

Productive Play in a Stage-Screen Space: The Human-Computer Interface Experience

Project and Purpose

In my proposed creative research project, I will be exploring the way humans interact with and react to developing technologies in a self-reflexive new media theater piece about new media theory. This theater piece will take place in a combined “stage-screen” space, which for my purposes can be described as a computer screen comes to life. The performance project itself will be a series of “expressive educational experience experiments” that invite audiences to interact with a combined human-computer interface consisting of live human actors representing computer interface elements, performing as computers, with computers. The objective is discovering how a combination of multimedia theater and interactive media in a live performance facilitates creative learning or “productive play”, and how these creative, immersive theater experiences have enormous potential for educators, artists, and everyone in the 21st century. This project is based on the premise that creation and expression are fundamental to learning, and has two main purposes: (1) to expose general audiences to new media theory in a creative, fun, and interactive way, and (2) at the same time and on a larger scale, to explore the ways people learn, interact, communicate, and express. The project, which is now in its formative stages, will ultimately evolve into my senior year thesis/creative project, exploring how the combination of theater and new media enables increasingly dynamic modes of interaction, expression, and creation with the potential to revolutionize education, theater, art, and recreation.

For this exploration of combining theater and new media to create the ideal creative, expressive, intellectual experience, theater will for my purposes be defined as live performance and physical interaction wherein the audience and performers share the same time and space, and new media will be defined as multimedia digital technology including websites, computer games, and DVDs. The technical and creative research that I conduct over the summer relating to themes in human-computer relations, theater, and new media will culminate in a two hour live performance event: the computer screen comes to life. The audience will have control over what they see, and will interact with a combination human-computer interface consisting of actors who serve as the mediators between the audience and the actual technology onstage.

Depending on who or what the audience “clicks” on in their interactions with the actor-screen interface (an actor as mouse, an actor as keyboard) they will be “hyperlinked” to the vignette/scene of choice. These vignettes will be theater pieces exploring some of the themes surrounding digital culture and human-computer interaction. Each piece will provide the audience with an opportunity to interact, create, and think about the concepts presented in their own individual way, depending on how they interact and participate. Audience members will control their own theatrical experience, and in doing so, will become users, players, and creators exploring some of the main concepts and theories in new media theory and digital culture studies.

Research Completed: Themes in New Media Theory

My familiarity with new media concepts comes from my experience as a Film Studies major. Last quarter in my Digital Culture class I explored the relationship between new media theory and theater in my final research paper, “The Symbiosis and Separation of Stage and Screen;” with the SURP project I am looking forward to putting some theory into practice, quite literally, as the final product will be new media theater about new media theory.

The material dealt with in this project will include seminal works of media theory, starting with media theorist Marshall McLuhan whose classic “the medium is the message” will gain new meanings for the participants in the context of the performance. The ideas of other theorists, artists, and scholars (Brenda Laurel, Vivian Sobcheck, Lev Manovich, Antoinette LaFarge, etc) will come up in other forms throughout the experience, as the piece touches on other new media themes including communication and connection, ownership, technophobia, improvisation and live interaction vs. the predetermined digital, sampling, distractions,

hypermediacy, the concept of audience as artist, internet as “the big brain”, memetics and mimesis, immediacy, decentralization, democracy, etc. Of course, the whole of new media theory cannot be easily disseminated in the course of a two hour theater piece, but participants will be able to explore at their own pace and be exposed to these ideas to gain whatever they can, encouraged to think for themselves about the impact of digital technology on their own lives.

Methods and Approach

I will be constructing a screen-stage space for the performance, and the details on how best to construct this interface will be part of my research, when I find out more about how humans learn and respond to certain interfaces. Most likely, there will be a digital projection onto something other than a flat screen, perhaps even on actors in a tableau, and there would also be actors interacting with the audience. The audience would control the experience through the “mouse” and “keyboard” characters, and after the first screen they would be able to hyperlink to a variety of vignettes on new media themes. One vignette, “Search Ingenuity,” will be an improvisational piece exploring the themes of connections, searching, and hyperlinking. “Search Ingenuity,” will consist of actors improvising scenes and interactions off of search engine results found by audience members/participants. I will refine the structures and details for these improvisations during the course of my research so that the participants’ experience is optimized.

Expected Outcomes

Two of the tangible outcomes from this experiment will be the production itself and a paper assessing the research and creative experience. This experience and the paper that comes from it will most likely evolve and become my senior creative project and thesis. The paper will include (1) findings on how humans interact, communicate, express, and learn in a “mixed reality” environment, in virtual worlds created combining theater and technology, (2) an informal assessment of what place these kinds of theatrical experiences have in areas outside of theater and art, extending to recreation, therapy, leisure time, and education.

This kind of “theatrical experience” is what I would like to identify as “productive play” or “enterbrainment.” The difference between the concept of “enterbrainment” and the commonly used catchword “edutainment” is significant: “enterbrainment” describes entering the brain, using and engaging it wholly within a performance or experience that encourages creation and interaction, not passive spectatorship of an entertaining presentation of ideas. I hope for one outcome of this experiment to be in understanding how “enterbrainment” or “productive play” can become a more mainstream pastime. A combination of theater and technology is an ideal way to experiment with productive play, as it combines multimedia, interactivity, physical interaction and presence. Some of the other important outcomes of the experience include insight into how ideas and interfaces are best organized, how creative worlds and “mixed realities” come about and how humans work within them, how humans interact and create within certain structures of creation; broadly how people create, express, communicate and learn in a multimedia, live and digital context.

