# *Messaging in the Noosphere* A Case Study in Integrated Performance Media

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#### Abstract

Could we ever know each other in the slightest without the arts?

Canadian writer Gabrielle Roy (cited on Canada's \$20 banknote)

This paper investigates ways that integrated electronic media can offer innovative support to the creation and delivery of theatrical performance events. This particular case study, *Messaging in the Noosphere*, consequently serves as a unique example of the new interdisciplinary genre of "Integrated Performance Media." Components of this practice-based research were:

- A series of live theatrical performance events that incorporated the use of "Integrated Multimedia"
- A globally distributed Internet media event
- A web site system, www.sundialmedia.com/messaging.html
- An interactive DVD product

Communicating an interconnection between theatrical performance, global communications technology, and HCI (Human-Computer Interaction) computer science, *Messaging in the Noosphere* shows how artists can serve to frame science and technology in a context that gives meaning to the monumental change in our society as a result of humans and computers interacting.

# Introduction

The electric dilation of our various senses causes what Pierre Teilhard de Chardin calls the 'noosphere' or a 'technological brain for the world.'

— Marshall McLuhan 1962

In early January 2004, I presented seven performances of *Messag*ing in the Noosphere to invited audiences at the University of Calgary, Canada as part of my Master of Fine Arts (MFA) thesis in the Department of Drama. The audience participants knew, from the information release, that it was created and directed by Lori Shyba and featured "Fast-cut video, live performance, immersive games, hip-hop cyberculture, visceral subwoof audio, and women with knives ... all in a big black-box theatre space." They were told that as part of the experience, they would "recline on comfortable floormats within an array of hanging crystal doorknobs signifying computer input devices. The computer output device? A huge plasma display screen suspended facedown at them from the ceiling ... a fully immersive human-computer scenography."



Fig 1. Information Release: Scene from web-delivered preview trailer.

In advance of attending the live performance, audiences were encouraged to log onto the web site to view the preview trailer. In the short web video, they discovered that The story, set in the Future of Tomorrow, is about a the family of Feargod who hires a company named HexaKali to create a three-dimensional computer in their media room so they can play the Noosphere Reality Game Show. A horrible virus named SatanKali666 invades the machine, kills the kid named TLK2U by engaging him in a Bad-Ass Adventure Game, and then victimizes his brother ASAP. ASAP takes direction from the God in the Machine to neutralize SatanKali through a surprising display of faith that consequently endows the family with participatory games of prosperity and enlightenment along with a spiritual connection with an artificial intelligence.

They came, they saw, they discussed the experience. They e-mailed their reactions, and stopped me in the halls. As writer, producer, and director of the production, I judiciously collected and analyzed this data because behind the scenes of this experimental performance media case study was a qualitative research project with serious objectives — to reflect on theoretical claims that firstly, human-computer interaction (HCI) and, secondly, integrated electronic media could establish new paradigms in the creation of performance media events.

This paper, assembled for the 2004 Interaction Symposium in Sydney, Australia, deals specifically with the second claim. In it I will describe the ways in which integrated electronic media helped to produce innovation within the *Messaging in the Noosphere* dramatic performance project and how this research consequently helps define the new genre of "Integrated Performance Media."

Since one of the aims of this paper is to allow readers to embark on other case studies based on the principles uncovered, I have chosen to embed specific hardware, software, and equipment information in order to share benefits of the technical achievements. Likewise, I hope my playful use of technology encourages other artists to advance ideas through a creative process that includes spontaneous experimentation.

# What Made the Piece of the Project "Integrated?"

In its essence, as it relates to my work, an integrated performance media project can be thought of as a series of technologically mediated events, services, and products that use a theatrical performance event as a creative incentive. The individual elements of the project support each other with coherence of representational metaphors, presentational design elements, and thematic content. Following is the breakdown of integrated media elements within *Messaging in the Noosphere:* 

- The media "events" were the live theatrical performances which combined the drama of acting, dance, and storytelling with a visual scenographic installation including the "Integrated Multimedia" video and sound design.
- A secondary integrated electronic media "event" was the globally distributed streaming Internet broadcast.
- 3. The media "service" was the interactive web site system that functioned as an informational tool as well as a delivery space for unique artistic elements.
- 4. The media "product" was the interactive DVD that disseminated bonus material including an archival filmic documentary.

