

## Rules of Engagement

The player uses a moulded plastic handgun (with properly aligned sights and a force-feedback system to simulate recoil) to shoot directly at enemies on screen...to increase the sweating tension...you always hear Time's winged Chariot. But relax into your task and revel in the challenge, for the blissfully simple rules are still the same. Kill them all.<sup>1</sup>

This description of the gameplay involved in the arcade game, *Time Crisis II* (Namco, 1998), is equated by Poole with the basic concept originally present in *Space Invaders* (Midway, 1978) when the depiction of violence in videogames was still in its technological infancy. As videogames became increasingly realistic, graphically, concern began to grow over the lack of formal classification according to disturbing narrative themes, use of drugs, violent and sexual content and socially inappropriate language.<sup>2</sup> In addition, tragic events such as the murdering of innocent students at Columbine High School were linked to the videogame *Doom* (id Software, 1993) because the killers not only played it, but also created their own custom levels for it.<sup>3</sup> With the evolution of videogame soundtracks from 'simple, single tone, electronically generated bleeps' into the fully orchestrated scores of *Halo: Combat Evolved* (Microsoft, 2001), music has been developed into a considerable tool for the depiction of violence as fun and exciting action games to horrifying thriller experiences.<sup>4</sup>

Videogames present an entirely different form of entertainment to media such as that of film or television in that the experience by each player is individual depending on controller input. The relationship between player and the required control apparatus determines the resulting visual and aural feedback from the game which can have various effects on how aggressive character traits are perceived. Although surveys indicate that the average game player is over the age of eighteen, the incredibly expansive range of videogame genres makes it very difficult for parents to understand what types of content they are allowing their

---

<sup>1</sup> Poole, Steven, *Trigger Happy: The Inner Life of Videogames* (London, 2000), p. 38

<sup>2</sup> Entertainment Software Rating Board, 'Frequently Asked Questions', (2006), <http://www.esrb.org/ratings/faq.jsp#7> [accessed 04/05/07]

<sup>3</sup> CNN, 'Report: 12 killed at Columbine in first 16 minutes', (2000), <http://archives.cnn.com/2000/US/05/15/columbine.report.04/> [accessed 04/05/07]

<sup>4</sup> Marks, Aaron, *The Complete Guide to Game Audio* (Kansas, 2001), p. 3

children to play.<sup>5</sup> Around ninety percent of all titles released are exempt from legal classification which led to the establishment of voluntary rating organisations.<sup>6</sup> Retailers and games console manufacturers such as Nintendo and Sony Computer Entertainment Europe require publishers to submit games for rating assignment before they can be produced for sale. The Entertainment Software Rating Board (ESRB), established in 1994, rates over one thousand videogames in the United States each year based on content suitability for varying age groups. The equivalent body in the United Kingdom is the British Board of Film Classification (BBFC) and the Entertainment and Software Leisure Publishers Association (ELSPA) is the organisation that is used where a game is exempt from classification under the Video Recordings Act.

The latest instalment of the *Pokemon* (Nintendo, 2007) series of videogames continues its theme of catching animal-like creatures, storing them in portable containers and releasing them only to partake in battles until they are knocked unconscious. In this game and many others, cartoon-like visual styles are frequently deemed sufficient to give a game a lower rating despite the violent concept of the gameplay and for *Pokemon* the rating is '3+' which means it is supposedly suitable for anyone aged three and up. If the purchaser of the game, i.e. the parent, does not have the time to test it before allowing their child to play it, then these ratings are the only available guide to understanding what type of content they are subjecting the child to. Although the *Pokemon* franchise remains seated in the unrealistic computer generated graphics of videogames and thematically corresponding cartoon television series, Computer Graphics Imagery (CGI) is capable of life-like imitation as seen in the film *Final Fantasy: The Spirits Within* (2001) and many games now make frequent use of realistic cut-scenes. In a study by the Independent Television Commission (ITC), parents wanted a better understanding of the potentially harmful effects of violence and sexual content depicted in cartoons.

---

<sup>5</sup> Entertainment Software Association, 'Facts and Research', (2007), [http://www.theesa.com/facts/gamer\\_data.php](http://www.theesa.com/facts/gamer_data.php) [accessed 04/05/07]

<sup>6</sup> Entertainment and Software Leisure Publishers Association, 'Age Ratings', (2007), <http://www.elspa.com/?t=agerating> [accessed 04/05/07]

Almost all the children said they were never scared by cartoons because they knew they were not real. Children are able to make the distinction between a cartoon and real life...[mums] are largely unaware of the different kinds of cartoons available, and so tend not to set rules about which ones their children can and cannot watch.<sup>7</sup>

Just as visual styles can mask violent content, central to gameplay in certain videogames, so too can the musical styles. Apart from genre defying games such as lifestyle simulator, *The Sims* (Electronic Arts, 2000), most videogames are similar in that they involve the completion of tasks. This makes it easy to mistake all games as following a pattern in the way in which they utilise aspects of audio. In the Adventure genre of videogames a player may play through a number of different experiences. In the case of *The Legend of Zelda: Ocarina of Time* (Nintendo, 1998) the player experiences a variety of orchestral melodies with very specific changes in musical style when the controlled player-character is approached by an enemy. In other games violent events are given the same musical treatment throughout the game as is the case with combat based games such as *Guilty Gear X* (Sammy Studios, 2000) which uses a variety of rock songs to represent the fast pace of gameplay appropriately. This is an association which the game creates, and although it is common to other similar fighting styled games, it is not a quality that is intrinsic to rock music that a concerned parent could be expected to be familiar with.

Visual and aural properties of a game are the only feedback through which a game player can form an understanding of what their actions have caused. It is never made clear whether music is used to promote or merely reflect the violence on screen. Semiotic aspects of the soundtrack are used in *Star Wars Racer Revenge* (Lucasarts, 2002) to associate music with a successful collision with an enemy racer. The music in *50 Cent: Bulletproof* (Sierra Entertainment, 2005) is used mainly to combine the pleasure of listening to the music of that artist with a gratuitously violent game which rewards the player for acts of theft and excessive killing. These actions unlock extras such as music videos and CD tracks for listening to outside of gameplay. The effect is the explicit promotion of illegal and

---

<sup>7</sup> The Independent Television Commission, 'Cartoon Crazy', (1998)  
[www.ofcom.org.uk/static/archive/itc/uploads/Cartoon\\_Crazy.doc](http://www.ofcom.org.uk/static/archive/itc/uploads/Cartoon_Crazy.doc) [accessed 04/05/07]

morally corrupt action which is rated as supposedly suitable for players aged eighteen and up.

