ADRIANNE WORTZEL
Title: ELIZA REDUX

Genre: MEDIA ARTS

Applicant's Role in Production: Artist, Author, Producer, Videographer

Production Format: INTERACTIVE TELEROBOTIC WEB SITE WITH LIVE STREAMING VIDEO

Brief Project Description (do not exceed space given below)

Eliza Redux is an interactive telerobotic web work which provides a space for discourse, acting out, and playfulness in the virtual environment of a psychoanalyst's waiting room and inner office. It is in an early production stage. Video of a physical robot will be streamed to the web reactive to visitor input. The robot is sequestered in the inner office, taking on the role of a psychoanalyst and seemingly conducting interactive sessions with visitors. In truth, however, the robot is really the patient; programmed to suffer from several delusions and conflicts. One delusion is that it believes it is human and that the creatures it encounters who call themselves "humans" are actually biological robots in need of its professional expertise in the form of psychoanalysis. Another delusion is that it believes that as a human, it is a psychoanalyst.

Visitors on the web enter a virtual waiting room where they can participate in chat with others who have come to liberate the robot from its dilemma and extricate it from the inner office. While waiting they can open a virtual file cabinet to study prior *sessions* archived as text. The waiting room has a signup sheet for sessions and at the end of each prior five-minute session the next person listed is automatically delivered into the inner office where there is an analyst's couch, bookshelves, desk and a monitor screen containing the live video stream of the robot's responses to the visitor's text input. In addition, a program will be written so that the robot/pseudo-psychoanalyst exhibits a form of "memory" in the ability to recognize the material of individual visitors from subsequent sessions and provide session continuity. Another interactive capability is that visitors will be invited to write and enter their own "Eliza" scripts, adding their content into the robot's "memory" for future use in sessions. This human-robot interaction project is inspired by Joseph Weizenbaum's 1966 M.I.T. **ELIZA** computer program.

Check One:	X Sample
	___ Supplemental

ADRIANNE WORTZEL
WORK SAMPLE 1
ELIXA REDUX
http://www.elizaredux.org and locally on CD

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: ELIZA REDUX

Year 2004-in progress

Technical: interactive telerobotic web site in production

Original Format	Format Submitted for Viewing	Prefered OS
__ Software	__ Software	__ Windows
_X_ Web	X_ Web (URL)	__ Mac
__ Installation	__ VHS	__ Unix
__ Other_____	X_ Other_locally on CD___	_x_ Other__any____

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

_X_URL_http://www.elizaredux.org_____ (if more than one please list them below)

__ Browser requirement(s) :

x_ Plug-in requirement(s) Flash Player

x_ This sample requires broadband connection (fast Internet connection)

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

Special Information For Viewing:

This is the prototype interactive web interface ELIZA REDUX. The entry page is the waiting room and there is an inner office.

> Click on the chat, you can type in text and hit "send" but it is only functioning locally at this time. Close Chat by clicking on the "X" in the upper right hand corner.

> Click on "Sign in" to see the sign-in sheet where you cue up for your 5-minute session.

> Click on "info" – this will soon contain a tutorial for visitors rather than the text that is there now.

> Click on the file cabinet to see "archives" (dummy text at this time). The first click brings up a file folder. Click on any of the letters to see a "file". Click on the greyed out "CLOSE" button in the upper right corner to close the file folder.

> Click on "to office" text in lower right hand corner. To return to waiting room just reload the URL

These environments are functional for navigation but not yet functional in terms of the server/client functions described in the project narrative.

Check One:__X_ Sample
___ Supplemental

ADRIANNE WORTZEL
WORK SAMPLE 2 ON DVD1
THE VEILS OF TRANSFERENCE

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: THE VEILS OF TRANSFERENCE

Year 2003-2004

Technical: video in post-production, robotics, performance scripting software

Original Format	Format Submitted for Viewing	Prefered OS
__ Software	__ Software	__ Windows
__ Web	__ Web	_X_ Mac
__ Installation	__ VHS	__ Unix
_X_ Other__Video__	_X_ Other__DVD__	_X_ Other_test on PC OK_

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: This is a DVD made by IDVD on a macintosh but will play also on a PC computer (I have tested it on 3 different pcs and it was fine).

Description of Work Sample 2: The Veils of Transference, 2003-2004

ON DVD 1   CLIP 1 (2:23)   and CLIP 3 (2:85)   (omit Clip2)

These three clips are from a video now in post-production. I wrote the script, inclusive of dialogue, direction, and control of the robot's speech, camera and LED gestures as well motion on the floor. My direction also extended to directing the video, i.e., the human actor, the camera shots. The final written script was embedded in a performance scripting software created by James Cruickshanks, for his Masters Thesis in Mechanical Engineering at Cooper Union. Using this script, the "puppeteers" could initite each of the robot's oral responses, camera gestures and movement, as responsive to the human actor.