Each of these elements in the series had its own audience and its own platform of delivery. However, they shared representational sensibilities such as the use of design and scenographic metaphors, presentational design aesthetics such as visual organization, and thematically they shared the stories of families and gods in playful challenges against the "Noosphere Reality Game Show."

# The Integrated Multimedia

When a performance is based purely on a text composed of words, there is a danger that the balance in the performance will be lost because of the prevalence of linear relationships.... This will damage the plot understood as the weaving together of simultaneously present actions. — Eugenio Barba 1991

The first instance of "Integrated Media" appearing in this project was the audio/visual "Integrated Multimedia" presentation that ran uninterruptedly throughout the performance on the plasma "output" screen. Before describing the screen's performative function, it important to understand the context of its scenographic installment within the mise-en-scène.

# Crystals and plasma as input and output devices

The main component of the "visual text" of *Messaging in the Noosphere* was a scenographic space through which both performers and audience could move within an enveloping array of crystal doorknobs. Suspended by monofilament strands from the rungs of the overhead lighting grid, these crystals sparkled and spun, shone and refracted the light focused on them through the performance space. The individual clusters of "Crystals One through Eight" dramatically simulated the *input* needs and desires of each of the characters of the Noosphere.



Figure 2. Clusters of crystals (symbolic of input) together with the filmic screen art (symbolic of output) within the corporeal, 3-D human-computer interaction space.

The forty-two-inch plasma monitor that ran the "Integrated Multimedia," was the re-active *output* device. It was installed in a harness frame and hung fourteen feet above the floor with the screen facing straight down. That way the reclining audience members could see, hear, and feel the full impact of the filmic screen art and the live performance, all within the same "gulp" of experience. The scenography, including the Integrated Multimedia, facilitated a weaving of aural, visual, and physical interactions where the audience became engaged in a relationship between a "sound" space and a "screen" space as well as a "live" or "real" space.

During the performances, the audio/video components of the Integrated Multimedia ran off the same G4 Apple Powerbook computer that they were created on — my trusty technology partner, the "Silky V" computer that enabled not only creation and delivery of the audio/visual content, Figure 3 (a) but functioned as a set piece as well as seen in Figure 3 (b).



Fig 3 (a). The plasma-delivered "Enlightenment Game" high scores in scene five. Fig 3 (b). Corresponding live action from scene five with Silky V as a "set piece." (As appeared in the split-screen interactive DVD documentary)

#### The "Sound Space"

The original sound design created for the show was composed by Zach Zamisky and Tessa Partridge whose goal was to "create an aural text of

mystery and electricity of non-specific space and time — a continual organic throb and pulsation." Their technique of creation was aligned with conventional movie soundtrack composition where they firstly developed an understanding of the production's artistic intentions and then, working from a videotape of rehearsal footage, developed an "electro-body" soundscape of the action and meaning of the scene. To supplement these original compositions, I montaged and "mixed up" additional sound and music files out of downloaded sound samples of Nokia ringtones, sine wave textures from 20 kHz (high-frequency) to 20 Hz (low-frequency), and three-second clips from contemporary hip-hop artists. The assembly was accomplished using Steinberg's Nuendo software on "Silky V" that was then exported and integrated into the Final Cut Pro video timeline.

During the production run, Silky V was cabled up to the sound system by stereo miniplug output to RCA to XLR and then on through the mixing board in the theatre's sound booth. These signals were fed into left and right channels in the existing ceiling-mounted speaker system with an additional channel allocated to low-frequency sounds that were distributed to a pair of enormous sub-woofers that were brought into the theatre space especially for this show.

### The "Screen Space"

An effective way to understanding the look and feel of the Integrated Video Multimedia is to review the storyboard graphic selections pictured in Figure 4. Since the audience was positioned on both sides of the screen, a simultaneous "upside-up" and "upside-down" orientation was required in many of the video's screen sequences.

Like most of the audio, the Integrated Multimedia video was also created and edited on Silky V. Software programs used were Final Cut Pro for video editing, Photoshop and iDVD screenshots for photo compositing and animations, and Quicktime for prototype exports used in rehearsals



Playing the online markets.