The range of experiences provided by videogames is not restricted to the domestic household and exists in the public space as gaming arcades. Here, the more inherently violent games are best suited owing to the competitive aspect frequently associated with violence. In the popular genre of 'Fighting' games, a player can begin by playing against a series of computer controlled opponents until a human opponent decides to join the game and challenge the first player. In *Street Fighter II* (Capcom, 1992), one of the most successful Fighting games of all time, if the human challenger wins the best of three fight rounds, they are allowed to continue playing the game, quite literally forcing the original player off the machine.<sup>8</sup> Virtual aggression, however, needs not to be directed at another human and many arcade games rely on the co-operative efforts of two players to defeat computer controlled enemies. *Time Crisis II* is just one of many arcade 'Shoot 'em Ups' that utilise the light gun controller whereby a player actually aims the plastic device at the screen in order to target virtual enemies. These games utilise music to fully control the feeling of tension and resolution in order to create a more immersive experience in addition to surprising or even frightening the player.

The one major facility of music that Shoot 'em Up and Fighting genres of arcade videogames share is that of attraction to the game. Arcade games cost money to operate, hence the term 'coin-op', and the specific experience that a game provides needs to attract players who are not even looking at the machine. Music for these types of games now serves two purposes of attraction; the first is to have theme music that entices a player to begin, and the second is to have in-game audio that encourages other players to either challenge the current player or join in to co-operatively annihilate the unending hordes of zombies on screen as in *House of the Dead* (Sega, 1996). Although many arcade games are based on premises of mindless killing or the skilfully controlled humiliation of an opponent in front of fellow players, the array of flashing lights and the cacophonous aural

---

<sup>8</sup> Byron, Simon, Ste Curran and David McCarthy, eds., *Game On! From Pong to Oblivion: The 50 Greatest Video Games of All Time* (London, 2006), p. 208

environment of such a place combines to provide an atmosphere for non-aggressive social interaction.

Half the kids were playing games less than half the time they were in the arcade. The rest of the time they were socializing. The arcades, like the ice cream parlor of yore, were providing a social gathering place, more than a place for compulsive play.<sup>9</sup>

The promotion of multi-player gaming is positively sociable but Newman suggests from a study by Anderson and Morrow that 'the competitiveness of the situations may be largely responsible for any observable post-play aggressive feeling'.<sup>10</sup> The nature of violence in each videogame genre is so varied that it can be difficult to know whether the physical action represented on screen will cause physically aggressive attitudes between players. The first-person form of the Shoot 'em Up, owing to the visual perspective during gameplay, can only be played by a single person per games console. Consoles can overcome this by linking remotely through the internet or hardwiring over a Local Area Network (LAN) to create LAN parties provided by gaming centres such as 'Combat Strike - Nottingham' where players sit at separate computers but compete within the same virtual world. By listening through headphones the player can experience the soundworld from their perspective alone as they play games such as *Half-Life 2: Deathmatch* (Valve, 2004) where the main objective is to kill the other players. As with other deathmatch games such as *Quake III Arena* (id Software, 1999) and *Unreal Tournament* (GT Interactive, 1999), matches are timed and players come back to life when killed so as to allow the individual to kill the same opponents repeatedly for points in order to win. This emulation of killing for points, although violent in its representation, is much like sport and retains a less aggressive function.

Something that might on the face of it look extremely violent on the screen may in practice have quite a different function. The players might for example blast one another and everything else in a violent game...while at the same time enjoying extremely peaceful, playful relations...<sup>11</sup>

---

<sup>9</sup> Greenfield, Patricia Marks, *Mind and Media: The Effects of Television, Video Games, and Computers* (Massachusetts, 1984), pp. 99 – 100

<sup>10</sup> Newman, James, *Videogames* (London, 2004), p. 68

<sup>11</sup> Newman, James, *Videogames*, p. 69

When killed by an opponent, the player is not punished visually or aurally. In fact, by 're-spawning' after being killed in a deathmatch game, the player is actually granted the opportunity to continue fighting but with the benefit of a renewed health gauge. The only aural punishment one might receive is through verbal taunts if the players are wearing headsets with microphones attached.

The uses of music in violent videogames are extended further by the interactive nature of the medium. Every game has its own rules of gameplay which comprise its ludological system. The complexity of this system in a videogame defines how the player forms an understanding of how visual and aural stimuli fit into the controller input to feedback loop. Games such as *Burnout: Revenge* (Electronic Arts, 2005) respond to specifically aggressive driving skill by rewarding the player with gameplay bonuses and short musical chord stabs which signify achievement. This use of aural stimulus is what causes the game to become an immersive feedback loop rather than merely engaging the mind through inconsequential button presses. Greenfield conducted a small experiment to investigate why children found interactivity preferable to engaging, but less immersive, media such as television.

[At the zoo] they prefer pigeons and squirrels, with whom they can interact, to the more exotic animals isolated behind bars...They were unanimous in preferring games to television...One nine-year old girl said, "In TV, if you want to make someone die, you can't."<sup>12</sup>

As videogames respond interactively to player control, music can no longer be viewed purely as a background effect as the ludological system imbues it with the added property of function, but what effects do these subtexts have on players? In a psychological study carried out by Craig Anderson and Karen Dill, experiments were carried out in order to better understand if there are correlations between 'Videogames and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life'. The various tests and methods used were specific to the measuring of the effects that videogames have on short-term post-play aggression and before the tests were even begun studies in 1998 showed that eighty percent of the sampled thirty-three popular games by Sega and Nintendo were violent in nature

---

<sup>12</sup> Greenfield, Patricia Marks, *Mind and Media*, pp.101 – 102

and that '21% of these games portrayed violence towards women'.<sup>13</sup> After subjecting one hundred and ninety-six students to gameplay in *Wolfenstein 3D* (id Software, 1992), the participants were then placed on consoles to play a competitive reaction time game which they believed to be against another human player. The instructions they received were as follows.