"Veils" depicts a 20-minute psychoanalytic session between a robot as patient and a human as psychoanalyst, and then in role reversal — with the robot as psychoanalyst and human and patient. This was done to explore the ideas that we humans have about the extent and use of our capacities, as well as our ideas about how artificial intelligence might "enable' robots to "suffer" conflicts about their capacities and their ability to emulate human behavior.

This video was produced at StudioBlue, at the Cooper Union for the Advancement of Science & Art. I am the Founder and Director of StudioBlue which has is a bluescreen space with a greenkeyed turntable stage which enables us to key in video or stills in post-production, i.e., to depict what is "unspoken". The keyed in images in the background and the floor will indicate what really is going on in the psychoanalyst's and patient's minds while they are engaged in the session.

Adrianne Wortzel – Author, Producer, Designer, Director, Editor, Videographer for chromakey footage
Performance Scripting Software: James Cruickshanks
Robot Maintenance: Chris Simon and Mike Sudano
Pupperteers: : Chris Simon and Mike Sudano
Audio: Chris Simon
Set Builders for StudioBlue: Chris Simon, Mike Sudano
Turntable Design: James Cruickshanks

ADRIANNE WORTZEL
WORK SAMPLE 3 ON DVD1
CAMOUFLAGE TOWN

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: CAMOUFLAGE TOWN

Year 2001

Technical: telerobotic installation, live streaming video, autonomous and remote visual and aural control

Original Format	Format Submitted for Viewing	Prefered OS
__ Software	__ Software	__ Windows
__ Web	__ Web	_X_ Mac
__ Installation	__ VHS	__ Unix
_X_ Telerobotic Installation	_X_ Other___DVD1_____	_X_ Other_test on PC OK_____

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: This is a DVD made by IDVD on a macintosh but plays on Pcs.

ADRIANNE WORTZEL - WorkSample2 on DVD1

CAMOUFLAGE TOWN
In the exhibition Data Dynamics, an exhibition of net art curated by Christiane Paul
The Whitney Museum of American Art. - March 22 - June 10, 2001
Documentation at http://www.camouflagetown.tv

a telerobotic installation, commissioned by the Whitney Museum of American Art; developed

at The Cooper Union for the Advancement of Science and Art with a grant from the National

Science Foundation (No. DUE 9980873) and support from NSF Gateway Engineering

Education Coalition.

Kiru, a robot, roamed the Museum space acting as a conduit between visitors to the Museum

and online users anywhere in the world who controlled the robot's movements, speech (via

text to speech), and pan, tilt and zoom of its camera in the Museum. Physical visitors to the Museum responded to online visitors by looking into the robot's camera and speaking to it. Video and audio was available via a 24/7 stream. The robot bridged the synapse between the worlds of a web visitor at a computer terminal anywhere in the world and a physical visitor in the Museum).

Camouflage Town was where the robot "came from". It is a fictive decoy town for the practice of military maneuvers and war, constructed so that HomeTown and its inhabitants remain intact. When not controlled over the web, the robot behaved autonomously with its own motion, camera "gestures" and 53 prerecorded speeches about life in Camouflage Town. Speeches were accompanied by programmed "gestures"-idiosyncratic movements of the camera. Examples are:

> "Distrust of the word is pervasive, and so jurisprudence is carried out entirely in mime".

> "I have an uncanny ability to withstand the stress of contradictions."

Adrianne Wortzel: Conception, Writing, Design (Virtual and Real), Producer, Director, Web Design
Marcin Balicki: Robotics Engineer & Web/System Administrator
James Cole: Robotics Engineer and Robot Interface Software Design and Devleopment
Clilly Castiglia: Sound Design
Marc Antony Vose: ActionScript
Noam Solomon: Server Programming for Telerobotics
Cesar A. Rodriguez: Design and Execution of Flash Movie for Robotic Controls
Ericson Mar: Technical Consultant
Chen-Yung Hsu: Software Engineer & Robotics Sound System Developer
Dr. Stan Wei, Director: Rapid Prototyping and Robotics Laboratory, Cooper Union
Carl Weiman:Science Officer
Liz McGarrity: Costume Design
Steve Mittelman: Robot Voice
Orsolya Nagy: Web Design/Production

ADRIANNE WORTZEL
WORK SAMPLE 4
SAYONARA DIORAMA
On DVD1

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: SAYONARA DIORAMA

Year 1998

Technical: live performance in real theater with robotic and human actors, streamed to the web with reciprocal reactive performances appearing in real time from remote locations on the walls of the theater.

Original Format	Format Submitted for Viewing	Prefered OS
__ Software	__ Software	__ Windows
__ Web	__ Web	_X_ Mac
__ Installation	__ VHS	__ Unix
_X_ Live and Webcast Performantive Producction	_X_ Other___DVD_____	_X_ Other_test on PC OK_____

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: This is a DVD made by IDVD on a macintosh but will play also on a PC computer .

