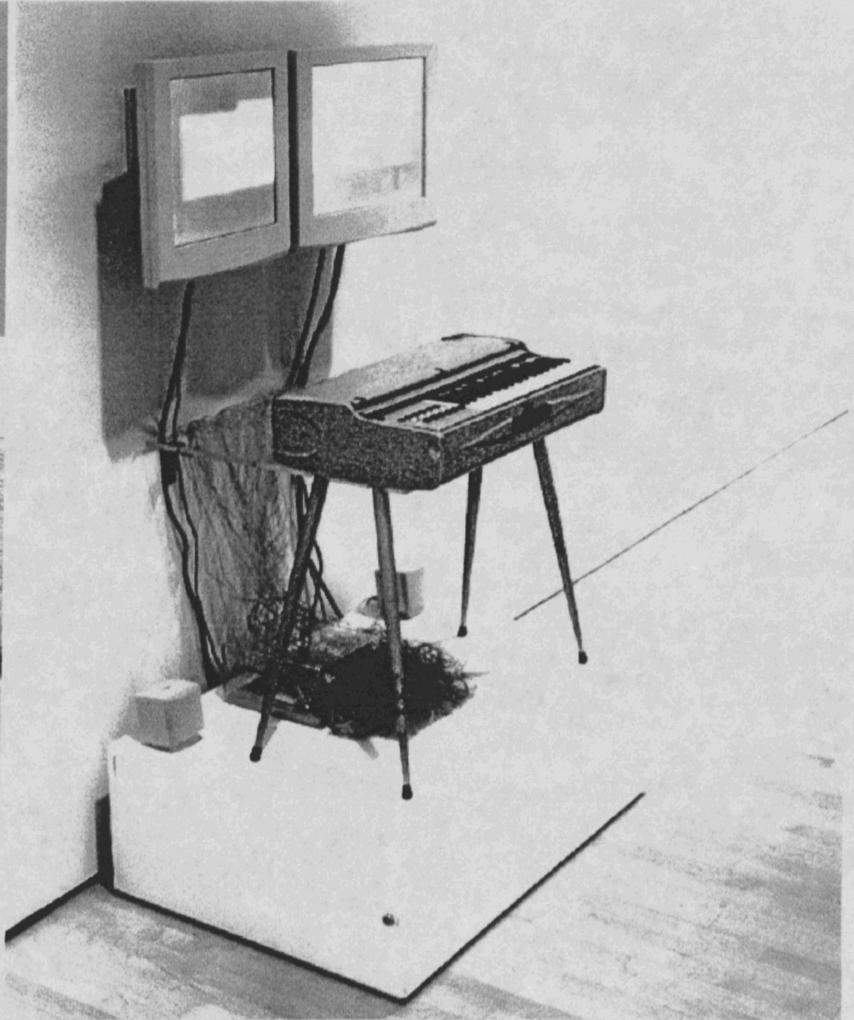
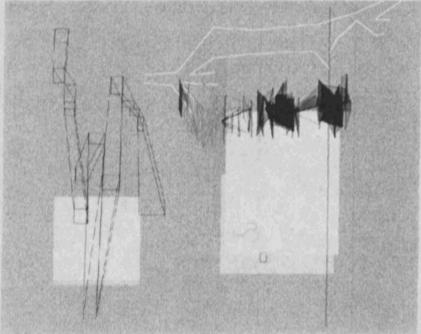
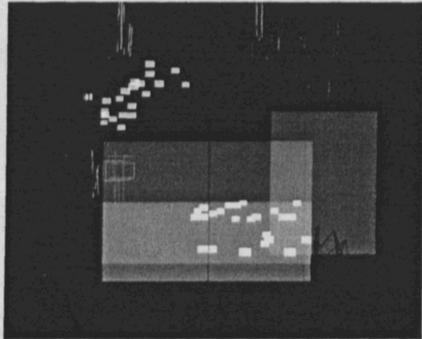
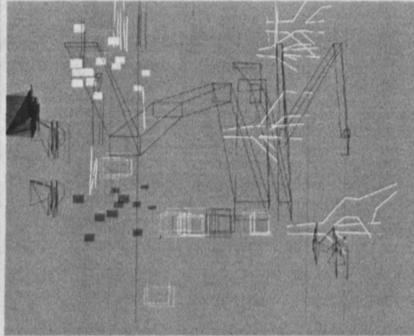
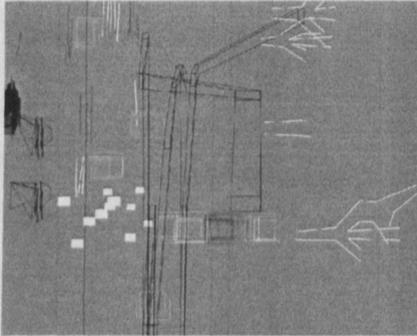
A local copy of the sample work has been included with the application

