Title: MEMORIA/MEMOIR

Genre: INTERACTIVE COMPUTER-BASED INSTALLATION AND WEBSITE

Applicant's Role in Production: ARTIST, PRODUCER, DIRECTOR
(Installation phase I was a co-production with the Banff New Media Institute)
(audio composition is in collaboration with Kip Haaheim)

Production Format: creation and presentation uses computers, video, audio, database programming, max/msp programming

Brief Project Description (do not exceed space given below)

"Memoria/memoir" is a project about the memory process, how we gain, lose and share memories and how through our senses and emotions we archive, access and change memory over time. The project exists as an interactive installation and website, both serving to collect memories from the visiting audience and relate common threads of experience, drawing the connections between our memories to those of the other viewers, as well as changes to our own memories over time. The memoria/memoir installation begins by gathering personal stories told by visitors speaking into a microphone in a recording booth. Visitors' stories are added to a continually growing database of recorded memory consisting of text, audio and visuals. Once the viewer relays a memory, it is archived into the database and added to the collective memories already stored there. Through the connection of key words linked to each visitor's previously recorded documentation along with other people's stories already within the database, a new series of multi-sensory stories are presented to visitors as they move through the space. The experience is an immersive environment that the viewer both participates in and observes, tying together the larger questions of personal memory, the way we record and remember, and how through the functions of memory consolidation and reconsolidation, memory is mutable and changing over time.
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 10 minutes. If slides are included in this application, please list the title and year of the work on this form.

Title: Ex/Changing Families

Year: 1997/1998

Technical

Original Format

Software
Web
Installation
Other

Format Submitted for Viewing

Software
Web
Installation
Other

Preferred OS

Windows
Mac
Unix

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: First piece on videotape

Description of Work (use an additional sheet if necessary)

My 1997/1998 interactive installation, Ex/Changing Families, is a work about adoption. In this piece, I looked at the role of contradictory messages in identity formation. I wondered at a society that bandies about such loaded terms as "out of wedlock" and "illegitimate" while simultaneously leaving women and children subject to poverty and neglect. In response to the fears and fantasies engendered by the more negative discourses surrounding adoption, I created the home of the unwanted child, the child for whom society has no place. The "Nursery/Orphanage" presents an environment dominated by cold, steel, institutional style cribs. Text panels explain the actual and emotional cost of
adoption and a low-level, triggered sound track blends the voices of the institution, the society that feeds it, and the (mostly) women and children who are both present in and absent from this scene. As viewers move through the installation, they trigger pressure sensors, activating the audio and altering the site's audio environment, not only for themselves, but also for each other.

This is the first of my interactive installations and began my exploration into the role the visitor plays in affecting their own experience of a work of art, as well as the experience of other visitors to the exhibition. It also began my ongoing interest in exploring non-keyboard interface. The Nursery/Orphanage is part of a four-room installation that I did in collaboration with Ann Fessler. We collaborated on two rooms and each did one room on our own. In creating the Nursery/Orphanage I had to invent ways to get the end results I was looking for and seek technical support where I could find it. Early in the process, Ann and I had a self-directed residency at the Banff Centre, but most of my actual work was done in my studio and the studio of my husband, sculptor Ed Fickbohm. The difficulties of doing so much of the technical work on my own with this piece inspired me to seek out collaborators who had many of the technical skills that I lacked, particularly programmers, fabricators and musicians.
2007 New Media Fellowships
Sample Work Form

CAROL FLAX

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

Title: Journeys:1900/2000
Year: 2000

Technical

Original Format | Format Submitted for Viewing | Preferred OS
--- | --- | ---
__ Software | __ Software | __ Windows
__ Web | __ Web | __ Mac
__X_ Installation | __X_ VHS | __ Unix
__ Other | __ 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: Second piece on videotape

Description of Work (use an additional sheet if necessary)

Journeys:1900/2000 was commissioned by curator, Alison Nordström for the traveling exhibition, "Voyages (per)Formed". The piece was completed in residence at the Institute for Studies in the Arts at Arizona State University and exhibited first at ISA, then at The Southeast Museum of Photography, Boston's Photographic Resource Center, and Houston Fotofest as part of that exhibition. It was last exhibited at the University of Arizona Museum of Art as part of the exhibition, "Love and/or Terror" in 2003.
This piece continues my interest in exploring the interactive experience and expanding the possibilities for non-keyboard interface. In this piece the visitor in essence becomes the prosthesis that connects the object and the experience, through the turning of the album pages. As with memoria/memoir, the piece uses a database and the programming for controlling events is done primarily using Max/MSP. Because I had the privilege of a one-year residency at ISA, I was able to explore much more complexity than with Ex/Changing Families, yet like much of my work, the end result is deceptively simple.

Journeys:1900/2000 is an interactive installation about a journey. It is a journey in which the viewer is complicit and it cannot occur without their active engagement. Using bend and touch sensors imbedded in a reproduction of a 19th century travel album, video and audio are triggered as the pages of the album are turned. I have constructed an album, which is composed of fragments of memory, pieces of voyages, and bits of history, taking single images from various existing albums, reproducing and recontextualizing them to create a voyage of my own devising. Each of these fragments is enhanced by video and audio, which may support, amplify or contest the visual information we are receiving from the photographic print on the album page.

This piece plays with notions of memory, presence and the idea of voyage as a metaphor. The voyages documented in these albums from the last turn of the century were significant events in the formation of our cultural history. We now approach them with hindsight, filling in the missing pieces, allowing our own interpretations to guide our experience. These albums stand in for a century of history and change as we begin the new millennium with entirely new notions of privilege and access. Both the voyage and the voyager imply possibilities never imagined a hundred years ago.

In the exhibition catalog, curator Nordstrom states, “Journeys:1900/2000 [is] a computer driven installation by Carol Flax that places the museum visitor simultaneously in the roles of wonderstruck traveler, covetous voyeur, and oblivious cultural imperialist. Flax is less concerned with nineteenth century images of travel per se, than she is with their relationship to the received knowledges of the travel experience and to the way that experience was and is shaped by the values travelers brought along with their bags and Baedekers. ...The story she tells in Journeys is intentionally complex and ambiguous as travel is. ...The piece, like a journey, is never the same twice.”
CAROL FLAX

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

Title: memoria/memoir

Year: 2006

Technical

<table>
<thead>
<tr>
<th>Original Format</th>
<th>Format Submitted for Viewing</th>
<th>Preferred OS</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Software</em></td>
<td><em>Software</em></td>
<td><em>Windows</em></td>
</tr>
<tr>
<td><em>Web</em></td>
<td><em>Web</em></td>
<td><em>Mac</em></td>
</tr>
<tr>
<td><em>X</em> Installation</td>
<td><em>X</em> VHS</td>
<td><em>Unix</em></td>
</tr>
<tr>
<td><em>Other</em></td>
<td><em>Other</em></td>
<td></td>
</tr>
</tbody>
</table>

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: Third piece on videotape

Description of Work (use an additional sheet if necessary)

This is my current work in progress, and detailed descriptions are included with the proposal.

