In a further complication, the lack of diversity in the creative documentation by those at work in these movements makes it challenging to trace any historical practices that lie on the fringes of the accepted art world. Other than Alison Knowles's *House of Dust* (1967), for example, there may be no earlier accounts of the development of full-blown computer games by women until *Mystery House*, an interactive narrative game by Roberta and Ken Williams and the first computer game to incorporate graphics of any kind (1980). In addition, there is poor representation of artists of color in these art movements, and a lack of designers, scientists, and others of color in contemporary gaming culture. Female artists and scientists, as well as artists and scientists of color, have certainly been involved in the major art and technology movements in the twentieth century—or have worked in parallel to them. More documentation and inspection is needed to broaden the way in which their recorded histories are shaped. The dearth of women and people of color represented in art history needs to become part of the investigation in critical practice.

Given the limitations outlined, the artists' work explored here, historic and contemporary, responds to the commercial ubiquity of play. At the moment, computer and locative games are especially prominent aspects of playculture. From war simulations to Bulletin Board System style chess to 3D computer games, digital technology has been inherently bound with interactivity and diversion, and artists who engage in computer-based creation and critique represent the majority of contemporary examples of critical play. Questions surrounding participatory play and multiuser participation within the creation and reception of artistic, game-related works should, therefore, at least be introduced. Players of popular games may play, reissue scenarios in online game environments such as *Second Life*. Music fans may download, upload, mix, and remix popular and independent music. The web can continue to provide a unique space where mainstream meets cult interests, creating subspecializations and massively multiplayer environments numbering in the millions of players. But, are artist-produced computer games, as systems, reinventing how these practices and their artifacts, how the culture, are constituted? What are the social ramifications of artist-produced computer games? How are these ramifications playing out? Above all, by what means do such works achieve in terms of critical discussion, dialogue, or interaction?

First, artists' games by definition take an "outsider" stance in relation to a popular, commercial games culture. This position itself suggests alternate readings of contemporary issues in electronic media and offers the possibility of commentary on social experiences such as discrimination, violence, and aging that traditional gaming culture either avoids or unabashedly marks with stereotypes. With her low-tech game projects, California artist Natalie Bookchin uses humor, low-tech graphics, and juxtaposition to place the player in various difficult, challenging, or paradoxical situations. Bookchin's use of both political and personal stories emphasizes ideas about the exterior and interior worlds of a game.

Best known of Bookchin's gaming works is her influential narrative project *The Intruder* (1998–1999). Working from a short story by Jorge Luis Borges, "La intrusa," the game takes the participant through ten arcade-style games as a means of interactively conveying the narrative. Readers or "players" interact with the simple arcade puzzles to advance the plot. Text and spoken-word narration, of a sort, emerge as players engage in what presents itself as a classic arcade system.

"La intrusa" was first printed in the third edition of *El Aleph* (1966) and was later included in the volume *El informe de Brodie* (1970). As in the original Borges story, the game too is set in the 1890s. Cristián and Eduardo Nilsen, two close brothers known for their fierce behavior, both fall in love with the same woman, and decide to share their intimate relationship with her. The woman, named Juliana, is later perceived to come between the violent brothers, causing emotional conflict. The narrative is distributed across a series of mini-games. Encountering and defeating, or outthinking, the small games that lie along the narrative path enables the player to move the story forward (figure 7.1). With each game move, the player earns a sentence or phrase. Players learn about the brothers' relationship, their history, and their fights over Juliana. As the narrative progresses, things become more complicated. When the brothers...
Rather than a celebration of the brothers' fraternity, or an inscription of a "cult of masculinity," a growing feeling of helplessness engulfs players of *The Intruder*. The narrative is dark, brutal, and compelling, but Juliana, so important to the story, is rife with mystery. She cannot speak. Who is she? What does she look like? Bookchin removes the character's last name to further impersonalize her in the telling.

In another mini-game in the same story collection, Juliana emerges as a silent, pixelated figure. Players immediately know this figure to be Juliana, yet she is never given dialogue or a voice. As the story unfolds around her, the Juliana character becomes a mere blocky shadow produced by the men's desire. The game's aesthetic further supports this narrative evolution. While the background graphic is somewhat detailed, in a high-contrast photograph of a rustic street, the closer human figure is obliterated in chunky pixels. Game players maneuver Juliana down the street, causing her to run or jump, and eventually advancing the narrative when the character falls into the traps set for her. These are inevitable. Juliana's possible actions and the meaningful choices that players make along with this character are irrelevant. Participants must oblige this framework to continue the narrative.

