

# Arcade Classics Spawn Art? Current Trends in the Art Game Genre

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## ABSTRACT

The paper investigates the emerging relationship between videogames and art. The author explores how the interactive paradigms and interface designs of arcade classics like Pong have been incorporated into retro-styled art games. This survey of the art game genre explores the limitations of the emerging work and the narrative and critical possibilities the game format offers artists. Discussion is focused in the following areas: defining a retro-styled art game, issues of quality and playability in the genre, art games that subvert traditional power relationships, and finally feminist art games.

## KEYWORDS

Art games, video games, and feminism

## INTRODUCTION

### ASTEROIDS SPOTTED AT THE WHITNEY?

The video gaming industry now competes with Hollywood for the highest gross annual revenue [1]. The immense success of the gaming companies, now a global phenomenon, has inspired droves of artists to create new works that appropriate a game-like format to explore new structures for narrative and cultural critique.

Many of the art games pay homage to arcade classics of the 1970s and 1980s—these are the art games discussed here. For example, *Font Asteroids*, allows users to select information itself as the enemy. The German collaborative, Esc to Begin designed the game to look exactly like the arcade classic with the substitution of words for rocks. 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 pesky fragments—in this case, prefixes, suffixes, and roots. In adopting the retro-styled game format, Esc to Begin seduces its audience with nostalgia, humor, and whimsy while simultaneously making a wry comment about information overflow on the Internet.

Retro-styled art games are making their way into world-renowned museums whose curators recognized the trend toward games as a forum for interactive play. 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," the Whitney Museum's "Bitstreams," and the Museum of the Moving Image's <ALT> DigitalMedia. Overall, this proliferation of works by artist gamers in conjunction with the sweeping accomplishments of the gaming industry will continue to have a reverberating impact

on working artists, established curators, and also young people—art students clamoring for courses and majors in game design.

## DEFINING THE ART GAME GENRE

My own intervention in the historical context elaborated above involves a critical investigation of the art game genre—focusing particularly on games that borrow either graphical sensibility or play strategies from the arcade classics. For the purposes of this paper, I apply the term "art game" to describe an interactive work, usually humorous, by a visual artist that does one or more of the following: challenges cultural stereotypes, offers meaningful social or historical critique, or tells a story in a novel manner.

To be more specific art games contain at least two of the following: a defined way to win or experience success in a mental challenge, passage through a series of levels (that may or may not be hierarchical), or a central character or icon that represents the player.



Figure 1: Breakout animation, Lidia Wachowska, 2002.

Traditional videogames offer serious challenges to hand-eye coordination; art games tend challenge one's mental focus in that the player needs to maneuver in the game and simultaneously figure out its conceptual message. A feminist art game generates new thinking about gender and typecasting compared to more saleable video games that promote gender stereotypes—imagine the wailing princess by Brooklyn Mario and Luigi.

I am particularly interested in art games that present alternatives to overt violence rooted in military traditions. Virtual bullets and candy-colored guns are not completely without their appeal. However, as I experience the effects of war, terrorism, and school-based violence in my daily life, I seek refuge in play activities that do not involve overt albeit virtual, brutality and conquest. Game fun without firearms is much harder to produce. Trading tanks for unexpected weapons, such as words (*Sissyfight*) can generate novel recreational environments.

Again, a "retro-styled" art game is one in which the artist juxtaposes the low-resolution graphics of a particular arcade game with academic or theoretical content. Of course, "retro-kitsch" is blazingly hip commercially—and artists and designers have been known to chase trends. Grand Theft Auto's new Vice City pays homage to 80's Miami Vice in the story lines and the Commodore 64 in the opening credits. Authentic Atari joysticks are so cool that online retailers seem permanently sold out of the 10-in-1 TV Game, a new plug-and-play system that features ten classic videogames: Pong, Missile Command, and Centipede [2]. Despite the numerous applications of the term, when I use the term "retro-styled art game" I speak of

a game that creatively subverts the format of an arcade classic to support a conceptual creative agenda.