This exploration of the memory process started by working with memory researchers to try to understand how human memory works, and by extension, allow me to conceive of a way to use the computer's memory as a metaphor for and repository of our personal and cultural memories. The installation followed the earlier development of the website and the two will eventually be fully interfaced. This work continues my interest in interactivity, but also extends it by
inviting the visitor to truly affect the outcome. My two previous interactive works used finite databases, so that each visitor had a unique experience based on how they interfaced with the piece (how they moved through the space in *Ex/Changing Families*, how they turned the album pages and what random selections were made through the database programming in *Journeys:1900/2000*), but neither could be added to or subtracted from. With *memoria/memoir*, the visitor adds content, growing the database and adding to the experience in profound ways for themselves and for other visitors whose memories create connections to theirs.

*Memoria/memoir* is an interactive installation, which serves as a metaphor for and repository of our personal and cultural memories. The installation collects memories from the visiting audience and relates common threads of experience, drawing the connections between our memories to those of the other viewers, as well as changes to our own memories over time. The *memoria/memoir* installation begins by gathering personal stories told by visitors speaking into a microphone in a recording booth. Visitors’ stories are added to a continually growing database of recorded memory consisting of text, audio and visuals. Once the viewer relays a memory, it is archived into the database and added to the collective memories already stored there. Through the connection of key words linked to each visitor’s previously recorded documentation along with other people’s stories already within the database, a new series of multi-sensory stories are presented to visitors as they move through the space. The experience is an immersive environment that the viewer both participates in and observes, tying together the larger questions of personal memory, the way we record and remember, and how through the functions of memory consolidation and reconsolidation, memory is mutable and changing over time.
2007 New Media Fellowships
Sample Work Form

CAROL FLAX

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

Title: memoria/memoir

Year: 2005-2006

Technical

<table>
<thead>
<tr>
<th>Original Format</th>
<th>Format Submitted for Viewing</th>
<th>Preferred OS</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>X</em> Web</td>
<td><em>X</em> Software</td>
<td><em>X</em> Windows</td>
</tr>
<tr>
<td><em>X</em> Installation</td>
<td><em>X</em> Web</td>
<td><em>X</em> Mac</td>
</tr>
<tr>
<td><em>X</em> Other</td>
<td><em>X</em> VHS</td>
<td><em>X</em> Unix</td>
</tr>
</tbody>
</table>

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

_URL:: http://memoria.Banff.org
(if more than one please list them below)

_ _ Browser requirement(s): works best on Firefox, but any current browser other than Safari works fine.
_ _ Plug-in requirement(s): Flash player
_ _ This sample requires broadband connection (fast Internet connection)
_ _ A local copy of the sample work has been included with the application: NO - because the website works off of a database, there is no way to include a local copy

Special Information For Viewing: From memoria/memoir main page, follow link to ‘enter to add a story’ to view the website. From carolflax.net, go to Net Art section and follow links as above.

Description of Work (use an additional sheet if necessary)

The memoria/memoir website works much the same way as the installation and uses much of the same data. Much like the installation, visitors add stories and receive feedback based on their chosen keywords. The primary differences are:
• Textual rather than spoken stories are added to the website
• Through database programming, keyword matching occurs automatically as stories are being written.
• Categories of memories which visitors select from are included as part of the visitor interface. These categories are drawn from working with memory researchers and are used to help trigger memories when working with research subjects.

As with the installation, once the viewer relays a memory, it is archived into the database and added to the collective memories already stored there. When visitors visit the site they are asked to choose from the memory categories, then to type in a memory related to that category. As they type, keywords that are drawn from their text and are currently in the database, appear in a window. They select three of these keywords and then move into the experience space, which gives video, audio and textual feedback tied to their chosen keywords. The web database contains low-resolution versions of the same data as in the installation. Once the next phase of work is done on the project all data will move back and forth between the website and the installation and visitors will have their same unique identity in both spaces that allows them to revisit their own memories.

There is still work to be done on the website, particularly fully enabling keyword matching and adding more video data, along with programming the synchronization between the website and installation. Stories gathered at all versions of the installation will be added to the website, so that it becomes the overall repository of the collective memories.
2007 New Media Fellowships
Sample Work Form

CAROL FLAX

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

Title: Journeys:1900/2000
Year: 2000

Technical

Original Format
___ Software
___ Web
__ Installation
___ Other

Format Submitted for Viewing
___ Software
___ Web
___ VHS
___ Other: CD

Preferred OS
___ Windows
___ Mac
___ Unix

Special Information For Viewing: Supplemental materials can be viewed in a browser. Launch from the icon on the CD. The link to the Journeys:1900/2000 website is in the section entitled installations.

Web Information  (answer only if sample work is in Web format)
___ URL: http://www.arts.arizona.edu/flax/journeys
(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

Description of Work  (use an additional sheet if necessary)

The website for Journeys:1900/2000 is both descriptive of the installation and the experience of creating it in residence at the Institute for Studies in the Arts. With much of my work, I create websites to serve a range of purposes, from a stand-alone piece to a place to provide supplemental information, to some combination of the two. Along with containing information on the project and the process, the site includes an interview with me about the project conducted by Dan Collins, who was interim director of ISA during the second half of my residency there. It also emulates the experience of moving through the installation.
2007 New Media Fellowships
Sample Work Form

CAROL FLAX

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

Title: CD of additional work

Year: 2000

Technical

Original Format
__ Software
__ Web
__ Installation
__ Other: Varies
Other__________

Format Submitted for Viewing
__ Software
__ Web
__ VHS
Other: CD

Preferred OS
__ Windows
__ Mac
__ Unix

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: Use browser to explore information contained on supplemental CD

Description of Work (use an additional sheet if necessary)

I have included a CD with examples of other of my works including installation, web and print work. Local versions of some websites are included on the CD and there are links to other sites, including my primary website, carolflax.net
CAROL FLAX

Floor plan from installation of memoria/memoir at Gallery 44, Toronto, Canada

- Entrance to sound booth
- Entrance to experience
- Story input
- Exit & voyeur's entrance
- 23' projection onto walls
- 12'
- Computers & peripherals under table; monitor, keyboard, microphone on top of table
As an artist, I am interested in those delimiting spaces where the personal and the social come together, where boundaries shift and nothing is quite certain. As an adoptee, I have spent most of my life caught in the transitional state between knowing and not knowing. For years my work has broached questions of uncertainly in my own identity, extended outward to include larger issues of social and cultural identities. I have used various strategies, sometimes working in the intense private realm, sometimes in the vulnerable and exposed public domain, and various approaches, from my early computer-altered print work in the mid-1980's to more recent web, multimedia and installation work. In each of my projects, questions of memory, both personal and cultural, help to shape my approach.

