New Frontiers for Aesthetic Pedagogy:

Web-cam technology as a partner in creating new places and spaces

for collaboration

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We first discussed dance and technology during a conference at John Moores in 2001. At that time we were both were chairing large departments of dance and had no time to spend on learning software and keeping up with hardware innovations or trying to put ideas into practice. After stepping down from chairing, we renewed discussion of our shared interest in using technology in pedagogy and the creative process. While we as artists/educators are very interested in the role of emerging media technology, as are increasing numbers of our students, our institutions (and many others) are not presently ready to invest the resources at the level of American institutions such as University of Florida, Florida State University, Ohio State University, Arizona State University, University of California, Irvine for instance. We therefore sought to find a low cost alternative that might be available to a larger number of dance educators and students without major resource requirements.

We talked about using cell phones, about emailing videos and finally settled on experimenting with the use of the internet. Each of us arranged to have five students and meet each week to plough forward with this idea. While we both had space and bodies, and software and hardware. . . we were unsure (as were the technicians at our respective institutions) of how exactly this would unfold. Temple University offered to host the sessions via Adobe Breeze (later upgraded to Adobe Connect and later to Adobe Connect Pro), software designed for "talking heads" in the corporate world.

Entering New Territory 2007-2008, Project 1

Original course description: This course will be an experimental use of technology, specifically internet technology, regarding its use teaching, learning and creating in the choreographic process, and more particularly internationally.

Specific objectives were:

- To experiment with the use of internet technology in choreographic pedagogy.
- To develop basic knowledge and skills with internet technology.
- To design creative and educational projects for dance utilizing internet technology.
- To build a conceptual and practical foundation for further study and use of internet technology in dance.

Attempts to keep a diary as the experience unfolded collided with ongoing issues, making it difficult to pay the hoped for time to teaching, the creative process or the journal entries. As we learned something new each week, we found that the challenges were considerable and often frustrating, often focused on the technology itself.

So off we went on September 19, 2007.

One of the first sessions included a warm-up led by Pauline. This was designed to introduce students into the software; how they would see themselves, their peers and possibilities of interactions.

Kahlich and Brooks



Computer Screen of Session – Liverpool on left and Temple on right

The students were then guided to experiment with new materials, finding workable structures, and to get to know each other. Three journal entries from early meetings give an idea of the initial difficulties and frustrations we all faced:

9/19/07

Problems with Liverpool connection. We need to know what to do with the students when the technology doesn't work. Worked for the most part, but mostly talking. Difficulties with audio. Size of screen with breeze limited.

9/24/07

Browser quit repeatedly

9/26/07:

Cameras are working well this time, but there is no sound from Liverpool. Worked on views that were more and less successful in sharing a physical warm-up, lead by Pauline, with students at both ends following. We began to work with the split screen that was set up, since each site had a screen set side by side. Students offered suggestions and we worked on the issues of levels of detail in the movement given the limited quality of video.

With the limitations from ongoing issues with hardware, networking, software and cameras, we finalized the work that was created during the semester for the semester final showing on December 5, 2007. The performance was aired via the Internet between invited audiences at both universities.



December 5, 2007 Internet Showing – Temple perspective



December 5, 2007 Internet Showing – Liverpool perspective

Temple University agreed to fund a weeklong trip to Liverpool for all of the US project members, which culminated in a shared performance at John Moores. We agreed to continue to meet weekly during spring 2008. In addition to reviewing our first semester work, we added three more projects: experimentation with video at both sites to be combined with the interface of live dance with film at John Moores; a structured improvisation, (demonstrating the split screen with two spaces with the live audience in Liverpool), and a new, live group dance.

Ongoing comments from the project participants included:

- Audio lag very troublesome.
- Could not log on at Temple.
- Total frustration.
- Projector not working.

- Things working!!!
- Total loss.
- Final session went great!!