#### EXAMPLES OF RETRO-STYLED ART GAMES

Thomson and Craighead's *Trigger Happy* (1998), is one example of a retro-styled art game based on *Space Invaders* [3]. Here, players must atomize words instead of aliens. When the game begins, sentences excerpted from Michel Foucault's essay, "What is an Author?" descend. In bombing the phrases, the player metaphorically deconstructs Foucault's text which itself deconstructs the idea of the author. Here the mouse controls the position of the ship and the spacebar releases bullets—no authentic joystick here. The "shot" words appear at stage top, where, if clicked, the game stops, a browser window opens, and a Yahoo search page that showcases the myriad hypertext instantiations of that particular word appears. While witty and inventive, the game does not capture my attention for longer than a minute or two. Multiple windows distract from game play.



**Figure 2:** Left to my Own Devices, G. Thomas, 2003

Examples of more complex retro-styled art games are harder to find. Geoffrey Thomas's *Left to my Own Devices* is a personal narrative about loss that takes the form of a multi-level game that leads the player through a variety of interactive experiences borrowed from the arcade classics [4]. The levels are loosely based on the psychologist Elizabeth Kubler-Ross's five stages of grieving: denial, anger, bargaining, depression, and acceptance [5]. In one sequence, the player waters desert plants by leaping from cloud to cloud as in a *Mario Brothers* platform game (Figure 2). Lingering too long on a single plant causes the player to fall out of the sky and consequently restart the session. Interaction with flying characters allows the player to move forward in the narrative and explore other game environments.

Art games are decidedly noncommercial in that they function primarily as single-use, or even disposable experiences due to their limited playability. Unlike *Grand Theft Auto III* or *Final Fantasy X*, popular games produced by hordes of developers that require weeks to master, art games tend to be more limited in scope. Typically, retro-styled art games do not offer players hours of play possibilities, rather, they provide viewers with a simple interface that assumes the viewer's familiarity with game play in arcade classics such as *Defender*, and *Pitfall*. In the art game, wry social commentary sparks interest rather than grandiose

landscapes and multi-nodal navigation.

#### REWRITING PARADIGMS OF POWER AND CONTROL THROUGH ART GAMES SHOOTING THE AUTHOR

Curricular issues initially sparked my interest in retro-styled art games as new structures to address and question power relationships, especially those related to authority and control in electronic media. In my course, "Interactive Multimedia: Breaking out of the Arcade," students at the School of the Art Institute of Chicago explore the rich history of denying authorial control in art games. We begin with the Surrealists' exquisite corpse collaborations and continue through Feng Mengbo's *Q4U*. Mengbo's Quake patch casts the artist holding a plasma gun and a video camera—both devices that shoot subjects—as quarry. Playing by the "kill or be killed" rules, participants hunt cloned versions of Feng Mengbo—a literal instantiation of Barthes' "Death of the Author." [6]. *Q4U* positions the artist-author as a subject for demolition as opposed to an untouchable entity that remains external to the game narrative.

#### MONEY IS THE ENEMY

Adopting the game format for art making allows my students to explore different ways of talking about agency and control in interactive media. Lev Manovich, among provides students with theoretical readings about the inherent power of the frame in interactive media [7].

Each semester as they learn coding basics, several students produce retro-styled variations on the familiar Breakout theme that playfully critique systems of consumption. In one ironic game, the loathsome bricks transform into international currencies to be squashed by a bouncing dollar bill. Another student explores the relationship between gaming and eating—with precursors in arcade classics like *PacMan* and *Burgertime*. The game begins with a food preference questionnaire. At the conclusion of the survey, the player confronts an array of distasteful food from which they must escape (Figure 1). In this subverted *Breakout* game, rampant consumer choice manufactures mandatory prison time. Food is your enemy.

#### TRAPPED IN THE MACHINE

In my own creative practice, I use the retro-styled game format to explore power dynamics—specifically, my own skepticism and distrust of high-tech surveillance technologies. In *a\_maze@getty.edu* (2001), a piece commissioned by the J. Paul Getty Research Institute, the viewer discovers herself imaged in a real-time visual labyrinth that ends with a Breakout game composed live using images from hidden cameras (Figure 3).