You will set a noise level that your opponent will hear if they lose...How long you hold down on the bar determines how long your opponent will hear the noise...If you lose you will hear the noise your opponent has set for you.<sup>14</sup>

It was understood that the actual increase in aggressive behaviour would be linked to the immediate provocation of receiving a noise blast for reacting too slowly. However, the results still showed an overall increase in aggressive behaviour after playing *Wolfenstein 3D*, and interestingly women delivered longer noise punishment than men. This further exposes the disappointing futility of this study as it does not take into account the already skewed gender differences in gameplay statistics which note that sixty-two percent of gamers are male.<sup>15</sup> The study understood also that certain female participants may have felt uneasy and hence, further provoked by the unfamiliar situation.

Unfortunately, the evidence for links between violence and videogames is made clear by the Role-playing styled game, *Super Columbine Massacre RPG!* (Danny Ledonne, 2005). The game, created by twenty-four year old Ledonne, was submitted for the 'Guerilla Gamemaker Competition' was never published but is available to download on the internet. Using the genre of the Role-playing game, the player is given control of the murderer Eric Harris and the game is painstakingly reconstructed from publicly released dialogue transcripts from the day of the massacre. Role-playing games are played from a third person perspective and are generally based on gameplay that presents the player with a compelling narrative. Clive Thompson suggests that it may even be capable of having 'artistic merit -- offering a new way to think about Columbine' as it forces

<sup>13</sup> Anderson, Craig A., and Karen E. Dill, 'Videogames and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life', *Journal of Personality and Social Psychology* (2000), 78/4, p. 772

<sup>14</sup> Ibid., p. 785

<sup>15</sup> The Entertainment Software Association, 'Facts and Research', (2007), [http://www.theesa.com/facts/gamer\\_data.php](http://www.theesa.com/facts/gamer_data.php) [accessed 04/05/07]

the player to be empathetic with a killer through the immersive experience of gameplay.<sup>16</sup> It uses unrealistic 'characters the size of sugar cubes, and cheesy MIDI music', does not pretend to emulate the actual feel of physically killing people and allows the player to critically explore Harris's psychological state, rather than dismiss it.<sup>17</sup> The gameplay directs the player through the last words of students before they are killed, but also shows the lives of Klebold and Harris as they sit down to watch *Apocalypse Now* (1979), one of their favourite films.

Danny Ledonne came under fire specifically after his game was blamed for the violent attack by Kimveer Gill that killed one and injured nineteen others at Dawson College in Canada. After it was discovered that Gill's favourite game was supposedly *Super Columbine Massacre RPG!*, Ledonne defended his creation understanding that his artistic statement should not be blamed more than any other violent media associations.

Though it was far from shooter Kimveer Gill's favorite game, it was among the list of games he liked to play. I can only assume, after 150,000+ downloads of the game, that it is also a game that other people like to play...What else did Kimveer like? Black clothes? Goth music? Pizza? <sup>18</sup>

One game which suffered the most scrutiny after the events of the Columbine High School massacre was *Shoot 'em Up Doom*. Featuring an unrelenting Heavy Metal styled electric guitar riff, the game was one of the first to realistically allow a player to experience the killing of enemies in a three dimensional space from a first person perspective. Harris and Klebold did create their own levels for *Doom*, and these were distributed on the internet but in an article by Barbara Mikkelson, the myth that these levels resembled Columbine High School is recognised as just that.<sup>19</sup> The effects of associating a violent game with specific types of music cannot be measured, but certainly explored. Punk Rock bands, such as *Sum 41*,

---

<sup>16</sup> Thompson, Clive, 'I, Columbine Killer', (15/01/07), <http://www.wired.com/gaming/gamingreviews/commentary/games/2007/01/72491> [accessed 04/05/07]

<sup>17</sup> Ibid.

<sup>18</sup> Crecente, Brian, 'Columbine RPG Creator Talks About Dawson Shooting', (09/20/2006), <http://www.kotaku.com/gaming/danny-ledonne/feature-columbine-rpg-creator-talks-about-dawson-shooting-201829.php> [accessed 04/05/07]

<sup>19</sup> Mikkelson, Barbara, 'The Harris Levels', (01/01/05) <http://www.snopes.com/horrors/madmen/doom.asp> [accessed 04/05/07]

frequently approach the subject of avoiding conformity and praising alternative music to that of popular charts.

Heavy metal and mullets it's how we were raised,  
 [Iron]Maiden and [Judas]Priest were the gods that we praised,  
 'Cause we like having fun at other peoples expense,  
 ...Become another victim of your conformity.<sup>20</sup>

Association between videogames, violence and popular music culture is under constant scrutiny on the television. A brief scan through the backlog of complaints to the *Advertising Standards Association* and *Ofcom* yields frequent issues in videogame advertising. For the promotion of a game entitled *Mercenaries: Playground of Destruction* (Lucasarts, 2005), the advertisement uses a voice-over and on screen text to state 'You are a mercenary. Blow up anything. Blow it up again. Keep Blowing stuff up. Blow the living hell out of it. Blow the living hell out of it some more'.<sup>21</sup> To say it was an incitement to violent behaviour is an understatement. A complaint referring to *Grand Theft Auto 3: San Andreas* (Rockstar Games, 2004) was upheld due to the threatening 'carrying, loading and use of guns as well as fighting and graffiti spraying'.<sup>22</sup> The combination of multiple forms of anti-social behaviour are used to cumulative effect and it should be noted that this promotion of violence is highly personalised. The *Grand Theft Auto* series of games offer the unique musical feature of realistic in-car radio entertainment which allows the player to listen to whatever style of music they believe to be appropriate to the current mission. The dual-role of music here is to portray the villainous missions in an enjoyable light whilst creating an innovative method of gameplay immersion, a moral issue that Janet Murray warns us of in *Hamlet on the Holodeck* (1997).

