## Art Games

Digital artists are using game technologies to create bold new works.

Christiane Paul, February 19, 2008

Self–playing computer game, custom computer

Digital art takes many forms: installations; Internet art; virtual–reality projects that use devices such as headsets and data gloves to immerse participants in a virtual world; software coded by the artist; or even "locative media" art that uses mobile devices (such as cell phones) to turn public spaces like buildings or parks into a canvas. Digital photographs, films, and videos have been common in the arts since the 1990s; even paintings and sculptures are now sometimes produced with the aid of digital tools. But projects that use digital technologies as a medium in themselves—and that, like their medium, are interactive, collaborative, customizable, and variable—still occupy the margins of art institutions and find their audience mostly at new–media art festivals or on the Internet.

A few artists use digital technologies as a medium for reconfiguring more traditional forms such as paintings, photographs, or videos. Among them are Brody Condon, John Gerrard, and Alex ‑Galloway and the Radical Software Group (RSG). All use the technologies of game development to investigate the status of traditional media in the digital age. Their works consider how the digital medium has changed the nature of representation, erasing the boundaries between established categories such as painting, photography, cinema, and sculpture.

All these artists generate images that are reminiscent of paintings or photographs, yet change and evolve. Condon, Gerrard, and RSG create computer‑‑generated 3–D scenes that are framed—in that they show a clearly delineated view, like a photograph, rather than being navigable worlds, like a game—and at the same time have a temporal, cinematic element in that they change over time. However, the cinematic movements

are not simply video loops that repeat; rather, the changes are generated in real time, algorithmically. John Gerrard's projects, in particular, could be described as image-objects, artworks that are as much images as they are three-dimensional sculptures in virtual space.

The combination of painterly, photographic, sculptural, and cinematic elements in these works would not be possible without current game-development technologies. Over the past decade, computer games have become an inspiration for artists in new media. Gaming references in digital art have been called a trend or a new style—a description that neglects many of the inherent and historical connections between computer games and new media. Early on, games explored concepts now common in digital art, such as navigation and simulation, points of view, non-linear narrative, and the creation of 3-D worlds. Many if not most successful video games are violent "shooters" seemingly far removed from art. Yet they often create sophisticated, navigable, immersive worlds. It is only natural that digital artworks should take a critical look at computer games in a different context.

Computer games are successful, in part, because their virtual worlds can be expanded and modified. Games frequently come with "level editors" that give amateur designers the tools to develop their own virtual environments and gaming scenarios, or to customize game content by creating modifications (often called "mods") or patches—extensions that change features of the game world or the behavior of characters. Some artists have used level editors or game engines—the core software of computer games, which runs their real-time graphics and audio, among other things—to create mods for commercial games or to generate stand-alone scenes. Others have designed their own games from scratch. But both types of gaming artwork have critically examined the politics and aesthetics of their commercial cousins. While most art based on gaming technology makes the technology itself its subject, Brody Condon's *Three Modifications,* John Gerrard's *Dust Storm (Dalhart, Texas)* and *Animated Scene (Oil Field)*, and RSG's *Prepared Playstation* more explicitly focus on the representational qualities of the 3-D image.

Condon's *Three Modifications*, which was shown at New York's Virgil de Voldère gallery in 2007, reinterprets several late-medieval Flemish (or Early Netherlandish) religious paintings: panels from Hans -Memling's triptych *The Last Judgement*, Dieric Bouts's *Resurrection*, and Gerard David's *Triptych of Jean de Trompes*. The landscape and overall structure of the paintings are re-created in non-interactive, animated, "self-playing" 3-D game versions that reflect on both the form and the content of the originals.

