

# VISUAL SCRIPTING

A documentation process for the *InterPlay*  
Multi-site, Real-time, Distributed, Surrealistic, Cinematic Art Form  
By Elizabeth Ann Miklavcic



Figure 1. Chun-Chen Chang and Travis Eberhard in Scene 12 of *InterPlay: Nel Tempo di Sogno*

## ***Abstract:***

The purpose of visual scripting is to provide a more complete visualization of an original script. With the advent of accessible media, especially software such as Adobe Acrobat, Adobe Photoshop, QuickTime, Storyboard Artist and other programs. It is possible to create a multi-media script that can be provided to actors, both as drafts in the development process and a completed version for restaging.

The methods of documenting the artistic creations of our age are in need of matching the complicated nature of these newly created original works and must begin to include additional layers as well.

*Visual Scripting* documentation is a proposed idea specifically for the benefits of a springboard for interpretation by a new cast. Not for the purposes of rote restaging, but for use as information for what was done. The *Visual Script* media includes text, auditory and visual files for the new cast to use as tools to move beyond the interpretations of the original cast, finding additional levels within the work.

A case study application is applied to the *InterPlay* series, and specifically to *InterPlay: Nel Tempo di Sogno* (2007) created by Elizabeth and Jimmy Miklavcic the directors of *Another Language Performing Arts Company* in Salt Lake City, Utah.

### 1. The Concept Behind Visual Scripting of Original Works:

1. To provide an accurate documentation of the original interpretations and character developments given by the original cast and crew.
2. To give future incarnations of the work, the advantage of seeing the original interpretations of the direction, character development, staging and technological layering within the script. This will provide springboards for analysis of the current recreation of the work.



Figure 2. *InterPlay: Loose Minds in a Box* Performance SIGGRAPH, Los Angeles, California 2005

### 2. InterPlay:

The word **interplay**, according to Webster's dictionary, is defined to mean *interaction*. For *Another Language* it describes the integration of the Internet and the process of playing, bringing into focus the act of playing on the Internet.

*InterPlay* is a multifaceted telematic event consisting of two or more performances that occur simultaneously at multiple sites throughout the world. The performances are concurrently captured, mixed, digitized, encoded and streamed onto the network. The director manipulates each video stream to appear in any of the various video playback

windows. This creates a work that takes individual events and weaves them into a multilayered distributed tapestry. Each artist has his/her thought process that leads to his/her artistic performance. The director moves that into another level by taking those performances and incorporating them into his own thought and creative process.

*InterPlay* should be viewed as a painting in motion. A myriad of colors, text, shapes and textures float about the framed video space to the resonance of sounds, music and words. Within these visual and audible constructions, stories hover and pass through the viewer's thoughts. Images of the performers add the human dimension to the visual fabric, allowing the viewer the possibility of a narrative, but stopping just short of telling an identifiable tale.

*InterPlay* is similar to the process that the brain performs during the formulation of a dream sequence. Images that have been stored through recent experiences simultaneously emerge in pieces and the brain mixes them into a surreal sequence that loosely resembles a story. Video streams being sent from several sites across the country and the world are then combined in a richly woven audio-visual experience.



Figure 3. Four Autonomous Simultaneous Performances in *InterPlay: Intransitive Senses* Top Left: Hanelle and Elizabeth Miklavcic, Top Right: Alex Caldiero, Bottom Left: Harold Carr, Bottom Right: Flavia Cervino-Wood

## **2A. *InterPlay: Intransitive Senses***

The first, *InterPlay: Intransitive Sense* (2003), was a prototype project held at the University of Utah Intermountain Scientific and Computation Center where, although all the performers were in the same building, they were in separate rooms. The explorative

performance served, as an opportunity to understand what kind of communications structure would be needed in order to stage an actual network distributed project. Four independent events occurred simultaneously in four areas of the building, a videographer worked with each artist who had autonomous control of the content in their performance and each event was treated as a *found object* in the digital mixing. These four independently processed and mixed video streams were transmitted to the display screen in the auditorium and onto Internet 2.



Figure 4. Brian Buck and Marie Larimer in *InterPlay: Hallucinations*

### **2B. *InterPlay: Hallucinations***

*InterPlay: Hallucinations* (2004) was the first to incorporate distributed sites, the University of Utah (Host Site), the University of Alaska, Fairbanks and the University of Maryland, College Park. Unlike the first *InterPlay* where the artists maintained total autonomy, a suggested concept was asserted for each artist to interpret. *Hallucinations* explored the collective social brainwashing that is imposed on us by others or the individual brainwashing that we impose on ourselves.

Beth Miklavcic wrote a script titled the *Surface of Things*, the staging was complicated by the fact that two characters held video cameras and used the projected video images as ammunition for their assumptions. The images were projected on hanging frosted plexiglass, on the scrim, as well as, streamed directly over Internet 2.

Three Flash MX animations served as an abstract apparition of the inner voice, created by Beth Miklavcic they were played when the exchange between the actors paused.

Additionally, music and animations were sent live from the University of Alaska, Fairbanks and live performances were sent from the University of Maryland, and were the focal points in the *InterPlay* during the pauses in the theatrical scenes.