...a common anxiety about the new technologies of simulation. Do we believe that kissing a hologram (or engaging in cybersex) is an act of

<sup>20</sup> Seek Lyrics, 'Sum 41 Fat Lip Lyrics', (2007), <http://www.seeklyrics.com/lyrics/Sum-41/Fat-Lip.html> [accessed 04/05/07]

<sup>21</sup> Broadcast Advertising Adjudications, *Advertising Standards Authority*, (04/05/05), [available online]

<sup>22</sup> Broadcast Advertising Adjudications, *Advertising Standards Authority*, (02/03/05), [available online] <http://www.asa.org.uk/asa/adjudications/public/> [accessed 04/05/07].

infidelity to a flesh-and-blood partner?...would the power of such a vividly realized fantasy world destroy our grip on the actual world?<sup>23</sup>

The specific association created by videogame designers between music and violent action depends entirely on the ludological system within which the game acts. We can delineate these systems into categories roughly divided by the broadly encompassing genres in which videogames are reviewed and sold. Browsing to the popular website, *Play.com*, separates games according to platform and then further categorises them into fifteen marketable genres. For reviewing purposes, a website such as *Ign.com* divides games into even more categories for a total of fifty categories in order to provide the most accurate description of new and innovative game types. For the purposes of the study of the relationship between music and violence in videogames, we will be exploring the following ten genres: Arcade, Platform, Adventure and Role-playing, Shoot 'em Up, Fighting, Sneak 'em Up, Driving and Racing, Real Time Strategy, Flight Simulation and Other which incorporates the various games that do not fit neatly into any previous category.

---

<sup>23</sup> Murray, Janet, *Hamlet on the Holodeck* (Massachusetts, 1997), p. 17

## Breath of Fire

It's stupid to say that computer games have bad influence on children. If *Pac-Man* had influenced children born in the 80s, today we'd have lots of kids running around in dark rooms eating pills, while listening to monotonous and dull electronic music...

- Kristian Wilson <sup>24</sup>

On the surface, *Pac-Man* (Midway, 1979) constitutes no more than the innocent collection of pellets for points from the various corridors of a maze. Successfully ingesting these pellets by the main character, a yellow circle with a mouth, allows the player to move on the next level. Beginning with easy scenarios and continuing up through progressively difficult levels is a trait common to most arcade games that allows companies such as Namco to make more profit whilst still attracting players to the videogame cabinet. Before the game begins, the following fanfare invites the player to the hunt (see Fig. 1.1).



Fig. 1.1 Pac-Man Level Start Theme

The shift in harmony from C to D $\flat$  Major in b. 2 reminds us of the Spanish Gypsy Dance and the culture of bullfighting fanfares (see Fig. 1.2).



Fig. 1.2 Spanish Gypsy Dance (Anon)

Although this musical association may not seem obvious to the general gaming public, the use of audio during actual gameplay is directly influenced by *Pac-Man*'s movement. Whilst the player is digesting pellets, four enemy ghost characters wander the maze with the intent to stop *Pac-Man*. The sound that is

<sup>24</sup> Quoted in Byron, Simon, Ste Curran and David McCarthy, eds., *Game On!*, p. 156

heard is similar to a police siren which has a beat frequency of roughly 120 bpm, which increases to roughly 140 bpm if Pac-Man is moving through empty corridors. This is a necessary tactic for escaping the ghost characters who will cause Pac-Man to open his mouth wide until he disappears. Conversely, if Pac-man ingests the spread out 'power pellets' he gains the ability to become the predator (see Fig. 1.3).

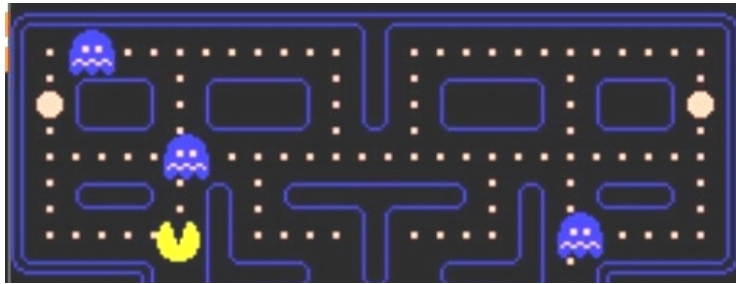


Fig. 1.3 Pac-Man in 'Power-Up' mode<sup>25</sup>

Upon contact with a ghost in this 'power-up' state, ghosts' bodies disappear and their eyes race back to a base where they are restored to their ghostly form. The music, a simple siren, increases to 240 bpm and also in pitch to a much higher frequency. The association with being chased by the police and the mimicry of the accelerating siren could not be more obvious to establish very basic roles of the hunter and the hunted.

A game with similarly primitive graphics and audio that proved to be immensely popular was Space Invaders (Midway, 1978). As waves of aliens descend to Earth, the player must control a single cannon to destroy them before they reach the ground. The music followed a similarly simple concept by literally translating movement into a descending bass line (see Fig. 1.4).



Fig. 1.4 Space Invaders

As the aliens are destroyed on their approach the planet, their speed increases as does the tempo of the music which begins at a very slow pace. The direct accelerando relates to the progress of player and when very few aliens remain the tempo raises to over double the original 80 bpm to signify the speed of

<sup>25</sup> Original image available online at [http://uk.media.xbox360.ign.com/media/821/821714/img\\_3640117.html](http://uk.media.xbox360.ign.com/media/821/821714/img_3640117.html)

enemy descent. If an alien reaches the ground then the music starts again and the player loses a 'life' of which there are usually only a few to begin with.

Arcade games which merely hint toward violent themes such as that of *Pac-Man* became more explicit in violent content with the Platform genre of games which owes its name to the concept of jumping from one platform to the next in order to reach the end of the level. The *Super Mario Bros.* (Nintendo, 1985) was released in arcades and on home videogame consoles and was so successful that it has been updated more times than any other Nintendo franchise. The player is given no instructions but faces a decision which Danny Ledonne explains whilst defending the violent content of *Super Columbine Massacre RPG!*.