Betting on sports online.



Playing the ponies online.



Betting on poker hands in an online casino.



\$400K in 4 minutes.

#### Cont ... Level four

minutes. At the \$200,000 mark, the members of the cherubim begin coaching his trades by moving in toward him whispering names of companies to buy and sell, and then run around the cherubim shouting instructions and coaching his progress like sports cheerleaders.

Cherubim: (A sample of the cheers.) Trade! Place a bet. Play that market. Roll the Dice. We have needs. A-S-A-P, Money, Money. Spin the Wheel, Go Brother, Drum it Up, Bring it Home.

(Picking up on the lyrics of Pink Floyd's Money song.) I'm in a high-fidelity first-class travelling section, I think I need a Lire Jet.

On screen, we see ASAPs Game Card for the Prosperity Game with the caption "ASAP High Score." The screen dimly drips the words " I have found prosperity."

GodMachine: His wanting and action attracted.

ASAP exits.



God in the Machine Drips "I have found prosperity."



HexaKali creates the interface for the "Noosphere Reality Game Show."

Figure 4: A sample page from scene four of *Messaging in the Noosphere* script illustrating the simultaneously upside-up and upside-down orientation of much of the integrated multimedia screen display.

and for soundtrack composition. Video cameras used to shoot footage of the actors and the media clips were Canon XL1s and Sony VX1000 three-chip digital camcorders. During the production run, Silky V was connected to the plasma screen via an "S-video" cable that was strung up through the ceiling grid. On only one occasion was there was a glitch in the communication between Silky V and the plasma screen and that was when the computer's "sleep" corner was hit in error, causing the screen saver slide series of the universe to play instead of the *Messaging in the Noosphere* footage. This occurred in level one amid a sequence of events describing the goddess "HexaKali's" lighting of the sphere and the error fit in to the theme of the creation of the Noosphere, becoming, therefore, a "happy accident."

#### The Noosphere Reality Game Show

If a conventional stage play had a huge game board fly in from the grid from scene to scene, it would, no doubt, be considered a scenographic set piece. George Black, a set designer widely known for his innovation within traditional theatrical environments, urges directors to acknowledge that set pieces, especially if they represent a human habitation, reflect the personalities of one or more of the occupants. Black observes that the visual statement of the setting will not only stimulate certain responses in the audience but the environment will have a significant affect upon the actors in their characterizations and relationships. (Black 1991) This holds true for Messaging in the Noosphere because from the time it first appears on screen in the first scene, the Noosphere Reality Game Show (Figure 5b), like a big crystal ball, affects audience response by providing them with a sneak preview of the characters in advance of their live appearances. It also gave the characters a reflection of themselves by displaying games designed specifically for their interests. Accompanied by a song jingle, the Noosphere Reality Game Show provoked a predictable response of shock and delight in each and every character by immediately inspiring them to mobilize

their personal computer control device in order to partake in customized game adventures.

The display screen is an essential focal point in *Messaging in the Noosphere.* Just as the God in the Machine character appears as a recurring "virtual" character throughout the production on the plasma display, figure 5 (a), the Noosphere Reality Game Show, figure 5 (b), recurs as a "virtual" set piece, like a huge game board.



Figure 5 (a). God in the Machine and the style of her whirling words and phrases. Figure 5 (b). The user interface of the Noosphere Reality Game Show.

## The "Live Space" and Audience Immersion

As mentioned, the audience was positioned comfortably on the floor at an angle that enabled perfect lines of sight for both the live action and the filmic action on screen. Being gathered together in this way, the audience was immersed into what I call a "zero-distance of experience" for intimate involvement in the audio-tactile experience of the dramatic performance — the feel of the actors' breath, the smell of their hair, the visceral reaction to the low frequency sound waves, the zing of SatanKali's Chinese knives. At several moments throughout the show, the audience members were completely surrounded by the action.