The story and the interaction in *The Intruder* may appear at odds with each other until the players understand the futility of Juliana's agency. The set of games are designed to establish a gap between successfully advancing the story and compromising the safety and well-being of the character. The disjunction between interaction and narrative is deliberate, a gap that could be a site for critique or irony. To activist designers, irony is one of many strategies of critical play.

In *The Intruder*, Bookchin's low-tech graphic style and her narrator's solemn reading ironically subvert the arcade-game art concept. While the story itself is written by a Latino, the pieces excerpted into the games are narrated, when there is voice at all, by a Latina. Since the narrative involves the control of a Latina character, having a Latina both participate in the narrative and refuse, or at least cause us to reflect upon the issue of voice by reading the text aloud, is an important aspect of the artwork. Here, Bookchin not only unplays game conventions—for example, the narrative advances when Juliana falls into the hole, which, in other games, would represent failure or restarting—she also rewrites questions of authority, identity, and representation in games through the confusion of narrative voice. This rewriting is particularly evident in the position of a game player versus that of a reader. Game players participate in the construction and evolution of narrative in different ways than in traditional textual forms. *The Intruder* narrative grows to become particularly effective and poignant because players, the once-"innocent" (perhaps) readers of text, now

decide that Juliana is getting in the way of their close relationship, they have her pack up her meager belongings in a bucket and sell her to a whorehouse.

This part of *The Intruder* may help game designers explore levels of abstraction and narrative that become a part of any critical game. Rather than set the game in the whorehouse, or depict the two brothers with Juliana's belongings, the image onscreen is abstracted in space and situation to feature simple elements of the narrative like the text, the belongings of the character, the props from the story, and the upfront images of a nude woman.

As *The Intruder* begins, players are presented with the image of a woman's bare underside situated over a bucket (figure 7.2). In this game, it is the woman's body that literally produces the story, as though the story was a kind of birth. The female body also produces trinkets the player must catch while maneuvering the bucket. This loaded image represents several narrative layers: Juliana's meager possessions, her own status as a possession of men, and the value of the woman's body as replaceable in the narrative, to be exchanged for her sales price to the whorehouse.
find themselves actually participating in the abuse of Juliana in the interactive format of the game.

What is most striking about The Intruder as an interactive work is not the assembly of cute, fun games and their blatant, funny sound effects, but rather how those cute, fun games implicate the participant within what is actually a very dark narrative. The full implications of game interaction style in relation to the narrative become stronger when one takes an actual player into account. The Intruder positions users in a precarious and uncomfortable place, rather than the typical “command post” position of power most computer gaming examples provide for players. Software theorist Chris Cheshire (2003) explores this unquestioned positioning of power in his work on game interfaces: “The cursor is not telling me something, but indicating that it is listening for my command.”

Players are almost always constructed as powerful agents, superheroes, or even gods. Additional implications of this positioning for the male player or, at least, a male gaze come to the fore given the current focus of much of the games industry. “Control,” Cheshire notes, “undermines the liberal notions of privacy based on the inviolability of the subject. It changes what a subject is.”

The complicity of Borges’s text and the critique of woman’s position emerge from the “overpowering” control a player must enact to win in this system. The final game in the set transforms the implications of all of the previous games into an indictment: The player takes part in a “fugitive”-style scenario in which he or she guides crosshairs over a pixelated, natural landscape graphic (figure 7.3). The point of view from the crosshairs and the sound of a helicopter let us know we are indeed the hunters and that there is also someone or something to be hunted, in other words, a victim. To complete The Intruder’s disturbing narrative, we must aim and “shoot at” a fugitive figure below who, metaphorically at least, must be Juliana. In return, players earn their “reward,” the story’s end. Bookchin’s Intruder design invokes violence against the lone female character. Perhaps this paradoxical involvement is a stronger indictment of violence in computer games, or perhaps it should be read as a metaphorical critique of the larger technologically influenced culture to which women do not yet substantially contribute.