One of the seminal moments in popular video gaming was the encounter between Mario and the first Goomba in World 1-1 of *Super Mario Brothers*... 1) jump OVER the Goomba and continue, 2) jump ONTO the Goomba and receive 100 points, or 3) walk INTO the Goomba and lose one of Mario's three lives... Mario could not give the Goomba a high five...could not ask for directions...<sup>26</sup>

It is clear that with the ludological system in a Platform game that no instruction is required when the controls are labelled 'left', 'right' and 'jump'. This is a virtual reality and the only movement available is in two dimensions. Jumping on the enemy to squash them is established, through trial and error, as the only way to survive. Mario, like *Pac-Man*, is also capable of achieving a 'Power-Up' status and can even launch balls of fire at his enemies to destroy them. In Platform games the musical functions very quickly become associated with general gameplay, paradigmatic shifts, gameplay beginning and gameplay ending whether it is by completion of a level or the demise of Mario. Death can be caused by sharp moving objects, enemy attack, falling ceilings, balls of molten lava, cannon balls and various other destructive weapons. However, in gameplay Mario can only die through the manipulation of player control which is a common trait to most videogames. The death music signifies the carelessness or even malicious intent of player to end the character's life. Death music, in *Super Mario Bros. 1* and *Super*

---

<sup>26</sup> Crecente, Brian, 'Columbine RPG Creator Talks About Dawson Shooting', (09/20/2006), <http://www.kotaku.com/gaming/danny-ledonne/feature-columbine-rpg-creator-talks-about-dawson-shooting-201829.php> [accessed 04/05/07]

*Mario Bros. 3*, begins with a trill-like ornament and all three games feature a short descending theme as the most common death in Platform games is falling off a platform. <extract CD tracks 1-3>



Fig. 2.1 Death in Super Mario Bros. 1  
<CD track 1>



Fig. 2.2 Death in Super Mario Bros. 2  
<CD Track 2>

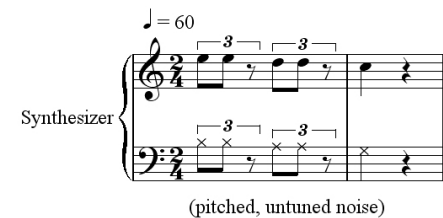


Fig. 2.3 Death in Super Mario Bros. 3  
<CD Track 3>

Games company, Sega, created a rival Platform game by the name of *Sonic the Hedgehog* (1991) with similar gameplay, but different rules and level designs. Sonic was unlike Mario in that he could not breath indefinitely underwater. If left too long, bells chime periodically to indicate how long the player has been swimming without surfacing for oxygen. The Sonic character actually makes eye contact with the player when he has been left submerged for too long (see Fig. 2.4).

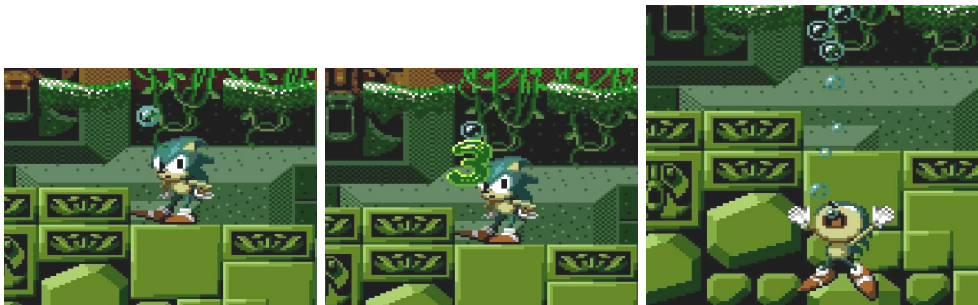


Fig. 2.4 Sonic looking, counting, then drowning.<sup>27</sup>

In a musical feature which can only be attributed to the Spielberg film, *Jaws* (1975), a quaver motif alternating between octaves and the semitones above it

<sup>27</sup> Image capture from Sega Genesis, *Sonic the Hedgehog*, (1991)

gradually warn the player of the danger they are about to inflict upon the character. If the music reaches its final speed then Sonic drowns (see Fig. 2.5).

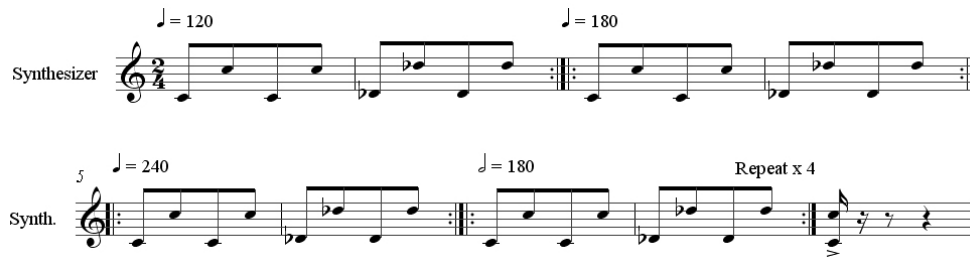


Fig. 2.5 Sonic – Drowning Warning Music

<CD Track 4>

The sound of danger is a function of music which is important in videogames where there is a mixture of situations. Adventure and Role-playing games are characterised by their narrative content and separation of exploratory and fighting areas. Role-playing games such as the *Final Fantasy* series are frequently released with the same style of game but with the emphasis placed on exploration of a new game worlds and story. One of the last Role-playing games to be published for the Super Nintendo Entertainment System (SNES) was *Chronotrigger* (Square Co., Ltd., 1995). Gameplay followed the journey of the main character, Crono, who begins the game in his home just outside of town. The player is given instructions by various non-player-characters to visit specific areas and along the way the character often walks through dangerous areas filled with harmful creatures. To differentiate between safe and dangerous areas, visual and aural factors are changed in the game to signify to the player that they need to act appropriately in order to continue gameplay. In *Chronotrigger*, the screen style remains the same except for a menu which appears across the top or bottom of the screen. The menu contains instructions which the player may select in order to attack any given enemy within range (see Fig. 3.1).



