

TELEMATIC ENCOUNTERS FROM THE AMERICAN DESERT SOUTHWEST

John D. Mitchell

Abstract

Telematic Encounters From the American Desert Southwest recounts the early experiences in distance performance at Arizona State University leading up to the Cellbytes 2000 project, the formation of ADaPT, the Association of Dance and Performance Telematics, and other international collaborations.

Keywords

Telematic, Mediated Performance, Dance and Technology, Distance Performance

Escape Velocity, created and performed by Melbourne's Company In Space, was the first telematic performance I actually witnessed. It was produced as part of International Dance and Technology Conference 1999 (IDAT99). In this work, Hellen Sky, who was located in Arizona, partnered with Louise Taube in Melbourne in a live telematic duet that spanned 5000 miles. Video from Arizona was sent to Australia, mixed with live performance video from that site, and sent back to Arizona with live interactive sound created by Garth Paine. I was the producer of IDAT99 and was well acquainted with the complexities involved in mounting this performance. We had to make special arrangements with the phone company to provide the ISDN lines needed (at a substantial cost) in order to make this groundbreaking performance possible. Several lines were ganged together to provide enough bandwidth to send video and sound from Melbourne to Arizona and back again.

Although *Escape Velocity* was the first telematic dance work that I had actually experienced, by 1999 I was well acquainted with the possibilities of distance performance and the achievements of others in the field. I had the good fortune to visit the Electronic Café in Santa Monica California in 1992. The proprietors, Kit Galloway and Sherrie Rabinowitz, are perhaps best known for their satellite communication work in the late 70's.¹ Of these, *Hole in Space* is perhaps the most famous.

Hole in Space was a Public Communication Sculpture that lasted for three days. On a November evening in 1980 the unsuspecting public walking past the Lincoln Center for the Performing Arts in New York City, and The Broadway department store located in the open air Shopping Center in Century City (Los Angeles), had a surprising encounter with each other. Suddenly head-to-toe, life-sized, television images of the people on the opposite coast appeared. They could now see, hear, and speak with each other as if encountering each other on the same sidewalk. No signs, sponsor logos, or credits were posted—no explanation at all was offered. No self-view video monitors to distract from the phenomena of this life-size encounter. *Hole In Space* suddenly severed the distance between both cities and created an outrageous pedestrian intersection. First, there was the evening of discovery, followed by the evening of intentional word-of-mouth rendezvous, followed by a mass migration of families and trans-continental loved ones, some of which had not seen each other for over twenty years.” (See: <http://www.medienkunstnetz.de/works/hole-in-space/>).

My visit to the Electronic Café took place on a late Saturday afternoon, and although I did not get to see a performance, I was able to speak with composer Richard Zvonar who was setting up for a performance that evening. This was to be a live music show with live music performed over phone lines and slow scan video linking two sites. Slow scan video sent images over standard phone lines at about five frames per second, and the electronic café was equipped with special gear that allowed them to connect to other arts organizations that were similarly equipped for slow scan video. In speaking with Zvonar, I was struck by two things: first that

he and his counterparts built their own components that allowed them to send MID and audio over the phone lines in real time, and second by the fact the performance time seemed to be extremely flexible – to the point that the performance took place only when everything was in order and ready to go. Publicized times were, in this case, just a loose guideline. This seemed at once odd to me because my experience in the theater and public performance had engrained in me the notion of the sacredness of publicized show times. But at the same time this seemed a rational, common sense approach that had an interest all its own. Why start if you are not ready? And if your viewers are willing to hang around and wait until the event happens, then that is definitely cool.

My next experience with distance performance was in 1997 when The Hub was in residence at Arizona State University. The Hub is a San Francisco bay area laptop computer music performance group. Hailing from UC Berkeley and CCRMA in Stanford, the hub was in residence at the Institute for Studies in the Arts in the winter of 1997. “Functioning in the West Coast tradition of composer as instrument builder—redefining music from the ground up—The Hub makes music using electronic and digital systems of their own devising. A natural extension of the late 1970’s ensemble the League of Automatic Music Composers, the group has performed worldwide over the past two decades and continues to break new ground in the ever-growing laptop medium” ([http://en.wikipedia.org/wiki/The_Hub_\(band\)](http://en.wikipedia.org/wiki/The_Hub_(band))).

While in Arizona they performed *Points of Presence*, a piece performed simultaneously in three US cities – Tempe, Arizona, Berkeley, and Palo Alto, California. They used the to send software synthesizer control information between sites.

