Digital Performance

A History of New Media in Theater, Dance, Performance Art, and Installation

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Videogames

A game is a machine that can get into action only if the players consent to become puppets for a time.

—MARSHALL MCLUHAN, 1964[1]

Academic Legitimization

In recent years, the academic study of computer and video games (which for ease we will shorten to videogames hereafter) has proliferated almost at the level of the rapidly expanding videogames industry itself, with numerous titles emerging to analyze the aesthetic, technological, semiotic, and sociological aspects of gameplay. Steven Poole's *Trigger Happy* (2000) was one of the earliest academic commentaries, and particularly focuses on challenging games demanding fast reflexes, while Henry Jenkins, the person above all who has most consistently flagged the videogame as an art/performance medium, expresses a clear preference for its narrative possibilities. Recent publications have studied the game as a popular cultural phenomenon (Berger 2002), as fictional form (Atkins 2003), and as "cyberdrama," "ludology," and "critical simulation" (Wardrip-Fruin and Harrigan 2004). Wolf and Perron have published the first *Video Game Theory Reader* (2003), which chooses to emphasize storytelling and its interpretation and consequences, as well as ideas around the psychology and "configurative performance" activities of the player, linking gameplay to Allan Kaprow's Happenings.

International journals have also emerged, notably *Game Studies* in 2002, whose second issue includes Kurt Squires's article "Cultural Framing of Computer/Video Games" (2002), which draws together many strands of cognitive science and cultural and educational psychology, and stresses the opportunities for cultural, humanities, and arts theorists to contribute. The online journal *Gamasutra* features announcements of graduate and postgraduate theses on videogames,[2] with topics covering industrial, business, and

technical aspects, analysis of gameplay, art and animation, and academic investigations such as how videogames have drawn upon film noir. In just the same way that academic conferences focusing on computing in the arts suddenly blossomed in the 1990s (and now have noticeably declined in frequency), so new organizations and conferences have proliferated to discuss videogames. In 2003 alone, for example, there was a student showcase in San Jose in early March; in late March the First International Conference on Technologies for Interactive Digital Storytelling and Entertainment in Darmstadt, Germany; a Microsoft technical conference in Redwood City, California, in May; an ESRC one in Manchester, England, in September; and, of course, the massive annual SIGGRAPH conference, whose emphasis on computer graphics has always promoted the cause.

MIT was centrally concerned in academic and practical development of the field and in 1999 a conference entitled MIT ("Media in Transition") set out many of the ground rules for the debate by focusing on play aspects of the new media (including but not particularly focusing upon videogames). Janet Sonenberg led what hindsight reveals as a key seminar on "Playing With New Media," where the ambiguity of the term "play" was explored. Eric Zimmerman provided useful distinctions between three aspects that could guide analysis of any specific games: the rules, the implementation of the rules (the play), and "the culture" in which both rules and play were embedded. Tom Kemper drew parallels based on cognitive theory between the relative engagements of sport spectators and videogame players in relation to Zimmerman's three categories, and "attendant notions of interactivity and empowerment." These early distinctions are now resulting in an advanced and complex set of theories that includes a contemporary debate that Gonzalo Frasca has dubbed "The Narratologists versus The Ludologists."[3]

The opposition between them is an ancient one, like the tension between literary analyses of plays as text and commentaries that approach them in relation to their realization in live performance. Ludologists put the emphasis upon the game (its practice, gameplay, visuals, manipulation, the experience of playing it), while narratologists put the emphasis upon its significance, meaning, and the philosophy underlying the progression of events. Both sides of the debate were present at an important one-day public conference in New York in 1999 entitled RE:PLAY,[4] which discussed the past, present, and future of digital games under four headings: Games as Structure, Games as Simulacra, Games as Narrative, and Games as Exchange. The need for specific videogame theories clearly emerged as a key theme for a number of the participants, including Marc LeBlanc:

> In an era where art and commerce coexist uneasily at best in *any* medium, what chance do computer games have of creating genuine art? I think it can happen but only if we make the . . . leap, from Industry to Theory. They [videogames] need an analogous "cultural infrastructure," including not only developers, publishers and consumers, but also critics and academics. But that won't happen without a theory of game design.

Chris Crawford continued the theme: "We have a long way to go before we can discuss interactive storytelling with any real familiarity. . . . We must completely purge the concept of narrative from our heads if we are to succeed. . . . We have to think in terms of simulation. . . . We need another layer, a higher level of abstraction." Henry Jenkins drew parallels with the early development of film theory, observing that it was such discussions and debates (rather than the medium itself) that ultimately provided the building blocks for academics to develop theoretical underpinnings that recognized and validated cinema as an art form. He urged a move away from the consideration of videogames in relation to long-established theoretical models, concluding that "we still think of TV and cinema and the book in terms of narrative, when clearly games require us to think about them in terms of games." While acknowledging and broadly agreeing with this principle, in this chapter we will particularly focus on the relationships and links between videogames and theater and performance, and we will trace their convergence both in games design and in manifestations of digital performance.

Videogames as Theater

Videogames—very theatrical—where you control a hero with a stick. You turn the stick right or left and the hero walks to his adventure.
—MILTOS MANETAS[5]

Videogames involve virtual and fantasy worlds which may seem technologically advanced but are largely constructed within the well-known parameters of narrative and theater, simulation, and make-believe. As Janet Murray notes: "games, as the word 'play' reminds us, are intrinsically dramatic, enactments of life situations at varying levels of abstraction."[6] When videogames were first developed, theater terminology was freely adopted by game designers, including "setting," "player," and "character"; and in early parlance the terms "player" and "character" were combined and known by the slightly confusing acronym PC, while other emergent acronyms such as IC (in character) and OOC (out of character) were drawn directly from acting and theater practice. But a key distinguishing feature is that the audience's identification with the character is closer within a videogame than in traditional theater (even though game characters tend to lack theater characters' psychological complexities and depths): the audience is the participant, the participant is the player, the player is the character.