Bookchin’s next game, Metapet (2002), is an online simulation game that examines the line between work and play (figure 7.4). In the Metapet simulation, players create virtual workers of the future in biotech corporations, specifically one fictional company called STAR DNA. The player’s task is to try to help employee characters, who are seated at their desks in a work environment no doubt familiar to many of the game’s players. Employees who can be trained to work more efficiently are
allowed to climb the corporate ladder. As a tongue-in-cheek critique, this game allows users to examine worker roles within corporate hierarchies. The game also touches on the constant presence of the network, and the addiction to maintenance brought forth by email, online dating, blogging, social networks, instant messages, voicemail, news feeds, and games like The Sims. Activities in Metapet include the workers’ constant checking, tweaking, and maintenance tasks as they live for workplace systems. These matters reflect the themes of networked culture inherited from both domestic practices and from the daily grind among the lower echelons of the information technology workplace. In Metapet, players are constantly reminded of the ubiquitous presence of the network and of the constant upkeep they themselves do at terminals throughout the day.

Manuel Castells, in his book The Rise of the Network Society (1996), notes that the change in the ways technological processes have become organized originates at the shift from surplus value and economic growth to data and knowledge economies. Bookchin’s work makes apparent this economic flow, and goes on to ask, “But at what cost?” The workers at STAR DNA are themselves products of genetic manipulation, optimized for multitasking performance. The network as a conceptual structure plays a vital role in the formation of Bookchin’s work and in many other kinds of Internet art, engaging with systems of information and communication and allowing us to examine links and structures that shape our experience of computer-mediated culture.

In other examples of critical play, computer-based gaming projects may delve into the meaning of identity in culture or more concrete subthemes, such as “woman in games” or “human versus machine.” The issues brought forth by the duality between body and mind are in some ways celebrated by games, where the agency of the physical body only now is beginning to approximate the agency of the virtual. Human computer-interface designer Joy Mountford observed that as “the computer stares back at you, it sees you as one eye and one finger.”23 In other words, computer interfaces are still designed as if players and users themselves are only partly bodied, or even disembodied. The relationship of the body to the mind, and now to the network, must be better articulated beyond various forms of utopian rhetoric, particularly in the era of the “social networks” frenzy, where ranges of intimacy and knowledge are set computationally, and often by systems designers, rather than by participants. Here, it is worthwhile to remind ourselves that, as architect Karen Franck notes, we “construct what we know, and these constructions are deeply influenced by our early experiences and by the nature of our underlying relationship to the world.”24 This is true for purely digital experiences as well as for hybrid or physical manifestations of play.

Games that Play Themselves

The computer game is the paradigm for the critical play of other artists as well. Eddo Stern’s work flourishes at the intersection of game-related art and technology works. Dealing with system-on-system interactions and game-related interactions, Stern’s remarkable range of projects has helped define the field of new media art, and larger art and technology practices. His Dark Game (2006) is a videogame prototype in which two rivals are deprived of their sight. Like his Tekken Tournament (2001), where the injuries of the virtual characters are translated to the physical players, Dark Game demonstrates the link between virtual actions and the players’ own bodies. Cockfight Arena (2001), perhaps the most whimsical of Stern’s works, consisted of a performance in which players work to control their avatar on the screen while wearing feathered chicken suits embossed with sensors. When Stern’s work borders, or crosses into, the absurd, the resulting players’ actions are most pleasing. The work unabashedly explores masculinity and power issues within commercial games, taking the manifestation of machismo posturing and “the fight” among players to their extremes.

In Best... Flame War... Ever (2007), Stern documented and interpreted heated online arguments as animated collaged characters speaking the dialog. In RUNNERS: Wolfenstein (2002), Stern inverted the destruction of World War II by allowing Israeli players to invade Nazi Germany. In addition to large-scale political issues, Stern investigates the mundane everyday experiences of his players. Fort Paladin: America’s Army (2003) is a Fisher Price–styled castle that houses the game America’s Army (figure 7.5). Robotic “fingers” play the game maniacally and repeatedly, like a human player might have to do to stay on top of the game. The game’s play features a repetitive scene: the same character launches the same grenade attack on the same nonplayer characters, or NPCs, and then spawns the same new NPC soldiers to kill again, in an endless loop.25 By letting the game play itself, Stern’s theories on play and his practice highlight the futility of agency in closed systems. Stern also exposes the iconography of games as fetish items and as forms of cultural shorthand. Demonstrating technical, conceptual, and aesthetic aspects of the work at all times, Stern questions what it means to play critically, opting at times for a system to play itself, as it understands its own rules best.

A Race of Races

In a comment on scientific perspectives and categorization, games and play are also used in the work of Paul Vanouse. One Vanouse work in particular, The Relative Velocity...