According to art historian Barbara Stafford, "Holmes's splintering maze reminds us of the process; that the beholder is always mapped into the instrument and always leaves traces in the system [8]." In this work that combines games with video tracking tools, the body operates as both agent and subject—the body controls the content of the visual output yet in so doing becomes subordinate to the dominant power of surveillance technology. Viewers cannot command or manipulate the animation in any way—the automated and thus "faux" game interface highlights to the rampant proliferation of surveillance interfaces in the public domain.

*A\_maze@getty.edu* covertly ambushes viewers in a

museum exhibition. Installed at the Getty Museum in Los Angeles, the surveillance cameras pillage the galleries and grab faces that are then automatically loaded as bricks into a retro-styled *Breakout* game. Hundreds of visitors are thus trapped, if only for a fraction of a second, in the machine. Next, the electronic paddle mechanically smashes the individual identities into oblivion—a small trace of text left onscreen reveals the time of file deletion.

Making this installation piqued my curiosity about identities of gamers on the Internet and what physical attributes, if any, influence technologically mediated play environments. The next section of the paper explores the identity of gamers in traditional game environments and investigates the problem of showcasing positive female role models for girl gamers. This next section is a prelude to a discussion of what constitutes a feminist art game.

### SPACE INVADERS: GIRL POWER ON THE GRID AMAZON WOMEN IN CYBERSPACE

In the late 1990's, 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, GameGirlz, 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 GameGirlz site...my only goal was to create a website 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” [9]. Like the quilting circles of yesteryear, women are actively creating their own spaces of retreat to share conversation that spans a variety of topics beyond game reviews and strategy.

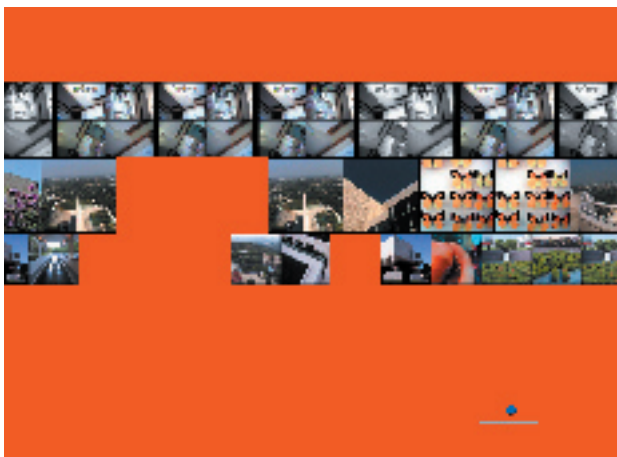


Figure 3: a\_maze@getty.edu, Tiffany Holmes, 2001.

Unfortunately, as theorists like Faith Wilding argue, this phenomenon of “cybergrrl-ism” is afflicted with a blinding net utopianism—meaning that despite its appeal, cyberspace does not actually provide a safe or more egalitarian environment in which to interact with men and women [10]. Trigger-happy girl gamers believe that Quake game patches for custom female tattooed skins inject an obvious feminist presence

into cyberspace. While the new anatomies capture the interest of marketing experts, film producers, and entertainment denizens, the bodies at best represent fascinating surface decoration. At worst, the female skins incite insulting, sexist commentary from the uber-masculine Quake community. A GameGirlz member anonymously complains: “I’ve been asked ‘do you suck cock?’ more than once, I have gone on servers and had the male players there demand that I should change my skin to an all-nude one, and further comment that women should only be allowed to use nude skins [11].”

Feminist artists should not stop experimenting with offbeat or novel skins due to virtual catcalling. The phenomenon of the online heckling reveals that pixellated skins create similar sorts of intrigue as do “meat” bodies. Behaviors or policies that verbally deter women from entering game spaces coded by and for men is part of modern society—newscasters still debate whether the venerable Augusta National Golf Club, host of the legendary Masters Tournament, should change its long-standing membership policy and admit women [12].

