Playas: Homeland Mirage

Jack Stenner Texas A&M University 811 N. Rosemary Bryan, Texas 77802 979-691-2070

stenner@viz.tamu.edu

Andruid Kerne
Interface Ecology Lab
Department of Computer Science
Texas A&M University
College Station, Texas 77843

andruid@cs.tamu.edu

Yauger Williams
Department of Architecture
Texas A&M University
College Station, Texas 77843
979-220-8800

yauger@viz.tamu.edu

ABSTRACT

This paper describes an interactive installation that addresses issues of presence and absence by creating a virtualized representation of the abandoned town, Playas, New Mexico. This town is slated for conversion into an anti-terrorism training facility by New Mexico Tech University in conjunction with the United States Department of Homeland Security. Using the metaphor of the mirage, the work functions as a critique of our understanding of "reality."

Categories and Subject Descriptors

J.5 [Computer Applications]: ARTS & HUMANITIES-Fine Arts

General Terms: Performance, Design, Experimentation.

Keywords: Installation, Art, Virtual Reality.

1. CONCEPT

Playas, New Mexico has always been a virtual construct. In the early 1900s it formed around the railroad installed by the Phelps Dodge Corporation. When the railroad died in the early 60s much of the property was sold, the tracks were removed, and the city became a ghost town. In the 70s, Phelps Dodge built a copper smelter near the dry lakebed, and created a "company town" for it's new employees, naming this city Playas, as well. At its height, Playas provided homes for over 250 families and had a population exceeding 1000. In 1999 Phelps Dodge closed the smelter due to poor sales, and abandoned the city. For the next several years the city sat in the arid climate of the New Mexico desert with little hope for its resurrection. But in late 2004, Playas will transform yet again. The United States Department of Homeland Security has funded the purchase of Playas, by New Mexico Tech University. Playas will be reborn as the site of a national and international anti-terrorism training facility.

This set of circumstances and the geography of this place suggest questions about virtual space. How real is reality? Is a constructed reality real nonetheless? How real is the training that will take place at this site? How real is the threat? What is the relationship between manufactured security in suburbia and the new national focus on security? What makes embodiment "real"? As an artwork, this project does not propose to answer these questions; rather, it raises them in the mind of the viewer. The discourse uses the familiar interface of the computer game, while displacing the interaction to an installation environment.

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2. INTRODUCTION

Viewers of the installation participate in the exploration of a 3D digital reconstruction of a portion of the homes and public structures located in the city of Playas. The primary activity takes place among nine homes located on Mesquite Street. Actual GIS information and site photographs were used to model the 5 square mile environs, though leeway is allowed for artistic suggestion.

A lone table with keyboard and mouse is located in the middle of the installation space. A single participant navigates virtual Playas by interacting within an environment that toys with the dichotomies presented by the subject matter. Simultaneously, a large-scale video is projected on the wall in front. This projection consists of the live feed from the video game, but the large-scale imagery is affected by the presence of those within the installation environment, as is the content of the "game" itself.



Figure 1. Installation View

The isolation of the individual "player" is situated in juxtaposition with the audience. The focus is on the communication of game as construct, rather than game as entertainment. The reading of the experience as "game," as opposed to novel interface, is important to the concept. The goal here is not to simulate reality, but to restructure the cultural paradigm of the video game. The work suggests parallels between gaming, suburbia, and society's recent obsession with terrorism. Suburban models of the city, as well as the anti-terrorism training exercise, are man-made constructs that are superficially connected to reality, much like the game itself.

The primary experience of the "game" is from the point of view of an innocent civilian explorer. As one approaches each home, actual photographs from the site are displayed along with technical information regarding the architectural structure, it's placement within the environment, and plans for future use. Each structure is documented with photographs from the site [1]. A goal is to provide a sense of what it might have been like to live there.