Fig. 3.1 Area Converted into Battle Field.<sup>28</sup>

<sup>28</sup> Original Image available online at <http://www.rpgamer.com/games/ff/fc/screens/battle.jpg>

As the menu appears on screen, any music that was previously playing is replaced by a battle theme. This music returns each time the party of characters runs into danger and hence gains the semiotic property which alerts the player to act in a heightened state of awareness. The ostinato bass line and drumkit beat are the musical instruments which cause this effect (see. Fig. 3.2). The snare drum anacrusis is actually the most significant musical feature and actually serves its own purpose in signifying the start of the battle theme which in turn signifies the start of battle.

The image displays a musical score for the 'Chronotrigger Battle Theme'. It is set in 4/4 time with a tempo of 160 beats per minute. The score is divided into two systems. The first system includes an Electric Bass line and a Drum Kit line. The Electric Bass line starts with a rest, followed by a series of eighth notes: G2, F2, E2, D2, C2, B1, A1, G1. The Drum Kit line features a snare drum anacrusis (marked with '>') followed by a steady eighth-note pattern. The second system includes an E. Bass line and a Dr. line. The E. Bass line continues the eighth-note pattern from the first system. The Dr. line continues the eighth-note pattern, with a final flourish of sixteenth notes at the end of the system.

Fig. 3.2 Chronotrigger Battle Theme

<CD Track 5>

A similar ludological system operates in Adventure games such as *The Legend of Zelda: Ocarina of Time* (Nintendo, 1998). This game was released for Nintendo's own console, the N64, and featured a narrative that recycled the characters from previous *The Legend of Zelda* games. Although players were familiar with many of the characters, the experience was far more complex and immersive owing to a combination of three dimensional graphics, real time manipulation of day and night in the game world and the elevated function of music. Where the soundtrack in previous games used to provide representative paradigmatic shifts, the music now took on the role of alerting the player aurally to nearby danger before the they or on screen character is even visually aware of the threat (see Fig. 3.3).

Fig. 3.3 The Legend of Zelda Threat Proximity Music  
<CD Track 6>

The technique of informing the audience about a potentially violent situation coming soon is typical in Films especially in the Horror genre. To further reinforce this dialectical relationship between passive and interactive media, attacking the nearby enemy can only be achieved by holding down a combat assigned button on the control pad which visually creates black borders across the top and bottom of the screen. This converts the game's visual style from letterbox to widescreen format, the conventional 16:9 ratio usually used for Film presentation in the cinema (see Fig. 3.4).

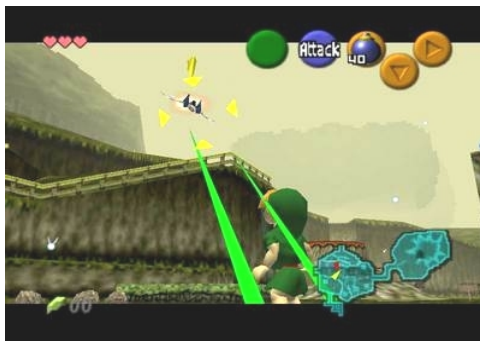


Fig. 3.4 The Legend of Zelda, Fighting in Combat Mode.<sup>29</sup>

It is usually a matter of life and death for a player to know the difference between dangerous and safe states in a videogame. In one innovative genre of videogames, the Sneak 'em Up, gameplay is entirely dependent on the complete avoidance of the dangerous state altogether. *Metal Gear Solid 2: Sons of Liberty* (Konami, 2001) is one of three popular games in the series which all utilise the

<sup>29</sup> Image available online at <http://cache.kotaku.com/gaming/images/zeldaair-thumb.jpg>

same ludological system. As the name of the genre implies, the aim of the game is to complete missions whilst remaining undetected by the enemy (see Fig. 4.1). The function of the soundtrack, again mimicking the cinematic quality of film, in the game is to not only directly reflect the on screen action, but to also to immerse the player in the body of the main character.



Fig. 4.1 Exploring areas undetected in Metal Gear Solid 2.<sup>30</sup>

This process of immersion benefits from the added musical functional complexity as the game is played from third person perspective. If the player is discovered visually by an enemy, the music changes and the character radar system is deactivated. This prevents the ability to know where enemies are which induces panic in the player in addition to the heightened danger of armed soldiers now searching specifically for the player. The music, composed by film composer Harry Gregson-Williams, switches between a slow paced mysterious track and a number of faster paced action specific tracks if the player is discovered. The slow track is in keeping with the tone that danger may be nearby and remains slightly unresolved because of the diminished fifth and the ninth (see Fig. 4.2).



Fig. 4.2 Metal Gear Solid 2 – Infiltration Track  
<CD Track 7>

When the player is discovered by the enemy, the radar is replaced with a square which displays the word 'ALERT' and the music changes to 'Battle' (see CD Track 8). At this stage enemies are moving quickly with guns ready to kill the player. If the player remains undetected for long enough, the 'ALERT' changes to 'CAUTION' and then finally to the 'EVASION' stage which takes the longest to

<sup>30</sup> Image available online at <http://www.tqny.com/NYC051648/metal-gear-solid-2-1.gif>



Fig. 5.2 Doom – At Doom’s Gate

&lt;CD Track 11&gt;

In *Doom*, the music begins with the fast semi-quaver riff being played by a single electric guitar. The rhythm pattern on the drumkit begins nine bars later and the electric guitar riff continues on two electric guitars. This music follows the same structural outline, instrumentation and rhythm as the track song ‘Master of Puppets’ (1986) by the Heavy Metal band called Metallica. Fig 5.3 shows electric guitar riff played at 0:26 in ‘Master of Puppets’ on the extracts CD.



Fig. 5.3 Metallica – Master of Puppets

&lt;CD Track 12&gt;

The subject matter approached by the lyrics in ‘Master of Puppets’ appears to be based on the control that cocaine addiction has on a drug abuser. The genre title, ‘Shoot ‘em Up’, suddenly begins to embody an even wider range of double entendres.

Needlework the way, never you betray,  
 Life of death becoming clearer.  
 Pain monopoly, ritual misery,  
 Chop your breakfast on a mirror.

Taste me you will see,  
 More is all you need.  
 You're dedicated to,  
 How I'm killing you.

