Uncredited Performance Procedures the confluence of interactivity and performance in an installation art setting

Jan Kordylewski Thesis submitted to the Interactive Telecommunications Program New York University May 2006

Introduction

Focus: Interactive art and performance needs to be more engaging and involving for the participant.

Direction: Is it possible to create a satisfying and meaningful live performance that utilizes only the audience and directs them using only interactive technology?

This project comes from two directions that I wanted to develop. One is that I am often dissatisfied with the level of interaction present in most interactive artwork. I am not content with a project that simply reacts to the user and the interaction is in effect nothing more that activating a switch that activates the project somehow. The second is my fascination and exploration of live performance. What does it mean to be live? Why is this necessary? Why do people go see live shows? What is a performance? What are the necessary components?

For the 2005 ITP Winter Show, I created an interactive video installation titled *Now and Then*, which allowed the viewer to interact with the image of their past selves. A thought struck me while watching people interact with the video installation I had made – it was very performative. Can this be a considered a performance? Can the audience and the performer be one? How could I make these actions more explicitly a performance? Could I use interactive technology to direct the audience in their own performance? Are narrative structures possible in such a situation?

I wish to create a performance installation piece that utilizes no "actors" aside from the audience. The audience is coaxed into performing by interacting with certain elements present in their space. I think a "director" can direct/prescribe certain actions to the

viewers in the same way that an interface designer or game designer can direct user interaction in their products. By having a more embodied and interactive experience the viewer is more engaged by the piece can be moved by it more and can take away more meaning form it.

My project is an experiment attempting to answer several questions: Is it possible to create a live performance that utilizes only the audience and directs them using only interactive technology? Can this performance be meaningful? Can this be called a performance?

In exploring the boundaries of performance theoretically, I am also exploring this idea thematically. I feel the ideas of memory, time, and physical existence, are particularly well suited for exploration through the use of interactive technology. I'm also interested in exploring technology's infiltration of our lives and the idea of the viewer/audience having direct input and control of what they see and experience. It is a given now that when confronted with something digital the user has a lot of control over the content. In a DVD you can pause, rewind, jump to scenes, look at multiple angles; in a webpage the user has much control over what they see and when and can follow threads or ideas that are directly suited to them and their interests. I like exploring the idea of setting a number of parameters, as one would in programming, and then allowing the piece to run, only then seeing things emerge that you didn't explicitly program. Applying this programming dynamic to performance art could really push the boundaries of the form. I

am interested in adding these ideas and possibilities into the embodied realm of performance.

The most significant aspect of my project is that I am to applying interactive technology in a performance context to the audience directly not to performers *for* an audience. I literally want the audience to be their own performers. The audience creates a performance by the way in which they interact with certain elements in their environment.

My Background

I am an artist. My medium is installation art and performance art. I started out in set and lighting design for the stage but I've always been interested in experimentation and pushing the boundaries of my field. From design I moved into installation art, but even there I felt it needed a live performance component. That's when I decided I should make Installation Performances. Throughout all of this I've always been interested in technology. I think it's an exciting and necessary component of my work. For many people adding technology to their performance or artwork is merely a gimmick or eye candy. I however, feel that there is a genuine use for it. I think its use can create user/ audience experiences that are unique, unprecedented and relevant to our contemporary lives so inundated with technology.

When I use the word performance I mean an event that incorporates a "live" element, an event that includes some kind of audience vs. performer element, and is an event that

does not easily fit into any other category such as theater or musical performance. Some useful definitions of performance art that I have come across:

"Performance art is art in which the actions of an individual or a group at a particular place and in a particular time constitute the work. It can happen anywhere, at any time, or for any length of time. Performance art can be any situation that involves four basic elements: time, space, the performer's body and a relationship between performer and audience. It is opposed to painting or sculpture, for example, where an object constitutes the work."

("Performance Art")

Also from the renowned authority on live art, RoseLee Goldberg:

"By its very nature, performance [art] defies precise or easy definition beyond the simple declaration that it is live art by artists. [...] Indeed, no other artistic form of expression has such a boundless manifesto, since each performer makes his or her own definition in the very process and manner of execution."

(Goldberg 9)

Additionally, I have found that many instances of installation art that have an interactive component, especially those that requires a full body interaction, can also be looked at from the perspective of performance. For example according to Michael Rush in many video installations "the viewer became a performer, a totally new viewing experience. Unlike performative strategies in Happenings, where viewers went to the event expecting or hoping to become a part of it, the viewer of a work installed in the museum has no such expectation. The privacy of the viewing experience is invaded, and willingly or not, the viewer becomes the viewed not only by herself but also by others." (Rush 124)

During my research last semester I came to realize that "interactive" is also broad in its meaning. Even when their work is completely static and unchanging, many installation

artists view it as interactive simply because the locus of meaning is not wholly contained within the piece but exists as a kind of dialogue between the viewer and it. On the other end of the spectrum, there are many pieces of art and many physical computing projects that are labeled as interactive because of the way the viewer approaches them (i.e. they can press a button or clap their hands). However, upon closer inspection these projects don't interact at all, they simply react in a prescribed manner to user input. Ultimately, in these instances the interaction translates to nothing more than pushing a proverbial "big red button" to which the system responds in a prescribed manner that is no more complicated then the simple action of turning on a light via a light switch on the wall.