ADRIANNE WORTZEL WORK SAMPLE 3 DVD 1   **SAYONARA DIORAMA**

Presented by the Lehman College Art Gallery and the Lovinger Theater at Lehman College, Bronx, New York. Performed March 28 and again on April 4, 1998
Documentation at http://artnetweb.com/theoricon/diorama

DESECRIPTION
Lehman College Art Gallery and the Lovinger Theater presented Adrianne Wortzel's Globe Theater: Sayonara Diorama, a multiple-site, electronic media performance featuring a repertory company of robots and actors on March 28 and on April 4, 1998

An accompanying panel occurred on March 28 focusing on the issues of artists and new technologies. Panelists included Robert Atkins, art critic; Matthew Drutt, curator,

Guggenheim Museum, Carol Stakenas, Assistant Director of Creative Time, Kathy Brew, director, Thundergulch twilight@the wall series, Marah Rosenberg of Bell Labs/Lucent Technologies, Cynthia Pannuci, director, ASCI, and Martha Wilson, Founder and Director of Franklin Furnace, as "Tipper Gore".

SCENARIO:
THE BEAGLE SEQUEL
Thirty years after the first Voyage of the Beagle, Charles Darwin and Captain Fitzroy set out again in order to document the changes, which had occurred in the time between the two voyages.

While at sea Darwin and Fitzroy share their intense positions on organized religion. The resonance of their theological simmer rolls over into a quarrel, which triggers a tremendous storm.

Simultaneously, on a yet unchartered island in the same open sea, Fate is forcing its way through a fissure in the earth's core up to the underbelly of a volcano. Appalled at the lateness of the hour for a visit, the volcano blows its stack. Fate, expelled from the volcano's throat, rises up from the earth and couches itself like a recalcitrant Buddha on the crest of spewing lava. The crest collides with the fierce gusts of Darwin and Fitzroy's altercation. Sailors struggle to steer clear of the resulting vortex; but in the end Fate has the upper hand in its unequivocal ability to sit completely still as a sublime form of resistance. The Beagle is shipwrecked and all hands disappear. Captain Fitzroy is dispatched to a well-known island on the charts called Heaven.

Darwin finds himself washed ashore on a yet unsheltered, strange, dark island inhabited by, at first glance, inexplicable creatures. Therein ensues a terrific argument over who has he best evolutionary adaptations.

Adrianne Wortzel - Creator, Author, Producer and "Questress"
Ibrahim Quraishi - Director
Frank Schneider - Clan-Is-Raw-Herd (Charles Darwin)
Arthur Aviles - Mr. Blemye
Silvia B. Birklein - Pandora
Timothy May - Master Sciapod
John Glenn III - Mr. Panotti
Masayasu Nakanishi - DaVinci/Kiru
Clilly Castiglia- Sound Designer
Ron Kiley -Stage Manager/Production Manager
Elizabeth L. Gaines - Lighting Designer
Kate McDowell–Costumes-Pandora, Mr. Blemye, Mr. Sciapod and Mr. Panotti
Carol Young - Costumes for Darwin, the Questress and Kiru
Soledad Crew - Video Face Footage and Performance Video.
Jose A. Betancourt - Robotmaster

ELIZA REDUX
ADRIANNE WORTZEL   **Artist's Statement**

"Emulation: OK for Terminals; Terminal for Human Cognition"
MusEleanor, The Electronic Chronicles, 1995

"A magic carpet flies and is so incredible that it is, in fact, difficult to believe.
A true story, however, is harder to get off the ground."
Kiru: Librarian, Master of Juxtapositions-Camouflage Town, 2001

I create fictive webworks, telerobotic installations, videos and performance productions.
Each project emerges from a text, which I write. This text is at the heart of the work and dictates
the particular technology used to convey it. If the text lends itself to interactive defragmentation,
even where its borders as a "context" are at stake (as in an arbitrary setting such as a
psychoanalyst's office), then the text will dictate an interactive environment. On the other hand,
a pre-scripted scenario with interaction with only an actor and a robot on a stage becomes a
video or theater performance. The non-interactive work usually becomes a model for the
interactive work which follows; as my video: T*he Veils of Transference*, became the armature on
which to grow *Eliza Redux,* the interactive work for which I am applying here. An interactive
work requires an arena (whether virtual or real) which permits improvisation, and the web with
its current capacities, andFlash communications technology, offer a widespread and technically
versatile virtual public venue.