Given the obvious gender biases in online gaming sites, do role models exist for women in videogame culture? The online explosion of the riotous cyberpunk culture in the middle to late nineties was followed by a resurgence of a glamorous fighter chick in both television and Hollywood productions. Hollywood’s Lara Croft, Buffy, Zeena, the *Matrix*’s Trinity, and Charlie’s Angels are but a few examples of the new technologically adept warrior princesses. Helen Kennedy argues that Lara Croft could function both as a transgendered male figure as well as a female character in drag due to the exaggerated female (breasts) and male (pistol) costume [13]. Virtual “babes” like Lara are potentially admirable due to their omnipotent power as females protagonists. However, feminists remain ambivalent about Lara’s artifice, in that she provides yet another reason for young girls to be dissatisfied with their own bodies [14].

While some of these fictionalized women possess agility, strength, beauty, and even computing prowess, these heroines do not exist in the real world of technology. While the Amazonian ideal provides an empowered role model of sorts for girls, youth culture in general would benefit tremendously from the presence of real-time female mavens in computing.

### CYBERHEROINES VS. REAL LIFE ROLE MODELS

Why are there astonishingly few real-life female superheroes in the gaming and technology industries? In their book, *Unlocking the Clubhouse: Women and Computing*, authors Margolis and Fisher examines the gender gap in computer science via a series of studies at Carnegie Mellon University. The current research reveals a persistent gender gap in computing—girls reporting less confidence in computing skills and little interest in studying either hardware or software engineering [15]. Perhaps due to girls’ lack of self-esteem and genuine passion for the computer, fields like systems analysis, software design, computer programming, and technological entrepreneurship are dominated by men—women make up a mere twenty percent of the information technology work force [16].

## FEMINIST ART GAMES

To develop a feminist presence in cyberspace that is complex and robust, women must develop their own games with the assistance of smaller organizations focused on pursuing a philosophy of game design with critical content. While this remains a marginal project in the videogame industry, artists have pursued it with vigor. The emerging art game genre provides both male and female artists with a new structure to hack power hierarchies, in particular, those that promote gender stereotypes and racial stereotypes. All of these art games are displayed online, though several, such as Bookchin's *Intruder* have been displayed in museum environments.

A few artists are working specifically to create games for audiences of young women—many of these projects are assisted by governmental agencies eager to promote female interests in computing. Funded by the US National Science Foundation, Mary Flanagan's *Adventures of Josie True* (2000) features a Chinese-American protagonist who travels through history meeting prominent female characters such as Wilma Mankiller [17]. Likewise, Brenda Laurel's research and design efforts at Paper Moon Productions in the late 90's contributed greatly to discourse on developing games with female interests in mind—her company has since been absorbed by Mattel [18].

## LOVE AND WAR

Perhaps the best current working example of the “low art” retro-styled game being elevated to the “high art” museum display is Natalie Bookchin's *The Intruder* [19], an experimental adaptation of a short story written in 1966 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 and choose to kill her to resolve the fight for her affection.

One of the most interesting moments in the game happens in the *Pong* screen, where the player and the computer compete for points by batting a female icon back and forth (Figure 4). 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.”

Gamers can only advance in *The Intruder* by perpetrating violent gestures that are linked to emotional content in a connected short story—progression through the story is correlated with advancement in the game. 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—the themes of Borges's tale. Due to the fast pace of the game, one's focus is rather challenged—one must piece together the spoken narrative as one intuits the various mouse-driven interactive interfaces.

## CLICKING KILLS

New modalities of play in the art game genre raise additional questions about the permissibility of violent

gesture. The artist Mouchette playfully introduces a new forum for exorbitant injustice in *Lullaby for a Dead Fly* [20]. In the animation, the artist invites the player 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.” While Mouchette's piece is not a “retro-styled” game by definition, it fits the genre of the art game due to its simple though conceptually weighty interactive interface.

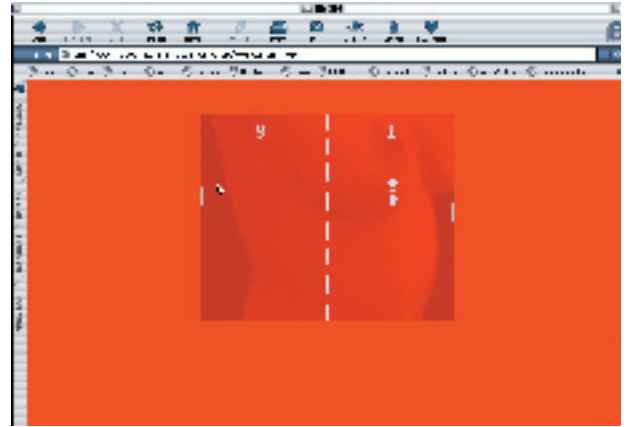


Figure 4: The Intruder, Natalie Bookchin, 1999.