I'm interested in making interactive artwork more of a whole body experience. I'm interested in making an environment instead of just an object. I'm interested in crossing boundaries of interactive art, installation art and performance art. I want to find out if my idea is a viable, interesting, pursuable goal. I'm interested in new combinations of existing technologies - Can I put things together that have established uses in a new way that no one thought of before? I love experimenting with technology but I also value interactive work that does not sacrifice embodiment. I think it's important to make interactive work that gives viewers/users experiences that are more physical and performative. I think it's possible to have a fully digital experience that exists mostly in the physical world and includes human interaction in a full body sense.

Context

As an artist it is important to understand what came before you. It is important to understand other artist's lines of inquiry. It is also important to be aware of what others have done so that you don't reinvent the wheel, and if you happen to invent it, you can see how your methodology differs from what others have done.

With that in mind there are many, many influences for my project and many categories in which it can be contextualized but I will focus on only a few. It is influenced by a long history of performance art. It is also influenced by the history of installation art. And most recently, it wouldn't exist without the history of interactive and digital art. I think it's also important to mention video games, which are highly interactive and lately have been getting better and better at presenting narrative in addition to simple interaction. There are many influences and many projects that have explored similar themes to mine but I haven't found anybody who is attempting the same exploration as I am.

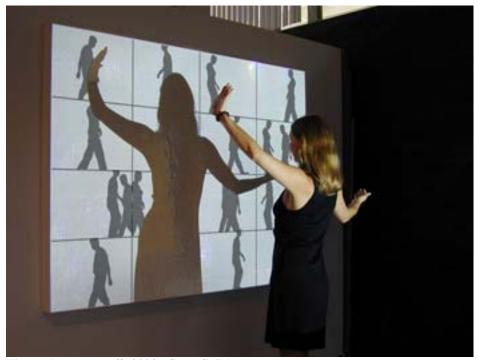


Figure 1 - Deep Walls 2003 - Scott Snibbe

The closest I've seen to the work I am doing is the work of **Scott Snibbe**. His work is digital and interactive. Something unique about his pieces is that all of the content is generated by the audience. In fact it is so audience driven that nothing happens if the audience doesn't interact. His pieces "force" the audience to play. This is also work that encourages whole body interaction.



Figures 2-3 Liquid Time Series 2001 2002 - Camille Utterback

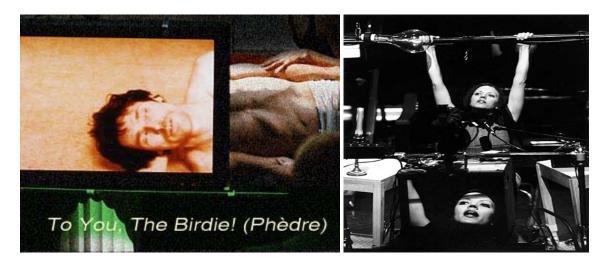
Camille Utterback is another example of an artist working with whole body interaction and using the viewer's performance in front of the work as an element of the work. She explores similar themes to some of the other artists I examined, but is certainly not interested in the performance of the audience as the content of the work. Tracking the audience's movement and making them perform in this case is just an interface for the piece.



Figure 4 - Text Rain 1999 Camille Utterback & Romy Achituv

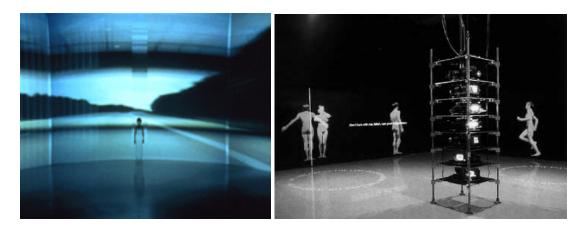
I admire how easily a piece like *Text Rain* gets a viewer to interact. Once again it is a whole body input, the falling letters gather wherever the viewers body obstructs their fall.

Even though their work is highly interactive, both of these artists are video artists rather than creators of performance. They are not focused on experimenting with performance though and are not exploring interactivity or digital art from that perspective. Both of these artists do work with the theme of time and body, something that is inherent to performance, and something that I am interested in exploring in my own work.



Figures 5-6 - TO YOU, THE BIRDIE! (Phèdre) 2002 & House/Lights 1998 The Wooster Group

The Wooster Group could be considered the least interactive and most traditional of all the artists I am influenced by. They are a highly experimental theater company. Their work is about deconstruction. Sometimes they are so successful at deconstructing a traditional play that audience members who come from a traditional theater background may not even consider the Wooster Group's work to be theater. They distill what makes live theater, what defines it, and then push those definitions to their breaking point. Some themes they explore in their work are time, narrative and the body. Their work often includes video monitors on the set that show pre-recorded footage of the same exact scene that is being presented on stage. Often, the live actors are competing for attention from the audience with their own pre-recorded selves. I'm inspired by how they experiment with the interaction between a live performer and digital media.



