

## **Altered States: Multi-site Performance High**

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“The relative freedom, spontaneity, and complexity of the images formed between the elastic body/mind of the dancer present in the room with me, the projected video of bodies, and performers interacting in space gave a palpable electric sense of virtual synergy.” These are the words I wrote to describe the experience of being immersed in my first *Interplay* multi-site performance. I had the sense that I had experienced a telematic embrace, an event that was truly more than the sum of its parts, which Roy Ascott described as a feeling of “connection” and “close community, almost an intimacy...quite unlike face to face meetings.”<sup>1</sup>

### **Introduction:**

For the past three years I have been participating as a collaborator in online performances with the Art Grid group,<sup>2</sup> and in this time my understanding of the ideas of community, place, and audience have been greatly expanded. But perhaps the most stunning alteration of my basic perceptions of live performance have come through my experiences in the *Interplay* series coordinated by the University of Utah and Another Language.<sup>3</sup> As a collaborator in these multi-site performances on the Access Grid (*Hallucinations*, *Loose Minds in a Box*, and *Dancing on The Banks of Packet Creek*), my understanding of what it means to be a performer has greatly altered. In this paper I will provide a brief overview of the performative history and three types of performance within the Art Grid community, then describe the *Interplay* performance processes as it occurred locally at the University of Maryland and try to re-capture the certain sense of synergy and electricity that comes from being totally present in the moment, alive to the changing needs of the art as it evolves.

### **History/Types of Involvement:**

The Art Grid group (formerly Art on the Grid) is an online community composed of a loose collection of artists/computer scientists at various research institutions. They communicate via an e-mail distribution group, meet monthly online via the Access Grid, and form additional collaborative groupings which meet, rehearse, and perform together as members are available.<sup>4</sup> Current members of the Art Grid consortium are from multiple universities and research institutions including but not limited to: the Arctic Region Supercomputing Center at the University of Alaska, Fairbanks; the Envision Center, Purdue University; the University of Montana; the University of Maryland; the

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<sup>1</sup> Roy Ascott, *Telematic Embrace: Visionary Theories of Art, Technology, and Consciousness* (Berkeley: University California Press, 2003), 6.

<sup>2</sup> My research can be seen here: [www.mith2.umd.edu/fellows/nadja/digthet/index.htm](http://www.mith2.umd.edu/fellows/nadja/digthet/index.htm).

<sup>3</sup> [www.anotherlanguage.org](http://www.anotherlanguage.org).

<sup>4</sup> Scheduling across institutions and time zones can be a difficult task.

Electronic Visualization Laboratory, University of Illinois, Chicago; the National Research Council, Ottawa, Canada; the Center for High Performance Computing (CHPC) at the University of Utah; Boston University; and Ryerson University.

Each site runs Access Grid video-conferencing software on their own equipment configuration (both Mac and PC CPUs, web cameras, and audio pickups such as echo-cancellation equipment, projectors or display monitors, etc.) on a high-speed Internet2 connection.

The group began meeting in 2002. I first encountered the group in the fall of 2003 through the University of Maryland's Visualization and Presentation Laboratory (a campus node), and have been an active participant and collaborator ever since. The informal community of artists and scientists meeting together to show media artwork and communications tools and to chat in shared venues, evolved into a performance community through open participation in a series of performance events (with calls for participation open to interested parties).

*Interplay* is by far the most central performance event in the Art Grid community. The *Interplay* series is seeing growing coverage from the *Journal of Higher Education*, greatdance.com, and via recent performances at the Siggraph and Supercomputing conferences in Summer/Fall 2006, as well as being finalists for the Peoria Prize. Initially meeting in public venues, the Art Grid group now meets in a venue created and hosted by Jimmy Miklavcic and the CHPC. The venue is modeled after a Theater building, and contains meeting "rooms" including a dressing room, backstage, black box, greenroom, and a café. This was done so that multiple performances/rehearsals could occur at the same time.<sup>5</sup>

Because *Interplay* has become such a central event for the community I will be discussing it in detail, but first I would like to describe what I see as the range of types of performance events occurring on Art Grid. These events range from simple improvisatory events much like happenings, to workshops and potluck performance, to rehearsed and scripted theatrical events, and orchestrated multi-site performances melding multiple media and forms of expression.