Simultaneous to being amidst the action of the live performance event from this immersive or zero-distance of experience, they were also positioned in a fourteen-foot distance of experience from the plasma screen — or about the same distance that an average television viewer would be from their monitor in their own family room, and in the same general physical condition as well — reclined and propped up on cushions. Each invited audience at *Messaging in the Noosphere* could, indeed, be seen as an invited semi-circle of TV-watching "couch potato" friends with all the conveniences except their own remote controls to change the channels — and all profoundly still except for their gaze that darted from screen to live performance in a most intriguing way.





Figure 6 (a). HexaKali's Kathakali-inspired "lighting the sphere" dance in Level One amid the reclining audience. She is bathed in light from the plasma screen above her.

Figure 6 (b). ASAP drumming on the crystal doorknob "input devices." ASAP looks up at the plasma screen to gauge the affect it has on his net personal worth.

# Streaming the Event over the Internet

One of the surprising properties of computing is that it is a social activity. — Howard Rheingold 1993

On Thursday, January 22, 2004, the entire performance was streamed out to the world as an Internet broadcast. Audiences were invited from the Media Arts Program at the University of Art and Design, Helsinki, and the film program at Bond University, Gold Coast, Australia. An email broadcast also went out to members of the EMMEDIA Production Society in Calgary, and several cast members notified friends and family around the world. According to Web download statistics, other audiences came in as well from Austria, England, New Zealand, and other undefined locations.



Figure 7. HexaKali, connecting with the remote audience through the camera lens.

A professional Internet streaming service company, was retained to ensure the quality of the broadcast was first rate and that there would be no dreaded technical glitches. The setup took about four hours, the majority of the time being taken up synchronizing the camera audio and video signal with the broadcast hardware, connecting with the University of Calgary's computer network, locating a robust exit stream from the university to the streaming server in downtown Calgary, and hauling equipment and laying down cables. The first step in making sure *Messaging in the Noosphere* found an audience on the Internet was to quietly groom one. Several months before the performance event, the web site was built, uploaded, and used as a promotional tool for the event and considerable time was spent with both the Finnish and Australian audiences to ensure that they had the local performance times correct and had the right equipment and communication protocols. In its essence, this was a custom broadcast for a custom audience. At just before noon MST on the designated day, local time, cellular phone contact was made with three venues to test the broadcast stream before the event began. In both Finland (9:00 p.m.) and in Australia (5:00 a.m.) both the audio and video connections were confirmed.

The second step was creating a broadcast environment that resembled, as closely as possible, a television studio. There were no coloured gels installed on the lighting instruments, the actors were briefed on the importance of "projecting," and yet ignoring, the camera, and the audience was warned that the camera operator, namely myself, would be weaving in and out of the scene. Due to the fact that I had to get in close to the actors in order to capture their performances for the small screen, I knew I would be in the audiences' sight lines at times.

Consciously, I knew from the moment we started streaming the show that we had, in our small way, created an actual "technoskin of cosmic consciousness" — a Noosphere among the assembled worldwide viewership. It just "felt" connected. My eye in the lens of the camera became a conduit of perception and I was able to supply a select group of viewers with an experience very much like what our audience was experiencing right at the University of Calgary that day — a globally expanded performance event simultaneously experienced by remote audiences through interactions with their computers. Another conscious manoeuvre was the method in which I photographed the show so that it could be used for other integrated media needs within this project. As

camera operator, I knew that I was able to easily justify being in the audience's line of sight because of their awareness of the day's experiment and I was able to capture close-ups and good-quality audio because of my proximity to the performers. I used this footage captured for the streaming event as the "master shot" for much of the documentary DVD film — and repurposed the media for several other categories of delivery including packaging, the web site and the illustrations within the final thesis paper.

### Audience Responses

The group from Helsinki, Finland, said about the "technicalities," that Technically everything went smoothly. Really, it was astonishing. The framerate was excellent and the image was really clear. There were maybe four encounters when we briefly lost the image but half of those are the blame of our video projector. The sound was on all the time.

#### About the "substance" they said,

We all had many laughs. Dialogue had some really funny moments and some of the actors had good body language. It must be hard to act both for the proximal and virtual audiences at the same time?

#### An individual watching from Australia commented that,

It was somewhat surreal talking with you on the phone, then watching our conversation unfold all over again over the Internet feed. The delay was only a few seconds, but it was enough to cast a somewhat dreamlike feeling over the whole experience....The handheld camera work was effective on its own, but used to great effect in that it added another dimension to the piece, giving the online audience a different perspective than the one enjoyed by the live audience.

