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Art Games and Breakout: New Media Meets the American Arcade

SUMMARY

This paper explores how the interactive paradigms and interface designs of arcade classics like Breakout and Pong have been incorporated into contemporary art games and offer new possibilities for political and cultural critique.

INTRODUCTION

Breakout, the first mass-marketable video game, was a defining game experience for many in the 1970s. It positioned Atari at the forefront of the game industry under the leadership of Apple Computer's founders, Steve Jobs and Steve Wozniak. The long-term potency of game culture has since been firmly established. In 2001, 25 years after the original version was released, MacSoft released a new Breakout that incorporated kidnapping narratives, paddle angling, and power ups into the classic game. Also last year, the release of two powerful new consoles, Microsoft's Xbox and Nintendo's Game Cube, redoubled the hype surrounding the obsession with gaming. In 2000, the video gaming industry surpassed Hollywood in gross annual revenues to become the second-largest entertainment industry after music in the United States. [Tribe and Galloway 2001]

RETROSTYLED ART GAMES

The immense success of the gaming industry, now global, has inspired droves of artists to create new works that pay homage to arcade classics of the 1970s and 1980s. For example, Natalie Bookchin incorporates interactive tropes from Pong and Space Invaders into work that demands both manual dexterity and theoretical reading. Bookchin's game, *The Intruder*, adapts a short story by Jorge Luis Borges about the life of two brothers who fight for the mysterious woman both desire. Another art game project, *Font Asteroids*, allows users to select information itself as the enemy. The German collaborative, Esc to begin, designed the game to look much like the arcade classic. After selecting a target URL, the text from that Web site becomes the interplanetary debris that you must shoot away. Like the original *Asteroids*, the words in *Font Asteroids* break apart into smaller and smaller fragments—in this case, prefixes, suffixes, and roots.

The exciting works of these game-influenced artists have begun to make their way into elite museums. Several exhibitions showcasing art games were organized in the last three years alone: Mass MOCA's "Game Show," the San Francisco MOMA's "010101: Art in Technological Times," the Walker Art Center's "Beyond Interface," and the Whitney Museum's "Bitstreams." Overall, the proliferation of works by artist gamers in conjunction with the sweeping accomplishments of the gaming industry has had a reverberating impact on a variety of cultural institutions: art museums, grant organizations, and, of course, art schools.

FANATICAL GAMERS AND ART SCHOOLS

The tremendous success of the commercial gaming industry has helped to shape curricula at universities and art schools around the world. Espen Aarseth, editor of the journal *Game Studies*, contends that computer games, as a cultural field, will carve out new territory for graduate programs. [Aarseth 2001] However, many art students seek only the computer and technical skills that will enable them to secure design and programming jobs at game-development companies. These students often sacrifice valuable classes in political theory, women's studies, and economics, among others, to obtain a solid grounding in software manipulation and code writing. Educators thus

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face a tremendous challenge in striking the proper balance between technique, craft, and theoretical knowledge in game-related media arts courses at both introductory and advanced levels. The largest challenge remains satisfying student-driven demands for technical skill while maintaining the intellectual and artistic integrity of art education.

OBJECTIVES OF PAPER

My own intervention in the historical context elaborated above involves a critical reading of the current surge in game-inspired interactive art works. I began to investigate this new genre while developing a course curriculum at the School of the Art Institute of Chicago. In *Interactive Multimedia: Breaking out of the Arcade*, intermediate-level students explore the history of art games, beginning with the Surrealists and Duchamp and progressing through the recent online experiments released by jodi.org. The principal assignment asks students to invent a unique version of Breakout that showcases their abilities to incorporate an individual narrative and concept within an arcade-style form.