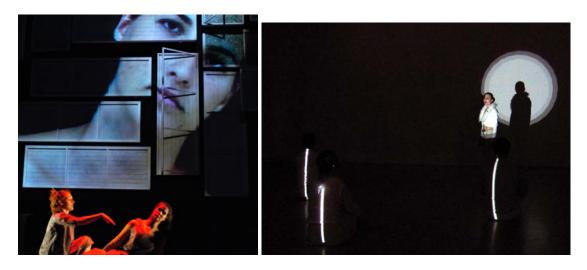
Figures 7-8 - *OR* **1997 Dumb Type**

Dumb Type, a Japanese performance group, are specifically interested in the idea of technology being pervasive in our lives, becoming part of our lives, and becoming our life. They are exploring the intermingling of technology and real life and blurring those boundaries. I really love watching their performance and the way it's hard to distinguish between what is real, what are performers on stage and what is digitally re-created. I like their aesthetic and I find their use of technology inspiring.



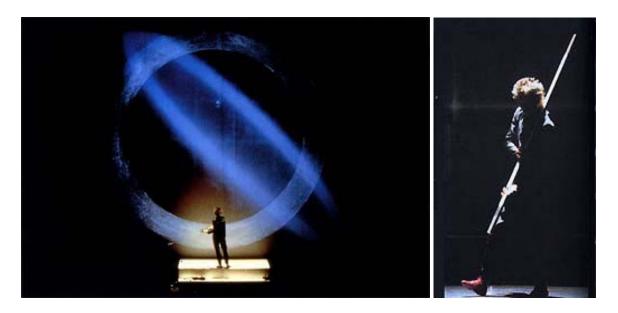
Figure 9 - Supervision 2005-2006 The Builders Association

The Builders Association is the only group I have ever seen whose entire sets are virtual. Beautiful and truly innovative, they create images, live, and before your eyes, of things you have never seen. It's kind of like watching Photoshop in 3D on a giant screen with live actors between the layers. They have a striking visual sense. And even though often I feel their performances are dramatically lacking they are a sight to look at.



Figures 10-11 - [16] revolutions 2005 Troika Ranch

Troika Ranch has really inspired me because they really know how to manipulate interactivity on stage. Their visuals are dynamic and usually not scripted, meaning they actually react on stage to the dancers/performers movements in real time. This is not an easy feat to accomplish in a performance setting and they do it masterfully and flawlessly.



Figures 12-13 - United States I-IV 1983 & Songs and Stories form Moby Dick 1999 Laurie Anderson

Laurie Anderson has been creating amazing large-scale productions exploring
technology and storytelling since the early 1980's. She is a pioneer in combining
physical computing and art, as well as incorporating technology into live performance.

Often times she performs with the objects she has created. Her objects and set pieces
often are interactive and serve as triggers for events to happen on stage.



Figure 14 - ACCESS Project 2003-2006 - Marie Sester

The ACCESS Project is an interactive installation by Marie Sester. For her the locus of interaction lies in the fact that this project has a web interface that allows users to choose whom the spotlight will be focused on. That is an interesting use of interactivity but for me the true locus of interaction in this project is between the people in the space and the spotlight. From the documentation it is evident how people react to being chosen. They try to figure out what is happening, they try to get away from it, they try to pass it to other people, and some even revel in the fact that they are in the spotlight.

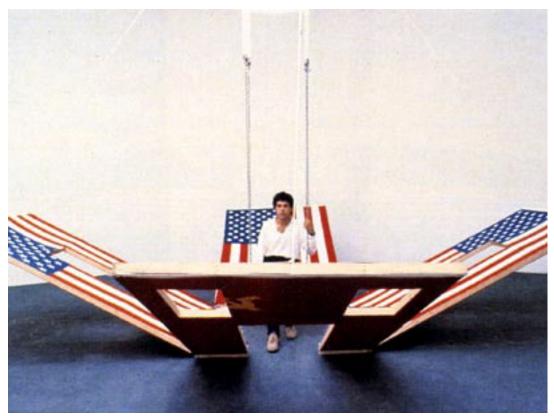


Figure 15 - Instant House #2 1980 - Vito Acconci

When **Vito Acconci** created Instant House #2, he was still working as an installation artist, rather than his current role as an architect. He made fully participatory interactive installations. What I find inspiring about this work is the fact that it's interactive without using a microprocessor or any digital technology. These pieces were dynamic because they did not fully manifest themselves without an audience member engaging, and in a way - performing.



Figure 16 - VB35 1998 - Vanessa Beecroft

Vanessa Beecroft's installation, counter to intuition, is not a performance. This is an example of using live beings as a purely visual and material choice for her particular aesthetic. Her work allows you to think about live performers from a purely formal approach.



Figure 17 Video Corridor 1968 - Bruce Nauman

This Piece by **Bruce Nauman** is one of the first to use live video of people interacting with it as part of its content. It also raises issues of surveillance, of involving the viewer in a kind of performance without their knowledge or consent.