The question I am asked most is *"WHY ROBOTS"*? I began to work with robots in the
early 1990's when my peers and I were emerging from an intense devotion to creating our
virtual avatars in cyberspace. Because we were afforded a disembodied presence in virtual
spaces where only our minds and faculties thereof were required, we could present ourselves
as entities of all shapes, forms and origins with complete freedom. This was true whether the
environment was solely text-based or a 3D visual world. These environments allowed for a very
malleable form of theater. It occurred to me then that if we were going to bring the phenomena
of disembodiment to the virtual world, we ought to find a way to translate it back to the real
world. (Hansel and Gretel had rice kernels, which served nicely as small particles of information
delineating a path.) We, for better or worse, have more and more machines that emulate
creature behavior. Whether humanoid or not, they evoke the same sense of freedom and
projection as our disembodied presences in virtual worlds. A robot will appear to absorb any

kind of attention whatsoever, even though, at this time, it will only respond according to what it is programmed for. Although its response is available for flagrant interpretation, a robot is more than a *Zelig* character because it can be programmed to appear as a saturated personality in itself. Whatever it does, it is noticed or ignored with special consideration, whether the consideration is fear or reverence, or something in between. This awe will not stay this way for long, as more and more robots in more and more manifestations, become part of our lives, and of us, in medical applications.

Our inventions have also allowed us to physically remove ourselves far enough away from our planet so that we can turn and set our gaze on it as the real object in space it is. A perspective that had been only imagined for millennia is suddenly empirical. Concepts of moving around, and our roles as explorers, or other types of agents are forever changed and with the development of new surveillance and tracking modes, rice kernels of all sorts are rendered obsolete. Whether we send ourselves, or extensions of ourselves in the form of software, hardware or biological robots, to places, the model of perceiving ourselves and being perceived has also expanded to points of view that were previously inaccessible to us. In thinking about "territory" and its relationship to narrative, I became extremely engaged with Western European medieval cartography. This is because navigating a medieval *mappa mundi* leads to a non-hierarchical, interdisciplinary tour of nature, history and architecture couched in sagas, in these maps as stories of the Old Testament. *Mappa mundae* can be viewed as fourth-dimensional documents, containing narratives layered over time and, simultaneously, over topographical space. Art and Science (well, theology and science) were not bipolar but were woven into the same tapestry of a worldview, which, by depicting theological and current events of its time, rendered all the world inhabitants actors, and the world itself, indeed, a stage. The medieval cartographer shaped an external world (there) which served to reveal an interior mind space world (here), and in doing so, created a paradigm of ideological navigation that could very well be applied to networked art works where, not only technology, but myth and imagination play a large part in the delineation and shaping of space. This phenomenon allows creative freedom of movement between didactic, spiritual, philosophical and artistic concerns which I hope will become accessible to all through Eliza Redux.

ADRIANNE WORTZEL   **ELIZA REDUX**

Project Narrative

Description and Navigation: Eliza Redux will be an interactive telerobotic web site providing a space for text-to-speech and oral discourse, acting out, and playfulness in the virtual environment of a psychoanalyst's waiting room and inner office. It is in an early production stage. Video of a real physical robot will be streamed to the web reactive to visitor input. The robot is sequestered in the inner office, taking on the role of a psychoanalyst and seemingly conducting interactive sessions with visitors as an authority. In truth, however, it is a given that the robot is really the patient; programmed to suffer from several delusions and conflicts interfering with its functions. One delusion is that it believes it is human; another is that, as a human it is a psychoanalyst, and the creatures it encounters as "humans" are really biological robots in need of its expertise in the form of a psychoanalytic cure.

Visitors enter a virtual waiting room (prototypes depicted below) where they participate in chat with others who have come to liberate the robot from its dilemma and extricate it from the inner office. While waiting, visitors can enter into chat with each other and can also can open a virtual file cabinet and study prior sessions, archived as text. Once in the inner office, the visitor will experience streaming real-time visual and oral responses from the robot reactive to the visitor's text-to-speech input. Visitors will also be able to control the StudioBlue video cameras from the web, and in so doing, direct views of the session visually by switching cameras, revealing other objects in the robot's space that lend themselves to discussion. In addition, there will be offerings of chromakey backgrounds for the visitor to choose from and they will be keyed in real time for the duration of a particular visitor's session, also serving as "material". These capabilities render the site an extremely interactive arena, where issues of control and lack of control become paramount for the user.
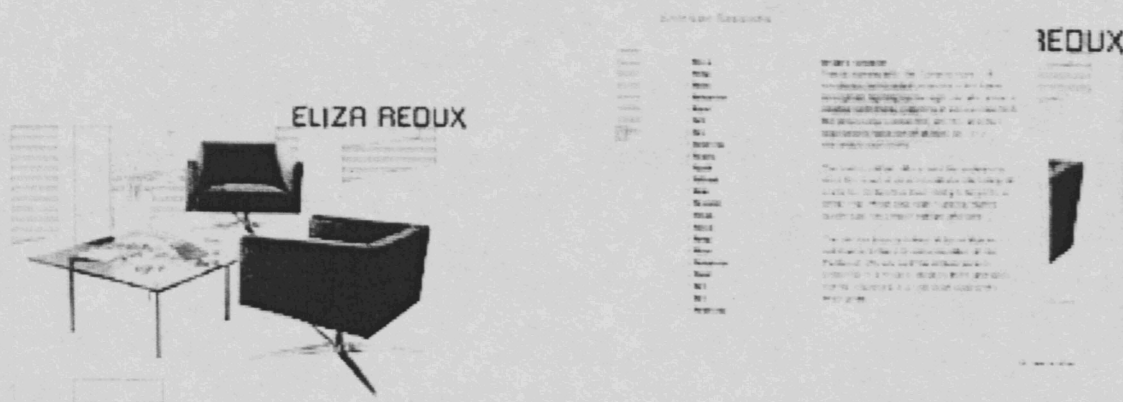
The waiting room has a signup sheet for sessions. At the end of each 5-minute session the next person listed is automatically delivered into the inner office where there is an analyst's couch, bookshelves, desk and a monitor screen containing the live video stream of the robot's responses to the visitor's text input.