Where Brenda Laurel drew on the fundamental properties of computers to demonstrate their intimate relationships with theater, the same analytic process can be undertaken to draw close correspondences readily between theater and videogames. Both are time-based; both engage in the telling of a repeatable fictional narrative with identifiable characters; the characters develop relationships and, to varying degrees, personalities; both undertake elaborately defined tasks or missions in a single or a series of specific environments; the participants who witness or engage in the time-based activities will be drawn through

various responses and emotional states; by the conclusion the characters will have fully achieved, partly achieved, or failed to achieve their particular undertaking; and, finally, main and subsidiary characters will be left either dead or alive. Such parameters are as true of *Hamlet* as they are of *Final Fantasy.*

The French critic Ferdinand Brunetiere (1849–1906) perhaps lived a century too early, for his famous dictum "conflict is the essence of all drama" seems to attain its greatest confirmation in the medium of videogames where dramatic conflict is in abundance, as epitomized in the violence of the shoot-'em-up game. Violent videogames, by far the most popular and high profile of the genre, have also drawn extensively from the same myths, legends, and epics as have classical dramatists from Euripides to Wagner. Wagner's *Der Ring des Nibelungen* remediated the same Germanic myths as Tolkien's *Lord of the Rings*, which has in turn been remediated by countless games reveling in its magical creatures and supernatural characters, its heroics, violence, and morals; and where, in true videogame style, any one monster defeated is immediately replaced with one even more vicious and terrifying. Since the earliest *Dungeons and Dragons* videogames, classical myths have provided games developers with a vast storehouse of plots, heroes, and monsters that repeat the same fabled challenges and victories where the final mishap is averted, good triumphs over evil, the world (be it local or the universe) is saved from calamity and death, and heroes live to go on to the next level and face the next challenge. Neither myths nor violent videogames discuss regional boundaries or compromise solutions: there are only winners and losers, triumphs or abject despair.

But even the worst violent excesses of shoot-'em-up games hardly compare with some of the horrors and desecrations of Greek mythology. Uranus, sky god and first ruler, was castrated by his son Kronos, who was inclined to eat his own children. One he spared, Zeus, had the wise Prometheus punished for giving man the gift of fire, chaining him to a rock with an eagle tearing at his liver, but in true gaming style he escapes, rescued by Hercules. Zeus himself is the perfect videogame action hero: supreme leader, god of justice and mercy, punisher of the wicked, and seducer par excellence (four wives and several mistresses). His son Dionysus, half-mortal and half-god, continues the tradition admirably for a follow-up game or expansion pack. A wild, eccentric, and suffering character, he transgresses animal, human, and gender boundaries and blurs the line between reality and a new state of mind with the mask of theater. God of madness, frenzy and wine, it is Dionysus who presides over the creation of "the mask" as the crossing point from one reality to another—the mask as the threshold of virtual reality. These are the liminal borders between persona and myth, between humanity and the divine, between the finite and the infinite that are rarely reached in contemporary theater—but are by the finest games as our heroes fight against the powers of death, darkness, and evil.

Such battles almost inevitably involve monsters, and Greek monsters were *über*-monsters: from Typheus, a fire-breathing dragon with a hundred heads, and the giants generated from Uranus's blood when he was castrated, to the Hecatoncheires, gigantic

beasts with fifty heads and a hundred arms, with which they rained down huge boulders on their foes. Such exaggerated horror is a common mythological norm; and Roman theater tragedy, based on the Greek originals, is even less refined. In Seneca's *Oedipus,* Jocasta rips open her own womb; in *Thyestes*, bodies of children are served at a banquet; in *BloodRayne* (not Roman but GameCube, PS2, and Xbox, re-released March 2003) there is excessive blood, gore, and severed limbs as our heroine battles her way into Nazi death factories and other locales that resemble hell on Earth. Videogames can thus honorably take their places within a long line of classical theatrical plays that have remediated gruesome myths and supernatural horrors.

Theaters of Blood

The dramatic depiction of blood is a significant aspect of violent videogames: a signifier of victory that is sometimes taken to ludicrous extremes. The classic 1996 game *Die Hard with a Vengenace* (part of the *Die Hard Trilogy* for Sony, Sega, and PC) includes a "Blood on/Blood off" option, with "Blood on" resulting in the whole screen appearing to splatter with blood, whereupon inbuilt (virtual) windscreen wipers wash it gorily away. Within performance traditions the emphasis on blood and gore is equally significant and revealing, from its grim reality in the spectacles of Roman gladiatorial battles and (even today) public state executions, to the buckets of stage blood required for Montmartre's infamous Grand Guignol melodramas in the late nineteenth and early twentieth centuries. The very stuff of birth, life, and death, just a spot of it signals Lady Macbeth's guilty conscience in a play that is steeped in it, and blood continues to provide a source of endless theatrical fascination: a shortcut to shock and tragic climax, and arguably also a shortcut to catharsis.

The Grand Guignol[7] opened in 1897 in a suitably spooky abandoned chapel in Montmartre in Paris, and followed on in the tradition of Emile Zola's grimly realistic French naturalism. It attracted and, by report, terrified audiences drawn from every sector of society including European kings and dignities as well as the local Parisienne society. The Guignol opted to portray the daily murders, rapes, and mutilations that featured in the headlines of the time, gratuitous real-life horrors brought to realistic life again onstage, this time as a "*tranche de mort*" (slice of death). The scripts from the period reveal much more dependency upon dialogue than one would expect to find in a contemporary videogame, but many stage directions have a whiff of familiarity about them: "She collapses in agony and crawls across the floor, screaming and retching. Henri goes over to her and continues to pour acid on her face."[8]