The term "Early Netherlandish" refers to a group of painters—from Van Eyck to Gerard David—working in the Netherlands in the 15th and early 16th centuries and representing a particular moment: the zenith of the Middle Ages and the transition to the Renaissance, an era when perspective—the technique artists use to mimic how three-dimensional objects appear to the eye—developed in several stages. On a formal level, Condon's work draws parallels between the evolution of perspective and realism in medieval art and the evolution of 3-D computer graphics in games. Another link between medieval art and computer games is the affection that role-playing games—from Dungeons and Dragons to Ultima Online, Everquest, and World of Warcraft—have for what Umberto Eco has called "neo-medievalism." In his 1973 essay "Dreaming in the Middle Ages," Eco writes of the "avalanche of pseudo-medieval pulp" in pop culture and points out that many organizational structures of the Western world, from merchant cities to capitalist economies, have their roots in the Middle Ages. The medieval elements characteristic of many contemporary computer games where technology and magic are happily confused may express the quest for the heroic foundations of contemporary culture.

The background of Dieric Bouts's original *Resurrection* painting (below)—a panel from one of the altarpieces for which he is famous—is a wide, serene expanse of land. Conveying an austere spirituality, Bouts's rigid composition shows Christ rising from the tomb, surrounded by an angel and three other figures in emotional states ranging from indifference to trepidation to shock. Condon re-creates the original landscape and adds a temporal element by depicting a sky caught in a state between day and night, with clouds and stars circling overhead while the sun is trapped in

the moment of setting or rising. The compositional elements of Condon's game modification portray the animated image itself as caught in a specific moment—a moment that captures the parallels between the development of realistic perspective in late-medieval art and in video games, as well as the transition between the two-dimensionality of painting and the real-time three--dimensionality of computer games.

While the landscape in Condon's *Resurrection* (below) mirrors the one in the original, the scene unfolding is substantially different: Christ is missing, his tomb has become an animated campfire, and the four surrounding figures are either nude or seminude. The angel has been replaced by a nude woman moving in and out of a yoga tree pose; two men sit by the fire, one looking away from it, the other looking into it with a hand raised for protection, both apathetically imitating the poses in the original painting; and the figure in red tights, who in the original lies face down in front of the tomb next to a helmet, has moved to the background, where it rolls its deformed, abstracted, polygonal head from side to side. By eschewing interactivity, which is at the core of video games, and setting a boundary for the scene and the movement within it, Condon creates a different kind of space for meditation. The religious themes and iconography of the medieval painting have been transformed into those of a countercultural spirituality rooted in the 1960s. In Condon's *Resurrection*, the savior is absent, and the other characters are thrown back on themselves. The fact that the work exists in a virtual world and a game environment points to a contemporary way of transcending the body: the avatar as a virtual alter ego. In his *Resurrection*, Condon contrasts and plays with cultural iconography and archetypes (or even stereotypes) of different centuries, using the parallels between medievalism and gaming environments.

Condon creates his modifications by means of the Unreal Runtime Engine, a stripped-down version of the game engine for the first-person-shooter game Unreal Tournament 2003. Within the scenes, the point of view that would normally move around the space remains still. Condon places the 3-D visual content he developed in the game space and then moves the camera through the space to reproduce the

composition of the original painting. Characters and landscape are tilted forward 45°, toward the viewer, and stacked in order to imitate the perspectival system used by the Flemish masters.

A different take on the relationship between game--development technology and traditional media is presented in the works of John Gerrard, who has created multiple scenes of portraits and landscapes that take the form of 3-D image-objects. At first glance, his projects *Dust Storm (Dalhart, Texas)* and *Animated Scene (Oil Field)* seem to reflect photographic conventions of landscape representation. But while they allude to the medium of photography, they also undermine the "freezing" of a moment in time.

In *Dust Storm (Dalhart, Texas)* (below), one of a series of pieces, Gerrard remakes a dust storm that occurred on "Black Sunday," April 14, 1935, and depicts it as permanently looming over a representation of Dalhart, TX, in its current state. The view is based on photographs taken by the artist on site, while the image of the storm itself is derived from 1930s archival photos of the Dust Bowl. Past and present collapse in a photorealistic yet unfixed temporal image space that appears simultaneously hyperreal and fantastic. Gerrard thinks of the work as "a 'memorial structure,' a type of public art placed on the (constructed) landscape as it stands now." The storm is a custom-built particle system on which the artist and his collaborators worked for six months; once it starts, it changes over time without shifting position over the landscape. The movement of the rolling and surging cloud was created on the basis of a video of a dust storm in Iraq's Anbar Province that Gerrard had seen.