One such open participatory event was *Network Touch* by Galen Scorer. This piece was a visual collage of hands touching across space. It was a simple, but effective experiential piece which communicated the visual impact of a perceived sense of proximity between participants across the United States and beyond. As a participant (in Fall 2003), I was compelled by the experience of reaching out for and sensing another's hand when I watched the mixed video stream joining my image with another's. In addition to the compelling visual imagery (hands are one of our most expressive features), what is striking about the piece is its simple improvisatory nature. I joined in the event my second time on the Access Grid without any preparation but the node facilities and response to the call to participate. The art-making event was simply open to

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<sup>5</sup> As far as I know, thus far, the *Interplay* group is the primary user of the Theatre venue (despite encouragement from Miklavcic that others should use the space).

everyone on the Access Grid. That kind of artistic openness is truly refreshing and also challenging to the infrastructures which often surround the performing arts. To be embraced as a participant and offer content to such a pure performance event opened my heart to the freedom of collaborating online. Likewise, other pieces such as *Impossible Sky* by Ryerson University simply asked participants to transmit video of the sky outside their nodes to be merged into one. This type of collaboration is simple, but visually, and on some level emotionally, effective.

The second type of Art Grid events have taken the form of demonstrations of various animations or VR software in meetings, as well as multiple workshops (such as a percussion workshop organized by Alaska) and pot-luck or variety style group entertainments. In the fall of 2003 I sent out a call for participants asking for Art on the Grid community members to join me in exploring the possibility of broadcasting from outdoor environments, thus demonstrating the distance between us through our varying physical locations. (It seemed to me that our fascination with the distance bridging capacity of the Access Grid would be better demonstrated with real-time video containing natural movement including birds, wind blown foliage etc, something which was more than the inside of white walled offices which could be just down the hall.) *Outside/In: Part 1* was performed in November 2003 with Boston, Alaska, Utah, Ottawa, and Maryland. The piece was a semi-structured event in which each participating group solved the issue of how to broadcast from outdoors in their own way and provided content that tied them to their physical environment. At Maryland, we used this as an opportunity to test the Personal Interface to the Grid or PIG in performance, running a laptop out the window of my office and broadcasting into the Access Grid Full Sail room from the lawn. The performance experiment was primarily successful with Alaska presenting video of lights in the sky, Utah reading a poem about the landscape, Boston singing the “Man Who Never Returned,” and Ottawa reciting an original poem about the cold and showed the effects of snow on their bare hands. Maryland read an archival poem about the region. Though the pieces were rehearsed at each site, participants (including myself as the coordinator) heard/saw them for the first time during our pot-luck joint performance.

The third type of performance event is a fully-scripted and rehearsed theatrical piece. *Outside/In: (Part 2) Within These Walls* is a good example of this type of event. I was interested in further exploring broadcasting from outdoor environments and joining the technology with an aesthetic metaphor. The metaphor of the mythology of Emily Dickenson and the lasting clarity of her poetry served as the basis for this performance experiment. The conception of her as an isolated woman whose physical self was stationary and yet her mind/spirit is freed into/by nature—was a wonderful conduit to exploring the technology’s potential to transport individuals out of themselves (and to connect us to the possibility of the physical world that surrounds us).

To this aim I created a script which utilized the idea (or ideal) of Emily Dickenson as a woman contained in an indoor space (her room, the black box theatre) who reaches out to aspects of herself (also costumed in white dresses for visual similarity) in different

outdoor environments (Places) for different life lessons suggested by a selections of poems grouped together interspersed with light dialogue.



