



# New Media Cultures

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# Playing game cultures: electronic games

Play, an essential component of human experience, has been under-studied. Although there have been some classic works on play, including Huizinga (1955) and Callois (1979), and there have been many studies of play by researchers in psychology trying to discern its meanings for children, it has not been a major object of investigation in media and cultural studies. With the emergence of electronic games, the idea of play and an analysis of its complicated relationship to everyday life has catapulted to centre stage. This chapter aims to explore how electronic games in all their various incarnations are presenting play as a central component of contemporary experience that may parallel other forms of entertainment but has significant qualitative differences. The interactive architecture of electronic games, which changes dramatically the cultural experience of games and play, is also investigated. Games present a particularly powerful example of the distinctive kinds of investment and engagement that are part of new media cultures. In their own way, gameplayers enact a form of cultural production in their remaking of the game through play. The chapter works through a reading of gameplay from the perspective of cultural production and finally an interpretation of the kinds of communities that have developed through online gaming.

The term I will use to encompass the various new media games is **electronic games**.

What is interesting about electronic games is that they are a form that has spanned and helped converge the technologies of television and the computer as well as challenge their default functions. Thus we think of videogames as console games plugged through cables and played on the television screen. We think of computer games as CD-ROMs that we place and store on personal computers or perhaps that we download from an internet site. Two other forms of electronic games are also part of a history of the converging technologies of television and the computer: the arcade game, with its larger-than-life quality, played in designated entertainment centres and the handheld game with its many incarnations over the last 30 years. Electronic games, in their four major formats, when contrasted with television, represent a major change in the organization of entertainment in our culture. In economic terms alone, the electronic game industry easily surpasses, in revenues and profits, film industry. Worldwide sales in 'entertainment' software according to the British Department of Trade and Industry had already reached \$21 billion by 2001 (Erard, 2004: E6). One survey indicated that 50 per cent of Americans six years and older had played some electronic game

in the past year (ESA, 2003). That number of players is said to be higher in countries such as Korea and Japan. Its impact transforms our use of time for leisure pursuits. Electronic games, once thought to be the province of children are now, as J.C. Herz has aptly pointed out, a normal and everyday experience for the more than two generations or 50 million Americans that are now in adulthood, 'whose memory and imagination have been colored by Atari, Nintendo and Sega, the same way that the memory and imagination of previous generations were tinted by television, cinema and vinyl records' (Herz, 1997: 1).

## Work and play: a cultural history of computer and videogames

One of the tropes of new media cultures is that there has been a change in the division between work and non-work. As detailed in chapter three, in order to encourage new information workers to work long hours, workspaces have transformed into play spaces. The American university dormitory or residence life has become a model for the organization of work. Similarly for the information classes home spaces have become workspaces as greater parts of homes are now dedicated to computer/internet workstations.

The current incarnation of the home computer, then, embodies this ambivalence and duality around work and play. Contained on the hard drives are the spreadsheets and word-processed files of work along with computer games such as *FIFA World Cup*.

The connection between work and play in new media has a long history that is intimately part of the development of electronic games. The origins of games more generally have an even longer lineage in human history. Games operate in a transitional space. They are outside of regular activities, yet often they stand in for or reconstruct potential experiences. This transitional quality of games is the reason why they are seen as so central to child development. Games structure play into rule-based order that becomes some variation of social structures. Sport with all its partnering in terms of teams and rules is emblematic of war and territoriality. Think of the way that American football or rugby operate as games that ritualistically gain and lose territory. The ultimate war game is chess in its elaborate designation of positions and roles within an epic battle of capturing the opposing side's king. Games also translate the stakes into something more everyday and less threatening. In this way games such as Monopoly serve particular socialization functions in dealing with others as much as understanding the power of money in society. Games' ubiquity in all cultures indicate that their role is beyond that of child development and they serve as something much more substantial than mere pastimes, diversions or leisure pursuits.

The earliest electronic games were very much part of the development of computer technology. Part of the history of the mainframe computer that emerged post-Second World War was testing their computational abilities through solving chess problems. Chess programs developed quickly and competitions between chess players and computers emerged by the 1970s. However it was not until 1997 that a chess program could beat a grand master in a series of matches. Because of this focus on chess, electronic chess games were one of the earliest standalone computer games. Chess served as a way to exit the algorithms and

matrices of computer programs and languages, and apply them to simple and straightforward mathematical possibilities. Playing the game via the computer was actually very useful for developing computer language and computer coding in their efforts to reach a form of artificial intelligence.