According to hub member Tim Perkis, for *Points of Presence*, “six Macintoshes at each performance site were connected to the net, and ran the software synthesis program Grainwave, as well as a custom patch in Opcode’s MAX musical programming environment” (http://perkis.com/_site/writings/w_hubem.html).

I was interested in how the machines were linked and especially in the way that unexpected ‘glitches’ were part of the shared data and timing information used in the performances. The fact that the glitches were an accepted part of the telematic experience provided an important frame of reference for us when we started to connect performances with video a few years later. It also was fascinating to see that The Hub had written their own code to enable much of what they did during their shows.

Up to this point my own creative experience was primarily in live, interactive performance. Meeting and watching The Hub showed me that the interaction could be networked and take place over distance. I began to consider how this could be applied directly to dance performance. Matt Wright shared some of his software, then called Grain Wave, for us to experiment with (also a tradition). His work blossomed into what is now known as Open Sound Control, or OSC. The proliferation of dial up modems as a means of connecting to the in the late 90’s, as well as

increasing infrastructure at major universities made projects such as *Points of Presence* possible.

By the time of IDAT99, sending video over distance was also getting easier to do. Phone lines, like those used for, could be used for distance performance projects involving video as well. For *Escape Velocity* we had to rent special lines (ISDN) and they were relatively expensive. But with a little preparation, the lines could be secured to acquire the bandwidth needed to present a transoceanic performance like *Escape Velocity* that required two way video and sound communication.

The creator of *Escape Velocity*, Company in Space, was founded by co directors John McCormick and Hellen Sky. The Melbourne-based company “has consistently pioneered applications of new technology to movement. The provocative works create dialogues between visual, aural and kinetic perceptions, and exist in a number of media; live performance installations, video, and interactive virtual spaces” (http://www.companyinspace.com/front/cis_fs.htm). During the performance of *Escape Velocity*, live video of the Hellen Sky in Arizona was sent to Melbourne where Louise Taube could see and essentially partner with the streamed images. The video of the Melbourne performer was combined with the interactive sound score and returned to Arizona where viewers watched Hellen dance with the combined sound and video images.

After experiencing the artistic success of *Escape Velocity*, I began to consider the implications for future developments in the new field of telematic dance. I met with some of the IDAT99 participants and began planning what was to become Cellbytes 2000, a co-operation between Shinkansen London, Institute for Studies in the Arts, Arizona State University and ResCen, at Middlesex University, London.

Cellbytes was held in the Intelligent Stage and the Dance Studio Theater at Arizona State University, Tempe. Arizona State had recently upgraded its service to ‘II’, which was 10 times faster than the previous service. The plan was for a group of international artists to work with artists from Arizona in these two, telematically connected performance spaces, located about a half mile apart on the ASU campus. In this way the researchers could collaborate, experiment, and research the structures and dramaturgical needs of live interaction across remote stages through experimentation with distance performance. Since we were not separated by hundreds, or even thousands, of miles, we could still meet up at the end of the day to discuss our successes and failures face to face (<http://www.ephemeral-efforts.com/cellbytes2000/index.html>), (Figure 1).

The artists from Europe included: Ghislaine Boddington, Scott deLaHunta, Joseph Hyde, Estelle Neveux, Jayachandran Palazy, and Christian Ziegler. The artists from Arizona State included: Gene Cooper, Deirdre Egan, John D. Mitchell, Melissa Rex, Kirsti Topham Petty, Jennifer Tsukayama and Sonia Valle. (See Cellbytes technical diagram, Figure 2.)