My current work *memoria/memoir* brings together many of these interests, looking at the connections between human and computer memory and the relationship of personal to cultural memories. It is a continuation of my investigations into new ways to think about the world around us, and our place in it. It looks at the spaces and ideas in-between what we see on the surface, as well as the explorations of the technologies that allow those ideas to take form. In both of my previous interactive installations, *Ex/Changing Families* and *Journeys:1900/2000*, my goal is to engage the audience in similar ways, as active participants rather than passive viewers. Each of these works is driven by ideas rather than technologies, but all are ultimately only possible through the technologies they employ.
Along with complex interactive installations, I have continued to look at these same issues of identity formation through quieter works. My 2002 work, *2 mothers, 2 daughters, 2 sisters, 2 brothers, 1 father* features a fifty year-old female adoptee, along with each of her five genetic and four adopted family members. Because she did not meet her genetic family until the age of forty, she spent most of her life without knowledge of her genetic connections. This piece is an inquiry into the question of nature vs nurture and whether the two can ever be separated.

The birth of my first grandchild in 2004 prompted me to create the DVD installation, *Kyle*. Along with a video projection of the mostly sleeping and mute newborn, the piece features genetic and non-genetic relatives of the still malleable and unformed infant, each of who will ultimately contribute significantly and in very different ways to who he is and who he becomes. This installation continues my exploration of family, history, memory and identity As in life, all my work with technology moves through multiple generations in order to reach its finished state. Just as I am bringing this next generation of family into my artistic explorations and continue to develop other new work, I will explore difficult issues and challenging new technologies as a means of expression, hopefully finding some answers and raising new questions along the way.
Description: memoria/memoir is a project about the elusive nature of memory, creating a metaphor for how we gain, we lose and we share memories through our transitory senses and emotions. Memory is a vast architecture of the mind, a changeable, sometimes reassuring, sometimes fitful archive, that determines our relationship to culture, family, collective history, even ourselves.

Like memory, this project exists in a multi-dimensional space, using an interactive installation and website to connect machines with human intelligence and memory with distinct visual and aural symbols. Employing a dynamic user interface, the website and physical installation create similar experiences, one in virtual space, the other in physical space, to allow users to input their stories, call up their own memories and those of others, and to return and ‘replay’ their memories. As the program acquires information, creating links from past to present via pattern matching, it emulates the processes of consolidation and reconsolidation in our brains, rewriting our memories each time they are activated. Importantly, it also helps to turn our individual memories into collective memories as each new connection is made.

As with much of my work, memoria/memoir exists in the liminal space between object and experience. Like memory, the moving visuals in this piece are fluid, temporal, and ambiguous. The audio tells the more complete story, the video suggests. The experience is an immersive environment that the viewer both participates in and observes, reminding us that memory is mutable and changing over time.

Two years ago, when I was in the early developmental stages of this project, I received a New Media Fellowship nomination. I have since been awarded a six-week residency at the Banff New Media Institute where we completed the first phase of the installation, which is essentially a prototype that simulates the keyword matching process. The website is also currently at a partial state of completion, with keyword matching not fully enabled. The installation was exhibited in this prototype state at Gallery 44 in Toronto in March 2006. It will be exhibited at Volitant Gallery in Austin, TX in May 2007 and my intention is to enable keyword matching as well as installation to website synchronization for this exhibition, then
continue to work on the more advanced programming and look for more venues to exhibit it over the next few years.

My previous interactive installations have informed this new work in many ways. Both *Ex/Changing Families* and *Journeys:1900/2000* (included in visual support material) play with notions of personal and historical memory and how it informs us as individuals and communities. Both bodies of work require the visitor to be complicit in the experience and the outcome – becoming fully engaged when someone enters the installation space and activates it by their presence. Each of these installations has been an increasingly sophisticated investigation into interface design using complex programming and necessitates technical collaborations with researchers in other disciplines.

The upcoming exhibition in Austin will be part of a larger collaboration between the Blanton Museum, Volitant and others about wedding customs in transition. The programming and hardware for this piece will serve as a template, allowing me to tailor content for both site-specific and topical exhibitions, such as this one. Visual and audio content will come from both existing and new data created for each venue. Stories are added by visitors at each installation and all cumulative data is added to the website.

**Navigation:** Visitors to the *memoria/memoir* installation or website begin by creating or inputting a unique login identity. This allows for all of their memories and selected keywords to be connected to them. They are then invited to tell a story, into a microphone when they visit the installation and textually to the website. For visitors, the richest experience comes from contributing a memory, becoming part of a vast interconnected outer world that reflects and enriches the inner one. Whether they participate directly, or not, they can inhabit the space created by the archived memories of those who have come before them. If they do relay a memory, it is archived into the database and added to the collective memories already stored there. Upon entering the experience space, through the connection of keywords linked to each visitor's previous memories along with other people's stories already within the database, a new series of multi-sensory feedback is received. Their experience is personalized to them until the next person enters. If
visitors choose to enter the space without contributing their own memories and receiving an identity, they would move through the space as voyeurs to the memories of others.

The attached budget sheets and diagrams list all the hardware used in the installation and describe some planned revisions to the installation layout.

**Feasibility statement:** One of my great skills is to bring collaborators together, to find necessary resources and to be dogged about accomplishing the work I set out to do. I have completed my previous installations with support from artist residencies and through making connections with a broad range of researchers. Most of the work that needs to be done on memoria/memoir over the next two years involves complex programming. I am applying to return to Banff for their co-production residency, "Liminal Screen" in March 2007 in order to complete work on the next phase. With support from the New Media Foundation, I can get this work to a point where it is self-contained and exhibition ready.

**Use of Work:** My goal is to create a stable and expandable template using both topical and place specific content in both traditional, and non-traditional venues. For instance, for the 2007 exhibition in Austin, memoria/memoir will collect memories and stories from visitors about weddings, which will be added to a database filled with other wedding-related content. I am also very interested in the idea of gathering and archiving the memories and history of a place (such as towns, workplaces, schools, etc), researching their historical archives and inviting community members to share their memories, creating an opportunity to enrich communities in a tangible way.