Special Information for Viewing:

Description of Work (use an additional sheet if necessary)

Variations

Our first installation of this type, "Variations," allows players to create complex animations and musical sequences by operating a simple, familiar device. We used a 1968 Montgomery Ward's Suitcase (toy) Organ as interface to the computer. With the simple shift of interface from a computer keyboard and mouse to a musical keyboard, the installation became accessible to users of any age, requiring no technical sophistication to operate. The keys produced animated imagery linked to sound in real time, allowing anyone to build simple or multi-layered audiovisual compositions. We saw mothers hold their toddlers who banged away on the organ and watched imagery dance by. Elderly people who might have felt intimidated by a computer-based installation were drawn to the organ keyboard. Witnessing this response was inspirational and reinforced our interest in creating projects for Play/Making.



"Variations" was installed at the San Francisco Museum of Modern Art in 2001. Post Tool design was awarded the Exhibit for Design Innovation by the Society for the Encouragement of Contemporary Art. "Variations" was a real-time, interactive, audio-visual keyboard that created unique musical and visual experience regardless of ones level of musical expertise.

SFMOMA, 2001

Artist Statement

If the last millenium was obsessed with the pursuit of information, this millenium is surely preoccupied with the task of making our way through the mass of data we have accumulated. The greatest challenge of the information age that is opening before us is not discovery but navigation. It is this conviction that lies at the heart of our work at Post Tool design.

From the beginning our most ambitious projects have been concerned with navigation. The proliferation of ideas, information and images that are so striking a feature of our time have rendered our mental geographies so complex that we cannot hope to find our way through them unescorted. The world of interactive media needs guides and mapmakers, and our ambition is to contribute to this effort.

In our own self-published projects we have tested the line between art and design. Even our most commercial commissions challenge the emerging conventions of interactive media using suggestive symbols rather than grids and buttons to serve as navigational aids.

The industrial economy of the 19th century built mechanical tools, weighty things of iron and steel that were energized by steam. In the 20th century our tools became electric: smaller, lighter and less dependent upon space and place. Today our most compelling tasks are no longer concerned with moving matter around or altering form, but with finding our way through all that we have created...

Project Narrative

We have been called 'Serious Doodlers'. Over the past ten years, Post Tool has created dozens of software based drawing programs which merge real-time interactive audio/visual composition controls with performance and multi-user interface. We have integrated intelligence and whim in these program as a consideration of the identity of the computer and the nature of its hand. Our drawing programs have taken the form of floppy disks, internet downloads, cd-roms, kiosks and installations. They are derived from the idea that information is linked to physical attributes but that in the virtual realm those attributes are open, a place to explore. A word may giggle when clicked upon and a color may shift when a certain sound is played. Connections are drawn poetically between information and attribute, not by the laws of physics. These experiential programs look to the future of human/computer interface.

We propose to step back and study the nature of the computer controlled real-time interactive audio visual presentation system. We want to create a multipurpose toolkit and interface for this medium by developing a symbolic graphic language and notational system for it. Our goal is to create a visual language that will drive the toolkit, and allow a non-programmer to design computer controlled audio visual presentations. The outcome of this toolkit will be a software application accessible to anyone. A music teacher will be able to link the position of her hand to a relative audio frequency and color. A performer might use the software to control lighting based on the loudness of his voice. The creative possibilities for an accessible multipurpose software are limitless.

The challenge of our study is two-fold: One is to identify the possible uses of this toolkit, the other is to design a symbolic graphic language and notational system to drive this toolkit.

In order to identify what the specific needs of these users are and how to best achieve these needs, we will dedicate the first phase of this project to inquiry. Through understanding the audience we will be able to model the tool to the needs of the makers.

In order to determine what these needs are, we will create a website that charts the evolution of this project and that invites specific as well as general participants to interact with online testing. There will be a survey/registration page that will ask users how they would ideally like to play/work with sound and image in a variety of contexts. Registered users will be asked to participate in specific tests. We will create a series of mini tests each focusing on specific actions and how best to graphically represent these actions. For example: if a particular mini test is looking at the connection between elements like, how the tone of a color relates to the pitch of a sound, what we will seek to determine is how best to visually connect these elements through graphic representation. We will employ a multiple choice system from which participants can select a specific symbolic graphic for each action. Each test will contain a field for comments. The data from the mini tests will be collected through the website and stored by function for analysis.