Master of Puppets I'm pulling your strings.  
 Twisting your mind and smashing your dreams.  
 Blinded by me, you can't see a thing.  
 Just call my name, 'cause I'll hear you scream.<sup>32</sup>

<sup>32</sup> Seek Lyrics, ‘Metallica – Master of Puppets Lyrics’, (2007), <http://www.seeklyrics.com/lyrics/Metallica/Master-Of-Puppets.html> [accessed 04/05/07]

Although these lyrics are not part of the music presented during gameplay in *Doom*, by associating the game with this genre of music players who are more familiar with it will be able to draw connections between the two even if only subconsciously. A similarly dark genre of music is that of Industrial bands such as Rammstein and Megahertz. The Shoot 'em Up game entitled *Quake III Arena*, also developed by id Software is based on the concept that was set up in *Doom*, but does not include a single-player plot based game of any sort. The gameplay is based entirely on deathmatches between players and computer controlled players. In order to retain the fast pace of *Doom*, the music continues to incorporate fast and loud drumbeats but with the added Industrial property of electronic sounds. These synthesized sounds replace the conventional sounds of the snare drum and bass drum to create a sound which fits in perfectly alongside the electronically generated sounds of shotguns, laser rifles, rocket launchers and 'Frag' grenades. As the synthetically created sounds are difficult to notate, please refer to the extract CD (tracks 13 and 14) for samples of audio from *Quake III Arena*.

The correlation of heavy and electronically amplified sounds with violence in videogames is not exclusive to the Shoot 'em Up genre. The traditional Fighting genre of games uses music which is strongly influenced by bands such as Iron Maiden and grunge rock band Sound Garden, but it also embraces other styles of music where it may apply to a specific region. Fighting game music functions in arcades to attract new competitors to the videogame cabinet, but within the game the music needs also to act on the current players. A common feature in most Fighting games such as *Street Fighter*, *Guilty Gear* and *The King of Fighters* series is that each character has their own musical theme and sometimes their own stages. This gives the music playing a regional aspect which emulates the aspect of 'home' and 'away' gaming in sports such a football. For a player that defeats an opponent whilst listening to their theme music in their home country, the victory is sweetened and vice versa for the losing player (see Fig. 6.1).



Fig. 6.1 Chun-Li Fighting in China<sup>33</sup>

China is the location that the character, Chun-Li, supposedly comes from and her music is given touches of oriental music such as quartal harmony (see Fig. 6.2).



Fig. 6.2 Chun-Li's Theme

<CD Track 15>

The music played for Chun-Li is slower paced and this relates directly to the fighting style which is required for controlling her as a character. Many characters in Fighting games can inflict damage through either special, quickly pressed button combinations or a combination of patient button holding and presses. Chun-Li is controlled through the latter mode which results in a slower, more defensive style of fighting.

The final genre where players might not expect to find themselves aggressively towards other competitors is in the Driving and Racing genres. Games such as *Ridge Racer Type IV* (Namco, 1999) remain focused on the basic concept of racing, but games such as *Star Wars Racer Revenge* (2002) actually change the concept to destruction of as many competitors as possible in order to finish first (see Fig. 7.1).



Fig. 7.1 *Star Wars Racer Revenge* – Destroying the Competition.<sup>34</sup>

The player is encouraged to act aggressively toward opponents aurally by the sound of driver shouting, the voice of the announcer and the clips of music which play when 'Pod-Racers' collide. Drivers shout angrily in a nonsense alien language similar to that used in the film *Star Wars Episode One: The Phantom Menace* (1999) by George Lucas. 'Hee poo rah!', 'Mar ko du mar mwah!' and

<sup>33</sup> Image available online at <http://www.mobygames.com/game/snes/street-fighter-ii/screenshots/gameShotId,32814/>

<sup>34</sup> Image available online at <http://www.gaming-age.com/media/2001/may/swracer/2.jpg>

'Hoo wah oo ta!' are among the angry cries as the player slams their Pod-Racer into the competition. The announcer joins in at these points with lines such as 'Oh, look at that abuse!' and 'Look at Anakin Skywalker really bashing out the competition'. Until a collision occurs however, the only sound is that of the player's Pod-Racer engine noise. Driving through the desert is a quiet experience until the Pod-Racer makes contact with another Pod-Racer which causes the follows thematic excerpts to sound (see Fig. 7.2).

The figure displays three staves of musical notation for 'Star Wars Racer Revenge – Thematic Fragments'. The top staff is labeled 'Orchestra' and 'Strings', showing a melodic line in 4/4 time. The middle staff is labeled 'Orch.' and 'Brass', with a treble clef staff containing a melodic line and a bass clef staff containing a rhythmic accompaniment. The bottom staff is labeled 'Orch.' and 'Brass', with a treble clef staff containing a melodic line and a bass clef staff containing a rhythmic accompaniment. The notation includes various musical symbols such as notes, rests, and triplets.

Fig. 7.2 Star Wars Racer Revenge – Thematic Fragments

These fragments are never more than a few seconds in length as collisions are short events. As they are played in no particular order, the player is encouraged to fight as many other drivers as possible in order to win the race and to piece together the various parts of the original score composed by John Williams. Although it is not a necessary aspect of a videogame, the aspect of competition is key to elements of gameplay and lends itself very well to violent content. The role of music in these games assumes ludological functions as well displaying referential properties which associate videogames with the culture with which it is consumed in. However, by entering cheat codes and attaining invincible 'God-Modes', the reality such a game world has little to refer to in a civilised real world. Although particular styles of music appear to have violent overtones which suit an entire genre of videogames, the creative use of music in innovative game design opens the door to large range of contexts within which any genre of music can be applied.

## Bibliography

### Books

1. Boyle, Karen, *Media and Violence* (London, 2005).
2. Byron, Simon, Ste Curran and David McCarthy, eds., *Game On! From Pong to Oblivion: The 50 Greatest Video Games of All Time* (London, 2006).
3. Feshbach, Seymour, and Robert D. Singer, *Television and Aggression* (California, 1971).
4. Greenfield, Patricia Marks, *Mind and Media: The Effects of Television, Video Games, and Computers* (Massachusetts, 1984).
5. Marks, Aaron, *The Complete Guide to Game Audio* (Kansas, 2001).
6. Murray, Janet, *Hamlet on the Holodeck* (Massachusetts, 1997).
7. Newman, James, *Videogames* (London, 2004).
8. Poole, Steven, *Trigger Happy: The Inner Life of Videogames* (London, 2000).