John Klima's multimedia installation, *Go Fish*, is a novel first-person shooter game with real-time consequences—the death of a goldfish [21]. Housed in a old arcade cabinet, the game asks participants take moral responsibility for their trigger-happy behaviors. A game victory flushes the live fish into a tank of similarly sized creatures while a loss results in the transport of the goldfish into a tank with a carnivorous Oscar. Klima's installation cleverly highlights the inherent violence in first person shooter games—especially since the game does not require skill or experience to win. One has to make a conscious decision to end a life.

## GIRLFIGHT

Traditional computer games—think, “happiness is a warm gun”—provide a culturally sanctioned outlet for male aggression usually in the form of a first person shooter or fighter game. But is there a permissible outlet for errant female behavior? GameLab's *Sissyfight* [22] asks participants to employ the violence of words in a multi-player online game set in the context of a playground, rendered with simple two-dimensional graphics and the sounds of recess (Figure 4). Players participate in a humorous catfight with other girls, using teases and tattles to break down the self-esteem of others and drive them away. Written in California teen speak, the directions encourage ruthless social climbing: “the best way to, like, totally let a particular girl know what a worthless dweeb she is, is to, like, seriously gang up on her [23].”

*Sissyfight* is one of the few art games in my discussion that successfully encourages repeat play—despite its simple graphics and click-driven interface. *Sissyfight* is a beautifully designed chat-based game that perhaps best lends itself to a daily coffee break in the cubicle at work. Perhaps to its detriment, the game allows players to scratch and grab in their quest for points—though these actions are not directly animated with the blood and gore that saturates fighter games. While admittedly

girls do scratch and grab each other on a regular basis, the unique characters and witty repartee, not the violent combat, make the game fresh and novel (Figure 7).

This satirical videogame provides a safe forum to commiserate with the teenage girls documented in *The New York Times Magazine's* cover story, "Girls Just Want to Be Mean," and Rosalind Wiseman's *Queen Bees and Wannabes: Helping Your Daughter Survive Cliques, Gossip, Boyfriends and Other Realities of Adolescence*. As an art game, *Sissyfight* validates and exposes the social struggles of young women while as an engrossing chat game, it exploits our baser desires to be socially popular, if only for fifteen minutes at recess.

**CONTINUE TO NEXT LEVEL  
RACE AND CLASS IN ART GAMES**

Art games provide a haven for artists to explore historical narratives and expose sensitive issues pertaining to race and class stereotypes. The concept of winning a game—progressing up through a hierarchy of levels—is a metaphor that has been appropriated by artists intent on creating a dialogue about social mobility.



Figure 5: *Vagamundo*, Ricardo Zuñiga, 2002

Ricardo Miranda Zuñiga's art game, *Vagamundo* is a mobile game focused on the plight of illegal Mexican immigrants [24]. Described as a "mobile public art project" the artist takes his battery-powered game to the street in a pushcart loaded with a monitor, computer and simple joystick. Like many fight games, hitting buttons and manipulating the joystick allows the player to navigate through three levels that detail the stages in the life of a Latino alien. Player movement is like that of the Jumpman in *Donkey Kong* (Figure 5).

The plot is simultaneously humorous and solemn. After sneaking across the border, the player must avoid flying liquor bottles to earn a job. After learning English at a corner store, the player waits tables at an upscale restaurant in the Upper East Side. The vector graphics are simple but communicative; there are some wonderful transitions between levels where we move from a photographic image of a Korean grocery to the simplified animated version. Between levels, facts and statistics about Mexican immigrants flash onto the screen, though the children I observe playing the game do not pay attention to the texts—here statistics are for adults only.