Figure 18 Half-Life 2 2004 -Valve Software

The ground-breaking video game, **Half Life 2**, is a fully interactive narrative - one of the first games to really pull the player into a story with out using cut scenes. In this game, the story and the action are one. What is amazing and inspiring to me is the ability of this game to tell a very involving narrative even though the whole game is presented from a first person perspective, fully controlled by the player. The feat is similar to being able to experience narrative in a movie that you are part of and where you are free to walk around and engage with the environment as you choose.

All of these artists I've described use technology in new and experimental ways.

However, I feel some of these uses of technology can be pushed even further to enhance and emphasize its particular aspects. I feel there is a disjoint between groups that are truly innovative in their use of technology and groups who use technology in their work in an innovative way. Most of the work is screen based, and there is a distinct line between user and computer and both are visible. On the other hand, people who are trying to blur the boundaries between computer and user, people who try to take the screen visualization and embody it, take it off of the screen and thrust it into the physical world usually loose some of the technological innovation. I think that there are ways to

better blur these two modes of creation. I'm also interested in the more sculptural elements of technology. I want it to occupy both the performers' space and the audience's. I'm interested in the ways it can help blur the lines between audience and performer.

Generative frameworks are another influence that I am interested in employing in this project. In software art it is possible to program something where the outcome on the screen is always different. There is a long history of programming random output in software art. According to Christina Paul this history can be traced as far back as "Dada, Fluxus, and conceptual art. The importance of these movements for digital art resides in their emphasis on formal instructions and in their focus on concept, event, and audience participation, as opposed to unified material objects" (Paul 11). The artist programs the environment and the general aesthetics of the way the output will look. But there are elements of this output that are influenced by chance or by user input. In that way the end result can surprise even the person who programmed all aspects of the project. A lot of artists experiment with adding random processes to their algorithms because programming is so process oriented. Ordinarily the point of writing a program is to obtain a specific result as the outcome of a set of procedures and formal instructions. Computing is supposed to be the opposite of random fluctuations and organic informality. But now artists who work with computers are more and more interested in creating things that are born from formal instructions and result in more organic forms and often have results that are unexpected.

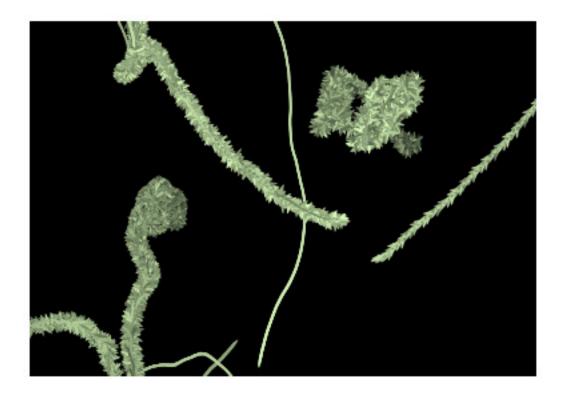


Figure 19 - Crawlies 2005 - Jan Kordylewski *

Crawlies is a piece I did for a Nature of Code class and it is an example of a generative framework. I wrote all of the code, so in essence everything that happens on the screen is only there because I wrote it into the code. And yet because of the way the code is written as a generative framework every time I run the program I encounter new forms and the image is surprising to me.

Conceptual Framework Influences

This is primarily an art piece therefore it is aimed at an audience that has an art context and awareness. It is for people who are specifically looking for an aesthetic experience and a thought provoking experience. That said I don't really believe in High Art. Of course there are certain ideas that artists explore that are only meaningful in an art

-

^{*} please visit http://jkordylewski.com/crawlies/ for a demonstration of this project

context and only artists, critics and theorists would understand. I think these kinds of ideas are important to explore. Art is a form of dialogue, and the conversation and experimentation are necessary. In trying to push the definition of performance I am working in this mode.

But I also come from the idea that art shouldn't exclude. Sure, sometimes it should require a little work, but it should also be open and inviting, at least on some level. In that sense I always try to make things that anybody can engage, that anybody, no matter what their background can come away with something. A good project should be simple enough that a kid can have fun with it, and complex enough that an adult can theoretically engage it. It should be able to work on all of these levels and I intend to achieve this goal. So even though the project is primarily an art piece, it should be engaging enough that anybody can get something out of it. Depending on what you bring to it you get different things out.

This also informs my design of the project and the way I choose the ideas I will engage thematically. When I make art I put together general ideas and themes I like to explore, but my projects are almost never exclusively about something specific. My work has to be open-ended enough that it can resonate with anybody on many levels. I hate telling people what to think. I can give them ideas on which to meditate, but I refuse to tell them: this is about this. Often times people tell me a project is about something I didn't even contemplate, but I'm open to that, it's a dialogue, and the user has just as much a right to tell me what the project is about as I do telling them.