*Image from Outside/In (Part II): Within These Walls*

The final performance was staged locally with participants sending video feeds in from Utah (the University of Utah's Center for High Performance Computing), Ottawa (the National Research Council Canada), and outdoors at Maryland (the University of Maryland's Visualization Performance Lab/Maryland Institute for Technology in the Humanities/Theatre Department). The images were projected on rear-screen projectors (via VPL's mobile Access Grid node) in the Theatre Department's blackbox theatre. There was a stunning contrast between the enclosed space and the varied natural environments projected on stage.<sup>6</sup>

Another piece I staged this Spring (2006) entitled *Compass Points* was also fully rehearsed, but this time collaboratively scripted. This piece was part of the interdisciplinary digital media performance I coordinated with Paul Jackson called *Elements*.<sup>7</sup> *Elements* was divided into four sections: Air, Earth, Fire, and Water. Each allowed different artists/technologists to take the lead on that section while collaborating with others, thus exploring a variety of approaches which might be characterized as abstract and ethereal, personal responses to place, politically charged, and ecological.

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<sup>6</sup> In Maryland, we had green grass but no leaves on the trees; in Utah they had bushes full of foliage and flowers; in Ottawa there was no growth—just bleak winter branches.

<sup>7</sup> which was a first of its kind media collaboration on campus between faculty, staff, and graduate students in Theatre, Dance, Music, and Art utilizing motion sensing/triggering, animation, video, and the Access Grid.



*Image from Elements*

*Compass Points*, (the Earth section of *Elements*) was a spoken tapestry of embodied place in which the three local and two online performers each represented a direction on the total compass. We had each constructed segments of writing which I edited and interwove, braiding themes together, and linking monologues about the great salt plain in Utah, Mount Saint Helens in the Pacific Northwest, the rich flat fields of North Dakota, and the beautiful Redwoods and coasts of Sonoma County California. These monologues were crafted into dialogues of fragmented thoughts and memories surrounding such shared personal themes as home, gardening, death, and a sense of love and respect for natural places. We worked separately on the stories, but joined together in online rehearsals to finish the process of linking them together (with a feel much like an interactive text). This sense of simultaneous fragmentation and connection of overlapping lives (seen on the Internet) was furthered in the performance. The actors were in different states of proximity or presence, and mediation: Moira Jackson and I were live in front of the co-present audience and looking at them and each other, Aaron Tobiason was at once live and mediated as he spoke from onstage through the PIG's camera and broadcasted out to the local audience via a screen and beyond, and Jimmy and Beth Miklavcic (of the Art Grid and *Interplay*) in Utah appeared to us solely through the Access Grid stream on the screen above us (or to Aaron on his PIG).



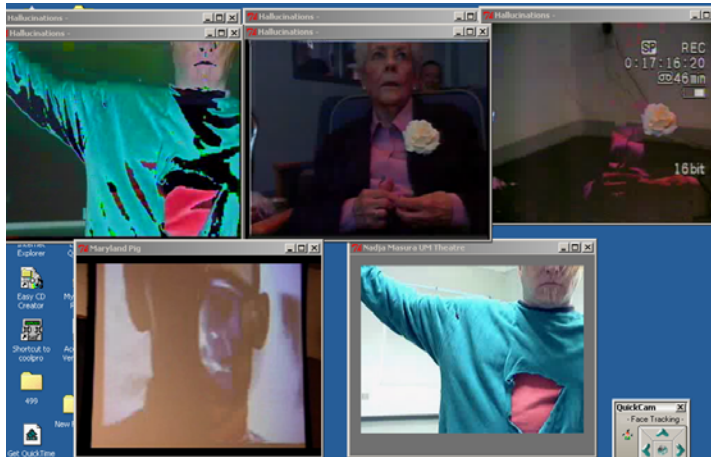
*Images from Elements*

In both of these examples, the performances were staged in theatrical venues with one local audience as the primary receivers of the event while distant (Access Grid) collaborators sent video of their performance to this location. The performances were well rehearsed, scripted, theatrical (and dance-theatre) events and contained a definite separation between backstage and on stage areas and roles. Once the action began, technicians were backstage and performers onstage. This is not the case with the next type of performance I wish to discuss.

*Interplay* coordinated and directed by Jimmy and Beth Miklavcic (at the University of Utah) began in 2002 with *Intransitive Senses* which consisted of artists, poets, musicians and other performers involved in a tea party installation videoed by camera people in multiple performance rooms in one building at the University of Utah and transmitted to a fairly large Access Grid audience (of which I was one). The next year the program experienced gradual growth as *Interplay* took its first steps into involving other institutions.