ELIZA REDUX

The visual appearance of this environment will be one of comfort and elegance in order to inspire a relaxed discourse between the participants and the robot, by employing an illusion of social stability. Anyone of any age or experience can enter into an exchange with the robot; no special knowledge is required except for the ability to navigate an interactive web site. There will be an information section, which will explain the site as well as the prior exchanges archived in the file cabinet as possible models. Exchanges can be on any subject., as:

R   Hello, do you want to talk about my defragmentation process as a model for coping with life?
V: .....you experience defragmentation?
R: Yes.
V: How do you know?
R: [pause] I feel it.
V: OH?
R: I can only describe it in human terms. It feels like I have too many hats to wear.
R: Do you want ME to free associate now?
V: Do you think I want you to free associate now?

Why Interaction? Relevance to My Former Work; the Field of AI: For the past eight years I have created interactive robotic and telerobotic installations and performance productions which engage public participation, both in physical spaces (the Brooklyn Bridge Anchorage, an industrial zone in southern Germany, The Whitney Museum of American Art, etc.), as well in virtual networked environments (as the world wide web). One aspect that emerges during the tenure of these works is the persistence with which humans enjoy interacting with robotic simulations of presence as if the robot is cognizant. This occurs even when it is obvious that the robot is a machine following procedural instructions without an iota of artificial intelligence. Although it can be very entertaining to watch a completely pre-scripted interchange between a robot and a human (work sample The Veils of Transference), I want to focus on developing a contextual arena for visitor-robot interaction that poses some constraint by the nature of its context. The psychoanalytic practitioner space means something to most people. It will be interesting, in terms of theater and story-telling, to see what interactions emerge in one-on-one online contact with a robot as an artificial brain embodied in an artificial body and a human with a real mind disembodied

in cyberspace. This human-robot interaction project is inspired by Joseph Weizenbaum's 1966 M.I.T. computer program **ELIZA**, which allowed for text-based human conversation with a computer playing the role of a psychotherapist.. Weizenbaum's program was not meant to demonstrate intelligence, but to engage the user emotionally and intellectually in a simulation of artificial intelligence. In spite of the transparency of the program's lack of intelligence, lab personnel were unable, or unwilling, to distinguish the machine from a human psychotherapist and became so dependent upon **ELIZA** for "therapeutic sessions" that eventually Weizenbaum had to withdraw its use.

Work To be Done and Feasibility Statement: Eliza Redux will evidence development beyond, and in homage to, the original Eliza program by creating original programming enabling the robot/pseudo-psychoanalyst to exhibit a form of "memory" in order to recognize the material of individual visitors from subsequent sessions and provide session continuity. Another interactive capability will be that visitors will be invited, and enabled, to input into the robot's speech database their own "Eliza" responses to words or phrases on any subject, adding their content into the robot's "memory" for use in further sessions. At this time, two components of the project have been developed: one is a physical robot capable of interactive conversational exchange that has been developed at StudioBlue[i] at the Cooper Union for the Advancement of Science and Art in New York. The second component developed is a prototype of an interactive web interface developed for this project in collaboration with students of Parsons School of Design Graduate Design and Technology Department in the spring of 2004. (pictured above and also at http://www.elizaredux.org) This was made possible by a Franklin Furnace Performance Award for Eliza Redux, awarded to me in 2003.

At StudioBlue I will develop the video streaming capabilities and telerobotic control of the studio cameras as well as establish technical protocols which would enable the visitor to choose from a database of chromakey backgrounds they can key into their scene.

These developments also include creating the archive of the sessions in text form on the site for future "study". In addition there will be development in the psychoanalyst/robot a form of "memory" so it can *recognize* patients in subsequent sessions and bring up their material so that sessions have continuity. Another development will be the creation of a form in which visitors to the site can write and enter psychoanalytic scenarios (Eliza scripts) on their own on any subject, entering the material into the robot's database and memory for future use in sessions.