Some of the successes were:

- Persistence, excitement and dedication of students.
- Creative work accomplishments.
- Improvement of institutional interest and support.
- Future possible individual and collaborative efforts.
- Clarity of needs for continued developmental work.
- Production of cutting-edge research in transnational pedagogy and creative work.

Issues that continue to need to be addressed as we continue to develop ideas of using the internet for pedagogical, research and creative practice:

- Networking at institutional level.
- Software for audio/video (DVTS).
- Cameras (NTSC/PAL).
- Delay and noise/echo.
- Microphones for moving bodies
- Time zones for scheduling.
- Dedicated Technology Space: designed to allow more productive use of time for researcher, teacher, and student.

Moving Forward – Learning from the Past 2008-2009, Project 2

Specific objectives were:

- To investigate how web-cam and e-mail technology can serve dance pedagogy and creative process, specifically if and how it might engage students in the making of dances within a new spatial 'frontier'.
- To use technology on a shared international project encouraging the development of international links and the practice of networking.
- To explore the potential for linking spaces and audiences via the internet with web-cam choreography, including performance experience and aesthetic pedagogy.

In the second year we experimented with an alternate module based on what we had learned the

previous year. Three Temple MFA students were paired up with John Moores BA students, each with different levels and ways of collaborating in creating and learning dance. In some ways this went more smoothly:

- We knew the software better (opportunities and limitations) and it had developed somewhat.
- We had some students who had worked with technology previously.
- The MFA students had more experience with choreography.
- We had a better idea of when to interject ourselves into the process.
- We provided more structure up-front and more time for development.

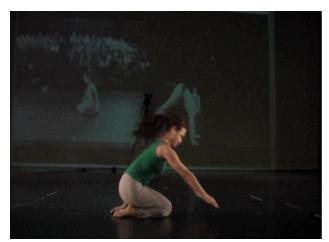
We paired up students early according to interests and provided the fall semester as time to develop ideas and the spring semester to move toward more finished works. In the end we also included two faculty works (one from each institution), as another alternative venue of sharing choreography.

On April 30, 2009, we held a formal performance via the Internet between our dance theatres. Along with an introduction of administrators from each institution, we presented three student works and two faculty works followed by an audience discussion.

Three student projects were developed:

Carolina and Faye

- Use of visual image and screen to influence devising
- Processes included: improvisation, camera frame, on screen-off screen cues; unison complement/contrast, split-screen exploration,
- Use of 'cone of capture'.
- Communication methods used: web-cam, email, Skype.



Trio working with split screen

Colleen/Sarah/Amy

- Use of personal lives to influence devising, props and text
- Processes included: free associative writing, use of question and answer, improvisation, split-screen, camera frame
- Use of 'cone of capture'
- Communication methods used: web-cam, email, Skype.



Trio using text, stories and props

Beau and Danielle

- Use of previously created material based from gesture
- Processes included: Accumulation formula, collaboration of ideas, autonomy of theme, numerical codes.
- Use of 'cone of capture'.
- Communication methods used: web-cam, email, Skype, You tube.



Group work based on accumulation and using metronome for accompaniment



Faculty work from Liverpool projected to Temple



Audience question from Temple to Liverpool

Project Evaluation - Artistic

"It was interesting that we each tried to do something specific with the technology, as well as to consider the definitions of the space of both the live theatre and the screen, and [how we were able to layer] connections and collisions between the two." (USA)

"It was not just about how the technology helped with the piece, but how the dancers became something else; for example, we became an interactive company of 7 on screen at the same time as being 3 or 4 live dancers interacting with varying numbers on the screen. "(UK)

"One choreographer makes the best of the awkwardness of adjusting to the technology... playing with the dancers going in and out of view." (USA)

Project Evaluation - Pedagogic

"The project and the technology gave us the opportunity to share a journey in a personal relationship through dance collaboration. It was an overwhelming experience for being in contact with each other...it has been a nice experience to get to know you, and weird because I cannot touch you." (USA)

"It feels strange to be part of a performance where we have built a relationship, yet cannot enjoy a post-performance social! Sharing the experience has enabled us to feel close." (UK)