**Fellowship use/budget narrative:** Total budget to date: $64,225.00 (see supplemental budget sheet), $35,000 from the NMF would allow me to get it fully exhibition ready (see budget sheet for details), BNMI values the in-kind support at $11,424.00 for upcoming residency. With a Banff residency and New Media Fellowship, the total project budget would come to approximately $110,000 providing me with the opportunity to reach the larger international audience this project deserves.
CAROL FLAX

• http://carolflax.net

EDUCATION
1982 MFA Photography, California Institute of the Arts
1980 BA Art, California State University, Northridge (Summa Cum Laude)

HONORS AND AWARDS
2006 Nominated for 2007 New Media Fellowship, The Program for Media Artists, supported by Rockefeller Foundation and Ford Foundation

2006 Banff New Media Institute, The Banff Centre, Banff, Canada
memoria/memoir co-production

2004 Nominated for 2005 New Media Fellowship, The Program for Media Artists, supported by Rockefeller Foundation and Ford Foundation

2002-03 Institute for Studies in the Arts, Arizona State University
Funded Residency for pre-production of memoria/memoir

2001 InternetKunstPreis 2001, Net-Z-Lab, Chemnitz, Germany
for Tuesday Afternoon (with Trebor Scholz)

2001 Finalist in the First International 'Lite Show: Flash and Other Low Bandwidth Media' festival, BostonCyberArts for website, Gravity

Funded Residency for production of Journeys:1900/2000

1996 Association of American Museums Publications Award
for artist's book, Some (M)Other Stories: A Parent(hetic)al Tale

1996 Banff Centre for the Arts, Funded Residency
for production of Ex/Changing Families, a collaborative installation later installed at the California Museum of Photography in Riverside, CA and the McKinney Avenue Contemporary in Dallas, TX

1992 Finalist, Long Beach MetroRail Pylon Competition (Blue Line), Long Beach, CA

1992 Finalist, Kodak Motion Picture and Television Imaging Center Lobby Installation, Los Angeles, CA

1991 Finalist, LA MetroRail Transit Station Design (Green Line), Los Angeles, CA

1990 City of Los Angeles, Cultural Affairs Artists Grant
HONORS AND AWARDS (con’t)

1989  First Award, Artist's Billboard, Arts Festival of Atlanta, Atlanta, GA

1988  First Award, 18th Juried Photography Exhibition, Houston, TX

1982  James D. Phelan Art Award in Photography, First Award, San Francisco, CA

1981  National Endowment for the Arts Photography Honorarium

1981  Security Pacific Bank Bicentennial Art Award, Los Angeles, CA

GRANTS AND CONTRACTS

2002  Foreign Travel Grant, International Affairs Office, University of Arizona, Tucson

2002  Internet Technology and Commerce Institute Grant in support of 3D Visualization Symbology for Disaster Relief Operational Management (Co-PI with Dr. Jerzy Rozenblit, ECE) ($14,500)

2002  The College of Fine Arts and the Internet Technology, Commerce and Design Institute, Digital Arts Planning Grant in support of Memoria/Memoire (PI) ($2000)

2002  Fine Arts Research and Professional Development Incentive Grant, College of Fine Arts, University of Arizona in support of research and development of work for exhibition, Traces (PI) ($2000)

2002  International Visitor Grant, Office of International Affairs, University of Arizona in support of 2002 Digital Arts Symposium, Neural Networks keynote speaker, Kevin Warwick (PI) ($500)

2001  New Learning Environments and Instructional Technologies Grant, University of Arizona, Office of the Senior Vice President for Academic Affairs in support of Art and Engineering: Creating Collaborations (co-PI with Lucy Petrovich) ($24,900)

2001  Arizona Commission on the Arts Grant in support of 2002 Digital Arts Symposium, Neural Networks (PI) ($2700)

2001  Arizona Commission on the Arts Encouragement grant in support of Journeys: 1900/2000 (PI) ($500)

2001  University of Arizona, College of Fine Arts Small Grant in support of 2002 Digital Arts Symposium, Neural Networks (Co-PI with Lucy Petrovich) ($1500)

2001  University of Arizona, College of Fine Arts Small Grant in support of School of Art Visiting Artist Program (PI) ($2500)
GRANTS AND CONTRACTS (con’t)

2000 National Endowment for the Arts, Creation and Presentation Grant in support of Voyages (Per)Formed (Co-PI) ($15,000)

2000 University of Arizona, College of Fine Arts Small Grant in support of Interfacing the Future: 3rd Annual Digital Arts Symposium (Co-PI with Lucy Petrovich) ($2500)

2000 Marjorie and Louis Slavin Grant in support of Interfacing the Future: 3rd Annual Digital Arts Symposium (Co-PI with Daniel Bernardi) ($1000)


1999-2000 University of Arizona, Small Grant, Office of the Vice President for Research in support of Journeys:1900/2000 (PI) ($4937)

1999 University of Arizona, College of Fine Arts Research and Professional Development Incentive Grant in support of Journeys:1900/2000 (PI) ($1926)

1999 Visual Arts II Fellowship from Tucson/Pima Arts Council (PI) ($4975)

1998 University of Arizona New Learning Environments and Instructional Technologies Grant (PI) ($13,122)

1998 University of Arizona, College of Fine Arts Small Grant in support of Mission:Mars (PI) ($2900)

1998 University of Arizona, College of Fine Arts Small Grant in support of Digital Arts Symposium (Co-PI with Lucy Petrovich) ($1100)

1995 Instructional Development Grant, University of California, Santa Barbara

SOLO AND COLLABORATIVE EXHIBITIONS AND INSTALLATIONS

2007 memoria/memoir, Volitant Gallery, Austin, TX

2006 memoria/memoir, Gallery 44, Toronto, Canada

2002 Traces, Tucson Museum of Art, Tucson, AZ

2000-2002 Journeys:1900/2000, Interactive Installation as part of Voyages (Per)Formed

2002 Fotofest, Houston, TX

2001 Photographic Resource Center, Boston, MA

2000 Southeast Museum of Photography, Daytona Beach, FL
SOLO EXHIBITIONS AND INSTALLATIONS  (con’t)

2000       *Journeys: 1900/2000*, Interactive Installation, Institute for Studies in the Arts Gallery, Arizona State University, Tempe, AZ. (This piece was completed in residence at the Institute for Studies in the Arts)

1997-1998  *Ex/Changing Families*, Interactive Installation (with Ann Fessler), 1998 McKinney Avenue Contemporary, Dallas, TX  
           1997 California Museum of Photography, Riverside, CA