The choice of real-life stories as a basis for the gore-plots of Grand Guignol is interesting in relation to the continuing debates raging around the links between videogame violence and violence in society, and while violent videogame narratives generally the lack the real-world referents of their Parisian predecessors, they have all their props, trappings, and buckets of blood, reinventing Grand Guignol in a modern idiom. Games reviewers

and players universally complimented *Grand Theft Auto III: Vice City* (all main formats, 2003) for their graphics and gameplay, but the narrative, which essentially consists of driving and killing people, drew condemnation from outside forces, including a *New York Post* reporter who complained in December 2003 that *Grand Theft Auto III* was "spewing the glorification of mass murder and the celebration of death. . . . Cases surface constantly in which *Grand Theft Auto* has been linked to violence and killing." The debate on the links between real and virtual violence has been particularly fierce given that children have traditionally formed a substantial proportion of gamers, and has led to an age rating system similar to film classifications, although as an essentially home-based activity these are not easily controlled. Japan, unlike Europe and the United States, does not have a ratings system for games, which in the past was not regarded as a problem in a culture known for its lack of violent crime. But Japan has seen a rise in teenage violence over the past few years, sparking controversy and intense media debate over the possible related influence of videogames. As with the parallel and longer-standing debate about film and television violence affecting violence in society, the issues are complex (do games generate real life violence or merely reflect an always-already violent society?) and the point is ultimately unprovable. Clearly, everyone who plays violent videogames does not become a murderer in real life any more than people who play Snakes and Ladders become herpetologists or window-cleaners; and in the absence of conclusive evidence supporting either side, thoughtful commentators tend to reserve judgment.

The Pentagon alone seems to recognize a possible *advantageous* link between VR and RL violence, as demonstrated in their numerous Internet recruitment pop-ups advertising the United States Army on game websites. American games company Sega is also a major defense contractor, and in September 2002 the Army released its own online game, *America's Army: Operations,* a first-person-shooter game available as a free download. It takes the player through a recruitment process, early training, and, controversially, an advanced training section that includes shooting "terrorists" who look suspiciously like Osama bin Laden and Fidel Castro.[9] The game's pre-publicity invites users to "earn the right to call yourself a Soldier, letting the enemies of freedom know that America's Army has arrived," and almost half a million requests for downloads were received in the first week of its release.

But one standard complaint about popular media (and in some cases, theater)—"too much sex and violence"—has a surprising omission in the case of videogames, where there is generally little or no sex.[10] There is an abundance of sex*ism*, and debates about related gender issues have proliferated, but most games avoid any pornographic imagery or depictions of physical sex. This is mainly because videogames originally developed with children as the main market audience, but as the average player age has increased (now estimated by most authorities as mid-twenties) this is a situation that has recently begun to change. In 2002 a Techmo *Dead or Alive* series game featured *Xtreme* (i.e., naked) *Beach Volleyball* (Techmo 2002), and some sex games have been produced by Zenith Publishing

that are not so much sexy, or even sexist, as dire. *Sexual Pursuits*, boasts "3000 sexual performance cards" and remediates strip poker with the addition of being able to win "magic spells" for "drunkenness," "striptease," and "favors from opponents." *Sex Party* is a multicouple computer sex game whose rules rather primly announce that the default setting means that couples can only interact with their own partners. The objective of *Panty Raider: From Here to Immaturity* (Simon & Schuster, 2000) is to take clandestine photographs of women in their underwear, which reaped enormous criticism for its concept before it was launched and, from a different group, for the quality of the photographs after it was launched, so neither faction seemed particularly well served. Meanwhile, within nonsexual games, there has been considerable interest from hacker-gamers to discover (against the public wishes of the production companies) the "cheat" code for removing the clothes of the characters so as to play the game with naked avatars (game characters are constructed as wire-frame figures that are then "skinned" and then clothed). It may come as no surprise that chief target for this mischief has been Lara Croft, subsequently nicknamed "Nude Raider," and locatable undraped on the Internet with even rudimentary research skills. Mario the Plumber and Sonic the Hedgehog have attracted less attention for this particular diversion.

Social Theater: *The Sims*

Hey ditch the beardy stuff in favour of a hip new god sim where you get to create your perfect holiday island and cater to the debauched needs of your guests with such amenities as Disco of Doom and the Chalet of Chaos (probably).
—PC GAMES NEWSLETTER, 2002[11]

But the most popular videogame of all time, Will Wright's *The Sims* (2000), is nonviolent and nonsexual, and indeed has nothing to with winning and losing. A "family with problems" simulation that had sold twenty million copies by 2003, *The Sims* finds a suburban family wrestling with the horrors of consumer acquisition and choice, and has well-developed characters with personalities, likes, dislikes, and emotions. It parallels more the concerns of the soap opera and *Big Brother* than a mythical epic or the army target range. It is the kitchen-sink or existential drama of the game world, even if still awaiting the equivalent angst of *Look Back in Anger* (1956). *The Sims* is a drama considered by some reviewers to be fractionally more complicated than life itself.[12] There are few aspects of everyday family life that cannot be simulated in *The Sims*, although sexual intercourse has only just become possible (or rather, new babies can now appear, through a new facility available in an expansion pack)—but only for heterosexual couples that the software recognizes as being officially married.[13] Much the same context existed on the English stage until 1956.

As one of the most popular games worldwide, the *Sims* expansion packs (additional software that allows the characters to undertake a wider range of activities) add both to range and revenue: for example, *The Sims Go On Holiday* (2003) comes with choice of

holiday, who goes, what happens, and so on. Several expansion packs emphasize a particular youth-market lifestyle: "Hot Date," "House Party," "Superstar." *The Sims Bustin' Out* (released late 2003, all formats) provided an additional dozen external locations (gym, Club Rubb and party locations), forty new characters, and ten new careers, including Mobster, Athlete, Mad Scientist, and (relatively new as a "career") Fashion Victim. *The Sims Online* has developed the scenario one stage further so that players are online with thousands of other Sims players "creating a dream home, building the trendiest boutique." *The Sims: Unleashed* (Electronic Arts, October 2002) allows members of the family to select pets from an unlikely if not impossible range, the accompanying publicity revealing not only an ironic undertone but also reflecting the desire of games manufacturers to meet a newly perceived audience demand for increased social collaboration within the game: "*The Sims: Unleashed* gives players dozens of new social interactions and expands their neighbourhood. Now the Sims can . . . build their relationships through their adorable animals."