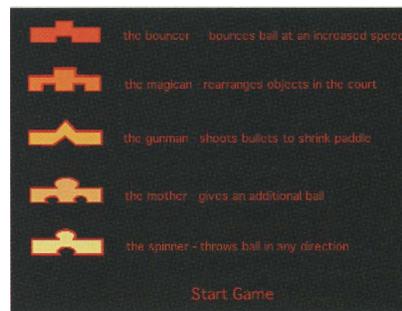


Figure 1. Breakout animation still, Lidia Wachowska, 2002

The course inspired a series of discoveries that enriched both my teaching and my own studio practice. First, appropriating the game form for art making allowed students to explore different models of space. Cultural theorists like Michel Foucault (whose Panopticon makes for a striking comparison) and Lev Manovich, among others, provided students with theoretical readings of power, space, and storytelling. "Narrative and time itself are equated with movement through 3D space," Manovich writes, "progression through rooms, levels, or worlds." [Manovich 2001] Second, in the art-making part of the course, students produced surprising variations, both serious and humorous, on the familiar Breakout theme. In one game, the bricks became government currencies. In another, the blocks took on human qualities, enacting behaviors labeled "mother," "magician," and "bouncer." One ambitious student, interested in the idea of game play rooted in the act of consumption, as evidenced in arcade classics like PacMan and *Burgertime*, chose to make her game begin with a survey that documented participants' food preferences (Figure 1). At the conclusion of the survey, players are presented with an array of distasteful food from which they must escape. Here, food becomes a medium that imprisons. In advising these student projects, I realized that the art-game genre provides a new vehicle for artists to articulate political and cultural commentary. Third, and finally, I incorporated the Breakout trope into my own work, in an installation called <a_maze@getty.edu> for a special exhibition of optical toys at the J. Paul Getty Museum in Los Angeles.

The remainder of this paper will explore these two topics in turn: video

gaming and models of space, art games as spaces for cultural critique.

SPACEWAR: GUN PLAY ON THE CARTESIAN GRID

The defining element of both mainstream video games and game-inspired art is the organization of play through and across space. The spatial aesthetic and spatial language of both shape the meaning of experience. While there are many different types of video games, the great majority are first-person shooter epics with plots based on militaristic combat. *SpaceWar*, *Tank*, and *Space Invaders* are early examples of shoot 'em-up contests in which, as the Beatles said, "happiness is a warm gun." *Breakout* is one version of the shooter epic, located within a prison complex. As illustrated in the arcade marquee from 1976, the player assumes the role of a convict attempting to escape by smashing through a brick wall with a mallet. In the video game, this narrative was formally simplified as a small rectangular paddle that the user guided to hit a ball that chipped away at a grid of jewel-toned bricks. Despite the imaginative narrative context, the game was essentially a flat, nondynamic grid.

In striking contrast to the two-dimensional simplicity of *Breakout*, the most recent generation of video games offers a version of hyper-reality in which story and space are three-dimensional, dynamic, and experientially real. On March 10, wedding bells rang online for Mr. Dong-jun Choi and Ms. Yousun Jang. The couple made their vows of commitment in the context of the multiplayer game environment that both fondly remember as their courting ground. The two lovers met online competing in Blizzard Entertainment's *Diablo II*, a role-playing adventure game in which participants choose characters and battle the forces of evil from their comfortable living rooms. The experience of Choi and Jang is part of an emerging dynamic familiar in the Web-based video gaming subculture. More and more couples are meeting virtually in their game communities and celebrating their romantic successes with faraway friends and fellow competitors. The game world has evolved from the geometric abstractions of *Breakout* to extensions of an individual's daily pathways and travels through space, extensions of real life.

Virtual spaces provide portals for exploration and discovery as well as a sense of amazement. Steven Poole, author of *Trigger Happy*, contends that the "aesthetic emotion of wonder" is the "jewel" of the game-playing experience. [Poole 2000] Certainly, the sheer plasticity of the spatial environment is a primary lure for the designers of the games as well as those actively playing. The newest games feature sprawling swaths of territory on which to battle. The frontier of the game world is limitless, contingent only on the speed and memory of the gamer's computer or console. On the Internet, *Diablo II* boasts "four different, fully populated towns complete with wilderness areas as well as multiple dungeons, caverns, and crypts in every town for players to explore." [Diablo ad] Ultrarealistic battles between the forces of good and the forces of evil take place in a sprawling land empire. Games like *Diablo II* and *Starcraft* are especially popular in Japan and Korea, where domestic space remains quite small and panoramic mountain vistas and babbling brooks are several hours away by rail.

Despite the extreme popularity of the newest cutting-edge graphics engines, game environments suffer from two limitations that complicate their relationship to new media-based art. First, they remain the same Cartesian enclaves clogged with familiar structures: skyscrapers, towers, trees, boulders, dams, and dungeons. The spatial aesthetics of video games have evolved from the abstract beauty of bouncing squares to the realism of metal-sheathed guns, but they celebrate rather than transcend the boundaries of Cartesian spatial logic. Second, and perhaps more obviously, game culture remains wedded to a first-person narrative of violence