1995       Solo Installation, San Francisco Camerawork, San Francisco, CA

1993-1994  Public Arts Commission, City of Manhattan Beach, CA

1993       Public Art Installation, Inverness Rail Station, Inverness, Scotland

1991       Solo exhibition, 92nd St. Y, New York, NY

1991       Solo exhibition, Executive Tower, Los Angeles, CA

1990-1991  Window Installation, 462 Broadway, New York, NY

1990       Artist's Billboard, Los Angeles Festival, Los Angeles, CA

1990       Solo exhibition, Midtown Y, New York, NY

1990       Artist's Billboard, San Pedro, CA (City of LA Cultural Affairs Grant)

1989       Artist's Billboard, Arts Festival of Atlanta, Atlanta, GA (First Award)

1983       Solo exhibition, LAPA Gallery, Venice, CA

1983       Solo exhibition, Hoffman Gallery, Spokane, WA

1982       *Constructs*, Graduate exhibition, Gallery D300, CalArts, Valencia, CA

1981       Solo exhibition, BC Space, Laguna Beach, CA

SELECTED GROUP EXHIBITIONS

2007-2009  *Seeing ourselves: masterpieces of American Photography from the Collections of George Eastman House*, traveling to Pensacola Museum of Art, FL; Columbia Museum of Art, Columbia, SC; University of Louisiana Museum of Art, Lafayette, LA and elsewhere

2004       CyberArts 2004, Prix Ars Electronica, Net Vision, Linz Austria

2004       *In the Center of Things*, Center for Creative Photography, University of Arizona, Tucson, AZ
SELECTED GROUP EXHIBITIONS (con’t)

2003  *Global Priority* Herter Art Gallery, University of Massachusetts, Amherst, MA (Catalog published by Routledge)

2003  *Love and/or Terror* University of Arizona Museum of Art, Tucson, AZ

2002  *dos madres* Second International Art Biennial-Buenos Aires, Museo Nacional de Bellas Artes, Buenos Aires, Argentina (catalog)

2002  *Tuesday Afternoon* (with Trebor Scholz), WebArt, XXV Bienal de São Paulo, São Paulo, Brazil (catalog)

2001  *Borderlands* (with Trebor Scholz), WebArt, Hellenic World Foundation, Athens, Greece

2001  *Zeros and Ones* Moser Performing Arts Center Gallery, Joliet, IL

2001  *Art Faculty Exhibition* University of Arizona Museum of Art, Tucson, AZ

2000  *F I L E (festival internacional de linguagem eletronica)* WebArt, Sao Paulo, Brazil

2000  *Art Faculty Exhibition* University of Arizona Museum of Art, Tucson, AZ


1999  *Art Faculty Exhibition* University of Arizona Museum of Art, Tucson, AZ

1998-1999  *Ruins in Reverse* Window Installation, CEPA Gallery, Buffalo, NY (publication and web site)

1998  *Digital Frontiers* George Eastman House, Rochester, NY (catalog on CD-ROM)

1997  *Telling Our Own Stories* Southeast Museum of Photography, Daytona Beach, FL

1996  *Mortal Coil* print and web, Sesnon Gallery, Porter College, University of California, Santa Cruz, CA

1996  *Faculty Exhibition* University Art Museum, University of California, Santa Barbara

1995  *P.L.A.N. Photography Los Angeles Now*, Los Angeles County Museum of Art

1995  *Autobiographical Works by Women Photographers* Silver Eye Center for Photography, Pittsburg, PA

1995  *Digital Identities: Technologies of Meaning* Sheppard Gallery, University of Nevada, Reno, NV
<table>
<thead>
<tr>
<th>Year</th>
<th>Exhibition Title</th>
<th>Location(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>Contemporary Photography: The California Focus</td>
<td>Armand Hammer Museum of Art, Los Angeles, CA</td>
</tr>
<tr>
<td>1994</td>
<td>L'Image réinventée: Art/Photographie/Numérique</td>
<td>CYPRES, Aix en Provence, France</td>
</tr>
<tr>
<td>1994</td>
<td>Transformations</td>
<td>California Museum of Photography, Riverside, CA</td>
</tr>
<tr>
<td>1994</td>
<td>Underexposed</td>
<td>Los Angeles Municipal Art Gallery, Barnsdall Art Park, Los Angeles, CA</td>
</tr>
<tr>
<td>1993</td>
<td>Pro-femina: Images of Women by Women</td>
<td>Samuel P. Harn Museum of Art, Gainesville, FL and Southeast Museum of Photography, Daytona Beach, FL (purchase) (catalog)</td>
</tr>
<tr>
<td>1993</td>
<td>Fotofeis: Scottish International Festival of Photography</td>
<td>Public Art Installation, Technology Venue, Inverness, Scotland (catalog)</td>
</tr>
<tr>
<td>1993</td>
<td>The Art Factor</td>
<td>FISEA 93, Minneapolis College of Art and Design, Minneapolis, MN</td>
</tr>
<tr>
<td>1992</td>
<td>Digital Photography</td>
<td>Centre National de la Photographie, Palais de Tokyo, Paris, France (catalog)</td>
</tr>
<tr>
<td>1992</td>
<td>SIGGRAPH '92</td>
<td>Chicago, IL</td>
</tr>
<tr>
<td>1992</td>
<td>Intimate Technologies/Fictional Personas</td>
<td>Brush Art Gallery, St. Lawrence University, Canton, NY</td>
</tr>
<tr>
<td>1992</td>
<td>Inaugural Exhibition</td>
<td>Southeast Museum of Photography, Daytona Beach, FL</td>
</tr>
<tr>
<td>1991</td>
<td>Clear and Present Danger: Censorship in an Age of Intolerance</td>
<td>Carleton College, Northfield, MN</td>
</tr>
<tr>
<td>1991</td>
<td>Virtual Memories</td>
<td>Friends of Photography, San Francisco, CA</td>
</tr>
<tr>
<td>1991</td>
<td>Out of the Ether</td>
<td>Film in the Cities, Minneapolis, MN</td>
</tr>
<tr>
<td>1990</td>
<td>Siggraph '90</td>
<td>Dallas, TX and traveling to Frankfurt, Madrid, Boston and New York</td>
</tr>
<tr>
<td>1990</td>
<td>Digital Image-Digital Photography</td>
<td>Jonsson Library, Dallas, TX</td>
</tr>
<tr>
<td>1990</td>
<td>SISEA, Groningen, Holland</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>Digital Photographs</td>
<td>Webster University, St. Louis, MO</td>
</tr>
<tr>
<td>Year</td>
<td>Exhibition Title</td>
<td>Location</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>----------</td>
</tr>
<tr>
<td>1989</td>
<td>Media Talk</td>
<td>Security Pacific Gallery, Costa Mesa, CA</td>
</tr>
<tr>
<td>1989</td>
<td>Creative Process</td>
<td>Downey Museum of Art, Downey, CA</td>
</tr>
<tr>
<td>1989</td>
<td>Just Beyond Photography</td>
<td>Montpelier Art Center, Laurel, MD</td>
</tr>
<tr>
<td>1988</td>
<td>Prix Ars Electronica 88</td>
<td>Linz, Austria</td>
</tr>
<tr>
<td>1988</td>
<td>Digital Photography</td>
<td>San Francisco Camerawork, San Francisco, CA, and traveling to University of Texas at Arlington; Houston Center for Photography; CEPA Gallery, Buffalo, NY; Museum Folkwang, Essen, West Germany; Musseet for Fotokunst, Odense, Denmark; Perspektief, Rotterdam, Holland; curated by Jim Pomeroy and Marnie Gillette (catalog)</td>
</tr>
<tr>
<td>1988</td>
<td>Eighteenth Juried Photography Exhibition</td>
<td>Foto Fest, Houston, TX</td>
</tr>
<tr>
<td>1988</td>
<td>Exhibition of Computer Art</td>
<td>SIGGRAPH, Atlanta, GA</td>
</tr>
<tr>
<td>1986</td>
<td>Faculty Show</td>
<td>photographs, California State University, Northridge, CA</td>
</tr>
<tr>
<td>1986</td>
<td>Outspeak</td>
<td>LACPS Gallery, Los Angeles, CA</td>
</tr>
<tr>
<td>1985</td>
<td>Olympic Show, Part I</td>
<td>Los Angeles County Museum of Art, Los Angeles, CA</td>
</tr>
<tr>
<td>1984</td>
<td>Otis Art Institute</td>
<td>Los Angeles, CA</td>
</tr>
<tr>
<td>1983</td>
<td>New Photographics</td>
<td>Central Washington University, Ellensburg and Cheney Cowles Memorial Museum, Spokane, WA</td>
</tr>
<tr>
<td>1983</td>
<td>Sequential Photography</td>
<td>Mount Vernon College, Washington, D.C.</td>
</tr>
<tr>
<td>1982</td>
<td>Phelan Award Winners Exhibition</td>
<td>San Francisco Camerawork, San Francisco, CA</td>
</tr>
</tbody>
</table>