The notion of virtual pets is by no means novel, and the "pet rock" had become an interesting mix of lunacy and performance art in 1975 as these "pets" were taken for walks (and made a millionaire of their inventor, Gary Dahl). *Tamagotchi*, created in Japan in 1997, was an even closer forerunner, a virtual pet that required digital looking after or it would die. Blamed for unnecessary childhood traumas and, among other things, causing traffic accidents, it was banned in schools in several countries and started a debate over the age that young children could cope with the death of a pet (and thereby creating business for bereavement counselors and *tamagotchi* babysitters). Having not quite reached a zenith of absurdity, the *tamagotchi* was followed by the *octogotchi*, which required the owner to keep eight digital pets alive, which in turn was followed by the *Octogotchi Deluxe* (fifteen different pets). There followed Furbies and twenty different versions of Gigas, including species that could be trained to fight friends' pets. A related outcome of this "caring game" has been the production of the computer-chipped baby doll, The Ready-Or-Not TOT, which is issued to American high school teenagers (boys as well as girls; the dolls are male or female and of all races) as part of parenting and sex education classes. Much like the games and simulations they now populate, virtual pets and baby dolls have generally been more popular with females than males, and in the videogame arena this has became part of a process *versus* goal debate, with games such as *The Sims* successfully providing for (or exploiting) the process element.

Women and Videogames

"lots of chores before completing more chores. . . "
—TV REVIEW OF *MARY KING RIDING STAR*.[14]

Girls and women have generally been the second-class citizens of videogames, and in 2000 the Top 100 PlayStation titles only listed two recognizably female names, *Britney*

(fortieth—a dance/pop game) and *Veronica* (fifty-eighth—the heroine's task is to rescue her brother Chris, and in the second part of the game Chris takes over). Xbox's Top 100 games only featured one female name, *Buffy the Vampire Slayer* (twenty-eighth, from the popular TV series). In the 1990s, the game industry was more than a little tokenistic when marketing games at girls and women, seeming to assume that beyond Barbie and horses they were a lost cause. Attempts to involve more women gamers were clumsy if not comical: *Mary King Riding Star* (1999) was an attempt to attract younger girls with the ever-popular theme of owning a pony, but the three female presenters on the game review program *Bitz* found that it consisted of "lots of chores before completing more chores," clearly getting the necessary contrast between RL and VR completely wrong. They concluded that "seasoned gamers will want to send *Riding Star* to the glue factory!"[15] The game industry's apparent ineptitude at conceiving effective female games has been evident since the outset: *Pac-Man,* one of the first arcade games (since 1980) and described as "a faceless yellow blob designed to look like a pizza with a slice removed that attempted to gobble up four enemies and 240 dots" was remarketed as *Ms. Pac-Man*, which consisted of a faceless yellow blob designed to look like a pizza with a slice removed, plus lipstick and a perfunctory red bow. James Davies has argued convincingly that one reason for the game industry's inability to gauge and respond to the needs of the female market is by virtue of negative and circular "recursive social and cultural processes with respect to gender" which he calls "gender feedback loops."[16]

Slightly more commercially and critically successful was the release at Christmas 2002 of *Mary-Kate & Ashley: Sweet 16* (GameCube), which features games involving learning to drive, jet-ski holidays, rock-climbing, and buying clothes. But the radical sounding *Macho Women with Guns* (a spoof that first appeared in 1989 and was revived in 2003) was found guilty of a mixed message. The title and narrative genuinely seemed to give women an active role in a shoot-'em-up style game that was complimented for its gun-toting heroines, but other aspects reaped heavy criticism, particularly its "Charisma Factor" feature, which was measured by bra size. Publications were soon appearing such as Cassell and Jenkins's *From Barbie to Mortal Kombat* (2000), which broached the debate about what games might attract girls, the implications of both existing and new games for girls, and how girls might find themselves drawn to new technologies. There are other signs of subtle shifts such as the foundation of womengamers.com in 1999, which has since acted as an effective lobby and creative arena for new ideas.

Brenda Laurel argues that girls' dislike for traditional computer games derives more from the fact that the characters tend to be weak and thus the dramatic experience is "boring," rather than from games' violent or competitive nature. Unlike boys, "girls are typically unmotivated by mastery for its own sake, but demand engaging and relevant experiences from video games. Both boys and girls see video game machines as for boys and computers as gender-neutral."[17] Laurel's VR experience *Placeholder* (1993, with Rachel Strickland) later spawned her successful Purple Moon software company, established in

1996 (and bought by Mattel in 1999) which produced a range of products and merchandise aimed at preteen girls, including the *Rockett's World* game and eight CD-ROMs. Laurel has reflected how the research undertaken through her *Placeholder* and Purple Moon projects provided strong quantitative findings related to how girls and women respond to computer products and experiences. Dance artist Mabel Klies has also reflected on the issue in live performance works such as *Gallery of Memories* (2000), which "avoids empty 'techno-gymnastics' for a more intimate and poetic approach, thus revealing the so often forgotten warmer, deeper and mystical possibilities of the digital imagery through its specific immaterial qualities."[18] The performance uses a VRML environment as a pathway for two dancers to take a journey through dreamlike rooms, and involves the audience in interactive games. But she contrasts masculine-dominated search-and-destroy structures with her own paradigm through which "the quest {is} for emotional and spiritual self/growth and revelation."[19]

Sony/PlayStation have been the leading company to develop games outside the rigid parameters of the male adventure, for example by developing games software that requires participants to dance or compose electronic music using a MIDI interface on the games console. The dance game requires the additional purchase of a PlayStation Dance Mat incorporating touch-sensitive contacts. It is relatively unsophisticated in its demands at the time of writing (though still not easy to do), essentially requiring the gamer to execute sequences of steps that become more difficult as the levels progress. But its very existence indicates an enthusiasm to think of concepts beyond entrenched structures, and it has proved particularly popular with young teenage girls and consistently appears in several of the Top Ten lists. The Football Mat, whereby the player controls a soccer videogame with touch-sensitive floor pads as well as the control console, is a further development of this new principle. But given its complicated foot-to-ball movements one could be forgiven for thinking it might be preferable to go outside and play soccer. *Eyetoy* (2003) was a further interesting development of the genre, a shoot-'em-up game with a distinct difference, since the player sees him/herself on screen battling against the odds via a USB web camera. *EyeToy: Groove* (PlayStation 2003) cleverly combines the interest in both developments—dancing and self on screen—so that the player/dancer can now appear live on the TV monitor. This paradigm has clear parallels with numerous digital dance performance experiments we have discussed in earlier chapters, and the transference to popular game formats represents a significant conceptual breakthrough that can be expected to exert a real influence on the future development of digital games.