I envision this project primarily as a one user at a time experience, but it is flexible enough that it works with multiple users at the same time. I'm interested in creating a controlled environment, therefore location and installation are of primary importance. Ideally this project is installed in a gallery, in a space that is self-contained and separate, but I can also envision it in a public space. As I said before, going along with not telling people how to think, is the task of making something understandable to a wider audience. If you set something up as only for an art audience then you're already imposing a thought structure and context onto your work. The location is ideally an art gallery, but it should be able to work in a public setting. That being said it is an art piece, and the imposition of art into the public sphere is a contentious subject. If it were in a public space it would have to be invited/commissioned for that space. I'm not interested in making a political statement about art in a public space. Time-wise it is something that the more time you spend with it the more you get out of it.

I'm definitely interested in creating a designated space for this project to exist in and for the audience to "enter." They don't have to actually go into a room or a box but there should defiantly be some designation of when they are part of the project and engaging with it and when they're not. I want the piece as a whole to be its own interface. By that I mean that there is not a separate control for the user to interact with it. The users actions and movements within are the triggers for the interaction. I don't want to have a separate interface, I want the environment to be interactive. People can interact with elements of it, but none of them are controls in an understandable one to one relationship

with the environment. People may figure out how an element reacts to them and use that knowledge to affect their environment, but the interactive elements will be designed in a way to elicit whole body interactions.

In a theatrical production the object of the performance is suspension of disbelief. We are transported to another world. For a successful performance we are to believe that the stage is another place and the actors are not themselves but the characters they are portraying. If an actor trips on stage or forgets a line momentarily we are reminded of the real world outside of the play, but soon enough we are happy to continue to look in on this other reality and believe in it again.

In many ways performance art operates opposite to this. The people performing play themselves, in fact are themselves and make no gestures to hide this fact. The performance is not representing something else it is the thing itself. Furthermore performance art welcomes what would in a traditional setting be the intrusion of the real world. In fact the performance is comprised of the interplay between the performer and the context of the performance, which includes awareness of the audience and the performance setting. The audience, their reactions, their movements and coughs, the space, its random creakings, a plane flying overhead, are not intrusions on a performance but are in fact part of what is being presented.

There are of course exceptions to this, and these definitions are not steadfast. And in fact overtime traditional theater artists have been exploring this definition and experimenting with it. Starting with asides directed toward the audience and continuing towards breaking down notions of authorship, character or even cohesive performance. On the other hand performance artists have also experimented in bringing in narrative and character, and creating a interplay between elements of both genres.

Another route of exploration that fascinates me is the idea of creating work that is not about something in particular. I'm not creating work to say this or that but instead am bringing together a number of elements and letting them interplay. Laurie Anderson explains it best: "My whole intention was not to map out meanings but to make a field situation. I'm interested in facts, images and theories which resonate against each other, not in offering solutions. "(Howell 6) In my work the objects that resonate against each other are not just the things I bring but also include the random juxtapositions of the audience and what they bring. This is why I am interested in making things that are site specific and interactive. In the juxtapositions I want to include the space the work resides in and the people viewing the work.

Project Description

The project consists of a space that has interactive elements that allow and underscore a performance by the audience members entering the space.

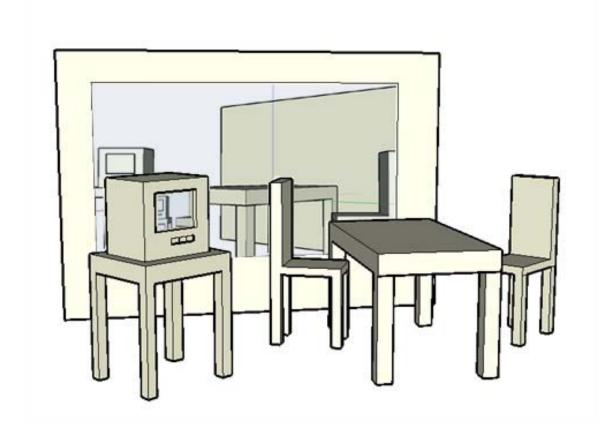


Figure 20 - Uncredited Performance Procedures concept sketch

The space consists of the following: There is a small monitor on one side that has a live video feed of the space being shown on it. There is a back wall that has a projection on it. A table and two chairs. On the table there is a small printer. Over one of the chairs is a small spotlight. There is a camera in the corner of the room which has the entire room in it's field of view.

User scenario: When a person enters the space the lighting in the space changes to indicate to them that they are affecting the space in some way. Right away they can see themselves on the monitor. The projection on the back wall is blank. They will probably become aware of the camera that is trained on them and the space. If they choose to sit in the chair with the spotlight over it as soon as they sit down the spotlight will turn on and proceed to get really bright. At the same time a miniature camera that is focused on their face will turn on and the live feed from this camera will be projected as a large close-up of themselves on the back wall. This is the part where they are creating a performance for themselves. If they choose to sit in the other chair the other camera that is monitoring the entire space will start recording what is happening in the space including the person sitting in the chair and any other people who are in the space at that moment. At the same time the projection on the back wall will show a recording that was made the last time someone sat in that chair. Every time someone sits in this chair they are creating a performance for someone else. After a while of being in the space a little printout comes out of the printer thanking the viewers for their performance and participation. In a sense this is their ticket to the performance, also their ticket stub reminding them of the performance they had seen.