**WEB ART**

http://www.tuesday-afternoon.net

*Tuesday Afternoon* (with Trebor Scholz), A project about borders and their political and social implications.

http://www.arts.arizona.edu/flax/journeys/

Web site for the Interactive Installation piece, *Journeys: 1900/2000*
WEB ART (con’t)

http://www.mind-shift.net/

Art-Id / Cyb-Id: Identities in Cyberspace, Curated by Roy Ascott and Josep Giribet, an

http://www.arts.arizona.edu/flax/gravity/

Gravity A piece about traveling parallel paths. Finalist in the First International 'Lite Show:
Flash and Other Low Bandwidth Media' festival, BostonCyberArts

http://www.mintmuseum.org/cflax/

Sometimes A piece of visual poetry commissioned by the Mint Museum of Art, Charlotte,
NC.

http://www.cmp.ucr.edu/ex/changing/

Ex/Changing Families At the California Museum of Photography, a web site and traveling
collaborative installation about issues of adoption and it's social and political implications

http://www.arts.arizona.edu/flax/

M/Other Stories A poetic piece on adoption and it's surrounding issues. This site offers
viewers an opportunity to add their own stories.

http://www.cmp.ucr.edu/flax/mortal/

In the Absence of Memory Part of the web project, "Terminals", and the UC, Santa Cruz
project, "Mortal Coil"

http://www.art.uiuc.edu/@art/carol_flax/carolflax.html

@art gallery A virtual gallery for contemporary electronic art maintained by Joseph Squier
at the University of Illinois, Urbana Champagne.

http://www.art.uh.edu/dif/flax_1.html

Digital Imaging Forum The electronic journal and internet web site for digital imaging,
maintained by Suzanne Bloom and Ed Hill at the University of Houston.

http://cepa.buffnet.net/exhibits/EXHIBIT.19981999/ruinsinreverser/0R.02.public.html

Ruins in Reverse: Time and Progress in Contemporary Art, Public Art

http://www.crania.com

Crania, A Literary/Arts Magazine. Featured artist, Issue 6

CITATIONS

2007

Regan, Margaret, "Now and Then", Tucson Weekly, May 27 – June 2, 2004, p. 34

Gerbracht, Grady and Susan Jahoda, Ed., Global Priority, Rethinking Marxism, (New York:
Routledge 2003); pp. 360-361
CITATIONS (con’t)


Silver, Joanne. “Visual Arts; Souvenirs inspire travels back in time.” *Boston Herald*, 7 Dec 2001


Nordström, Alison. “Voyages (per)Formed,” *in the loupe* (November/December 2001): pp. 5-8

Xu, Gan, Ph.D. *Installation Art*. (Beijing, China: Art Publishing House, 2001)


Nordström, Alison. *Voyages (Per)Formed*, Daytona Beach, FL: Southeast Museum of Photography, Daytona Beach Community College, 2000 (catalog essay)


*Fotografie Nach Der Fotografie*, Siemens Culture Program, Verlag Der Kunst, Germany, 1996


CITATIONS (con't)


“Cyberscope.” Newsweek. 12 December 1994


CAMERAWORK, A Journal of Photographic Arts. SF Camerawork, Fall/Winter, 1993, vol. 20, no.2


Foster, Alisdair, ed. FOTOFEIS. (Edinburgh, Scotland: Fotofeis, Ltd, 1993), pp. 110-111


Howe, Graham, and Pilar Perez, eds. FRAMEWORK (Summer, 1991)


Gerken, J. E., ed. CLICK 1, (Northlight Books, 1990)

PERSPEKTIEF 37, Perspektief Center for Photography, Rotterdam, Netherlands, Dec 1989-Jan 1990


O’Dair, Barbara. “Media Talk’ Exhibit Manipulates Images as it Examines the Concept.” Orange County Register, September 15, 1989

Security Pacific Corporation, Media Talk, with essays by Mark Johnstone and Irene Borger, 1989

Houlihan, James W. “The Ethics of Manipulation.” SPOT, Houston Center for Photography, Winter, 1988

Leopoldseder, Hannes. Meisterwerke der Computerkunst, Prix Ars Electronica, TMS-Verlag-Bremen, 1988

San Francisco Camerawork, Inc. Digital Photography: Captured Imagery, Volatile Memory, New Montage, 1988, includes essays by Martha Rosler, Tim Druckrey, and Jim Pomeroy (exhibition catalog)


PUBLICATIONS


Flax, Carol. Journeys: 1900/2000, Southeast Museum of Photography, Daytona Beach Community College, 2000 (Commissioned catalog in conjunction with exhibition, Voyages (per)Formed) (Funded by a grant to the Museum from the Florida State Institute of Museum and Library Services).