Official histories of the development of electronic games vary somewhat, but what is clear in their emergence is that the programmers were originally involved in working through other problems. For many of these computer-related problems, games were an indirect way to solve the problem of the lack of display of computer activities. The cathode ray tube terminal that we now associate with computers was not part of its origins. Instead punch cards and elaborate printed computations were the only visual evidence of computer work.

In 1958 William Higinbotham, while trying to come up with an exhibition for the Brookhaven National Laboratory, developed the first primitive game that allowed people to manipulate with a knob and button a blip on a radar screen vaguely like a game of tennis (Poole, 2000: 29). His intentions were to make his machines come alive for the public and the game was a popular exhibit over the next two years before it was dismantled (Herman, 1997). Parallel developments occurred at MIT in 1962. Steve Russell in the Engineering Department of MIT worked with the new PDP-1 computer, which included switches and a cathode ray tube for display. He was intrigued by the possibilities of expanding the utility of the display screen beyond inputting data. And, in that sense of play, he developed a game called *Spacewar*. Through using keyboard functions and laying a background of night-sky stars, duelling rockets attempted to shoot each other and avoid the deadly gravitational pull of the sun (Poole, 2000: 30-1, Herz, 1997: 5-8, still available at <http://ics.www.media.mit.edu/group/el/projects/spacewar/>).

Neither of these early prototypes was made into commercial properties. *Spacewar* was left to be copied and circulated to virtually every major research institution nationally and internationally. It became a pastime of computer programmers and engineers, who often fiddled with its basic structure in an attempt to improve the game. Other computer games developed in similar fashion. *Lunar Lander* became popular with students, computer programmers and researchers in the 1970s: players would attempt to land the lunar module on the moon through carefully manipulating the key strokes that governed the speed of descent, the reverse thrusters and the tilt of the craft. Like its predecessor, *Lunar Lander* helped programmers fill the hours of work with some hours of play. The repercussions of games like *Spacewar* and *Lunar Lander* are neatly summarized by Steve Russell:

I think the thing I take the most pride in about *Spacewar* is that it got so many people hooked on computer programming. It caught a lot of eyes and got a lot of interesting people asking, 'How do you do that?'

(Herz, 1997: 8)

The intersection between programmers and games continued in all sorts of different directions. As ARPAnet – precursor to the internet – developed, programs and games were freely distributed among researchers. Fan-like interest in science-fiction novels, films and television programmes was exchanged as often as scientific research in the 1970s and 1980s. Into that mix were added attempts by scientific researchers to develop games that played on

these science and fantasy interests. Early versions of text-based games with complicated instructions included *Hammurabi*, *Advent* and *Hunt the Wampus*. These served as versions of the complicated role-playing games such as *Dungeon and Dragons* that were facilitated by internet connections to become multi-user domains (MUDs) by the 1980s (Hertz, 1997: 9-11).

## The commercialization of electronic games: home, arcade and amusement park

With the origins of electronic games firmly ensconced in the small research culture of universities where aspiring graduate students played while they developed programming skills, it became difficult to imagine how these games could move beyond a few thousand players into a commercially viable industry. These early games were dependent on gargantuan mainframe computers to operate. However, by 1970, the microchip and microprocessor with their capacity to be programmed in any way, much like a computer, and their ability to store data in a much smaller unit led to some new possibilities in developing electronic games and other commercial applications such as the personal calculator (Gere, 2002: 116).

Certain entrepreneurs worked on bringing that technology out of the research institute and into the home. Because electronic games predated the home computer by well over a decade, the first commercial generation of electronic games was designed to attach to television sets. Nolan Bushnell founded the game company Atari and through his first venture, an arcade game called *Computer Space*, failed, his second game with all the simplicity of the original oscilloscope computer game, entitled *Pong*, was massively popular after its commercial release in 1972 (Poole, 2000: 33-4). As early as 1966, Sega, a Japanese company (whose name stood for SErvice and GAmes) was also developing simple game structures (Gere, 2002: 177). By the mid-1970s, *Pong* was not only in every sports club, bar, lounge and pub in North America and Europe, it was also part of the generation of home television games that ran on cassette consoles and add-on screens. With little variation, *Pong* could transform from a tennis-like game to a soccer or hockey game via a different program. The first game console (1975) was made by Magnavox; it was called *Odyssey* and distributed widely by the giant retailer Sears Roebuck (Gere, 2002: 178).