Conceptually this performance is about pedestrian movements. It is about looking at our everyday actions as performance. It is meant as a reality intervention that makes you look at yourself and at the space around you as a performance. The subtle cues of the space are meant to make you look at this space from the perspective of performance. In

this space your everyday normal actions become the subject of and the actual performance.

Methodology

The technology aspect of the project is set up as a site-specific installation for eliciting and underlining the performance aspects of the audience interacting with it. As such it is not an object that is made instead it is comprised of a network of underlying technologies that all work together to outwardly achieve the desired effect. The following is a list of the objects that comprise the project.

- A computer running MAX/MSP JITTER. This is the central brain of the project it takes most of the input directly and does most of the output.
- Two chairs. Each with a Qprox sensor attached to it for detecting presence.
- Each Qprox is part of a module that includes a pic16F812 microchip and a TRG-24 wireless transceiver.
- A pic18F452 microchip assembly for receiving the wireless signal from each of
 the remote sensors. The wireless signal is relayed to the central computer via a
 serial protocol. The pic chip also receives serial signals from the computer. This
 assembly is also for sending a MIDI signal out.
- A MIDI-PAK portable dimmer for controlling the lighting. It is controlled by a MIDI signal from the pic18F452.
- A small compact USB label printer is set up on a table between the two chairs.
- One mini cam for close up video input.
- One camera for surveillance of the whole performance space and video input.

- One monitor as an altered video output.
- One projector as an altered video output.
- Various lights.

All of these objects need to work together, so I've used Max/MSP Jitter on the computer as the central brain and all of the objects eventually input into it and information is output from it. Max/MSP Jitter is being used to record the video, to play it back with a delay, as well as to do live image processing on the output to the monitor. It is also the device that sends information to the printer. And is also the device that switches between the two cameras based on information it gets serially from the pic18F452 microcontroller. It also sends information serially to the pic18F452 based on processing the live video and detecting someone's presence in the space.

The pic18F452 is part of an assembly that receives information wirelessly form the remote sensors through a TRG-24 transceiver. It relays the sensor information to the computer with MAX/MSP but it also sends out MIDI information to the MIDI-PAK. The MIDI-PAK is a portable dimmer often used by DJ's for controlling their lighting. It can run on it own or take instructions in either DMX or MIDI format. In my case I know how to make the pic chip send out MIDI information so I had it send information directly and communicate that way.

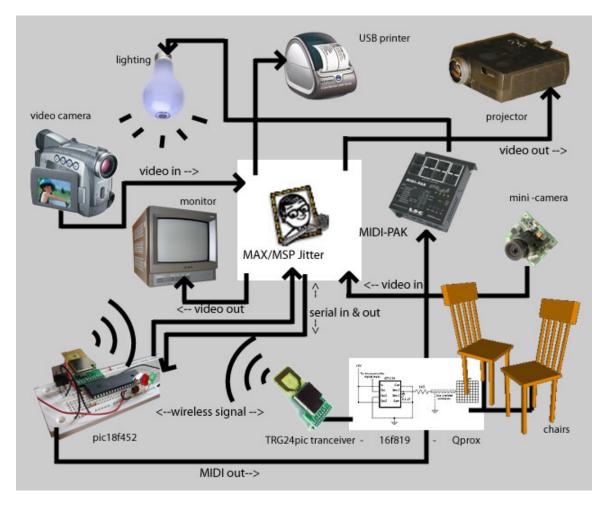


Figure 21 - Map of Device Network

There are many problems in trying to have such a wide array of devices all communicate with one another or at least be on the same network so that I can have control over them. The main problem is that they often do not speak the same language. There is a lot of different protocols involved in making this thing work and a lot of translating devices were employed. Even a simple action, such as getting a dynamic printout, took a significant amount of time to research and eventually implement.

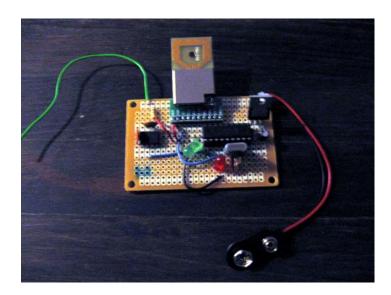


Figure 22 - QProx-Pic16f819-TRG24 Assembly

It was also extremely important to me to have the chairs (which are my input devices) not have any external clues about them that they had sensors embedded in them, To achieve that it was extremely important to have a very small, concealable wireless switch assembly developed. Making this interface, prone to malfunctioning, work correctly and without fail also took a lot of debugging and construction time.