Flax, Carol and Robert Cook, eds. "Power and Control Imag(in)ing Technology", exposure, Vol.30, No.1/2, 1995

PUBLISHED ARTIST'S BOOK

SELECTED COLLECTIONS
- Museo Nacional de Bellas Artes, Buenos Aires, Argentina
- Seattle Art Museum, Seattle, WA
- Center for Creative Photography, University of Arizona, Tucson, AZ
- George Eastman House, Rochester, NY
- Santa Barbara Museum of Art, Santa Barbara, CA
- Visual Studies Workshop, Rochester, NY
- Southeast Museum of Photography, Daytona Beach, FL
- Bank of America (formerly Security Pacific Bank) Art Collection, Los Angeles, CA
- Numerous Private Collections

SCHOLARLY PRESENTATIONS
2006 Invited Speaker, San Jose State University, San Jose, CA
2006 Invited Speaker, Banff New Media Institute, Banff Centre, Banff, Canada
2006 Invited Speaker, University of Colorado, Boulder, Boulder, CO
2006 Invited Speaker, New York University, New York, NY
2006 Invited Speaker, Ryerson University/GEH partnership, Rochester, NY
2006 Presenter, Society for Photographic Education National Conference, Chicago, IL
2003 Invited Speaker, Southern Illinois University, Carbondale, IL
2003 Invited Speaker, Representational models for the creative process and computational models of memory, Institute for Studies in the Arts, Arizona State University, Tempe, AZ
2003 Invited Speaker, Maryland Institute College of Art, Baltimore, MD
2002 Invited Speaker, XIX Jornadas de la crítica, Second International Art Biennial-Buenos Aires, Museo Nacional de Bellas Artes, Buenos Aires, Argentina
2002 Invited Speaker, College of Arts and Media, University of Colorado at Denver,
2002 Invited Speaker, Computer Imaging Department, The Metropolitan State College of Denver, Denver, CO
2002 Invited Speaker, Society for Photographic Education National Conference, Las Vegas, NV
SCHOLARLY PRESENTATIONS (con't)

2002  
**Invited Speaker**, *Eye of the Beholder*  
Optical Science and the Visual Arts, Tucson Museum of Art, Tucson, AZ

2001  
**Invited Faculty**, American Photography Institute, National Graduate Seminar, New York University, New York, NY (June 8, 2001)

2001  
**Invited Speaker**, Net-Z-Lab Awards Ceremony, Chemnitz, Germany

2001  
**Invited Speaker**, *The Art of Family*  
Center for Creative Photography, University of Arizona, Tucson, AZ

1999  
**Invited Speaker**, *Photography; Digital Spin*  
Simmons College, Boston, MA

1999  
**Invited Speaker**, Centro de la Imagen, Mexico City, Mexico  
(Part of an invited residency. See description under Artist Residencies)

1999  
**Invited Speaker**, Colloquium on Technology Development Studio, Institute for Studies in the Arts, Arizona State University, Tempe, AZ

1998  
**Invited Speaker**, Artist in Residence, Summer Media Institute, Ohio Arts Council, Ohio University, Athens, OH (see description below under Artist Residencies)

1998  
**Invited Session Chair and Presenter**, Technology and Collaboration, College Art Association Conference, Toronto, Canada

1998  
**Invited Session Chair and Presenter**, The Magic Classroom: Pioneering the Digital Future I: Art Studio, College Art Association Conference, Toronto, Canada

1998  
**Invited Visiting Artist**, Mixed Media Series, Maryland Institute College of Art, Baltimore, MD

1997  
**Invited Speaker**, in conjunction with the exhibition, "Discomfort", Contemporary Arts Forum, Santa Barbara, CA

1997  
**Invited Speaker**, Symposium: *Telling Our Own Stories*, Southeast Museum of Photography, Daytona Beach, FL

1995  
**Invited Speaker**, Rhode Island School of Design, Providence, RI

1995  
**Panelist**, Teaching Multimedia, LA Freewaves conference on Artist and Activist CD-ROMS, University of Southern California, Los Angeles, CA

1995  
**Invited Speaker**, Carnegie Mellon University, Pittsburgh, PA

1995  
**Invited Speaker**, Loyola Marymount University, Los Angeles, CA

1994  
**Invited Speaker**, Rochester Institute of Technology, Rochester, NY
SCHOLARLY PRESENTATIONS (con’t)

1994  Invited Speaker, Pro-Femina: Four Women Photographers, Southeast Museum of Photography, Daytona Beach, FL


1993  Invited Speaker and Panel Moderator, Photography Without Borders, SF Camerawork, San Francisco, CA

1992  Invited Speaker, Photography Studies in France, Paris, France

1992  Invited Speaker, Southeast Museum of Photography, Daytona Beach, FL

1991  Panelist, "Documentary Photography: Repeatedly Buried, But Not Dead", SPE Western Regional Conference


1990  Invited Speaker, University of California, Riverside, CA

1989  Invited Speaker, California State University, San Bernardino

1989  Invited Speaker, Maryland Institute, College of Art, Baltimore, MD

1985  Co-chair and Panelist, LACPS Symposium: Issues in Education, Otis Art Institute, Los Angeles, CA

ARTIST RESIDENCIES

2006  Invited six-week residency, Banff New Media Institute, Banff Centre, Banff, Canada funded technical residency/ co-production in support of installation production for memoria/memoir

2002  Invited three-month residency, Institute for Studies in the Arts, Arizona State University, for planning and pre-production of memoria/memoir

1999-2000 Invited one-year residency, Institute for Studies in the Arts, Arizona State University, Tempe, AZ. Residency included funding and technical support for completion of the project, Journeys:1900/2000

1999  Invited one-week residency, Centro de la Imagen, Mexico City, Mexico. Residency included teaching a one week workshop on web design and an invited lecture to members of the Center
ARTIST RESIDENCIES (con’t)

1998 Invited one-week residency, **Summer Media Institute**, Ohio Arts Council, Ohio University, Athens, OH. Residency included teaching one-week workshop on digital book design and giving public presentation on my work.