and point acquisition. The win/lose dichotomy and the shooter aesthetic and subjectivity that dominate the industry offer an impoverished model of space, their "virtual" experience notwithstanding. The issue of who controls the spatial aesthetics of commercial video games is complicated. The limiting factors associated with consumer economics, mathematical models, and popular taste combine, resulting in the formation of surprisingly similar structures for the putatively cutting-edge graphical worlds: futuristic cities, Gothic churches, medieval castles. The Cartesian perspective is the most straightforward to generate mathematically, but the hardware industry also has a vested interest in the popular penchant for ever-realer spaces. And PC manufacturers and console developers rely on the game software's demand for speed to spur sales. *Joystick Nation* author J.C. Herz describes the parasitic relationship that develops between the computer hardware industry and the game-development industry: "The only thing that will push a computer to its limits is a game. No one admits it, but no one needs a new computer to do a spreadsheet programme or Word document." [Herz 2001] She asserts that games ultimately manipulate and rule the PC industry: "Unless you are in a military installation, the most demanding application on any computer will be a game."

However produced, the video game industry's reliance on Cartesian realism sits in striking contrast to the contemporary art world. Over a century ago, painters abandoned Cartesian space after mastering the process of manipulating pigments to form a perceptively accurate space. Fine art collectors, including museums, have for decades defined gallery-quality art in terms of "high-brow" aesthetics that honor the traditions of minimalism, conceptualism, and abstract expressionism. Video games, in contrast, constitute a popular "low-brow" form of entertainment that takes realism for granted. Yet as games re-enter the immaculate spaces of museums, they force a new dialogue about what constitutes an "art space" as opposed to a purely "game space," resurrecting long-standing debates about high and low culture, high and low art.

Artists have taken notice of the proliferation of the commercial game medium and are experimenting with not only the spatial aesthetic but also the mode of game play. They are attempting to vary the characters and introduce narratives with game outcomes and objectives that resist the assumed spatial and narrative logic of a traditional game. Feng Mengbo, for instance, began his work in the art-games arena by recasting the popular Nintendo character Mario as Mao Zedong. His first piece, *The Long March Goes On*, locates the game objectives of the Mario Brothers classic within the contentious relations between his homeland, China, and the West. Throughout his life as a child of the Cultural Revolution and a young adult during the events at Tiananmen Square, Mengbo witnessed oscillating degrees of openness between China and the West. The artist chose to make work about the opposing ideologies shaping Chinese society: revolution and modernization. In selecting the highly structured and delimited game format for this politically charged subject matter, the artist grounds his cultural critique in a pop medium that is itself an emblem of Western consumerism and modernization. In his most recent work, *Q4U*, Mengbo writes a patch for the *Quake* game that features the artist wielding a camera in one hand, a rifle in the other. The frag-or-be-fragged excitement so dominates game play that one ignores the specific identity of the enemy, the artist himself. Perhaps the instantaneous forgetting is the slippage that is the resonant point.

SPACE INVADERS: CYBERFEMINISM AND ARTISTIC PRACTICE

In the late 1990s, women publicly laid claim to the crowded territory of the male-dominated gaming world. As online games became



increasingly accessible, more women tried their hands at fragging, dueling, and role-playing. A host of new organizations sprang up to create a safe and stimulating place for women to experiment in trigger-happy cyberspace: *Womengamers.com*, *Joystickenvy.com*, *GameGal.com*, *Gurlgamer*, *GameGrlz*, *Grrl Gamer*, and many, many more. Why this sudden landslide of femme-only gaming communities? Single-mom "Aurora" Beal confesses her motivation: "When I started the *GameGrlz* site...my only goal was to create a Web site where girls who were into games didn't have to wade through the semi-nude pictures and scroll through the jokes only a guy could appreciate." [Beal 2002] Like the quilting circles of yesteryear, women have created their own spaces of retreat to share conversation that spans a variety of topics beyond game reviews and strategy.

Unfortunately, as theorists like Faith Wilding have pointed out, this phenomenon of "cybergrll-ism" is afflicted with a blinding net utopianism. Wired women participate in an ambiguous feminist politics by adopting the "if you can't beat 'em join 'em" attitude with regard to online gaming. However, in the real world, women are not in visible positions of leadership in the critical venues of research and development in new technologies, neither in business and industry nor in the university settings of science laboratories and art schools. Trigger-happy girl gamers might believe that *Quake* game patches written to produce custom female tattooed skins inject a certain feminist presence into cyberspace.