Because the first generation of electronic games was composed of such simple codes, clones quickly appeared across the industry and led to the flooding of the market. Microchip technology also allowed for the miniaturization of games, and the handheld game market grew from the mid- to late 1970s. As Gere explains, the videogames began to represent the possibilities of digital culture: 'In the 70s, for want of anything better, the image of the video game acted as a metonym for the burgeoning computerization of society and started to appear in mainstream media as such' (2002: 178). Their ubiquity predated the personal computer as emblems of a transforming culture. Emerging in the late 1970s was the arcade

hit *Space Invaders*, which eventually led to the *New England Medical Journal* reporting a new condition entitled 'Space Invaders wrist' (Hertz, 1997: 15).

Rapidly changing markets, the frequent development of clones, and the burnout effect of games themselves on users led to an industry that went through a number of booms and busts. By 1983, the industry was worth over \$3 billion. By 1985, it had contracted dramatically to be valued at \$100 million (Hertz, 1997: 39). With each successive hardware transformation, past games became valueless as players bought the new console and sought new compatible games. Thus Atari floundered when Nintendo's console became dominant; likewise Sega struggled for market share with the emergence of Sony PlayStation in 1995 and Microsoft's X-Box in 2001. In the early era of electronic games, the industry was very much attached to the toy industry's cycles as different fads enveloped the form and died away matching that particular generation of players' exit from adolescence. The new economy of electronic games is vastly different and differentiated.

In terms of platforms, the computer game market has the most adult demographic. The average age of the computer game purchaser and player is 29 in the United States, the largest market (ESA, 2003). The game-console player, with its attendant technology attached to televisions is generally younger and hovers around the pre-teen to teenage age group. The youngest of players is now the handheld market. In the last decade, handheld games have included *Pokémon* from Nintendo and other games with Game Boy (GameCubé was its console mate) maintaining a steady flow of new users, and new and updated games. Arcade games have the most complicated demographic. Because of the successive generations of players, the arcade is often a mixed location with older players and teenagers. Older players use the arcade as a break from work at lunch or after hours. Teenagers use the arcade as much as a social setting as a place for games. This dual market has also shifted in some cities: progressively there is a cross-integration of games with entertainment centres where pinball and video arcade games are in close proximity to paintball game locations and laser tag venues.

The breadth of electronic games is difficult to limit to these four platforms. For most of the 1980s and 1990s, arcades were generally the venue for platform experimentation in the development and selling of elaborate new games where concerted attempts were made to add to the sensorial impact of games. For instance, Sega developed several locations including Tokyo, London and Sydney for Segaworld, a theme park with many interactive games and simulated rides. Because of financial hardships partly engendered by the failure of its Dreamcast console, Sega no longer operates the overseas amusement parks; it does, however, continue to have a thriving chain of entertainment centres in Japan. Theme parks, from Disney World to the Australian MovieWorld are arcades writ large. Their ultimate rides over the last decade have tried to simulate movie scenes within rooms that add motion to overwhelming moving images and 360-degree sound. On smaller scales, large-scale simulated race car games have developed: individuals in full-size vehicles compete with others; giant video screens position the location of the driver on the track and ultimately a winner is declared who reaches the virtual finish line represented by its screen image. Over the last decade, the arcade and amusement centre have been the sites for new versions of virtual-reality games. Simulated skiing or snowboarding are some of the most common versions of these games: players are invited to mount a moveable 'board' as they navigate their way down

a hill by leaning and balancing on the board. Full virtual-reality games were in vogue in the late 1990s and demanded competing players to don a headset and gun to compete in the virtual space of the game.

The economic impact of electronic games has also meant that the entertainment industry more widely is affected by trends emerging in gaming. Since the 1980s, Hollywood has mined games as a source for its own new narratives. Some such as *Tron* (1982) are extensions of the gaming experience. Others such as *Lawnmower Man* (1992) are extensions of the interactive and immersive sensation of games taken to the level of horror. A vast majority are simply based on electronic games and try to work the brand visibility into yet another product. *Super Mario Bros* (1993) and *Street Fighter* (1994) represent some of the earlier efforts to cross-promote a film out of its status as an electronic game. The most successful cross-over hit in film is *Lara Croft: Tomb Raider* (2001), which built from the game's enormous popularity over several versions. One of the least successful films was also the most audacious: *Final Fantasy* (2001) transformed the game into the first complete digitally animated feature film. The technical achievement with its uncanny construction of human figures created temporary moments of thinking the animation was real; however the film failed because of its lumbering story line that translated into stolid if beautiful images.