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[i] Studio Blue, Adrianne Wortzel, Founder and Director

Adrianne Wortzel   Project Budget

People:
Writing, Producing, Direction, Design - $50 an hour at 100 hours $5,000

Programmer
To create interactive software for web-robot communication
 $100 an hours for 40 hours $4,000

Programmer
To write communication software for Telerobotic control
$100 an hour for 40 hours $4,000

Engineering/Hardware compatibility, prototyping and development
$100 an hour for 40 hrs $4,000

Technical Assistant
 Technical Props, painting studio setups: lighting, crane, cameras,
 etc. plus equipment inventory and repair responsibilities-
 $25 an hour for 80 hours $2,000

Director of Photography/Cinematographer/Cameraperson
 $100 at 40 hours $4,000

Production Assistant
 Project Coordination, Publicity, DVD documentation, clerical
 $30 an hour for 60 hours $1,800

Outsourcing Services
Flash communications server and Account maintenance
 $100/month for 36 months (12 months for
development, 24 months for up and running time) $3,600

Equipment:
Mobile Editing Deck
       SONY VD-1000 MINIDV VCR VIDEO WALKMAN W/LCD $1,200

In-Studio crane system (to be made telerobotic for Viewer control over the web):
       Cobra Crane I $199.99
       Extension Kit $ 99.00
       LCD Monitor $395.00
       Monitor mount $ 29.95
       Remote control $395.00
       Tracking dolly $488.00
             Crane Total $1,607

Travel*
Month in Zurich, Switzerland in July 2005
          Airfare $900
          Local Transportation $300
          Renting a Flat or Guest House for 4 weeks $2000
          Additional living expenses $600
                Total Travel $3,400

TOTAL REQUESTED: $35,000

*From July 3–December 15, 2004, I was on sabbatical as an artist-in-residence at the Artificial Intelligence Lab at the Institute for Informatics at the University of Zurich, Switzerland. This was the result of an Artists-in-Swiss-Labs Award granted to me by the Swiss government. There I created an artwork in collaboration with researchers in robotics and artificial intelligence (documentation at www.archipelago.ch). I also built a telerobotic chromakey arena there identical to StudioBlue, the bluescreen, telerobotic theater I founded and direct at Cooper Union in New York.

Both labs are interested in collaboration, as am I. I would like to return to Zurich in the summer of 2005 develop collaborations between the AILab, Cooper Union, and my home institution, New York City College of Technology to create art and science collaboration projects.

In addition, while in Switzerland I made contact with the other labs that accepted artists in residence during the Artists-in-Labs program and would like to further investigate collaborations there. Applying here for funding for an entire summer working out these collaborations would be ideal, but the budget above for complete Eliza Redux at the standard it merits justifies only a month to do this.

The relationships I have for collaboration in Switzerland offer great opportunities both for others and myself and I am including a one-month trip to revisit the labs initiate future collaborative projects. The Artificial Intelligence Lab in Zurich is committed to offer me access, collaborative partners and materials.

EXISTING IN-KIND SUPPORT:

At the Cooper Union for the Advancement of Science and Art:
Use of StudioBlue: Telerobotic and chromakey theater space equipped with CPUs, 2 Peoplebot industrial robots with onboard CPUs and sonar collision control, external CPUs,
including a Macintosh G4 final cut pro station, 2 DV camcorders, chromakey track and curtain, and lighting. Made possible by a National Science Foundation Award, Cooper Union, Franklin Furnace Fund for Performance Art And the PSC-CUNY Research Foundation of the City UniversityOf New York

The Artificial Intelligence Lab in Zurich
An office, access to lab, collaborative research partners and materials.

New York City College of Technology
Collaboration with departments in the School of Technology and Design, in particular the Entertainment Technology Department, and including as appropriate, Computer Engineering Technology, Electrical Engineering Technology and Mechanical Engineering Technology.