As functions and relationships are tested we will begin to evolve a model of the toolkit as well as begin to develop a symbolic graphic language to communicate relational functions. Once a graphical system has begun to take form we will return to an online testing forum to test the success or failure of the graphical system. The goal is to create graphical symbols that intuit meaning; ex.) this symbol means that the Volume of a selected sound will effect the tone of a selected Color.

The project would be concluded by creating a comprehensive model in the form of diagrams that outline all of the data that we have compiled and which has been organized and evaluated by online study group culminating in the form of a publication that includes a CD-rom. The web site will be revisited to include the interpreted research material that is included in the book and CD-rom. The publication, CD-rom and web site will chart the evolution of this project from the outset, describing the ambition of the project and the challenges inherent in it, and it will illustrate how the process of inquiry served to navigate the process of developing a model of and a symbolic graphic language for a real-time, interactive audio/visual software.

The conclusion of this proposal is the publication, CD-rom and web site.

Work Context

Our interest in this project grows from a progression of projects that we have created:

Listen

Listen poses the question, "What can we learn from chaos, the infinite stimuli rippling past us throughout our lives?" The omnipresent sights and sounds of the world around us from which we are always navigating? What emerges is the understanding that every experience is unique and that authentic communication requires tuning in.

'Listen', a dual platform CD-Rom, was commissioned by Bodyshop International to speak to its myriad franchisees around the world. The goal was to present the company's perspective that global commerce is a dialogue among unique cultures, and that it is only through cultural sensitivity and active listening to the customer that an authentic experience can take place. Five stories are told in 20 different languages; the user must navigate the interface in order to find their language base and to filter meaning from chaos.

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organ and watched imagery dance by. Elderly people who might have felt intimidated by a computer-based installation were drawn to the organ keyboard. Witnessing this response was inspirational and reinforced our interest in creating projects for Play/Making.

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Satellite

Created for the exhibit "Teleopolis," this installation addressed a specific theme formulated by the Exploratorium in San Francisco. Teleopolis probed the ways the physical city and its inhabitants are altered or reshaped by the increasingly powerful presence of electronic and broadcast media. The intent of "Satellite" was to draw attention to the mass of invisible frequencies or waves occupied by electronic and broadcast media. Physically, the installation's main component was a hollow mirrored surveillance ball, suspended overhead to represent a satellite. The surveillance ball was filled with motion sensors that produced noises best described as transmissions (fax sounds, radio static, dialing tones) when visitors happened into its "hot spots." (The "hot spots" had a sharply defined range much like that of cell phones, the user losing or gaining connection based on location.) Below the satellite on the floor was a silkscreened map showing the entirety of FCC frequency allotments. The air, we see, is full of invisible activity, its density depicted visually in the chart.

These past projects serve to describe the ongoing conversation in which we have engaged regarding physical space, virtual space and the experience of the user. We have concentrated on creating experiences that provide a forum for creative play and discovery. This proposal seeks to deconstruct the interactive experience. Rather than create a specific experience we wish to create a toolkit for open interaction.

Feasibility Statement

We are considered to be design & technology innovators. We have developed content for printed and interactive work for more than fifteen years. We are college professors on the subjects of media technologies and design. This project is an encapsulation of the last ten years of our development as well as the development of our peers. The research is already in progress. The data collection will be centralized by our web site. The technical requirements of the web site, final publication and CD-rom are the core competencies of Post Tool design.

Use of Work

The intended use of this project is to serve as part of a growing field of research. The interest in developing a visual language for such a toolkit is evidenced by Cycling'74's Max/MSP and Meso's vvvv. Although these are powerful and impressive softwares they still approach the medium from a programmers point of view. Our main intention is to publicly begin the dialogue toward building a multipurpose toolkit that allows non-programmers the ability to design computer controlled audio visual presentations.

The Budget Narrative

The Fellowship money will be used to fund the research, develop and maintain the web site and to create the publication and CD-rom at the projects conclusion. It will also be used to provide some compensation for our expert participants. We do not expect to print the final publication with this budget. When the development is complete. we will consider approaching publishers with the project.

research	\$10,000
participant compensation	\$ 5,000
web site publishing	\$10,000
publication & cd-rom development	\$10,000

Resume

Post Tool design is an internationally acclaimed art and technology partnership based in San Francisco since 1993. Post Tool design has garnered numerous awards and recognition for its work in interaction design. In 2001, the San Francisco Museum of Modern Art recognized the firm with an exhibit of their interaction and navigation-based work, honoring it with the First Annual SECA Experimental Design Award. The museum has also acquired the group's work for its permanent collection. The Smithsonian's Cooper-Hewitt Museum in New York has also featured the work of Post Tool as part of their first "Design Triennial." Post Tool is distinguished by its ability to link art with technology; the partners, David Karam and Gigi Obrecht are philosophically committed to the integration of design and technology.