What is emerging from this synergy with Hollywood film and the strength of the game industry to influence the film industry, is that certain characters that were established in games are developing allegiances with their audience/players in a way that was once the preserve of television and film. *Maria*, for instance, defines Nintendo games as a brand as much as Mickey Mouse is emblematic of Disney. Likewise, Sega's *Sonic the Hedgehog* has a value as a convertible piece of intellectual property in the same way as Warner Brothers' Bugs Bunny. Game manufacturers, as Jonathan Dee recounts, are beginning to exercise their clout across the entertainment industry (Dee, 2003). Popular music is now placed in games – especially those games that are connected to a musical subcultural style. Product placement, a now routine form of promotion through film and television, is currently a successfully sought-after revenue line for electronic games.

Finally, one of the major differences between electronic game production 20 years ago and today is the actual cost of production per individual game. No longer is it acceptable to produce a game without three-dimensional rendering of the images. Thus the tasks of coding the range of possibilities of games, but also the various artists – from those who work on two dimensions (texture artists) to three dimensions (modellers) – make game production expensive just in terms of sheer workforce and time. Some games are also accompanied with extensive animation sequences and acting talent for these movie trailer-like productions. Further voice-over talent is used throughout the repetitive elements of gameplay. Production of games can take up to a year and have crews that resemble a motion picture credit list. Their costs now exceed \$1.5 million (US) for a major game. In addition, game companies are likely to buy the rights to particular films and other forms of popular culture to turn into games. Just as film has drawn on games for its sources, game companies have matched their releases with the marketing push of a major motion picture. For instance, the resurrected Atari Corporation bought the rights to the *Matrix* and even employed the film directors –

Larry and Andy Wachowski – and the acting talent to add new live action sequences to the game (Dee, 2003). The final production costs for the *Indiana the Matrix* game were \$20 million (Herald, 2003).

## Gameplay: genres

As the electronic game industry has matured, certain genres have developed. Genres connect expectations by the player with those of the producers, and help organize the markers and the pleasures derived from games. Briefly, here are the principal genres of electronic games.

**Simulation:** As the name implies, these games try to simulate something for virtual play. They emerged from flight simulators and range from incredibly accurate tank and aircraft control simulation to car, boat, snowboard and ski racing.

**Role playing:** Unlike simulation games, role playing has emerged from board games and the original *Dungeons and Dragons*. Although they are not all inspired by something gothic or medieval, they have emerged as the older version of networked computer games in multi-user domains (MUDs) and have been studied extensively in terms of their construction of particular internet communities (Turtle, 1995; Markham, 1998; Pargman, 2000).

**Strategy:** Like role-playing games, strategy games owe their lineage to board games and pit the player against the computer, other players or the limits of the game itself. Often these games are called god-games because the player could control millions of 'virtual' lives in their negotiation and play with building their world, their civilization, their city or suburb.

Because of the complexity and the need to play these games over a number of hours, they have tended to be more computer-based games.

**Adventure:** Games that set up a mission or a quest are often called adventure games.

These range from children's games to the bestselling CD-ROM *Myst*, which was designed for all ages. Hybrid versions of these games have developed, such as the *Tomb Raider* series, which incorporates action with the quest. Like strategy games, these games have sold better but not exclusively as computer games.

**Fighting/action games:** The greatest controversies around games have emerged from these so-called shoot-em-up games. The player is often portrayed in the 'first person' where only their arm and guns are visible as they move through the particular space killing enemies. In fighting games, there is a martial arts flavour to the type of fights although this is massively embellished with new moves and forms of knocking out or killing your opponent. Action games are closely linked to science fiction but not exclusively. Fighting/action games suit both the console and computer platform for playing and have been very successfully adapted to multiplayer online gaming.

**Sports:** Sports games are really a subgenre of simulation games. As a player you can represent a team or an individual depending on the type of sport and at this stage most major sports have an electronic version. Even country-specific games such as Australian rules football can be played virtually. The key value of any of these games is realism and the opportunity for the gameplayer to simulate being part of major professional sports and teams; in some ways it is a simulation of televised versions of sport in terms of camera angles, commentators and the general look of these games.