Figure 5. Charles Nichols, Elizabeth Miklavcic, and Tina Shah in *InterPlay: Loose Minds in a Box*

### **2C. *InterPlay: Loose Minds in a Box***

*InterPlay: Loose Minds in a Box* (2005) was an entirely new level in the *InterPlay* form as the technology became more stable and additional users became aware of the *InterPlay* projects. The central concept focused on the exploration of limitations, roles, and the dichotomies of entrapments or freedom as one lives in boxes either from external forces or self-imposed, and what is one's definition of a box? The *box* idea was also a literal reflection of using the Access Grid Toolkit where meetings consist of mostly talking heads in a video stream box.

This project incorporated six institutions, the University of Utah (Host Site), University of Alaska, Fairbanks, University of Maryland, University of Montana, Missoula, University of Illinois, Chicago and Purdue University. In this *InterPlay*, we incorporate additional technologies such as motion capture, remote MIDI control and interactive virtual reality. This *InterPlay* was the first to incorporate screen displays that changed for each scene and were manually assembled by the Access Grid Node Operator.

There were over fifty artists and technologists involved in this project and I have only mentioned a few. The work that was committed to *InterPlay: Loose Minds in a Box* brought the work national recognition as it was selected as a National Semi-finalist for the 2006 Peoria Prize for Creativity.



Figure 6. Jimmy Miklavcic Running Digital Mix During *InterPlay: Dancing on the Banks of Packet Creek* Performance Supercomputing Global, Tampa, Florida (2006)

## **2D. *InterPlay: Dancing on the Banks of Packet Creek***

*InterPlay: Dancing on the Banks of Packet Creek* (2006) focused on the tenuous devotion that people have towards the inundating wave of digital information and non-experiential knowledge, or more concisely, the idea of information overload. This project incorporated forty-six artists and technologists, and five institutions; the University of Utah (Host Site), University of Alaska, Fairbanks, Boston University, University of Maryland, and Purdue University.

This project included further investigations into the idea of choreographing the kinetics of the screen display. A separate system with an interactive 3D desktop was focused on the center screen and the Node Operator, was able to map video onto a 3D cube while adding effects like sticky corners on the windows, adding rain drops to the surface or spinning the cube as either an exterior cube or an interior cube.



Figure 7. Scene 8 from *InterPlay: Nel Tempo di Sogno* Photo By: Rusty Kirkpatrick

## **2E. *InterPlay: Nel Tempo di Sogno***

*InterPlay: Nel Tempo di Sogno* [In the Dream Time] (2007) was a work of unprecedented integration between sites. This project incorporated thirty-two artists and technologists, and six institutions; the University of Utah (Host Site), University of Alaska, Fairbanks, Boston University, University of Illinois, Urbana-Champaign, University of Maryland, and Purdue University.

A script that centered around ten individual characters from various time periods framed the structure of this work. Actors from Utah, Illinois, Alaska and Maryland portrayed each character. Beth Miklavcic conceived the characters and most of the actors created their own monologues, each revealing how time affected the lives of these characters.

The kinetics of the screen display consisted of graphics that were rendered as flash movies and played behind the different geometrical designs of the Access Grid video windows that changed for each scene.

## **3. Applications for Complicated Visuals of Distributed Work:**

Visual scripting can help in the process of representing the variety of technologies and layering of technical and performance elements involved when creating or re-creating the work.

Often these types of performances take place in unique performance spaces the visual script can give a representation of how the performance was tackled in these unique spaces.

There are many different types of media considerations, multiple cameras, multiple point-of-views, graphics, different technologies such as motion capture, animations, visualization clusters, virtual theramins, remote MIDI control devices, interactive immersive technologies - caves, AG Juggler, gaming software applications, video processing, animated and or programmable displays.



Figure 8. University of Utah Visualization Cluster Projectors and Systems Used in *InterPlay: Dancing on the Banks of Packet Creek*

Explanations and graphic representations of high bandwidth networking layouts and videoconference systems can also be included in the visual script index.

Other elements such as lighting design plans, set designs; listing of props can be included as an index in the script. Performance layouts from all sites can be included, this will help the directors to have an in depth idea as to how the performance was presented at each site.

Screen capturing of the node display is the most accurate representation of the performance layer that exists on the screen. Unfortunately at this time because of the high-resolution used in the displays our ability to capture a video representation of the display kinetics is limited by the technology in screen capture software.



#### **4. Video Clips Included in Visual Scripts:**

The ability to view a clip of a monologue or scene and then view a clip of the screen display associated with the performance while reading the text can be a useful multi-media representation of the work and can provide valuable information for the reader.

The choice of video clips to represent the work is infinite, the lead author of the work can decide what to emphasize in the script itself. The point is to provide visual highlights of the performance, because of course; a full video clip of the performance can be included in the electronic documentation package.

#### **5. Conclusion:**

As we move into a visually pronounced age, our performance works contain more layers of auditory, visual and kinetic stimulation; including but not limited to computers, projections on multiple screens, choreographed soundscapes, choreographed screen displays, distributed simultaneous performances where the same performance at a participating site across the country or the world may even be seen as an almost different work entirely.

*Visual Scripting* documentation is a springboard for interpretation by a new cast and crew. Not for the purposes of rote restaging, but for use as information for what was done. The *Visual Script* media includes text, auditory and visual files for the new cast and crew to use as tools for representation of the original work and to move beyond the interpretations of the original staging, finding additional levels within the work as it is restaged in future incarnations.

#### **6. Acknowledgments:**

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