More and more female bodies are invading the spaces of popular entertainment, yet they share the same buff bodies and aggressive personalities. The online explosion of the riotous cyberpunk culture in the mid-to-late 1990s was followed by a resurgence of a fighter chick character in both television and Hollywood productions. The entertainment industry labored to establish women as players in a larger culture of sanctioned violence. *Buffy*, *Xena*, the *Matrix*'s Trinity, and *Charlie's Angels* are but a few examples of the new warrior heroine. Women who do not play games can thus passively endorse the commodification of violent gesture as a symbol of girl power. Yet for the most part, both women who "game" and women who watch participate in a larger narrative of, at best, ambiguity, and, at worst, submission that their overwhelming desire to beat the boys at their own game promotes.



Figure 2. *The Intruder*, animation still, Natalie Bookchin, 1999

To develop a feminist politics and activist trajectory in cyberspace, girls need to develop their own games. While this remains a marginalized project in the game industry, artists have pursued it with vigor. The emerging art-game genre provides artists with a new structure to hack masculinist institutions and power hierarchies. Perhaps the best current working example of the "low art" form being elevated to "high art" is Natalie Bookchin's aforementioned *The Intruder*, an experimental adaptation of a short story by Jorge Luis Borges. The game changes readers into players who move through the linear narrative by shooting, fighting, ramming, and dodging objects. Bookchin mines the arcade classics to

tell the story of two brothers who fall in love with the same woman. One of the most interesting moments in the game happens in the Pong screen, in which the viewer and the computer compete for points by batting a female icon back and forth. The war takes place atop a field of flesh. Photographs of a nude female body appear each time one of the players temporarily takes possession of the woman. The "field" metamorphoses from skin into turf. The body becomes territory to possess in a game of football. The story advances when one man tackles the other. Here, the narrator comments: "They preferred taking their feelings out on others." [Bookchin 1999] Computer games have traditionally provided a culturally sanctioned outlet for male killing and sexual fantasies. Gamers can advance in *The Intruder* only by perpetrating violent gestures. This novel, first-person shooter structure invites gamers to see how popular computer games perpetuate masculine ideologies of spatial conquest, combat fantasies, and sexual domination.

New spatial paradigms and modalities of play in the art-game genre raise additional questions about the permissibility of violent conduct by introducing new forums for injustice into the online world. For example, in *Lullaby for a Dead Fly*, the artist Mouchette invites the gamer to kill a fly with a click of the mouse. In this simple interaction, the fly reminds us that a click represents a choice, an assertion of power in her own elegiac song: "You clicked on me, you killed me." Likewise, Eric Zimmerman's *Sissyfight*, an immensely successful project produced by the online magazine *Word.com*, asks participants to consider the violence of words in a multiplayer online game set in the context of a simple two-dimensional playground. Players participate in a wickedly humorous catfight with other girls, using teases and tattles to break down the self-esteem of other players and drive them away. Perhaps to its detriment, the game allows players to scratch and grab in their quest for points. The all-girl characters and witty repartee, not the violent combat, make the game novel.

As artists continue to work collectively to recontextualize and reinvent female characters, so too must industry and gamers re-imagine the diverse cultural possibilities of game space. The popular excitement around the culture of cybergrllism reveals a positive new interest in carving out an active space for women to communicate, congregate, and play online. Yet in the absence of roles for women in cyberspace different from those assigned to or by men, there remains a profound ambiguity. As history shows us, today's Internet originated as a system to serve war technologies. War games are but a fantastic extension of militaristic laboratories. In the future, women must claim their territorial rights not only as players of games but as producers, designers, and developers of technologically mediated experiences like games—games that are not war games, games that steer us toward a more engaged relationship with complex female characters that refine today's definitions of cyberfeminism. Today's art games and multimedia projects are opening the door to a more nuanced description of virtual spaces that embrace a diverse array of characters and modalities of play.

CONCLUSION

Game-inspired artworks represent a vitally important emerging form that explores new modes of visualizing space and time, and from these investigations emerge new narrative models for interaction, new formats for cultural and political critique, and alternative interfaces for game play. John Klima's multimedia installation, *Go Fish*, is a novel first-person shooter game with real-time consequences: the death of a goldfish. [Klima 2001] Housed in a retro-styled arcade cabinet, the game asks participants to take moral responsibility for their trigger-happy behaviors. Arcangel Constantini's new game, *Atari Noise*, features a hacked Atari 2600 that functions as an audio-visual noise pattern

generator—a very abstract look at the spatial possibilities inherent in the art-game genre.

From the straightforward Breakout sequence to the complex 3D landscapes of games like Quake, video games have collided with the world of art to forge a new genre of art games. As artists, we have much more to explore in the game format in terms of both spatial innovations and game play. It is our responsibility as artists to “break out” our software design abilities to continue to refine, via formal structure and cultural commentary, the realm of game architecture to create new interactive structures for expression.

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