**Platform:** Many of the original videogames from the 1970s and 1980s were games where the player controlled a character that moved horizontally across the screen and, after conquering and overcoming certain obstacles and enemies, would achieve a new level of play or new platform. *Super Mario*, *Donkey Kong*, *Sonic the Hedgehog* and *Crash Bandicoot* have all emerged from the two-dimensional horizontal game structure of platform games to their current three-dimensional structure. Platform games are generally designed as family entertainment. Because these games are connected to children, the key characters have been developed outwards into animated television series and (in the case of *Pokemon*) movies and thus are used to brand companies such as Nintendo and Sega in a manner similar to the way Mickey Mouse is used to represent Disney.

**Puzzle games:** The most weakly commercialized genre of electronic games is commonly known as the puzzle game. The most famous puzzle game is *Tetris* where the player has to continually fit awkward-shaped blocks on top of each other to fill up a shaft. Most of these games have become those that are bundled into computers when purchased or have long been associated with shareware and are therefore virtually free. Puzzle games, however, do sometimes become part of adventure games in order to intensify the mystery and challenge of finding places and things. Over their history, puzzle games have also been well adapted into handheld games and are now regular components of, or downloadable onto, mobile phones.

**Traditional games:** An often overlooked category of electronic games are those that have been converted into electronic form from board games. Thus you can find versions of Monopoly and chess in electronic form along with backgammon and chequers. Because computer screens are usually organized for one user, these games have had limited success as standalone properties. Once they became staples of online sites connected to large institutional sites such as Yahoo!, they developed massive numbers of loyal users that have become dedicated to their games. Generally these games are two-player games and online variations of board games such as *Literati* (which is a transformed word game in the Scrabble tradition) now have enormous followings internationally. Players are ranked in games such as *Literati* and chess; online tournaments are regular special features; and chat among players is standard.

**'Entertainment' games:** Because using computers is seen as a necessary skill for young people, games have been developed that blend education use with game strategies. Maths and language 'quest' games are common in the genre, where learning is attached to discovering letters, numbers or word sequences – depending on the skill and age level of the game's design (Herz, 1997; Marshall, 2001).

## Gameplay: interaction, cybernetics and cultural production

In all these genres of electronic games, there is a level of interactivity that separates games from other forms of entertainment culture. For the child who owns a *Nespet*, an electronic toy that demands to be fed and taken care of or it will 'run away', there are relentless demands of pet maintenance to attend to that come from the game itself. For other games,

the player may be pitted against the machine or against another player or possibly against a host of players. In these various scenarios, which occur primarily in first-person shooter, role-playing and simulation games, the range of interactions moves from the structure of the machine to human-to-human interaction that is mediated by the game. Interactivity becomes increasingly complex as the human-to-human interaction becomes a central feature of the pleasure of the game itself. Interactivity in these games becomes a kind of cultural production albeit contained within the framework of the game's rules.

Lev Manovich rightly underlines that the game's interactivity is highly structured by the game's programmer and the player is not creating freely but within this limited world (Manovich, 2001). This critique presents games as ultimate cybernetic systems: rules cannot be broken, and the goals and objectives of the game can rarely, if ever, be challenged or changed within a game. Thus if the objective of *Wolfenstein* or *Doom* is to kill the enemy, there is no opportunity to change its rules to build in clever diplomatic negotiations to avoid bloodshed. For gameplayers working within a given genre who accept the game's and genre's rules, this challenge would be absurd partly because it destroys the pleasure of the game itself. Nonetheless, the cybernetic critique of games is powerful, particularly when it is taken as leading to the potentially limited worldview that may be proffered via games for players.

The cybernetic critique of electronic games takes on greater credibility when the military's profound and lengthy interest in both the development of games and the utilization of games for training soldiers is factored into our consideration. Flight simulators, long a training tool for pilots, were an invention of both gaming and the military, and developed with electronic display from the 1960s onwards. By 1978, flight simulators had become a standard computer game which has gained in sophistication over the last quarter-century and integrated into the construction of many war-related electronic games. Games have been used in military training to improve reflexes and to accustomize the soldier with the electronic displays of targets and objectives. Most recently, the US Army, through a military academy, developed a very sophisticated multi-level training game entitled *America's Army*. Players move from Fort Benning and basic training to eventually assessing their abilities for Special Forces at Fort Bragg, another training base. Certainly the game glorifies the military and is being used as a sophisticated marketing tool to connect to the core recruiting market in the United States who regularly play electronic games. Indeed, because of a convergence of display technologies from electronic games to the means of controlling military machines from anti-aircraft guns to the operation and firing of tanks, elements of war itself in its hyperreal and mythological conception of precision resembles – deceptively and falsely – electronic games.