Videogames as Art

Lucien King's collection *Game On: The History and Culture of Videogames* (2002), adopts the slightly garish cartoon approach that currently typifies videogame imagery but is, in fact, an exhibition catalogue.[20] As the foreword notes, the first forty years of videogames' existence has been largely ignored by the art world, and the 2002 exhibition was surprisingly

the first specifically devoted to videogames at a British art gallery (although others, such as *Serious Games* and *The Art Casino*, had included examples). Lucien King, together with independent games designer Eric Zimmerman, used the catalogue to highlight the absurdity of the art world's detachment from videogames. Both are outspoken about the need to acknowledge games as a significant cultural phenomenon and to repair games' glaring omission from the field of legitimate visual arts. Nonetheless, Zimmerman's contribution "Do Independent Games Exist?" (2002) highlights the "staunchly conservative . . . and completely screwed up" commercial game market dominated by "lookalike, genre–bound drek,"[21] and he describes the games industry as "completely technofetishistic, with the value of games typically being judged on their technical merits. Innovation in games needs to come from sources other than hardware and software technology."[22] It is rare for a national art exhibition catalogue to make such provocative statements, but it is indicative of a growing awareness that the artistic and narrative potentials of videogames are underdeveloped, and that a gauntlet should be thrown down as a challenge to artists as well as games companies.

The response from artists and performance practitioners has been gradual over the last ten years, but is now rapidly increasing. One early game featuring actors and performers, and dubbed the "Weirdest Game Ever Made" by *The Essential Guide to Video Games* had an appropriately theater-related title: *Deus Ex Machina* (Automata 1984). It enlisted such unlikely British luminaries of the time as Frankie Howerd, Jon Pertwee, and Ian Dury, and presented the player with an animated television fantasy including several minigames. The *Essential Guide* now records it as a collector's item, particularly since it includes the late Ian Dury as a giant sperm singing "I'm a fertilizing agent." Another early deviation from the speedy combative videogame norm was *Little Computer People* (Activision, 1985) which tried to insist that within players' consoles (the Commodore 64 in this instance, a machine that realized a number of innovations but was not wholly successful in the market place) lived a very little person who needed some looking after and who, when prompted, could write to you to tell you how he felt. Historically, we can now regard this as influential in the development of both the *tamagotchi* and *The Sims.*

Game Art and Performance

In 1996, Tod Machover combined music, performance art, and games paradigms for innovative sequences in *Brain Opera* (figure 24.1). It included sections where the audience/participants could download software to use as interactive musical games and send their interactions directly to live performers in the space, who would stop playing to facilitate the Internet performers' contributions. This direct interface, playing with patterns and codes either manipulated or in some instances created by external contributors, was also the subject of experimentation for dance companies such as Johannes Birringer's Alien-Nation Co. Their performance installation *Before Night Falls* (1997) is almost as far removed from the norms of videogames as could be imagined—"fantasies/memories of

Figure 24.1 A participant plays a custom designed "rhythm tree" instrument for Tod Machover's game-like performance *Brain Opera* (1996).

specific sexual experiences, bodily orifices, and organic substances/materials linked to a conceptual exploration of deprivation and injury/trauma"[23]—but its sophisticated concept wrestling with space-time dimensions is structured into the mathematical logic of a simple game: hopscotch, which provides a framework for the ordering of complex ideas and movements.

Artists such as Cory Arangel and Olia Lialina modify and customize existing games to imbue them with completely new aesthetic forms and navigational structures, while others adapt games engines for entirely new game forms. Media artist duo Mathias Fuchs and Sylvia Eckermann use and abuse game engines such as Epic Megagames' *UNREAL* engine to create elaborate navigable worlds such as *Expositur (*aka *Unreal Museum*, 2000), which Fuchs describes as "a knowledge space rather than a game." The player's avatar can dance and gesticulate through a Theater History Museum, run and somersault around a Jewish Museum, delve down and then fly through the subconscious labyrinth of the Sigmund Freud Museum, and dive underwater to swim with the fishes at the Museum of Natural History. The game-space is modeled on ancient Greek and Renaissance notions of mnemotechnique used by philosophers and orators to memorize complete speeches:

> The orator picked a building and learned every nook and cranny very intensely until he was able to move about the building in his memory. As a preparation for the speech a plethora of items of different complexity and amount of detail could be placed in the memorized rooms, e.g. a scales of justice. While delivering the speech the orator [mentally] wandered from room to room and collected hints while the speech unfolded.[24]

Fuchs notes the average British consumer now spends more time playing videogames than going to the cinema and renting movies, and considers the gaming paradigm to be one of the most important to the future of interactive arts and performance: "Games contain possibilities for knowledge spaces of a delicate nature—if they are thoughtfully conceived, carefully designed and joyfully experienced."[25] Fuchs and Eckermann's *FluID: Arena of Identities* (2003) is a particularly fascinating and performative example of his conception of a knowledge-art-game where on its journey the player's avatar interacts with characters, borrowing aspects of their identities and building up a fluid rather than stable ontology (figures 24.2 and 24.3).