"The audience struggled to watch both live dancers and the screen sometimes." (USA)

"It can be difficult for developing intimacy. The relationship between dancers is on display. The dancers have to try to build a connection with one another, talking in front of everyone, while watching their own image projected on a screen, and often hearing their voice in an echo." (USA)

General Student Comments

- Ideas lost in translation-- Many ideas and thoughts were lost in translation over email because we did not understand each other's intentions.
- Links to sessions -- Once I had links to the sessions, I would watch them during the week and piece together the phrase work.
- Audience accepted technical issues-- I received interesting and surprising feedback about our performance. Because of its structure, any technical difficulty that we

- experienced read to the audience as part of the piece.
- Learned about each other and technology--This was a new way for me to create work and I think our performance reflected what we learned about each other and technology.
- Dancers were resourceful-- We dancers were resourceful, and willing to keep bending to the capabilities of the technology.
- Strangeness of navigating mediated presence— The strangeness of navigating mediated presence, the experience of connecting with another human being through a technological filter.
- Can't sense subtle energetic shifts--You can't really see them, you definitely can't touch them, and you can't sense those subtle energetic shifts that allow dancers to sync up their movement. ... At times, their movement feels purely mechanical to me. At the same time, certain human characteristics are amplified; one dancer leaves the microphone on and close to her mouth as she dances, and halfway through a lengthy piece, the sound of her breathing drowns out all other noise in the space.
- Exercise in letting go-This process has been an exercise in letting go, not only of the expectation of being able to work on any given day, but also of any previous ideas for the work because of communicating through this medium is so different than anything experienced before.
- Grasping for energy-- I feel like I am grasping for someone's energy.
- Comfort with image-- I was becoming uncomfortably aware of her image at first, but then gradually settling into the experience of being larger than life.
- Prior experience helps-- The one choreographer who had the most prior experience... developed a very specific, cleanly geometric and gestural phrase... Even with this adjustment, he commented that teaching the phrase to the Liverpool counterparts took an inordinately long time.

Inspirations for future work

Despite the challenges, each choreographer felt that he or she had gained something positive from this process. Some of these benefits expressed by the students were:

"I had a connection with dancers half way around the world, and that this project enabled me to be connected to a global sense of a dance community".

"This process increased confidence in using technology in work in the future".

"This opportunity was valuable career skill building, enabling him to have at least a familiarity with technology that is becoming increasingly important in all fields".

"As a dancer and a kinesthetically-oriented person, I still value personal contact over virtual. However these kinds of virtual connections offer a complementary education and communication tool that enable connections and information that would not be shared otherwise".

Their suggestions for future projects included:

"Longer sessions might bring more humanity to the work. You would see the tiredness, the tension, readings that you get when you see a person".

"If I worked with this technology again, I would most likely narrow down the scope of my project from the beginning. I also think that it would be helpful to have one person in charge of setting the choreography and the other performers could contribute input and creative ideas".

Future Work/Considerations include:

- Exploration with students idea of new extended body through the use of technology and screen projection possibilities
- Education of audiences regarding viewing of intermedial/ telematic performances shown in theatre settings
- Networking at institutional level
- Software for audio/video (DVTS)
- Cameras (NTSC/PAL)
- Delay and noise/echo
- Microphones for moving bodies
- Time zones for scheduling

 Dedicated Technology Space: designed to allow more productive use of time for researcher, teacher, and student

Larger issues for Consideration

- How does the use of technology affect pedagogy and creative process?
- Can traditional expectations be applied or do medi-aesthetics need to be developed?
- How can this work be more widely used?
- How can international collaborations be developed into the regular curriculum?
- Where do we go for other technology?

The Next Exploration: Fall 2009, Project 3

The next mission will be...

- Restricted to Fall 2009 semester
- Have more developed structure from outset
- Faculty directed work
- Use a longer session for final audience discussion.
- Experimentation with assisting the education of audience, by bringing them into key points of the process and involving them in dialogue with the creators and performers.
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