While the scene captures a single, quasi-photographic moment, the light conditions of the work cover a whole year: the orbit of the sun has been programmed so that the light of the scene accurately cycles through day and night as they vary throughout the four seasons. The temporality of *Dust Storm (Dalhart, Texas)* is therefore realistic in terms of our conventions of measuring time, in seconds, minutes, and hours. It also unfolds in real time in machine terms, since the dust storm and the light conditions are based on continuously calculated data. The events in the scene—changing light and

rolling dust cloud—occur as the machine processes them. As in other works, -Gerrard subtly references the effect of environmental pollution. The storms in the Dust Bowl were a result of a recurring drought combined with the effects of poor agricultural practices and industrialization.

In another landscape portrait, the diptych *Animated Scene (Oil Field)* (below), Gerrard networks two images of oil pumps so that they perform identical and simultaneous movements on two screens. Each image features a single, central pump flanked by two more pumps in the distance. All the pumps face east, toward the sun, and run endlessly and identically.

Gerrard's works fuse media on yet another level, since they also have a strong sculptural component: the framed screen that holds the images can be turned on a central pivot point, so the viewer can look around and behind the depicted subject in a 360° pan. Through the use of gaming technology, -Gerrard makes his landscapes "navigable" in real time, while still maintaining the framing of the scene. And Gerrard's works, like Condon's, include cinematic elements as well. The movements of characters, objects, and natural elements maintain a subtle balance between stillness and motion. Gerrard refers to the image world he creates as a "postcinematic slipping space between the image and the object."

While John Gerrard and Brody Condon explore painting and photography, RSG playfully deconstructs the video loop. RSG's series *Prepared Playstation* takes its name from a series of works by John Cage, the artist and musician who wrote compositions for "prepared piano"—one whose sound had been changed by objects placed on the hammers or dampers or between strings. The "preparation" in this case is distinctly low-tech, a rubber band wrapped around the game controller (below, top image) so that it holds the buttons in place and makes a scene from a game play perpetually. *RSG–THUG2* (2005) (below, bottom image), a work in the *Prepared Playstation* series created for the 2005 exhibition *Logical Conclusions: 40 Years of Rule-Based Art* at the Pace Wildenstein gallery in New York, uses three scenes

prepared inside the skateboarding game Tony Hawk's Underground 2. The project exploits glitches in the game's code: navigating through the game, RSG discovered moments where movement cannot be properly rendered or characters get trapped in loops. In one of the scenes from *RSG−THUG2*, the game character is skateboarding along a railing, and the game architecture "breaks open"—the image cracks and starts oscillating between the accurate representation of the image and colorful abstract forms. In all the *Prepared Playstation* scenes, RSG "catches" a particular game sequence and makes it play itself in a continuous loop. While the project references and plays with the concept of the video loop, it also reveals the architecture of its image construction, exposing the moment where the data creating the image is improperly processed.

*Prepared Playstation*, *Three Modifications*, and John Gerrard's works all exist in a "slipping space" that opens up a new perspective on the qualities of the digital image. *Prepared Playstation* appears to be a video loop but reveals and deconstructs the creation of its images. *Dust Storm (Dalhart, Texas)*, *Animated Scene (Oil Field)*, and *−Resurrection (after Bouts)*evoke painting and photography yet present scenes that are in constant motion or evolve over time and can be navigated. All the projects capture characteristics of traditional art forms and demonstrate how the digital image transcends and reconfigures them. They are 3−D image spaces that operate in real time and perpetually play themselves, suggesting a state of being driven by algorithmic calculations.