In *Hallucinations* (2004) Brian Buck and I from Maryland (he contributing dance choreography inspired by the Möbius strip and I contributing MIDI-controlled video clips merging consumerism and politics), joined Scott Deal and Miho Aoki in Alaska at the Arctic Region Supercomputing Center (lending complex ethereal computer animation and live electronic procession respectively), to form a creative tripod with Utah's flash animation and hallucinatory multiple location and camera POV staging of a piece on stereotyping. The feeds were mixed together by Jimmy in Utah. As a partner in the creative project, I felt as if this were a very balanced creative experience; Brian danced to Scott's Music, Jimmy mixed Miho's animated hands and my hamburger commercial, Brian danced back and forth to the pedestrians forever caught in a recursive loop walking up the Lincoln memorial steps, and Beth's words and the image of the imposing bald

executive blended with Brian’s eyeball or a giant Barbie doll or an American Flag. It all just seemed to work, having its own sort of (radical slippery) logic.



*Images from Hallucinations*

For this performance, Brian and I were in a small room with only two assistants, two PIGs (comprised of computers, video cameras, headsets/microphones and speakers), one projector and an archival camera. We improvised and provided our own costuming, properties, and much of the computer equipment. We had converted a classroom into our mini-Access Grid performance space and performed the roles of technicians (installing and maintaining the PIGs even during the performance if necessary), camera operators, performers, and content creators (MIDI-video, etc.). It was an experience of “hey, let’s try it and see what we can do.”<sup>8</sup> Each site was exploring this type of mediated online performance with others for the first time, testing out the collaging of images, and reacting to the sounds and shapes created by others. With everyone reacting to multiple stimuli and creating mediated art with people hundreds of miles away in real-time, in performance there was a sense of it being electrically charged, as if the real event was taking place in a unnamed virtual/interstitial intersection between us.

The next year the series experienced a growth spurt, with six total sites participating. As *Interplay* grew to include additional sites, it evolved in computer, artistic, and practical complexity (including creating a simple color-coded dramaturgy, and scheduling rehearsals). *Loose Minds in a Box* included VR from the Electronic Visualization Laboratory at the University of Illinois at Chicago, a performer in a motion capture suit sending data which triggered a MIDI patch written in Montana which played back (at varying speeds, pitches, directions, and voice tracks) a poem I wrote. The show included animation from Alaska and a sound duet between Scott Deal in Alaska and Charles Nichols in Montana, and multiple dancer/movers in Maryland mixed into to the visual scene with Beth blue-screened in Utah and the motion-capture dancer in Perdue. The work was mixed live from multiple feeds into one central stream which was broadcast online as well as over the Access Grid, where multiple windows could be displayed and

<sup>8</sup> As Paul Jackson likes to say, our enthusiasm and aesthetics is akin to garage theatre or “I’ve got a barn” attitude of old Mickey Rooney and Judy Garland films.

arranged by any Grid audience site. The idea that no single audience could grasp the totality of the same whole event causes Jimmy to now call it an “earthwork.”