Dance Studio Theater

Intelligent Stage

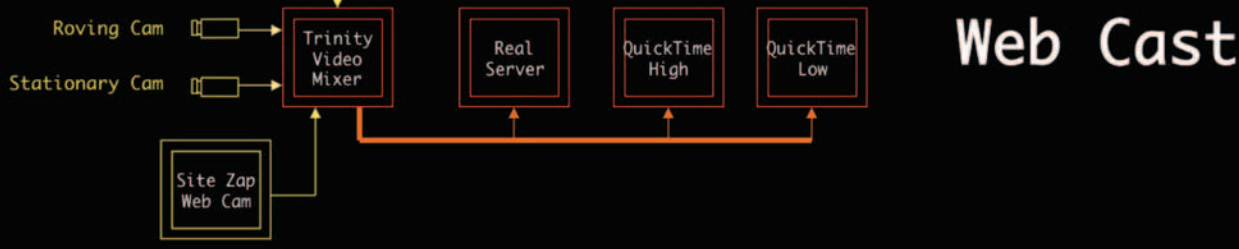
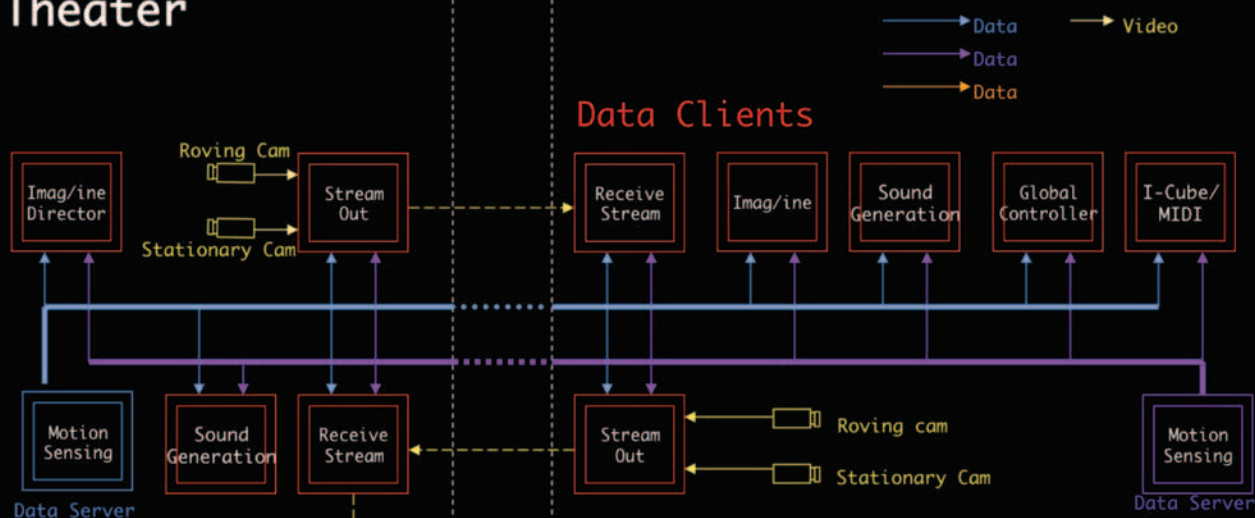


Figure 1. Cellbytes 2000 technical layout



Figure 2. Cellbytes - ACTG

A total of eight three to five minute performance fragments were created during the two-week residency. The research presentations as well as the rehearsals, which were open to the public, were all streamed live to the web.²

About the same time as Cellbytes was coming to fruition, I organized a meeting of researchers from other large universities that had substantial dance programs with the purpose of setting up a collective to pursue research in telematic dance performance. The goal was to connect with major universities that were on the new, high-speed, backbone in order to have the bandwidth necessary to support our intended research. After our initial meeting, we decided to form ADaPT, the Association for Dance and Performance Telematics.

ADaPT is an interdisciplinary association of artists, technologists and scholars from educational institutions dedicated to research and critical dialogue on performance and media in telematic space. The objectives of ADaPT are to: create a site for telematic collaborative inquiry for the purpose of developing new models of practice and training techniques for the creation of networked dance and performance; develop a shared mediated space for investigating performance and creative collaboration through a distributed environment across time zones; situate research within a larger cultural and political context that acknowledges how mediated performances both frame and are framed by issues such as identity, privilege and access. This inter-university research group originally consisted of five core centers; Arizona State University, the University of California Irvine, Ohio State University, the University of Utah and the University of Wisconsin, Madison. It was later expanded to include several international institutions as well (<http://www.ephemeral-efforts.com/adapt/>).

ADaPT originally set up a weekly meeting time, and all five of the original institutions met in telematic space and experimented with performance possibilities every week. Soon classes were brought into the exchange and students began creating work across distance. As time went on the meetings became less structured and focused more on preparation for joint performances such as the work LIVE! from February 2003 (http://youtu.be/JOeT0_vn6Uo).

Eventually, the regular meetings of ADaPT gave way to a wider network of online performances, with rehearsals taking the place of weekly meetings for pure research. This opened ADaPT up to a wider group of researchers that included Keio University in Japan, Corpos Informaticos at the University of Brasilia, Brazil, Nottingham-Trent University in the UK, and The Waag Center for Old and New Media, Amsterdam, the Netherlands.