In addition to the visual technical information each structure provides, selected homes contain objects such as furniture, televisions, and toys that trigger audio and video samples to evoke the life that once occupied this place. These objects remind us that this is not just an empty structure, but also the place someone has called "home". The objective at this level is to create a sense of place, and connection with those who lived there. Juxtaposed with this imagery are suggestions of the future use of Playas; video clips of training exercises, military equipment, and politicos proclaiming the value of this place to society.

Simultaneously, while exploring the city, other events are taking place that conspire to thwart the explorer's ability to learn. As people enter the installation zone, a video tracking system monitors them, and spawns a new character for each new entry. This character can take on the behavior of one of three types: an innocent, a terrorist, or a Department of Homeland Insecurity (DHI) agent. Innocents and terrorists are visually similar, appearing as civilians, while DHI agents wear SWAT uniforms. DHI agents hunt terrorists, but periodically, accidentally kill innocents (explorer included). For every innocent they kill, multiple new terrorists are spawned. During the course of the game, characters approach the explorer and cannot be distinguished as friend or foe. One character may simply want water, while another may self-detonate. A third may suspect you are a terrorist, and shoot. This tension between the desire to explore and the ever-building threat provides conflict within the game. The player's goal is to survive and learn rather than "win."

In addition to the spawning of characters in-game, the presence of audience members also impacts the visual representation of the environment itself. This is an intentional act to suggest the idea that we, as a society, are implicit in the world we create. As viewers move throughout the installation space, a ghost-like form of their presence is composited within the game environment. Their presence perturbs the video imagery in a way that suggests the idea of a mirage. Waves of displacement follow their movement through the world.

3. RELATED WORK

Recently, artists such as Brody Condon, Anne-Marie Schleiner, Julian Oliver, Maia Engeli, Gonzalo Frasca and others have used game technology to produce art works. John Klima created some of the earliest works in the late 1990s. Of these, his Great Game [2] series is related to this work by virtue of its critique of the wars in Afghanistan and Iraq. In this "game" a terrain map of the Afghanistan Theater is patrolled by icons representing aircraft, troops and targets culled from daily Defense Department briefings. The map automatically refreshes itself every 60 seconds to produce a timeline of military events taking place remotely.

In 2002, Anne-Marie Schleiner created Velvet-Strike, a modification to the Half-life based game, Counter-Strike [3]. This modification allows the player to place user-created imagery within the online game. As such, it functions as a tactical media work that subverts the game designers' intention. Another innovator of game based artwork is the art collective, c-level, who developed Waco Resurrection [4]. This project reconstructs the site of the Branch Davidian Compound and the FBI siege of 1993. Using networked game play, participants assume the avatar of a resurrected David Koresh and navigate Mount Carmel listening to inner voices and interacting with FBI agents.

Of course, the video game environment is a child of other types of digital immersive environments such as VR systems and computer graphics. This project distinguishes itself from prior work by creating an environment that responds both in-game, and from without, to the installation itself.

4. TECHNICAL DETAILS

Playas: Homeland Mirage uses the Torque Game Engine [5] as the foundation for game development. 2D imagery is represented using Gameswf [6], which allows the rendering of Flash content within the 3D view port. The video tracking system uses a DV camera connected to a second computer running Max/MSP [7] and SoftVNS [8]. On a frame-by-frame basis. SoftVNS isolates motion information and then counts the number of people in the frame by isolating head shaped objects. This count is fed by TCP/IP to the game engine. The game engine uses this information to spawn new characters. A second video camera is trained on a mirrored image of the video game from the first computer, and fed into Max/MSP. An image of the environment participants is converted to grayscale, alpha-composed, and displacement filtered with the video game imagery before being displayed via the video projection system. The Playas environment is modeled in Alias' Maya along with Quake Army Knife[9]. Characters and various props are modeled in Maya and exported as DTS geometry. The system runs on two wirelessly networked Apple computers.

5. ACKNOWLEDGMENTS

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