# Inspirations and Discoveries

There was a remarkable confluence of knowledge flowing straight into this exploration from many disciplines of literature used to inform the research — a great meeting in the "academy of the global village" about the powers behind a collective harmonization of consciousness in "cyberspace." On the subject of the exploration of cyberspace as performance venue, Steve Dixon, in "Theory and Contexts: Ontologies of Online Theatre" asserts that, "The world wide web is a site of therapeutic catharsis-overload, and constitutes the largest theatre in the world, offering everyone fifteen megabytes of fame." (Dixon 1999)

From HCI and computer sciences, Hewett, Baecker, Card, et al. of the SIGGCHI committee brought to my attention that the interaction between human and machine "leads to a 'rich space' of interdisciplinary possibilities" (Hewett et al. 1996). From media and information arts Marshall McLuhan contributed comments on the catalytic effect of new technologies that extend man's simultaneous sensory mode perception through "dilation of eye or ear ... a surprising new world which evokes a vigorous new 'closure' or novel pattern of interplay among all the senses together" (McLuhan 1962).

From the world of computer games, Janet Murray, author of *Hamlet on the Holodeck* says

The new digital environments are characterized by their power to represent navigable space. Linear media ... can portray space, whether by verbal description or image, but only digital environments can present space that we can move through. (Murray 1997)

# The Web Site System

Information exploration should be a joyous experience. — Ben Shneiderman, Designing the User Interface 1998

### Conceptual Modeling

Designing a good conceptual model for a web site includes visibly communicating affordances and constraints, and providing a clear causality of interactions. Based on theories of industrial design, good conceptual modeling allows us to predict the effects of our actions when dealing with objects as varied as phones, coffeepots, jet airliner cockpits, or computer systems. Conceptual modeling had a big influence on my general outlook of the way the *Messaging in the Noosphere* web site worked, where "big picture" architectural site navigation planning was intended to allow a frustration-free user experience. (See Figure 8)

### Representation and Presentational Strategies

When it comes to visualizing a representation, Ben Shneiderman reminds us in the epigraph above that we should enjoy our information explorations. I tried to follow that advice and make the web site an enjoyable place to search through information and to play a simple game. In order to support the tasks of the users of the site, attention was paid to the *visual representations* of size, shape, value (brightness), orientation, and colour of objects and elements in an interface design.

A style guide was created in the production phase to maximize the use of *metaphorical representations*. By choosing a black background and rainbow shapes and colours, I provided a metaphor for the screen being like a cosmos, or a universe, or a sky — something wide and mystic and representational of "The Future of Tomorrow." Intriguingly, this metaphor extended into all the areas of the *Messaging in the Noosphere* Integrated Media Series where the rainbow shapes were extended into the spherical shape of the crystal doorknob array in the scenography and into the costume, crystal, and chakra-flower colours of the perform-



Figure 8: The conceptual "site map" model of the Messaging in the Noosphere Web site system. http://www.sundialmedia.com/messaging.html

ance event as seen in Figures 9 (a) to (d). Even the posters, program, and script covers reflected this metaphorical representation; however a white background was used primarily to reduce the cost of the ink as seen in Figure 9 (e).



Figure 9 (a). Metaphorial representations of rainbows in the "Integrated Media" art. Figure 9 (b). Rainbows on the "Contact Lori" page of the web site. Figure 9 (c). Chakra Flowers in the "Integrated Media" art.



Figure 9 (d). Rainbow-coloured crystals in the Performance Event. Figure 9 (e). Rainbows behind the characters on the poster and program. Another essential component of the GUI (graphic user interface) design of both the web site and the "Future of Tomorrow" game, was the *presentation* of the material. Consideration of graphic presentational details such as visual consistency, visual organization, appropriate imagery, familiar idioms, visual relationships, legibility and readability, and navigational clues were implemented.



Figure 10 (a). The entry screen to the Future of Tomorrow game. Figure 10 (b). Àngel's's advice screen with Quicktime Movie playing over top.