Post Tool has worked with a wide range of cultural institutions including the Getty Center, the Rock and Roll Hall of Fame and The Exploratorium. Post Tool is featured in numerous contemporary books on design and technology and has been recognized both nationally and internationally. They have traveled extensively and are sought out to make presentations and teach their innovative style in design throughout the United States, Europe and Japan.

Post Tool partners, David Karam and Gigi Obrecht met in 1989 as students at the California College of Arts and Crafts, (CCAC). Sensing then a natural affinity, the two experimented with computer animated interactive art, then in the media's infancy. While their backgrounds run the gamut of practitioner and classicist, David and Gigi have made a permanent imprint on the art and technology world.

David began his career as a teenager, designing and selling through Radio Shack a software game, "To Preserve Quandic." Later, he attended college at the University of Texas at Austin, where he concentrated on Music and Programming. At CCAC, David was named a distinguished graduate in 2000. He is currently teaches in the Graphic Design program at CCAC in addition to designing the schools curriculum for new media studies.

Gigi studied painting and art history first at Skidmore, then at the Parsons School of Design in Paris where she also studied French at the Sorbonne. She later attended CCAC in San Francisco. She currently teaches in the Graduate program in design at CCAC.

post tool design has been featured in

ID Magazine 'An Interpretation of Dreams for Our Times' 2/1995
ID Magazine 'Electronic Youth' 12/1995
Graphis Magazine 'Multimedia by the Bay' 3/1995
Communication Arts 'Post Tool design' 5/1996
Popeye Magazine-Japan 'Post Tool' 7/1996
Creative Review 'Brainshift 11/1996
Design Plex 'Post Tool design' 10/1997
IMG SRC 100, Auras Inc. 1998
Typographics Three Global Vision, Hearst Books Intl. 1998
*Eye Magazine 'Serious Doodling' 6/1998
The AIGA Journal 'Playing With Code' Summer 1998
Radical Graphics, Chronicle Books 1999
Sonic Graphics/Seeing Sound, Rizoli, 2000
Design Culture Now, Cooper Hewitt Nat'l Design Museum, 2000
Coast to Coast, Contemporary American Graphic Design, 2001
Graphic Design in the 21st Century, 100 of the best Graphic Designers, Taschen, 2002

post tool design has delivered lectures on design and technology to

Cal Arts 'On Interactivity' 1995
AIGA National Convention 'Post TV' 1995
SVA How We Learn What We Learn 'Redefining Interactivity' 1997
The Creative Show, London 'Redefining Interactivity' 1997
AIGA Seattle Minds On Conference 'Interactive Environments' 1997
AIGA National Convention 'Virtual Identity' 'The Museum in the Digital Age'
'Generation Extraordinaire' 1997
Technique, Monterey 1998
Cal Arts 'Style and Content' 1999
Sci Arc 'Differentiated Topographies' 1999
Art Center Pasadena 'Audio Interface' 1999
University of Hawaii 'Behavior is Form' 2000
Beursschouwburg, Brussels, (visiting artist lecture) 2000
Parsons 'Excavating the Archive' 2000
SFMOMA, 'Digital Masters' 2000
The Netherlands Design Institute, 'D.DADA' 2000
Yerba Buena, AIA lecture Series, November, 2001
Stanford Design Lecture series, May 2003

post tool design is in the collection of

San Francisco Museum of Modern Art 'Post Tv' 1997
Cooper-Hewitt Ntl. Design Museum, Smithsonian Inst. 'Cardinal Direction' Video 4/2000

post tool design has been exhibited at

Cooper-Hewitt Ntl. Design Museum
SFMOMA
San Jose Museum of Art

post tool design has received nominations and awards for

Chrysler Award Nominee for Innovation in design 1995,1997 & 2000
Fleishhacker Foundation grant nominee for 1996 artistic achievement
ID Magazine Interactive Silver 'Listen' 6/1999
E-Phos Intl. Festival of Film and New Media Best CD-Rom 'Listen' 8/1999
SECA/ SFMoma A+D Experimental Design Award, 1/2001