Objective and Significance of Project

This project is important because it further explores the developing faction of digital arts and culture studies exploring performance and new media, a field that is still in its formative years. In this project I will be able to contribute something to the experimentation taking place in this field, while promoting an awareness of the philosophies and theories behind how we relate to the combined stage-screen space, all taking place within such a space. This project is important beyond the academic and art fields because the implications extend beyond theater and technology in the 21st century: The project extends into the realm of how people use their spare time, what they do, how they interact, and the possibility for an increase in such interactive experiences as a way to live and be entertained and educated in the future.

Hence, this project is also an experiment in effective education through theater and new media: exposing audience members to major theories about new media, encouraging them to think about the way they relate to digital technologies in their everyday life, educating them by exposing them to ways of interpreting the

digital revolution that is well underway, and doing so in a creative, interactive way that avoids the at times lofty jargon of much new media theory. The idea is that audience members are in a better position to consider the new media themes when they are physically involved in a complex, stimulating, and fun interaction with new media technologies and concepts.

It is important to understand that this project is not just another exploration of how technology can be utilized in theater, and does not treat technology as a “novelty” but rather as an integral part of not only the behind-the-scenes theater work but in the actual content of the work. By making the stage more like a computer screen, we approach Bolter and Grusin’s concept of “ubiquitous computerization,” which is the opposite of virtual reality in that it makes the technology more apparent and actually emphasizes it so that the audience can use it and become participants.

Student’s Responsibilities

My specific duties for this project are to create the content of the script, which entails extensive research in new media theory. I am also responsible for the creation of the format of the production itself, which will involve researching interface, theories of learning, and creative structure. I will be individually responsible for not only creating the content and format of the piece, but also for coordinating the entire production technically. I am in the process of recruiting arts majors from the Studio Arts department and the Drama department to assist in the digital design and performance elements for the show. I am responsible for researching, finding the equipment and technology for the production, and managing any expenses for the technology and performance space. I am also responsible for finding a way to monitor the audience’s experience, such as in an informal discussion session after the performance so that I can assess the overall response after the experience and write a thorough, effective analysis in my final paper.

Faculty Mentor and Experience

Some of my most valuable experience in becoming familiar with the technical and creative aspects of putting a piece like this together will be in the interaction I have with my faculty mentor, who is an artist and educator in the forefront of explorations in digital art and performance. I have been working with my mentor over the course of Spring Quarter, and over the summer, I will be working closely with my mentor, becoming familiar with the technical and creative aspects of putting up a production combining technology and theater by participating hands-on as a volunteer in her piece, “Demotic” over the summer. My mentor is an exceptionally valuable resource, and she has inspired me to look further into the fascinating aspects of combining theater and technology, as she has articulated perfectly the idea that “*the interesting gap is between the improvised and the canned, between what is imperfect, ever-changing, fallible, unscripted, and what is fixed.*”ⁱⁱⁱ In this project, then, I will be experimenting within this “interesting gap”, inviting others to explore along with me, exploring the potential and creative possibilities that the combination of theater and new media offers.

Timeline

April:

- Meet once a week and discuss project with Faculty Mentor
- Brainstorm topics and themes for the scenes/vignettes
- Research interface construction (technology and the human element)
- Determine exactly the audience’s role in the experience.

May:

- Meet once a week and discuss project with Faculty Mentor
- Show rough drafts of script ideas and formats, and themes for the scenes/vignettes
- Discuss interface construction (technology and the human element)
- Research by topic and vignette themes (telepresence, connectivity, immediacy, etc) explore ways they can be performed.

- Begin research on how humans interact with interface, computer and game design research, brainstorm some vignette models off of these theories.
- Rough idea of all vignettes.
- Request space for summertime production in Nixon, Little Theater, or Studio Theater. Recruit help for design and production and actors for actual performance.

June

- Meet twice a week with Faculty Mentor
- Work on and revise script, discuss technical elements of production.
- By June I will have my ideas solidified, rough draft of script and how the production will be segmented and arranged. June will be a month of much research and writing however, exploring theories of learning, interface, and new media theory. Format will be constructed by the end of June, and script draft will be complete.

July:

- Meet with Faculty Mentor a few times a week, volunteering with her “Demotic” performance project, getting a hands-on idea of how to set up a similarly complex production.
- Intensive project development begins for my piece: artists and actors recruited, space confirmed, technical set-up conceived.
- More research and reading: Research concepts involved (new media philosophies), research learning and human/computer interface, and research what technology will be used.
- Finalize script and begin drafts for scenic/light design and set-up of actual production.

August:

- Set-up actual production, experimentation, rehearsals.
- Meet with Faculty Mentor once or twice a week, keeping her updated with rehearsal process and progress of project.
- Secure space for performance

September:

- End of August & Beginning of September: Production, Performance
- Final revisions, experiments in rehearsal before performance.
- Develop order of informal assessment of experience (Q&A Sessions)

October 2004- May 2005:

- Assess production and prepare paper for symposium
- Check in with Faculty Mentor to show her results and drafts
- Work on staging a second performance for thesis project credit, second experience revised to meet what I learned from the assessment about interfaces and the effectiveness of the set-up for the summer production.

Sources Consulted

Endnotes

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- ii. LaFarge, Antoinette. <http://yin.arts.uci.edu/~forger/ongoing.html>

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