1995 Invited one-week, Artist in Residence, **Drexel University**, Philadelphia, PA funded by a Teaching Learning Committee Grant for Residency and Production.

1993 Invited six-week residency, **Fotofeis**, Inverness and Dundee, Scotland for research and production of banners to be installed in Inverness Train Station as part of Fotofeis, The Scottish International Festival of Photography.

PROFESSIONAL EXPERIENCE

2006 **Visiting Artist**, University of Colorado, Boulder, Boulder, CO

2005 **Curator**, Artstream, University Art Museum, University of Arizona, Tucson, AZ

2003-2005 **Faculty and Research Associate**, Treistman Center for New Media, University of Arizona, Tucson, AZ

1998-2004 **Assistant Professor**, Photography and Digital Arts, School of Art, University of Arizona, Tucson, AZ

1997-1998 **Visiting Assistant Professor**, Photography, School of Art, University of Arizona, Tucson, AZ

1998-2004 **Chair**, Electronic Publications, Society for Photographic Education

2002 **Co-chair**, Fourth Annual Digital Arts Symposium, *Neural {Net}work*, University of Arizona, Tucson, AZ

1993-2001 **Member**, National Board of Directors, Society for Photographic Education

2000 **Chair**, 3rd Annual Digital Arts Symposium, *Interfacing the Future* University of Arizona, Tucson, AZ

1999 **Chair**, Second Annual Digital Arts Symposium, *Artists and Technology*, University of Arizona, Tucson, AZ

1998 **Chair**, First annual Digital Arts Symposium, University of Arizona, Tucson, AZ

1997 **Adjunct Professor**, Laboratory for New Media, School of Film and Television, UCLA, Los Angeles, CA
<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
<th>Organization/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>Curator, &quot;Discomfort&quot;</td>
<td>Contemporary Arts Forum, Santa Barbara, CA</td>
</tr>
<tr>
<td>1997</td>
<td>Art Director</td>
<td>Cyberteca MultiMedia Production, St. Martin's Press, New York</td>
</tr>
<tr>
<td>1996-97</td>
<td>Researcher</td>
<td>University of California, Santa Barbara, Department of Germanic, Slavic and Semitic Studies. Project to research distance learning using the Web</td>
</tr>
<tr>
<td>1996</td>
<td>Chair</td>
<td>Society for Photographic Education, National Conference, Los Angeles, CA</td>
</tr>
<tr>
<td>1995</td>
<td>Producer and Creative Director</td>
<td>CD-ROM &quot;A Poetic Vision&quot;, commissioned by Santa Barbara Museum of Art in Conjunction with exhibition of work by photographer, Anne Brigman</td>
</tr>
<tr>
<td>1994-96</td>
<td>Adjunct Professor</td>
<td>Electronic Media, Dept of Art Studio, University of California, Santa Barbara, CA</td>
</tr>
<tr>
<td>1994</td>
<td>Instructor</td>
<td>Video Catalog Production, Vidkidco, LBMA Video Annex, Long Beach, CA</td>
</tr>
<tr>
<td>1993</td>
<td>Instructor</td>
<td>Video Production, Multivision Cable Television and City of Manhattan Beach, CA</td>
</tr>
<tr>
<td>1993-94</td>
<td>Instructor</td>
<td>Electronic Media, Orange Coast College, Costa Mesa, CA</td>
</tr>
<tr>
<td>1989-94</td>
<td>Instructor</td>
<td>Computer Graphics, UCLA Extension, Los Angeles, CA</td>
</tr>
<tr>
<td>1991-92</td>
<td>Chair</td>
<td>Western Region, Society for Photographic Education</td>
</tr>
<tr>
<td>1989-92</td>
<td>Member</td>
<td>Board of Directors, Society for Photographic Education, Western Region</td>
</tr>
<tr>
<td>1989</td>
<td>Chair</td>
<td>Western Regional Conference, Society for Photographic Education</td>
</tr>
<tr>
<td>1984-88</td>
<td>Instructor</td>
<td>Photography, California State University, Northridge, CA</td>
</tr>
<tr>
<td>1982-88</td>
<td>Member</td>
<td>Board of Directors, Los Angeles Center for Photographic Studies (VP, 1987-88)</td>
</tr>
<tr>
<td>1984</td>
<td>Administrator</td>
<td>LACPS/LAOOC/MOCA 1984 Olympics Photo Commission Project, Los Angeles, CA</td>
</tr>
</tbody>
</table>
CAROL FLAX  Supplemental Budget Information, Budget to date

Space/studio/office rental
Lighting and sculpture studio (BNMI in-kind) 400.00
Visualization lab (BNMI in-kind) 19,000.00

Equipment
1 PC computer for project R & D (BNMI in-kind) 2000.00
Macintosh G5 dual core computer 2600.00
iMac computer 1500.00
Dell computer 900.00
Maxtor 250 GB firewire drive 400.00
Tapco link 200.00
m-audio fast track pro 290.00
fingerprint reader 80.00
Sennheiser MD46 microphone 300.00
Marantz digital audio recorder 800.00
Epson Powerlite multimedia projector 2500.00
2 audio speakers @150/ea 300.00
audio amplifier 200.00
linxys router 75.00
assorted electronics, cables, etc 1000.00

Software
Max/MSP/Jitter 970.00
ViaVoice 155.00

Travel expenses
travel to Kansas to work with K Haaheim 1 wk 500.00
Banff residency travel + room & board 4000.00

Administrative
Banff New Media Institute (in-kind) 1218.00

Programmers
Banff New Media Institute (in-kind) 3750.00
Treistman Center for New Media (in-kind) 4000.00
University of Arizona, Electrical and Computer Engineering Programming support (TRIF fund) 15,300
ViaVoice scripting application for speech-to-text translation 137.00
Database, Max/MSP for Toronto show 1500.00

Other expenses
web hosting 1 yr@150.00 yr.(BNMI in-kind) 150.00

Total 64,225.00
### Revenue

Planning and implementation funds secured:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Research Initiative Fund, State of AZ</td>
<td>16,997</td>
</tr>
<tr>
<td>Institute for Studies in the Arts, Arizona State University (in-kind)</td>
<td>8,425</td>
</tr>
<tr>
<td>Treistman Center for New Media, University of Arizona</td>
<td>7,285</td>
</tr>
<tr>
<td>Treistman Center for New Media, University of Arizona (in-kind)</td>
<td>4,000</td>
</tr>
<tr>
<td>Banff New Media Institute (in-kind)</td>
<td>26,518</td>
</tr>
<tr>
<td>Gallery 44, Toronto</td>
<td>1000</td>
</tr>
</tbody>
</table>

**Total** 64,225.00