One such international project was Proyecto PASO. Proyecto PASO was conceived as a critical reflection on human rights and developed as a collective international performance created in three different remote locations and streamed through the Internet. The collective international performance began as one of the activities of the Second International Biennial of Contemporary Art that took place in Seville, Spain in

December 2006. The collaborators included en lugar de creación from Seville, Ivani Santana from Salvador, Bahia in Brazil and John Mitchell from Arizona State University in Tempe, Arizona.

The thirty articles from the United Nations declaration of human rights were used as the source material for the project. A team of artists at each location worked out three-minute performance excerpts for each of the 30 articles. These excerpts were intended to reflect the geographical, cultural and political ramifications of the UN document from each location. (Needless to say, the reactions to the Declaration of Human rights vary widely from one location, country, and continent to the next.) The creative process was handled entirely online through the creation of a wiki and a repository for video and image files. Work began in September and continued up to the day prior to the December 2006 performance.

En lugar de creación, the lead organization on the project, is an association dedicated to the spread of culture and art, especially in the area of their scenic manifestations: dance, theatre, music and other graphical and visual arts. As an example of their activities, they organize a large number of courses, workshops and performances every year. The primary team includes Laura Hernández, new media artist, Sergio Moreno, specializing in media architecture, Luis Gómez, software designer, and Salud López, choreographer. At Arizona State University School of Film, Dance, and Theatre we share a common interest with en lugar de creación in investigating the ever-changing landscape of dance, new technologies and the new cultural formations that result from these technologies. The Arizona team included John Mitchell, Andrew Marcus and a large cast of performers. The cast in Brazil included Ivani Santana and Thainah Aquino with the assistance of Hugo Leonardo.

The Arizona contributions to Proyecto PASO, in addition to the creation of live video components for each article, included the development of interactive systems that used video sensing to generate sound that was then mixed in with the main performance in Seville. The 30 articles of the declaration were organized into a series of three-minute vignettes that moved steadily for the 90minute duration of the piece. The three remote sites performed these vignettes simultaneously for the duration of the show.

The work was stage managed over chat, mixed in Seville with the final output streamed back to Salvador and Tempe where the teams could see and hear the final combination of the efforts of the inter-continental collaboration.

Proyecto PASO had multiple performances over a two-year period, which is unusual for this type of work, due, in part, to the logistics involved. By the end of the Proyecto PASO run, the Arizona State team was beginning to move into the realm of performance in virtual worlds. This seemed to be a logical step, building on the experience and practice of working with artistic teams in other countries and on other continents. The move to virtual worlds initiated a series of performance and educational endeavors that would take place on a newly acquired island in Second Life. But that is another story.

Endnotes

- 1 See: <http://18thstreet.org/public-programs/past-exhibitions-events/collaboration-labs/kit-galloway-sherrie-rabinowitz-electronic-cafe-international>. Hereafter, all web references are noted in the text, itself.
- 2 See the excerpt of Feedback from Cellbytes 2000: <http://youtube/sa1YHiRnBjE>

Original membership of ADaPT:

Arizona State University

John D. Mitchell, ADaPT chair
Department of Dance/Institute for Studies in the Arts
Department of Dance
Sam DiGangi
Information Technology, Instructional Support

University of California Irvine

Lisa Naugle
Department of Dance
Alan Terricciano
Department of Dance

Ohio State University

Johannes Birringer
Department of Dance
Tim Glenn
Department of Dance

University of Utah

Ellen Bromberg
Department of Dance
Jimmy Miklavic
Center for High Performance Computing
David Zemmels
Assistant to the Dean of Fine Arts, Department of Theater

University of Wisconsin, Madison

Douglas Rosenberg
Inter-Arts and Technology
Chris Dowling
Center for Instructional Media

Biography

John D. Mitchell is an interactive media designer, composer, and researcher committed to expanding sensory and creative experiences in the arts. For much of his career Mitchell has focused on exploring the use of computer interactivity in dance and movement performance. In 1990 Mitchell became a founding member of the Institute for Studies in the Arts at Arizona State University, where he pioneered the development of the Intelligent Stage, a facility where he continued to work for the next ten years as a composer, director and interactive media designer.

Mitchell turned his attention to performance telematics in 1999 founding ADaPT, the Association for Dance and Performance Telematics. From 2000 through 2010 Mr. Mitchell participated in numerous international multi-site performance projects with artists in Amsterdam, the Netherlands, Nottingham, UK, Bahia, Brazil, Melbourne, Australia and Seville, Spain and many others.

Currently, he co-directs ADaPT and teaches dance media and interdisciplinary performance courses in the School of Film, Dance and Theater at Arizona State University.