Margarete Jahrmann and Max Moswitzer's *Nibble Engine Toolz* (2002) is a spectacular and dramatic piece of game-art using complex navigation and animal-like forms composed of swirling interlocking loops and spirals of digital code (figure 24.4). Feng Mengbo creates visually stunning game-art by adapting games software engines and inserting full-figure photographic images of himself. In pieces such as *Q4U* (2002) his naked-torso figure is the protagonist (holding a digital camera in one hand and a huge gun in the other) who runs and flies through elaborate Gothic interiors, encountering numerous other clones of himself. Natalie Bookchin's Web-based game *The Intruder* (1999) proceeds through ten

Figure 24.2 The user/character encounters life changing experiences and acquaintances that enable them to establish a fluid identity in Mathias Fuchs and Sylvia Eckermann's *FluID: Arena of Identities* (2003).

Figure 24.3 Some of the dreamlike characters and spaces in Mathias Fuchs and Sylvia Eckermann's *FluID: Arena of Identities* (2003).

Figure 24.4 Margarete Jahrmann and Max Moswitzer's spectacular *Nibble Engine Toolz* (2002).

levels from Pong to war games, like a history of computer games, using Jorge Luis Borge's love story of the same name as inspiration. Bookchin's deeply ironic *Metapet* (2002) resource-management game is based on the premise "that biotech innovation and corporate creativity gave birth to a genetically engineered worker, a new sort of Tamagochi to ensure its productivity for the game's virtual business company whilst meter read-outs keep track of its levels of discipline, health, energy, morale, and visual standards. A class of virtual pet that replaces the all too human worker"[26] (figure 24.5).

In Marc Lafia's online *The Vanndemar MEMEX or Laura Croft Stripped Bare by her Assassins, Even*,[27] the player establishes a code name and undergoes some rudimentary psychological profiling, and is plunged into a particular route and character in a world of espionage, intrigue, and surveillance. For Weibel and Druckrey, it "explores the mythic desires invested in the network as both a space of collective action and human transformation. The *Vanndemar Memex* simultaneously constructs and unravels narratives of self, history, politics, communication and society: it is an engine in which new possibilities are forged."[28]

Figure 24.5 Phluffy is one of several genetically engineered worker Tamagochis (complete with tail) that gamers tend and train in Natalie Bookchin's *Metapet* (2002).

Tom Betts's installation *QQQ* is based on the online video game *Quake III* (one of the best known, longest running and most violent of the shoot-'em-up genre) that he located, appropriately, in an abandoned, semiderelict 1960s cinema.[29] Betts filtered and abstracted images from games of *Quake III* to create a frantic procession of image trails that the accompanying program described, with some accuracy, as "the high-speed death-match becoming slow-motion ballet." The images were accompanied by a loud, violent, and overpowering soundtrack that remained constant until a visitor chose to intervene (by selecting a recycle or pause button), whereupon an eerie silence momentarily fell on the empty, darkened space.

Videogames have also made incursions into stage dramas, including David KS Tse and Yellow Earth Theatre's *Play to Win* (2000) staged at London's Soho Theatre. Videogames become an escapist fantasy world for the bullied schoolchild protagonist, and his fantasies blur into reality as he becomes involved with a Triad gang. The action-packed production brings together projected game imagery and onstage martial arts performed by gold medalist Tom Wu. In Talking Birds' theater performance *Joy-ridden* (1999), two frustrated and increasingly crazed hitchhikers gesticulate wildly at the passing traffic. High-speed video footage of point-of-view shots from speeding cars (blurred landscapes; road markings) play on screen behind them, then suddenly mix to point-of-view images from different high-velocity videogames.

A number of innovative live performances incorporating games models have already been analyzed in earlier chapters, including ieVR's *A Midsummer Night's Dream* (2000, with the University of Kent), where the fantasy world of the fairy forest was transposed

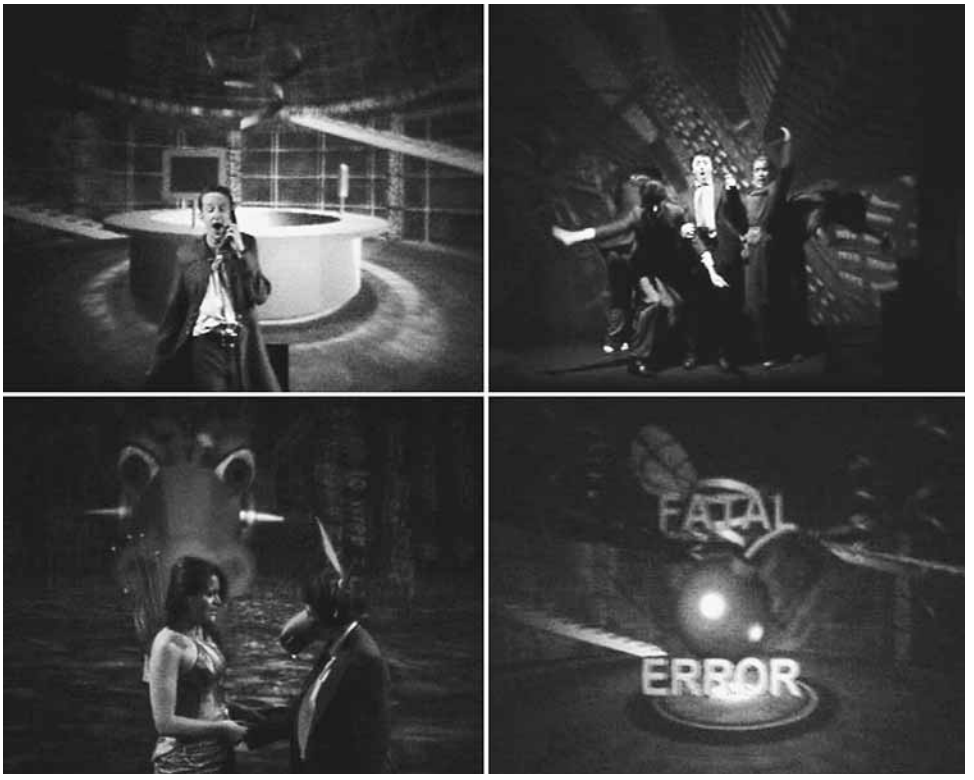

Figure 24.6 Shakespeare's *A Midsummer Night's Dream* is updated in VR for the videogames age in ieVR's production with the University of Kent (2000).

to become the contemporary fantasy realm of the computer game (figure 24.6). The vastness of the fairy world becomes the vastness of cyberspace and the bickering lovers battle in the midst of violent computer games, while remnants of *Pac-Man* and *Pong* are strewn in a sewer backdrop. A number of important examples of the convergence of theater and games paradigms will be explored in the following chapter on CD-ROMs, while the "performance games" of MUDs, MOOs, and RPGs (role-playing games) have already been discussed in chapter 19.