The cybernetic quality of games has served as a source of critique for the most violent games. Gruesome real-life shootings in the United States with the 1999 Columbine High School massacre and in Germany with the Urfurt massacre in 2003 by 19-year-old Robert Steinhäuser have been linked to the perpetrators' overuse of violent videogames. *Doom* became the *blêre noire* because it was seen as the Columbine shooter's favourite game. Critics of violent electronic games indicate that the routine killing in games leads to a general desensitization towards the actions of violence and a specific effect on those that already have



a predisposition to violence. This critique is not new and is not unique to electronic games. It has been used for decades against violence on television and violence on cinema screens; however with electronic games the research has a different angle that has allowed for the debate to intensify. In contrast to television, games demand a more intense experience by the gameplayer and repetition of violent action to advance in the game. As a result, the effect of the violence on-screen is greater than in the passive structures of television watching (Anderson and Dill, 2000). Debates about violence in electronic games have mainly circulated around protecting children because games are seen as products in a regulatory sense primarily aimed at youth (even though most games are now bought by people over the age of 18) and it is a truism in the industry that violence levels become a kind of selling feature. To counter this development the games industry has attempted to self-regulate through providing warnings and buying guidelines for games. Despite these efforts, the debate about whether screened violence is compartmentalized by players and viewers remains an endless and seemingly irresolvable issue.

Although the objectives of games may be simple (for example, the common 'kill or be killed' in first-person shooter games) and structured by game designers, there is no question that games are compelling for players. The sensation that games are controlling players is an extension of the cybernetic critique of games: a popular reading of games is to call them addictive. Players are drawn into a pleasure of repetition in the long struggle to master the game. Game manufacturers have constructed levels to differentiate and provide gradations of skill for game players to gauge their progress. Parents baffle this play compulsion where they feel they must limit the time that children spend playing games. As Girdal relates, game players move through a succession of emotions in their playing which identifies the different and enticing pleasure that games permit:

The first time a game is played, it is experienced with a certain unfamiliarity; the world is new and salient and poses challenges and mystery. By playing the game numerous times, the game world will become increasingly familiar. The peak result of such a learning process may be a trance-like immersion in the virtual world, because of the strong neuronal links that are forged between perceptions, emotions, and actions. But the end result of the learning process is what the Russian Formalists called *automation*, and what psychologists might call *desensitization by habituation*. The virtual world becomes predictable, it loses its visual and acoustic salience and the player will probably stop playing the game at this stage. Thus, this aesthetic of repetition is based on the sequence: first unfamiliarity and challenge, then mastery and finally automation.

(Girdal, 2003: 148)

Calling this process of involvement and mastery addiction is medicalizing what many of us do in all sorts of pursuits from gaining competence in playing a sport to understanding a subject or language. Although the compulsive behaviour may be irritating to those around who are not playing and there may be a sense of wasted time, a player is simply motivated by a desire to master the particular game in all its intricacies.

What gives electronic games an extra dimension of investment is the notion of *gameplay*. Gameplay has become a term used in critical reviews of particular games and has now become a way that academics are understanding the pleasures of gaming (Banks, 1998). Both simulation and first-person shooter games rely on elaborate relays of interpreting and responding quickly to conditions. It is tactile and very often filled with a tension that envelops the body and concentrates the mind. Gameplay is how these various elements of connection to computer games intersect with navigating the rules and regulations of the game. Good gameplay implies that the aesthetics and appearance of the game align with its interactivity and the progressive level of difficulty. It is very much a feel of how the game produces itself through the player. If the player is secondary to the experience, as often happens in games derived from films, the gameplay quality is substandard.

Gameplay also implicates the kinds of narrative that are part of games. To describe games as narratives is somewhat of a stretch, but what narrative refers to in games is the general direction that they follow. In role-playing games, narrative is much more central to the experience of the game. A quality of mystery and a progressive unravelling of the enigma may be fundamental to the pleasure of the game.