Sometimes the process of producing an art game has



Figure 6: *Tropical America*, OnRamp Arts, 2002.

both artistic merit and pedagogical value. *Tropical America* is a collaborative bilingual art game with beautiful black and white woodcut graphics developed by a Los Angeles-based nonprofit, OnRamp Arts with the help of high school students and their teachers [25]. The object of the game is simple—the player, a survivor of a terrible massacre, must find four pieces of evidence to bring justice to the memory of your small village. As the player wanders about the countryside looking for clues she encounters the Salvadorian peasant-activist, Rufina Amaya, sole survivor of the 1981 massacre of the village, El Mozote. With a deceptively simple point and click interface, the game quickly creates an engaging world built around historic characters determined to remember the tragedy their government hid from public view.

**THINKING OUTSIDE THE BOX: GAMES AS INSTALLATION ART**

On many levels, games operate as interactive environments that come alive with the indispensable input of the player. All of the online games discussed in this section—*The Intruder*, *Lullaby for a Dead Fly*, and *Sissyfight* appropriate and manipulate words as part of the game entertainment. From my perspective, today's art games and multimedia projects revitalize and amplify our relationship to language while pushing online explorers to expand the notion of a "point and click" interface might look like—*Tropical America* and *Sissyfight* are examples of superior point and click interactive design (Figure 7).



Figure 7: *Sissyfight 2000*, still from online game.

"Retro-styled" art games can exist in a world outside of the Internet. Recently, I began a collaborative project with a writer to create a parody of the game, *Operation*. In this popular children's game, the participant must remove a patient's "ailments" with tweezers—without

setting off the buzzer and making the patient's nose light up. In our prototype, the viewer removes sentence fragments printed on gauze from an altered game board. In the art game, interactors use forceps to remove texts from bodily orifices while a tiny video monitor displays different heads—continually shifting the identity of the patient. Accidentally hitting the metal edges of an orifice causes the participant's head to be imaged via a hidden camera—thus incorporating and implicating the participant directly in the infirm body.

Designed as take-home items, the textual fragments dispense advice to others disgruntled with “by the book” medical treatment: “The doctor says he sees healing, but I can't tell because all the hardware gets in the way,” and “I was also able to have a pain free recovery from the eight-inch incision cut across my abdomen [26].” In this project, the act of extracting first person accounts of surgical misfortunes raises questions about the operative power dynamics between doctors and patients and between traditional and alternative medical practices in the practice of healing the body.

## CONCLUSION

Games represent a vitally important emerging art form that encourage exploration of new spatial models of interaction; consider body cavities as repositories for language (*Operation* parody) and playgrounds as battlefields for self-esteem (*Sissyfight*). Retro-styled art games in particular offer a novel, “readymade” container in which to insert texts—consider the absurdity of using *Space Invaders* to mock Foucault's essay: “What is an Author?” (*Trigger Happy*) and the odd synergy created between violent gameplay and violent literature (*The Intruder*). Artists such as myself generally seem less interested in promoting videogame violence though art game creators celebrate the absurd for ironic effect. For example, winners of *Vagamundo* get to choose whether to discriminate against new immigrants by assisting the shooters on border patrol or do something altruistic and help them cross.

Art game play sometimes requires a tolerance for critical theory mixed with intelligent humor—it is this combination of heavy content with clever punning that makes the game format an excellent structure to critique power relationships between technology and society (*a\_maze@getty.edu*) and between men and women (*The Intruder*). Like many other forms of creative production, art games are primarily designed for an educated, academically oriented audience. Art games rarely attract serious gamers—their interfaces are not designed to withstand hours of use. Due to their limited audience and interactive potential, some of the art games operate as one-liner amusements—think, blasting compound words to bits over lunch (*Font Asteroids*) or shooting down an artist-author in a Quake fragging match (*Q4U*). As the medium is rather new; it holds a great deal of promise, particularly for artists focused on investigating new ways to talk about gender stereotyping and feminist identities online—imagine the Guerilla Girls battling Lara Croft.

From the straightforward Breakout sequences to the elaborate 3-D landscapes of games like Quake, video games collide with the world of art to forge this new genre of art games. As artists, we have much more to explore in the game format in terms of expanding

options for repeat game play and for greater complexity in defining content—particularly content that supports a diverse audience. 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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