Using the example of the "Future of Tomorrow" game design, figure 10 (a) shows the entry page to the game the "Future of Tomorrow," and figure 10 (b) shows an example of one of the advice cards with the Quicktime movie clip playing on top. Visual consistency is exemplified by the red-coloured table borders, visual organization by the way in which the advice cards are lined up on the left of each screen. Appropriate imagery and familiar idioms are shown by the graphics chosen for the cards themselves — as if the characters are creatures from a computer with battery and wireless levels and play buttons. Visual relationships are established between these screens and other screens within the web site, the Integrated Media art, and the DVD navigational GUI due to the media-bridging attributes of the established style guide.

Fulfilling the "informational" component of the web site were creative briefs, information releases, the promotional video trailer, script fragments and video clips from the show, and information about the musicians. Another required element of the site that was identified during a "feasibility" phase, was a "stand-alone information system that allows the audience to learn more about the myths and background behind the characters." This was achieved by repurposing the performance actors' character analyses by posting them to the web site.

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The relationship between the performance events and the practical services and artistic features that the web site provided was interwoven in an integrated synergy. They were synchronized on many fronts — representational and presentational similarities including information visualization and metaphor choices, content cross-overs such as the characters and narrative storyline, and considerations of time/action conceptual modeling. The two media complemented each other but could also stand alone — creating opportunity and promoting innovation for each other in an affinity of cross- and inter-platform synchronicity.

### The Interactive Documentary DVD

[Bertold] Brecht argued that 'the old forms of communication are not unaffected by the development of new ones nor do they survive alongside.' His argument is that as modes of communication change, so must the means of devising performance. The theatre, if it wishes to be responsive to contemporary mediatized culture, needs to engage the technologies that have helped to occasion that culture.

- Matthew Causey 2002

Taking a live dramatic performance and making it into a filmic documentary involves much more than locking a camera off in the back of the theatre and hitting the record button. In the case of *Messaging in the Noosphere* it meant planning and storyboarding, shooting the show almost daily from different angles and distances, recording additional performance vocals, and then editing the shots and mastering various versions of the documentary onto Digital Video Disc (DVD) media.

I made two primary decisions in the making of this documentary: firstly, to integrate the physical necessities of cinematography directly into the dramatic action of the performance event, which meant the camera operator, namely myself, getting into the scenes as unobtrusively as possible during actual performance. The second thing was to "double-duty" the performance style to accommodate both the live audience and the filmic audience. This meant putting the audience's "eyes" at the same approximate distance away from the action as the camera lens to allow a style of performance delivery that was believable as projected to a live audience, and as projected to the camera. Once those factors were decided, further considerations of mise-en-shot, a term invented by Russian filmmaker Sergei Eisenstein, came into bearing such as camera position and movement, shot scale, the duration of shots, and, later on, the pacing of the editing.

# Shooting and Camera Dynamics

Shot on a Canon XL1s video camcorder, there were, more or less, three types of shots of each scene captured to tape: a wide master shot; POV, or point-of-view reaction shots, often "over the shoulder;" and close-ups where necessary. The performance action was never interrupted and the camera was entirely hand-held. The duration of shots was determined by the conscientious effort to avoid being in the sight lines of any particular audience members for too long and a necessity to avoid collisions with the performers. Camera angles were decided, for the most part, by a desire to portray the most important aspects of the narrative action and the status relationships between characters. An example of this is "Level Three" where the physical movements between ASAP and SatanKali were choreographed to portray shifts in status of their relationship through use of levels. This status was reinforced in the filmic version through the use of camera angles.



Figure 11 (a). ASAP at the beginning of Level Three using a high-camera angle. Figure 11 (b). Low-camera angle indicating ASAP's power shift through the scene.

Audio was captured during performance but was only usable when there was no other background music or sound playing from the "Integrated Multimedia" element of the production. Therefore, voice recording was captured in an ADR (Additional Digital Recording) session, using the same camera microphone as had been used in primary shooting in order to match sound quality as closely as possible.

### Post Production

Editing this videotape was a time-consuming undertaking, partly because of the relatively random videotaping of each scene due to the

uninterruptible camera tactics, but mostly because of my decision to attempt to portray the audio-tactile aesthetics of the theatrical performance as closely as possible. Therefore, I needed to deliver a constant presentation of the Integrated Multimedia filmic component of the production along with the live action so that the viewer of the documentary would get as complete an experience as possible.