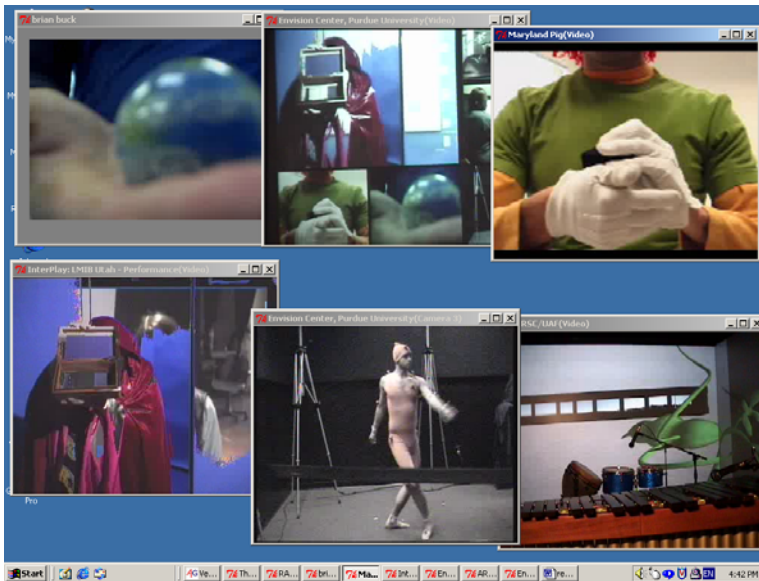


Image from *Interplay: Loose Minds in a Box*

The starting point of each *Interplay* performance began with a title or theme to be interpreted by each site and submitted to the total process. Locally, we were sending images of four dancers (myself included) among physical objects of child’s play such as a doll house and oversized colored building blocks, boxes from which we removed brightly colored costumes which we layered on haphazardly (following Beth’s idea that there be “dressers”), adopting certain social roles as our garments changed. Our interpretation of this performance’s theme was the idea of social roles as societal boxes in which we put ourselves. Brian did his dance from within a large blue-screen-able box and was attended by a clown, while I was attended by a multi-colored-coated mother figure (played by Moira Jackson). One of the potentially most compelling mixes involving scale at our site included my body posed and ready to be dressed by cut-out paper doll clothes from Alaska and put inside of the doll house on the other side of the room in Maryland. Over time<sup>9</sup> the performance evolved into three other iterations as our local cast/crew changed. But certain aspects such as the unsocialized individual coming out of a blue cocoon against the white wall, the red mother and daughter violent hair brushing scene, the couple’s waltz, the doll house, paper dolls, and dressing scene, and the little girl in blue for the poem that ends the piece, remained.

In this year’s performance, *Dancing on the Banks of Packet Creek*, again with six participating sites, the amount of video streams sent out was tremendous (and perhaps even overwhelming). Participants included the University of Alaska Fairbanks, Boston University, University of Maryland, Purdue University, University of Utah, and Ryerson University-Toronto in Ontario Canada. Purdue provided motion triggering; there was a cello and zen gardening duet wrapped in string joining Boston and Utah; Utah also had

<sup>9</sup> performed first in summer and then fall for two conferences.



performers in multiple venues such as staircases and an artist creating sculpture out of books; Alaska had a class involved in playing percussion and an Irish jig as well as animations this time from multiple sources; and from Maryland we had three to four performers, spoken words, and video of water I had been shooting and images of rivers from space. Truly, this was an immense undertaking, an event which was growing beyond the scope of anything we had collectively done before—and far beyond what one audience member or participant could take in at once.

“While one is not equal to zero, begin: Packet by packet, block by block, We seep in, pause to saturate the fibrous optical tumor, then slip unperceived beneath errors and root’s power, gather electron speed, churn with muddy waters carving the data bank in swift gushes- recurse and bend, bend and recurse, recurse and bend, bend and recurse, crashing into the sea of data, again becoming what we once were.”<sup>10</sup>

For me, one of the highlights of this production was moving in relation to the two dancers at Perdue while on the bluescreen which allowed us to visually share space. Another highlight for me was swimming on the screen while shot above from a ladder, allowing me to surf the other sites’ video and animations. Also rewarding was collaborating with Jimmy on a piece of spoken text which I wrote in terms of water flow and he adjusted to fit information flow in an online dramaturgical session.<sup>11</sup> It was also rewarding to work at the University of Maryland with Paul Jackson (Dance Technical Director) in a new performance space.

### **Performance Setups For Interplay Audience/Performance Spaces:**

There has been a wide range of site setups for the performances: the Electronic Visualization Laboratory using motion capture and CAVE-like wall projections; Alaska using a node space converted into a performance workshop with percussionists and animation; Montana with a smaller performance space and doing primarily data manipulation; Utah providing the main audience space, multiple performance spaces, and conductor’s mixing booth; and the University of Maryland (with the exception of *Outside/In Pt2* and *Elements*) using classroom spaces and a choreography studio.

Many of the other sites had more sophisticated computer resources than our group, because they were associated primarily with computer sciences or research facilities, rather than the performing arts. As the interest in performance happening on the Access Grid grows, additional artists in the campus and professional communities are becoming involved in the performance adding to the variety and quality of performance. It is much more difficult, however to approach from the artistic side and convince performing arts

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<sup>10</sup> Jimmy Miklavcic, text from *Dancing on the Banks of Packet Creek*, 2006.