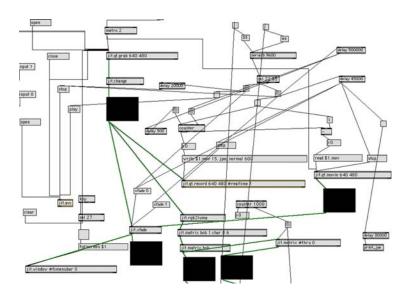


Figure 23 - max/msp jitter patch screenshot

Implementation



Figure 24 - Uncredited Performance Procedures as Installed at ITP

For the actual installation of this project I chose a room on the ITP floor that is designated as the quiet lounge. It is a room that is meant for quiet study or relaxation filled with work-spaces and also places to relax. Generally it is a space that facilitates these actions and is a quiet place to study. I should probably say managed to secure, instead of chose, as this space would not have been my first choice. As I said before this installation/performance is more tailored towards an art setting where the its subtle nature would be more easily picked up on. Nevertheless this particular space allowed me to explore a more site-specific version of my project. In this implementation I basically managed to camouflage the elements of my project so that the whole looked as if it was always a part of this space or that even at first glance it did not exist at all.



Figure 25 - Installation View

I made few subtle changes to the original concept to make the piece fit this space better. For example I cut the projection on the wall and instead used the video monitor that was already present in the room as the output device for all of my video. I put a fluorescent light bar under the table to under light it and give the space a slight bit of dramatic effect. This is also the light that would turn off the moment someone entered the space of the piece. For the spotlight I used a lamp that was part of the space already. The sensors were hidden in the chairs so that there was no indication of there being anything special about them. I was pleased with having made a space that required a whole body interaction, and that there wasn't necessarily a one to one relationship between triggering

and action and the space reacting to that trigger. I managed to make an interactive piece that did not function like a big red button saying push here.

When I used/performed in the space and in watching other people interact with it I found the subtleness of the piece very poetic. I really enjoyed the subtle declaration of these actions as performance. Unfortunately, the flip side of this is that the piece was almost too subtle. From audience feedback I realized that the piece was not very successful at letting them know they were part of a performance. The label from the printer gave them an inkling into my thought process, but it was almost as if I managed to create a performance where the audience is the performer but I am the only one who can appreciate it. Another element that wasn't as successful as I'd hoped, is the fact that if the audience did realize this piece was about a performance and they were part of it, it wasn't a very meaningful performance for them. Essentially the performance I created was interesting for me, but not necessarily for the participants.

This piece also functioned like a generative framework. In the same way I did with the software version, I set up a framework, or a set of interactions and events that happen in response to certain triggers, but the actual content or the final manifestation I had very little control over. There was a major difference between the two though. The different elements in the screen version behaved as if they had free but this was just an illusion. Everything they did was just the outcome of a complex set of calculations by a computer. In the other generative framework, the variable elements, meaning the audience/performers, actually do have a free will. Not only do I have absolutely no

control over this element of the performance but I also in a sense have very little control over the content of my performance. And in actuality this is where the problem of authorship comes in that is often applied to digital art that involves audience participation for its execution. Whose performance is this? In essence this is as if I made a performance in which I hired random performers and told them to do anything at all that they want while they are on stage. I created the framework but the content comes from the participants/performers. This could get into a long argument about conceptual art, but essentially what validates this as a performance of my creation regardless of content or participation by the audience is the fact that I am the one calling attention to it as a performance in the first place. This is not very dissimilar from the way digital artist approach this problem. Many of them make work whose content is heavily dependent on user interaction and participation but I have yet to see one of these pieces without the artists name on it or one in which the credit is given to the participants instead of the artist.

This brings up the question of what this performance is about and its general aesthetic. In the generative framework as it relates to screen based art, even though in that instance perhaps the individual elements have a certain degree of randomness to them, they are still the product of the programmer. He or she had a certain image in mind when creating that particular piece of generative work and they tailored the "free will" of their elements to the general aesthetic of the piece. If it is the type of generative framework where the content is more user generated, then the programmer would tailor the interactions available to the user to coincide with their predefined aesthetics. In my performance

piece the performers truly had free will to do what they please, they also did not have any knowledge of what my aesthetic was or what kind of performance I had in mind. This is why this iteration of this project was a success for me while it was not really for the actual participants.

Future Considerations

I am interested in finding ways to make the performance more meaningful for the participants. I am also interested in exploring ways to have more creative control over the performance. The project started out as the idea of using interactive technologies to make the audience going to see a performance their own performers. I believe there are methods to be explored where you could direct the audience in some subtle ways to for example create a more interesting visual experience.

In the work of Scott Snibbe and Camille Utterback, through exploration the user comes to understand the relationship between their actions and how they affect the piece. Once they realize what that relationship is they can take more creative control of how the piece is viewed or what the content will be. I think future iterations of my type of performance could benefit from the audience knowing more clearly that they are engaging in a performance and if they have a better understanding of the interactive elements in their environment ultimately they could possibly have more control over the aesthetics of the performance itself. In terms of my own control over the overall look and feel of each performance I would like to explore the possibilities of setting up stricter frameworks. In

particular I am still fascinated with the idea of being able to possibly add some kind of narrative frameworks to these performances in the same vein as in the computer games.