Gameplay in first-person shooter games may be less about narrative than about how objectives are presented for the game and how well those objectives when reached are rewarded. Also, the perspective of first-person shooter games is critical to the operation of the game. Because the gameplayer sees only part of the body and perhaps the weapon of their character, it is important that the game maintains a coherent realism in its construction of the imaginary game space. Even failure or 'death' in games has to have a workable degradation: this in first-person shooter games, it is common for one's 'health' to be represented by a graphic that indicates what percentage of one's powers remain. In simulation racing, as Poole explains, it is essential that crashes and bumps into the wall do not completely derail the driver: gameplay in simulation is to produce some verisimilitude but allow for its bending for the sake of the race and the gameplayer's pleasure in staying in the race (Poole, 2000: 186-7). Gameplay also implicates how well the game holds up to repeated play. Does the game maintain its intensity for the gamer after the fifteenth play? Equally importantly, have the programmers provided enough variations, challenges and subtle extras to make the game have new elements to employ? These elements of gameplay are considerations as to how the game has embedded hidden 'cheats' that gamecoders have made possible.

Cheats are special moves related to a sequence of buttons on a joystick or console that generates something that gives the aficionado the advantage. Special magazines and websites publicize 'cheats' for games that maintain a loyalty among gameplayers resembling a secret society. Cheats also reflect a game's relationship to a dichotomy of rule structures and rule breaking that in the study of games is referred to by Callois as the open-endedness of *paiolos*, or play, and the relative closed structure, *ludus* or game.

## Identity and the community of gamers

There is a quality of electronic games that invites the player to cross into the screen. Martti Lahti writes about this eloquently:

One of the characteristics of video games throughout their history has been an attempt, with the help of various technologies, to erase the boundary separating the player from the game world and to play up tactile involvement. Indeed, much of the development of video games has been driven by a desire for a corporeal immersion with technology, a will to envelop the player in technology and the environment of the game space. That development has coincided with and been supported by developments in perspective and the optical point-of-view structures of games, which have increasingly emphasized the axis of depth, luring the player into invading the world behind the computer screen.

(Lahti, 2003: 159)

Lahti's argument builds on the idea that there is a corporality dimension in understanding the experience of playing electronic games. As described above, the subjectivity of the gamer is structured into a cybernetic loop so that the gamer becomes an extension of the game's directives. But what is interesting about Lahti's developed argument is how the game is a conduit for the player to move through the 'proscenium arch' of the screen. Games develop a subjectivity that, despite the deceit of the machine and software's control, is an alluring invitation to become part of an environment and to make things happen in that environment. The process of playing is a process of production. Although not a free-spirited form of production, the gamer is producing results within the ecology of the program. Like other new media, electronic games move the individual to the centre of cultural production: the gamer is the subject and the agent of the game. He or she enacts a role and makes the decisions within parameters of what that role entails. As we shall see in chapter seven, reality television also allows the individual to cross into the screen, however contrived and constructed that passage to representation might be. Games work in new media cultures as the strongest and most regular site where the individual produces their entertainment and that 30-year two-generation gamer sensibility percolates through our other media forms in interesting ways.

The cultural experience of how gamers make the game is not lost on the industry itself. Gameplayers are regularly employed to beta-test games before they move to the open market. Game testers have become an important step for the production of electronic games to eliminate glitches and to improve the connection to the core players. The integration of players into the economic structure of game manufacture also heralds shifts that are occurring in other media and in other industries. The game tester is a role that goes well beyond previous efforts to have strong feedback marketing loops with audiences. Many game testers go on to careers in the game industry based on their identification of code problems which generate the solutions to playing issues. Also, there is a large group of players who manipulate the codes of games and thereby modify a game's rules and play. Gamers who are 'mods', even though they are transforming the code of copyrighted materials are welcomed to a degree by the industry to help games morph into new editions (Marriott, 2003: E1).

Because of the array of games, there is no consistent identity or typical game player. Most games, but not all, require the player to take on an avatar as they move into the gamescape. The degree of the significance of the avatar changes with the type of game. For

instance, in role-playing games, the avatar is essential and determines future alliances and progressions through the game. While in fight games such as *Tekken 4*, it is possible to choose specific characters who have special fight moves. In many games, one can choose 'to be' a male or female; however in *Tomb Raider* everyone becomes a Lara Croft in the game. In sports games built around soccer or ice hockey, the gameplayer becomes a team; in some cases part of the game is picking the team and thus the player becomes more a manager or a coach. The logic of the game is more significant around character choice than any gender-bending.