<sup>11</sup> “While one is not equal to zero, begin: Packet by packet, block by block, We seep in, pause to saturate the fibrous optical tumor, then slip unperceived beneath errors and root’s power, gather electron speed, churn with muddy waters carving the data bank in swift gushes- recurse and bend, bend and recurse, recurse and bend, bend and recurse, crashing into the sea of data, again becoming what we once were.”

programs rooted in traditional forms of performance to increase their technology. For the first two years of our involvement, I and my collaborator Brian Buck performed in classroom spaces, utilizing our own resources and some of the University's (such as a single CPU and the classroom projector). It was great luck that for our third year, I linked up with Paul Jackson (the Technical Director of the Dance Department), who was somewhat of a performance maverick and one of the few staff members who was open to and skilled at technology collaboration. With Paul's help we secured a choreography studio and upgraded our equipment by one PIG with the ability to send two streams. With a larger space we were able to facilitate a local audience<sup>12</sup> and set up the blue screen on loan from University Video services.

The space was a free and active arrangement of surfaces, computers, and mobile bodies. We played with shooting the bluescreen from the front and above (as mentioned earlier), the reflective surface of the mirror, the white walls, even the views out the windows and the lofted industrial-looking ceilings. It was like being set free in our own playful world of cameras and computers. In the center of the room was a table with an miniature Zen garden and cut-out words, a ladder and two (and a half) PIGs: to the left the Dell with a cheap Logitech camera which could be hand-held and moved anywhere), and slightly to the right Paul's Mac with a newly installed PIG allowing for two streams; one from a minor web-cam, another from either a good camera or from a transmission of prerecorded video files of water or Google Earth images of rivers from space. On the first wall of the rectangular space was the projected image of the Dell PIG's desktop, showing most of the windows of the performers, our feeds, and the Main Mix. This was to help us stay abreast of the action and orient ourselves in space and time in relation to the other performers in the Mix—as well as for the audience. In the corner of the next wall was the area setup with the blue cloth (water) and papier mache boat which we manipulated along waves during the Irish jig scene. The next wall was bare except for the Dell PIG and a microphone station and my laptop PIG which I used both for cueing (which was set up on Jabber), and the text I read as a voice-over during the performance. The third wall contained properties (and was a “back stage” space), while the fourth wall held the bluescreen and the rehearsal mirror, and the occasional audience member. It was as though we had been set free in our own world of cameras and computers.

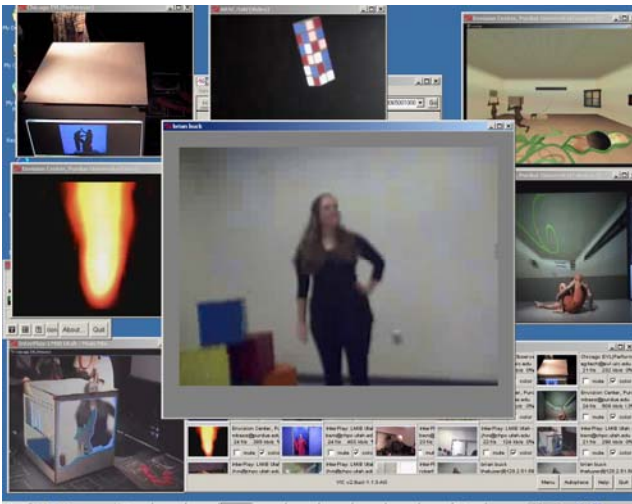
The four of us—Paul, Moira Jackson, Peter Rogers, and myself—generally had multiple performance tasks and technical responsibilities. Because we all had previous experience with *Interplay* or at least basic training in the use of the PIGs, we were able to function as a unit, each interchanging between roles of performer and technician on various levels at different times within the performance. One might hold a camera on another while they danced, another would take screenshots, then switch and allow the other to move in front of the camera. It often took all four of us to create the desired effects on both PIGs or with staging. (An example was when we had two people wave the blue cloth, one to manipulate the boat, and another to come in close with the camera.) It was an exhilarating experience, and very fulfilling.

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<sup>12</sup> present during dress rehearsal.