Conclusion

Is it possible to make a performance that only uses the audience as their own performer? Yes I think so. My thesis project is proof of that. But I also feel like I've just barely scratched the surface and want to continue this line of inquiry. I feel there are many more aspects of this idea that can be developed and it can be taken in new and interesting directions.



Figure 26 - USB Printer with Performance Ticket

Works Cited

- "Performance Art." Wikipedia. 2006. 15 April 2006.
- Goldberg, RoseLee. <u>Performance Art: from Futurism to the Present</u>. 3rd. New York: Thames & Hudson, 2001.
- Howell, John. Laurie Anderson. 1st. New York: Thunder's Mouth Press, 1992.
- Paul, Christiane. <u>Digital Art</u>. London: Thames & Hudson Ltd., 2003.
- Rush, Michael. New Media in Late 20th-Century Art. New York: Thames & Hudson, 1999.

Extended Bibliography (Works Consulted but not Cited)

- Auslander, Philip. <u>Liveness: Performance in a mediatized</u> <u>culture</u>. London: Routledge, 1999.
- Crawford, Chris. "Chapter 1: What Exactly Is Interactivity?" The Art of Interactive

 Design: A Euphonious and Illuminating Guide to Building Successful Software.

 San Francisco, CA: No Starch Press, 2003.
- Cohen, Robert. Theatre. Boston: McGraw-Hill, 2002.
- De Oliveira, Nicolas. Installation Art. 1st. London: Thames & Hudson, 1994.
- De Oliveira, Nicolas, Nicola Oxley, and Michael Petry. <u>Installation Art in the New Millennium</u>. 1st. New York: Thames & Hudson, 2003.
- Dourish, Paul. Where the Action Is: The Foundations of Embodied Interaction. London: The MIT Press, 2004.
- Dove, Toni. "Theater without Actors: Immersion and Response in Installation." <u>Leonardo</u> 27.4 (1994): 281-287.
- Elsenaar, Arthur. "Electric Body Manipulation as Performance Art: A Historical Perspective." Leonardo Music Journal 12 (2002): 17-28.
- Fried, Michael. "Art and Objecthood" <u>Art and Objecthood</u>. Chicago: University of Chicago Press, 1998.

- Goldberg, RoseLee. <u>Performance: Live art since 1960</u>. 1st. New York: Harry N. Abrams, Inc., 1998.
- Hartzell, Emily. "Sculpting in Time and Space: Interactive Work." <u>Leonardo</u> 34.2 (2001): 101-107.
- Hood, Woodrow, and Cynthia Gendrich. "Memories of the Future: Technology and the Body in dumb type's memorandum." PAJ: a journal of Performance and Art 25.1 (2003): 7-20.
- Humphries, Holle. "A Philosophical Inquiry into the Natureof Computer Art." <u>The Journal of Aesthetic Education</u> 37.1 (2003): 13-31.
- Iuppa, Nicholas V. "Chapter 1: Interactivity?" <u>Interactive Design for New Media and the Web</u>. Woburn, MA: Focal Press, 2001.
- Izzo, Gary. <u>The art of Play: The New Genre of Interactive</u> <u>Theatre</u>. Portsmouth, NH: Heinemann, 1997.
- Jones, Amelia. "'Presence' in Absentia: Experiencing Performance as Documentation." Art Journal 56.4 (1997): 11-18.
- Kac, Eduardo. "Foundation and Development of Robotic Art." <u>Art Journal</u> 56.3 (1997): 60-67.
- Laurel, Brenda. <u>Computers as Theatre</u>. Reading, MA: Addison-Wesley Publishing Company, 1991.
- Magnat, Virginie. "Theatricality from the Performative Perspective." <u>Substance A review of Theory and Literary Criticism</u> 31.2&.3 (2002): 147-166.
- Murray, Soraya. "High Art/Low Life: The Art of Playing Grand Theft Auto." <u>PAJ: A</u> Journal of Performance and Art PAJ 80 27.2 (2005): 91-98.
- Phelan, Peggy. "Ontology of Performance." <u>Unmarked: the politics of performance</u>. London: Routledge, 1996.
- Ryan, Marie-Laure. <u>Narratives as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media</u>. Baltimore, MD: The John Hopkins University Press, 2001.
- Saltz, David Z. "The Art of Interaction: Interactivity, Performativity, and Computers." The Journal of Aesthetics and Art Criticism 55.2 (1997): 117-127.
- ---. "Live Media: Interactive Technology and Theatre." <u>Theatre Topics</u> 11.2 (2001) :107-130.

- Schechner, Richard. Performance Studies: An introduction. London: Routledge, 2003.
- Shanken, Edward A. "Art in the Information Age: Technology and Conceptual Art." <u>Leonardo</u> 35.4 (2002): 433-438.
- Spielmann, Yvonne. "Intermedia in Electronic Images." <u>Leonardo</u> 34.1 (2001): 55-61.
- Zurbrugg, Nicholas, ed. Art, Performance, Media: 31 Interviews. Minneapolis, MN: University of Minnesota Press, 2004.