VR War Games and *Desert Rain*

The first Gulf War (1991) has been described by John A. Barry as the first "technology war," by Carlo Formenti as the first "postmodern war," by Mark Dery as history's first "made-for-TV" war, and, most (in)famously of all, by Jean Baudrillard as a war that "did not take place" (since it was virtual).[30] Television footage, particularly the green phosphor

images from cameras mounted at the front of computer-guided "smart bombs," conjured the unreal, sanitized battles of computer games. High technology was deployed not only in the weapons of destruction, but also as a political propaganda weapon that preached high morality, since smart-bombs minimized the so-called collateral damage of civilian casualties. High technology won the headlines and, it was popularly thought, the war. But later the untold story emerged: "the Air Force announced that laser- and radar-guided bombs and missiles made up just 7 percent of all U.S explosives dropped on Iraq and Kuwait. The other 93 percent were conventional 'dumb' bombs, dropped primarily by high-flying B-52s from the Vietnam era."[31]

It was the most obscenely uneven war game in history (Formenti calls it "The War Without Enemies"),[32] a veritable turkey shoot. Just over one hundred American, British, and Allied troops were killed (the majority of British casualties being victims of U.S. "friendly fire") compared to some 100,000 Iraqi civilians and soldiers—most of whom, in an important sense, were civilians themselves, being forced conscripts rather than professional militia loyal to the regime. The war provides the backdrop for Blast Theory and the University of Nottingham Mixed Reality Lab's *Desert Rain* (1999), which, we should stress, offers nothing like the blunt political condemnation of our little outburst of friendly fire. It does, however, constitute what in Gabriella Giannachi's words is "one of the most complex and powerful responses to the first Gulf War to be produced within the sphere of theatrical performance."[33]

One-hundred thousand grains of sand, each representing one Iraqi corpse, are contained in a small box that is secretly put into the coat or jacket pocket of all *Desert Rain* participants. The players/audience members, whose coats and possessions have been taken from them by performers before they entered the main installation, find the sand-filled box sometime (often days or weeks) later, once they have left the VR desert and are back in the real world. The box also contains the text of General Colin Powell's response to a journalist's question about the 100,000 Iraqi dead: "It's really a number I'm not terribly interested in."[34] *Desert Rain* was one the most successful and advanced digital performances of the late 1990s, a collaboration between Blast Theory (led by Matt Adams) and one of Britain's most advanced Virtual Reality computer laboratories, the Mixed Reality Lab led by Professor Steve Benford at Nottingham University, England. Benford describes himself as a "hard scientist,"[35] and the collaboration with Adams, who was determined not to get lost in the technology but to ensure the result raised aesthetic, intellectual, and political questions, spawned a seminal experimental production fusing the technological complexity of hard science skills with a truly original artistic vision.

First performed in a large disused warehouse as part of Now Ninety9 Festival in Nottingham and later toured internationally, *Desert Rain* combines a videogame and performance installation structure, with each participant being required to undertake a mission in a virtual world. Each thirty-minute performance is limited to six players, who are led into a room where their coats, bags, and other hand-held possessions are taken. They each

Figure 24.7 Six players are led into individual gauze cubicles equipped with sprung floorplates to commence the VR war game experience *Desert Rain* (1999, Blast Theory and the University of Nottingham Mixed Reality Lab).

don a blue, hooded jacket uniform. They are each given a picture of a different person (their target) and are led into the main installation space where they are zipped into one of six separate gauze cubicles that are walled on three sides (figure 24.7). In the huge open space of the fourth wall in front of them all, rain is falling hard, in the form of a solid sheet of fine water spray onto which VR environments are projected. The players' task is to work together (they communicate with one another via a hands-free microphone and headphones device) to find their targets within the VR desert landscapes and the mazes of underground bunkers and doors projected in front of them. Amid the rain-screen VR images of numbers, targets, lights, and landscapes, the player's own avatars appear, which the players manipulate and move through the spaces by transferring their weight and rocking in different directions on the sprung floorplates on which they stand. As they navigate to find the flags and pictures representing their targets, two Blast Theory

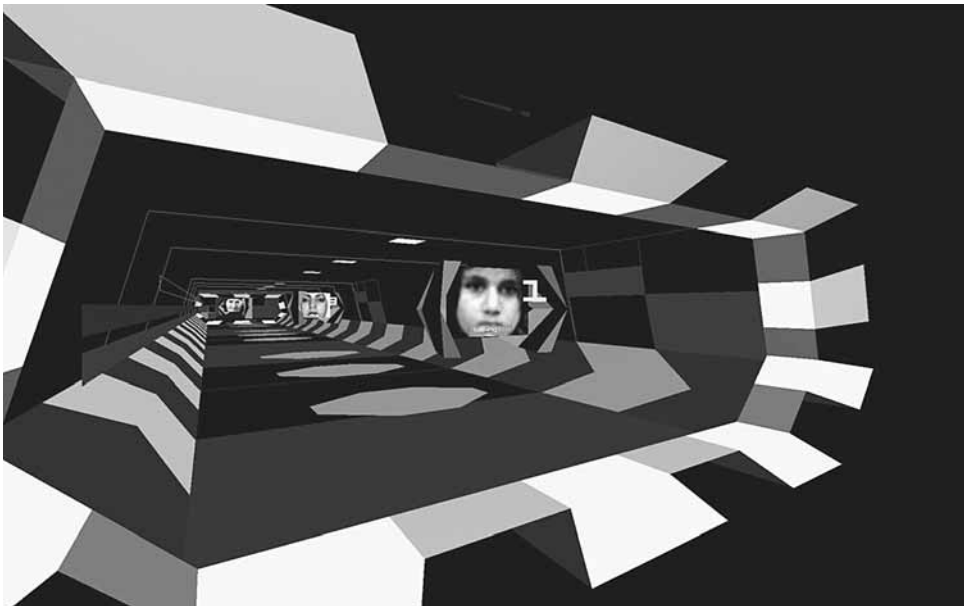

Figure 24.8 The exit tunnel in Blast Theory and the Mixed Reality Lab's *Desert Rain* (1999).