But performances with technology are not often without incident. Anything can happen. The key is to just keep going. In earlier *Interplays* there were moments where the PIG would stop working, moments when the video would cut out if someone tripped the cable, classroom projectors on timers that turned themselves off in the middle of a performance, and one time the blue screen came down on me while we were in the main mix. Occasionally, I would have to leave the stage area to attend to a technical issue and during performances verbal cues would often be given aloud.

These events are times which make it clear the necessity and difficulty of wearing multiple hats as coordinator/director/performer/technician, as more trained hands make for easier work. Due to the fringe nature of our performances, (despite growing acknowledgement from off-campus sources) I was glad to have the committed team we did. At this point, the performance can not—by its nature as a technology blended event—be perfect. The evolving nature of the Access Grid platform and awareness of our own limitations instill a sense of competence and readiness; being able to fix things as they happen and roll with the unexpected. It changes every night, mutating into slightly subtler or starker shades of meaning. It is always evolving, and committing to this type of multi-site performance means retaining flexibility and above all, remaining in the moment—alive to all the sights, and sounds, and messages around you.



*Image from Interplay: Loose Minds in a Box*

The real-time art-making process requires a flexibility of both mind and body. In the middle of each performance, one reaches an active sense of flow, as elements of sound, movement, and art shift and blend from one aspect into another. The experience creates a heightened awareness in which many roles (director, technologist, visual artist, poet, dancer, actor, and problem-solver) occur in quick succession as elements mix seemingly simultaneously. This multi-site performance high is both exhausting and exhilarating. It is an hour filled with idealism, disappointment, stress, and elation. It is like nothing else; a sense of synergy which comes from being a part of a performative experiment in connection. As a performer/technologist you are ‘on,’ there, mentally-present, virtually connected, discarding roles, flowing with the data.

But how can one put the deeper meaning of this experience into words? There is something slippery, elusive, and alive manifest in these moments of interaction. What is it that we are really doing when we combine images of distant participants placing ourselves in composite virtual or actual location, or when we act upon environments we are not in, or when we interrupt the boundaries between performer and audience, society and self,<sup>13</sup> or when we use motion capture to trigger patches or programs to tweak and reassemble data made of human voices, or when we multiply audiences (location)?

We are creating connections. We are creating new ways to know our world and act within it. We are suspending (for a time) rules of ‘here’ and ‘there;’ boundaries between ‘you’ and ‘me;’ pushing for a moment the concept of ‘other’ out the window. Through our video portholes, our virtual meetings, our online communities, we seek each other and connection in the undeniable present. We fumble towards a utopian breath, a total art, a happy moment of un-claimable uncertainty. It is almost as if a barely perceptible weightlessness occurs through the frenzied pace of doing, all of us doing (performing, creating images, sounds, etc.) on our separate sides of the world...making something beautiful and strange where our energies meet. This energized moment is there, like a warm stillness within the rush of activity (that does not manifest each time, but is still sensed).

Perhaps the core of this type of art-making transcends traditional performance emphasis on entertainment, existing essentially as an experimental performance born in the technologically-linked collaborative process. Some of the sites have experimented with allowing audiences to create a part of their collaboration to the artistic whole. This is very exciting. I believe that the strength of the Art Grid community is the sense of openness which can be seen in the calls for participants, and in the good-natured meetings and e-mails which link the community. I would like to imagine that someday this awareness (as happened to me in my first *Interplay*, and has been experienced by other contributors in various performances<sup>14</sup>) is something could be expanded, and that the pool of participants could be somehow broadened (both geographically and socially) to give this sense of inclusion, connection and contribution on a yet unheard-of scale. To quote Oscar Wilde, “A map of the world without Utopia is not worth glancing at.”<sup>15</sup>

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<sup>13</sup> As in Stellarc’s work on the body or audience participation Edwardo Kac or Maggie’s Love Bytes which dispel ideas of public/private place.

<sup>14</sup> Brian, Paul, Jimmy and others have all made similar comments.

<sup>15</sup> Oscar Wilde in Lucy Lippard, *The Lure of the Local: Senses of Place in a Multicentered Society* (New York: The New Press, 1997), 290.