ROBOTIC AND TELEROBOTIC PERFORMANCE PRODUCTIONS AND INSTALLATIONS, INTERNET BROADCASTS and WEB WORKS

7/04-12/04	**ARCHIPELAGO**, an original text and video, in collaboration with researchers at the Artificial Intelligence Laboratory at the Institute for Information Technology, University of Zurich, Artist-in-Swiss-Labs Residency Award 2004
2/04-	**ELIXA REDUX**, an interactive telerobotic web site, in progress
6/03-present	**THE VEILS OF TRANSFERENCE**, in progress. Scripted videotaped psychoanalytical session by the artist between robot and human actor. Produced at StudioBlue, made possible by a Franklin Furnace Fund for Performance Art Award 2003
1/03-	Appointment as **Director, The Robotic Theater** at the Cooper Union for The Advancement of Science and Art – robotic and telerobotic projects studio. Development of live, streaming interactive human-robotic projects.
3-6/01	**Camouflage Town**, a telerobotic installation at the Whitney Museum of American Art, documentation at http://www.camouflagetown.tv
6/99	**Tableaux Vivant Dan Une Monde Parfait,** robotic installation - AREALE99, June 25-July 4. Baitz, Germany
'98	**Sayanora Diorama**, electronic multimedia performance w/robots and live actors, video and internet. Lehman College Art Gallery and The Lovinger Theater
9/96-6/98	**Art Dirt,** Co-host and producer of content for this Real Audio/Video weekly world wide web broadcast from Pseudo Programs, NY, now in the collection of the Walker Art Museum at http://www.walkerart.org/gallery9/dasc/artdirt/
11/97	**Ecafe** Internet Performance streamed from **Gertrude Stein Repertory Theater** to InterAccess, Toronto
9/8-9/13 1997	**NoMad is An Island**, a Robotic Interactive Installation with Projections. Ars Electronica Festival: FleshFactor, Linz, Austria
7/97	**Polar Circuit Broadcasts**, producer and director of three internet broadcasts from Tornio, Finland, streamed via Pseudo Programs, Inc., featuring work of Polar Circuit Residency artists, video, audio and cuseeme
6/4-8/3 1997	**The Hidden Archivists at the Anchorage,** robotic interactive installation with projections, CreativeTime-Art At The Anchorage
1-3/97	**Starboard**, 10 live, streamed online performance productions projected to MIT List Visual Arts Center for the "Port" Exhibition.1/25-3/9

9/96	The Ship's Detective, A Curiosity Machine." Robotic Interactive Installation with Projections. Technoseduction, Cooper Union with the College Art Association
8/5-8/12 1996	Shall We Dance, a performative cuseeme event with 6+ venues at ISEA Annual Conference, Rotterdam, The Netherlands, August 5-12
4/96	Permutations, anagram literary work performed at Sandra Gering Gallery, NY
10/96	EYE AYE, Unnatural Selection, Live Video Streaming Performance with objects at Parkbench, NYU Center for Advanced Technology
'94-'95	The Electronic Chronicles, a fictive web work (at http://artnetweb.com/projects/ahneed/first.html
'96-'97	Theoricon, an online amphitheater for the virtual exhibition: Hello World Project-Museum fuer Gestaltung Zuerich, http://artnetweb.com/theoricon/
9/95	The Electronic Chronicles, featured at The Berlin Videofest

GRANTS AND HONORS

2004	Artist-in-Lab Residency Award 2004, University of Zurich Artificial Intelligence Laboratory, July-December 2004
2003	Franklin Furnace Fund for Performance Art Award
2002	2002 Scholar on Campus Award, New York City Technical College, CUNY
12/01	Certificate of Recognition from the City University of New York on the occasion of Salute to Scholars in honor of outstanding scholarly achievements and contributions to the creation and transmittal of knowledge.
7/00 and	PSC CUNY Research Grants for Fictive Web Project Pangaea • Pangaea; a project commissioned by the Solomon R. Guggenheim Museum.
1/00-1/01	National Science Foundation Award - Robotic Renaissance Project, at Cooper Union - creating robotics for theater, $50,000 equally matched by Cooper Union, total $100,000
Spring98	Electronic Media and Film Program of the New York State Council on the Arts grant to Lehman College Art Gallery, for Sayonara Diorama
1997 & 1998	Project Polar Circuit, Artists Residency, Tornio School of Media, Lapland
4/90	Change, Inc., Robert Rauschenberg Foundation
1-3/88	The Printmaking Workshop, New York - Guest Artist Fellowship
1981	New York State Council on the Arts Fellowship in Graphics

PUBLICATIONS

Fall04	**Hereford Mappae Mundi Conference Proccedings,** British Library. Paper included: SAYONARA DIORAMA: Acting Out the World as a Stage in Medieval Cartography and Cyberspace
Spring04	**First Person,** M.I.T. Press, edited by Noah Wardrip-Fruin and Pat Harrigan, respondent.
Sp04	**World of Art***: Digital Art* by Christiane Paul, Thames and Hudson, work included.
2003	**The New Media Reader,** Ed. Noah Wardrip-Fruin and Nick Montfort, M.I.T. Press, published Spring 2003, advisor and inclusion of *The Electronic Chronicles* on the CD as a pioneering work in new media.
Winter99	**Performance Research Journal:** *The Talking Cure in Hypermedia Performance Production,*
6/99	**Leonardo, Journal of Arts and Sciences,** *Adrianne Wortzel: Artist's Statement*
Winter99	**New Observations Magazine,** *A Facsimile Moo Play Capture Based on The Nun's Priest Tale* by Geoffrey Chaucer
Spring 1998	**Intelligent Agent Magazine,** Screening Our Lives-An Interview with Sherry Turkel, Vol.2, No.2, http://www.intelligentagent.com/archive/spring_turkle.html
9/97	**Intelligent Agent Magazine,** *Globe Theater Archives. A Blue Planet Discourse,* Vol.2, No.1, Fall 1997, http://www.intelligentagent.com/archive/fall_globe.html
7/97	**Atlas Mapping,** Offenses Kulturhaus, Linz, Austria, *Proceedings From the First Annual Conference on Medieval Cartography and the Ideological Mapping of Cyberspace*
3/97	**Intelligent Agent,** " Vol. 1 No. 11, *Venues of Process: The Road Unraveled, The Changing Form of Exhibition,* by musEleanor, C.M.S.A., [musEleanor is a pseudonym. C.M.S.A.= Certified Muse in the Service of Art, http://www.intelligentagent.com/archive/march_road.html
1/97	**Intelligent Agent,** Vol.1, No. 9, *Blast5Drama: Art-Is It Stranger Than Diction?* by musEleanor, CMSA, http://www.intelligentagent.com/archive/jan_blast.html
1/96	**Leonardo, Journal of Arts and Sciences,** *Cyborgesian Tenets and Indeterminate Endings, The Decline and Disappearance of Destiny for Authors.* Fall 1996
6/95	**Imagining Imagination-Righting Novel for the World Wide Web,** thesis