A richer area of study is the more general question of gender and gameplayers. It is widely assumed that more males play electronic games than females. In most countries this is quite accurate, although there are many female players and the male stereotype for gameplayers loses the varied nuance of gamers. According to the American Entertainment Software Association, 39 per cent of gameplayers are women (<http://www.theesa.com/pressroom.html>). Moreover, 57 per cent of games are bought by women. Women are also more likely to play online games and least likely to play console games than men. Although there have been efforts by educators in cooperation with key game manufacturers to make more female-friendly games (Cassell and Jenkins, 1998), there have been counter-movements to this tendency to essentialize female game pleasure. Gamegirls is one of those groups that has had a large online presence and celebrates its prowess in action and first-person shooter games. *Quake*, another first-person shooter game has had a small but visible group of female players – *Quake Girls* – with an associate e-zine that articulates their desire to excel on their own terms in the game. The industry itself has generally been drawn to produce the ultimate girl game or perhaps more ideally a cross-gender game. Twenty-five years ago, *Pacman* represented the game designed to attract female players. In terms of industrial strategies, perhaps movie-derived games such as *Harry Potter* might have the same cross-gender appeal.

With the average age of video or computer gameplayers in 2003 reported to be 29 in the United States (ESA, 2004), gameplayer identity and subjectivity has shifted quite dramatically over time: games have become mainstream adult entertainment as much as they are and have been part of children's culture. One of the most interesting transformations is online gameplaying, usually called multi-player online gaming (MMOG) or massive multi-player online role-playing game (MMORPG). MMOGs come in many forms and styles and originated from the multi-user domain games that resembled online *Dungeons and Dragons* games in the early decades of the internet. The simplest online games are traditional board games and are available free of charge on portals such as Yahoo! and MSNGames. Millions participate in these games and use them primarily for breaks from their everyday lives. Other games, such as first-person shooter and role-playing games, have had a more protracted development on the internet that has led to a very loyal following for particular games. One survey indicated that there were 31 million casual online game players involved primarily in traditional and simple games. In contrast, what are labelled as hard-core players numbered 8.4 million (IGDA, 2003).

As the principal software and hardware game manufacturers moved into producing online versions of their games, the number of hardcore players and quality of the multi-player games has accelerated. Three-dimensional space with multiple players, as well as many



stand alone avatars created by the game are available in the most popular of the online games – *Everquest*. According to one survey, 90,000 players are logged on to the role-playing game at any one time (Armstrong, 2003). The total number of players is estimated at 2 million who roam through a virtual space of 323 square miles (Massmog, 2003). Not all games are organized for massive numbers. A trend in online games resembles chatrooms. Games between two or a group of friends are often the norm with online games. With these smaller numbers, games also betray their origins, where players once created local area networks by connecting their computers into a local network in order to play against each other. Emerging in online game spaces are similar micro-communities loosely linked to other communities. Tournaments have grown more sophisticated and professional as a more formal site for play.

Games in this online environment have become places where friendships are built and maintained through interests in particular games. Afficionados of specific games develop their own argot and acronyms that rival the best text messagers. With online games, the critique that games are socially isolating makes little sense as players build their social networks through their online game connections.

## Conclusion

Through their long history, electronic games have been the most influential of new media forms in transforming the cultural landscape. Their status as diversissement perhaps allowed their influence to go unrecognized except in the most vituperous articles critiquing their debilitating effects on children. What has made electronic games particularly significant is the way that they have shifted our relationship to media and entertainment. As detailed here, electronic games were instrumental in the new blending of work and play in contemporary life. The delineations are less clear than in the past as work invades domestic space and play pervades the creativity space of the information economy. Via electronic games, the entertainment industry has also redirected itself and moved the idea of play into the structure and meaning of other forms, from film and television to popular music and radio. This shift is very much related to incorporating the essential component of electronic games and play more widely: interactivity. The kinds of engagement embodied by electronic games have become the benchmark for popular culture and presaged the prolific cultural investment and interactivity that have made the internet and the web such a fascinating and dynamic environment for information and cultural exchange since the 1990s. Games have provided for massive participation, but qualitatively different than the participation offered by television or radio. Electronic game participation implied the individual's personalization of the medium through playing the game and bringing the structure to life. I have called this a form of cultural production, albeit contained within the framework of a cybernetically interactive game. Electronic games have democratized contemporary cultural production in a patterned way: they have allowed the player to move into the action of the screen. This profound shift is a celebration of the activity of the populace to make their culture. The electronic game has been a broad channel for that will-to-produce even as it has been brilliantly made into a successful form as a cultural commodity.