### Journal Articles

1. Anderson, Craig A., and Karen E. Dill, 'Videogames and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life', *Journal of Personality and Social Psychology* (2000), 78/4, p. 772 - 790
2. Emes, Craig E., 'Is Pac Man Eating Our Children? A Review of the Effect of Video Games on Children', *The Canadian Journal of Psychiatry* (1997), 42/4, pp. 409 - 414

### Articles

1. Broadcast Advertising Adjudications, *Advertising Standards Authority*, (02/03/05), [available online]  
<http://www.asa.org.uk/asa/adjudications/public/> [accessed 04/05/07].
2. Broadcast Advertising Adjudications, *Advertising Standards Authority*, (04/05/05), [available online]  
<http://www.asa.org.uk/asa/adjudications/public/> [accessed 04/05/07].
3. 'Depiction of Violence on Terrestrial Television', *British Broadcasting Corporation, Broadcasting Standards Commission and The Independent*

Television Commission, (2002), [available online]  
<http://www.ofcom.org.uk/static/archive/bsc/index1024.htm> [accessed  
04/05/07].

#### Websites

1. BBC, 'News 24 Sounds at TV Home ', (2003),  
<http://www.tvhome.co.uk/bbcnews24/sounds.phtml> [[accessed 04/05/07].
2. British Board of Film Classification, 'About the BBFC', (2007, rev.  
30/04/07), <http://www.bbfc.co.uk/about/index.php> [accessed 04/05/07].
3. CNN, 'Report: 12 killed at Columbine in first 16 minutes', (2000),  
<http://archives.cnn.com/2000/US/05/15/columbine.report.04/> [accessed  
04/05/07].
4. Crecente, Brian, 'Columbine RPG Creator Talks About Dawson Shooting',  
(09/20/2006), <http://www.kotaku.com/gaming/danny-ledonne/feature-columbine-rpg-creator-talks-about-dawson-shooting-201829.php>  
[accessed 04/05/07]
5. Entertainment Software Association, 'Facts and Research', (2007),  
[http://www.theesa.com/facts/gamer\\_data.php](http://www.theesa.com/facts/gamer_data.php) [accessed 04/05/07].
6. Entertainment and Software Leisure Publishers Association, 'Age Ratings',  
(2007), <http://www.elspa.com/?t=agerating> [accessed 04/05/07].
7. Entertainment Software Rating Board, 'Entertainment Software Rating  
Board', (2006), <http://www.esrb.org> [accessed 04/05/07].
8. Janushewski, Derrick, and Myna Truong, 'Video Games and Violence',  
(1999),  
[http://socserv.mcmaster.ca/soc/courses/stpp4C03/ClassEssay/videogames  
.htm](http://socserv.mcmaster.ca/soc/courses/stpp4C03/ClassEssay/videogames.htm) [accessed 04/05/07].
9. Mikkelson, Barbara, 'The Harris Levels', (01/01/05)  
<http://www.snopes.com/horrors/madmen/doom.asp> [accessed 04/05/07].
10. Seek Lyrics, 'Metallica – Master of Puppets Lyrics', (2007),  
<http://www.seeklyrics.com/lyrics/Metallica/Master-Of-Puppets.html>  
[accessed 04/05/07].

11. Seek Lyrics, 'Sum 41 Fat Lip Lyrics', (2007),  
<http://www.seeklyrics.com/lyrics/Sum-41/Fat-Lip.html> [accessed 04/05/07].
12. The Independent Television Commission, 'Cartoon Crazy', (1998)  
[www.ofcom.org.uk/static/archive/itc/uploads/Cartoon\\_Crazy.doc](http://www.ofcom.org.uk/static/archive/itc/uploads/Cartoon_Crazy.doc)  
[accessed 04/05/07].
13. Thompson, Clive, 'I, Columbine Killer', (15/01/07),  
<http://www.wired.com/gaming/gamingreviews/commentary/games/2007/01/72491> [accessed 04/05/07].
14. Walsh, David, 'Video Game Violence and Public Policy: National Institute on Media and the Family', (2001),  
<http://culturalpolicy.uchicago.edu/conf2001/papers/walsh.html> [accessed 04/05/07].

#### CDs

1. Various Artists, *The Magic of the Budapest Gypsy Orchestra*. The Budapest Gypsy Orchestra, conducted by Lajos Boross. Hungafoton Classic HCD10305, (year unknown).
2. Kondo, Koji, *The Legend of Zelda: Ocarina of Time [Original Soundtrack]*. Koji Kondo B000058ABH, (year unknown).
3. Gregson-Williams, Harry, *Metal Gear Solid 2: Sons of Liberty: The Other Side*. Harry Gregson-Williams B000CBV9SE, (year unknown).
4. Metallica, *Master of Puppets*, Elektra Entertainment, 60439 (1986).

#### Videogames

1. *Chronotrigger*, Square Co., Ltd., (1995), [for Super Nintendo Entertainment System].
2. *Doom*, id Software, (1993), [for PC].
3. *Guilty Gear X*, Sammy Studios, (2000), [for Sony Playstation 2].
4. *King of Fighters 1999: Dream Match*, SNK, (2001), [for Sega Dreamcast].
5. *Metal Gear Solid 2: Sons of Liberty*, Konami, (2001), [for Sony Playstation 2].

6. Pac-Man, Namco, (1999), [for Nintendo Game Boy Advance].
7. Sonic the Hedgehog, Sega, (1991), [for Sega Genesis].
8. Space Invaders, Taito, (2005), [for Sony Playstation Portable].
9. *Star Wars Racer Revenge*, Lucasarts, (2002), [for Sony Playstation 2].
10. *Street Fighter II Turbo*, Capcom, (1992), [for Super Nintendo Entertainment System].
11. Super Mario Allstars, Nintendo, (1993), [for Super Nintendo Entertainment System].
12. *The Legend of Zelda: Ocarina of Time*, Nintendo, (1998), [for Nintendo N64].
13. *Quake III Area*, id Software, (1999), [for Sony Playstation 2].