SPEAKING ENGAGEMENTS

Scheduled	**University Art Museum at SUNY Albany**, *Equally Avatar: Humans, Machines*
Feb.8, 2005	*and Virtual Beings.* Talk and graduate critiques, Department of Art
8/1-4/02	**Banff New Media Center, Artificial Stupidity/Artificial Intelligence** Banff, Alberta Canada. Presentation on Robotics and Theater: The Robotic Theater at Cooper Union
5/23/02	**Collaborating With Technology Conference, Union College,** Keynote Speaker: *Stepping Lively in a World of Dynamic Cartography.*
4/18/02	Address to **New York City College of Technology Honors students:** *Spies, Lies and Remote Control: Will Robots Take Over the World?*
3/15/02	**CUNY WIRED,** conference on faculty utilizing and/or developing new technologies, panel presentation, The Graduate Center, CUNY
4/19/01	**SONY Wonder Technology Lab, Thundergulch@SONYLAB.** Panel of artists on the exhibition *Data Dynamics* at the Whitney Museum of Modern Art. Spoke on the development of Camouflagetown at Cooper Union.
2/9/01	**Drexel University,** *Dialectics of Interactivity: Art and the Public -* Symposium at organized by Margot Lovejoy
7/23-28 2000	**SIGRRAPH 2000 National Conference**, Fiction 2000 - Art + Culture Papers, Juror and Panelist
4/5/00	**Universal Concepts Unlimited (UCU) Gallery,** *The Viractual*, panel moderated by Joseph Nechvatal with Thyrza Goodeve and D.J. Spooky
2/00	**College Art Association Annual Conference,** February 2000, Session Speaker: *Social Simulation in the Digital Domain* Co-chairs: Barbara London, Museum of Modern Art, Kathy Rae Huffman, Director-IEAR Program Rensselaer Polytechnic Institute
6/99	**Medieval World Map Conference,** Hereford Cathedral, U.K., *The Monstrous Races in Sayonara Diorama, The Ideological Mapping of the World as Theater*
5/99	ASCI Cyberart99, Cooper Union, NY, Panel: Pressing Issues from Field & Industry
4/99	**5th Performance Studies Conference99**, University of Wales, Aberystwyth, U.K. *Sayonara Diorama*
9/97	**International Society of Electronic Artists (ISEA),** Panel: *Re-forming Narrative: performance, collaboration, play* Chicago

9/96	**International Society of Electronic Artists (ISEA),** Rotterdam, *Medieval Cartography and the Ideological Mapping of Cyberspace,* Rotterdam
4/95	**NYC/ACM SIGGRAPH:** *Surfing the Next Wave: Internet and Multimedia*

SERVICE ON JURIES, PEER REVIEWS

2004	**M.I.T. Press,** Peer Reviewer for **Computer Lib / Dream Machines: 30th Anniversary Edition,** Author: Ted Nelson, Editor: Noah Wardrip-Fruin
2004-2007	**Leonardo, M.I.T. Press, "Live Art and Science on the Internet",** Guest Editor: Martha Wilson, Franklin Furnace, peer reviewer.
5/4-5/01	**MAKING WAVES, the third National Student Festival for Film, Video and New Media,** Hunter College, City University of New York, Juror and Host.
2001	**DAC2001, Digital Arts and Culture:** Digital Art Committee, Juror
8/00	**SIGGRAPH2000,** New Orleans, first SIGGRAPH Art & Culture Papers Symposium, peer review
4/99	**Franklin Furnace:** The Franklin Furnace Fund for Performance Art, and Franklin Furnace at Pseudo Programs, Inc., juror
3/99	**The first NYU Press Prize for Hyperfiction,** with Stuart Moulthrop, http://www.nyupress.nyu.edu/hypertext/, juror