performers monitor the proceedings "backstage" and provide occasional audio clues, support, and encouragement via the headsets. But if the players collaborative search and find mission is unsuccessful, it ends with the disappointment of any failed computer game: "Game Over."

The players' human targets are all finally to be discovered in a bunker that initially appears empty, and groups that succeed in getting there and finding them within the allotted twenty minutes are rewarded with a true *coup de théâtre* (figure 24.8). The hooded figure of a live performer slowly breaks through the screen of water like some specter of death emerging out of a solid wall, utterly shattering the space between the virtual and the real in a heart-stopping moment of total disorientation. For the players who have been engrossed with increasing anxiety in the VR desert spaces as the clock clicks down, the discovery of their targets is dramatic enough, since it is (brilliantly) unclear whether they will now rescue or murder them. But the thin dividing line between the real and the virtual represented by the VR water-curtain is then suddenly not simply "problematized" but violently, actually, rent asunder (figure 24.9).

The rain-soaked figure approaches the players and, without a word, hands each a swipe-card and leads them through the rain ("a ritual act of purification," suggests Giannachi),[36] over a huge mound of sand at the other side, and into a "motel room." Here they swipe their cards through a wall-mounted device, activating a television to play prerecorded

Figure 24.9 The press and publicity image for *Desert Rain,* which provides a sense of the live figure's emergence out of the VR projections.

video footage of the "real" people who were their targets. They are seen sitting and talking from the same motel room the players are now in, and describe how the Gulf War changed their lives:

> The targets were: Glen, a soldier who served in the war; Shona, a soldier who was bedridden at the time of the war and watched it on television; Richard, a peace worker on the Iraqi-Saudi border; Sam, an actor who played a soldier in a television drama about the war; Eamonn, a BBC journalist who was in Baghdad when the air-raids started; and Tony, an actor who was on holiday in Egypt at the time of the conflict.[37]

This final debriefing reveals how these people—like the players themselves, who have each been separate and separated, and have taken a different course toward a different target—hold wholly divergent views on what constituted the "reality" of the Gulf War. Yet all, targets and players alike, have intimately conspired and collaborated in the intricate production of what was and will always remain a war game of sickeningly real and obscenely unreal "virtual" "reality." *Desert Rain* is the most artistically significant and

technologically advanced exploration in conjoining videogames and live performance, and we will reserve another of the company's extraordinary explorations in game performance, *Uncle Roy All Around You* (2004), to the concluding chapter.

Conclusion

We began this analysis by noting some close correspondences between theater and videogames, but it is equally obvious that there are also fundamental differences. They are quite different forms, and the medium of transmission of the videogame raises all the usual hackles in the "live" versus "mediatized" debate. Videogames are not live in terms of their technological ontology, but they operate responsively in real time and certainly appear live from the perspective of the player-character, arguably far more so than plays or films, since they demand rapt attention and lightning responses. A more qualitative problem arises in relation to the substance and content of videogames, which in comparison to literary theater could be regarded by academics as simplistic, cartoonish, inconsequential, and essentially plebeian.

But such an analysis puts the focus on subordinate issues and misses the substantive point: that videogames are a most prolific, effective, and developing form of popular theater. With all the attributes (and disadvantages) of "globalization" that they so effectively entertain, videogames, whether console-based or online, embody the most expansive and successful display of involvement in theater-based concerns that the world has ever witnessed. It is as if the *skene* and *orchestra* of the ancient Greek theater suddenly stretches around the world, or the rumbling medieval pageant-wagon is suddenly carrying an extra prop, the Earth, in the spread of a new type of world theater. Its current form might appear somewhat rough and ready, and indeed it is considered by many to be crass, abhorrent, repulsive, and plebeian. But it has appeared, has been adopted in large measure, and is still developing apace. As Paul Rae puts it, taking up Peter Brook's assertion in *The Empty Space* that "A play is play,"[38]

> why play with a play, when you can play more(.com) with Microsoft's Xbox; and why bother with an empty space when the Sony PlayStation 2's *Third Place* is arguably the rightful heir to *The Theatre and its Double*? If so, where Artaud's nightmare scenario of the theatre consisted of "an incredible fluttering of men in black suits busy arguing over receipts by the entrance to a white hot box office," the *Third Place* dragoons Stelarc's posthuman cachet into its expansive commodification of play.[39]

We began this chapter by noting the important development of academic studies of videogames, where a whole new research field has emerged. This research relates not only to game studies itself as a distinct area of new media scholarship, but to numerous branches of the humanities where interest in the field has spread—for example, complete issues of academic journals on psychology and sociology are devoted with increasing frequency to the analysis of games and their significant aesthetic, cultural, psychological,

and social implications.[40] While there has not been total silence from theater and performance academics, the voices broaching the subject have so far been few and in terms of their impact, they have been relatively quiet. Part of the success of the videogame, and we believe a direct reason for its slow appreciation as a serious medium by theater academics, is that it fundamentally uses a dynamic *visual* rather than verbal/textual narrative. Understandably, theater academics find difficulty in correlating the crude and melodramatic cartoon form of videogames with the great subtleties and depths of the printed classics of drama, and it will take time (perhaps generations, perhaps the time needed for child game-players to become professors of theater) for the field of *game performance theory* to fully develop.