Figure 12 (a). HexaKali's warning (left) as it appeared in the split-screen DVD. The "Integrated Multimedia" appears on the left and the live theatre on the right.



Figure 12 (b). HexaKali's warning as it appeared in the "Integrated Multimedia" during performance.

The solution I evolved for this task was a split, wide-screen format where the "Live Performance" is shown on the right side of the split screen and a variation of the "Integrated Multimedia" is shown on the left side of the split screen — variation because the Integrated Multime-

dia footage was re-manipulated from its upside-down and downside-up configuration to a more normal cinematic configuration as described in figure 12 (a). Compare that to the figure 12 (b) which is a comparable scene in the original "Integrated Multimedia" that ran during the performance.

### Mise-en-scène

The mise-en-scène, or visual style and action of the video's movement, lighting and set design, was determined by the priorities and aesthetics of the theatrical production and one of the important ways that this digital video serves as a performance documentary is that it was not "reshot" for the camera. However there was also a conscientious effort at the planning stage to allow for a mutually informed production environment where the live performance event could not help but be under the influence of the technical and artistic demands of the video art. I believe innovation was instilled into the event as a result of the practical demands of the filmmaking notably in the quality of performance delivery and choreography, in lighting, and in scenographic representations.

In *Messaging in the Noosphere* the scenographic metaphors of humancomputer interaction — the glass doorknobs, the cellular phones, and the plasma screen positively affected not only a "rich space" for performance, but also provided rich production design elements for the video art. These elements, supplemented by the turquoise-blue audience mats, rainbow-coloured cushions, not to mention the audiences' bodies, created a full filmic visual style, or mise-en-scène.

# Conclusion

Within this practice-based research, each facet of integrated electronic media offered innovative support to the creation of *Messaging in the Noosphere*, making it a unique performance case study.

# The Integrated Multimedia and Streaming Media Events

The Integrated Multimedia introduced, to the performance, a dynamic exchange where the performers had a relationship between a "virtual" screen and sound space, and a "real" space. One of the implications for this in Messaging in the Noosphere was that visually, every character in the show was represented as a screen image, usually allowing a brief glimpse into the future or into a spacially expanded environment. Notable is the God in the Machine's roles as a character of a "not-reallythere" or "elevated spiritual" layer of the show where although the audience "sees" her in the real space, she is only perceived by the other characters as residents of the screen space. Further performance event innovation that could draw upon these finding would be the streaming in of "virtual" characters who are not seen in the real space but still interact with the characters onstage. This opens up possibilities for celebrity cameos, cost-effective special effects, and even audience interactivity — especially if the streamed media is live from a "remote" location with a symmetrical, or two-way, audio and video broadcast feed.

### The Web Site Service

One way the web site could be perceived as offering innovative support to the dramatic performance event is that potential audience members could access extra information in the way of video and audio files about the show to decide, for themselves, if they were interested in responding to an invitation to attend. There is, I believe, significance to this particular finding as an extension into further research. *Messaging in the Noosphere* was free-of-charge and did not require any kind of sales initiative but considering how relatively easy it is to publish to the world wide web, enhancing a web site service to provide ticket sales, contests, or discussion groups is a logical extension.

### The Interactive Documentary DVD Product

The DVD makes a decidedly practical contribution to the integrated media series as a product that allows for archival preservation of the live performance and related bonus materials. In a more subtle way, the methodology of planning and the technique of shooting also induced certain directing decisions, resulting in performance and scenographic implications in the areas of performance style and action, audience placement, and the relationship of the lighting and the scenographic design. I like to think that these sensibilities, described throughout the paper, created an ambiance of intimacy where each audience member was engaged in an immersive experience that replicated the voyeuristic attributes of a camera lens.

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Each element in the *Messaging in the Noosphere* media series, the events, the web site service, and the interactive DVD, had its own unique audience and platform of delivery. Central to this research, however, is that when functioning together as an interconnected phenomena, the elements of *Messaging in the Noosphere* serve as an example of the a new interdisciplinary genre of "Integrated Performance Media."

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