Videogames and American Society:
America's disposition toward virtual environments and hyperreality

Image © Take-Two Interactive. Used without permission.

American Studies
Rijksuniversiteit Groningen
Prof. Dr. W. M. Verhoeven

Mark Murkes
2004

Contents

Preface

When I was very young, my parents used to tell me bedtime stories, giving me my first experience with imaginary and alternate worlds. My first encounter with videogames occurred much later, when I was about ten years of age. The leading department store in my hometown had set up large displays, and gave potential customers the ability to try this new mode of entertainment. It was unlike anything else I had experienced in my short life. The ability to control another entity (albeit in the rudimentary shape of a colored square) in a completely different reality blew me away. Although a comparison with the imaginary worlds of the fairy tales I knew might prove too much for some people, I felt that they overlapped in certain areas. Both offered similar forms of alternate realities, with one method using the processing power of the mind, and the other method using the power of the machine. These forms came together when I played my first textual adventure in the late eighties. Machine-driven texts supplemented with mental imagination married controlled interactivity with an imaginary reality. During the nineties, computer networks allowed multiple people to simultaneously share the same intangible environment. Better processing power eliminated the need for imagination as the texts became graphical representations. These graphically rich environments were also networked. At the same time, it seemed that new communication methods were introduced every 6 months. Using not a few features of videogames (modes of presentation, control schemas, and network capabilities), the boundaries between real and imaginary realities began to blur.

We are at the threshold of a new communication revolution. This revolution is not so much driven through technological methods of communication, but through the new methods of representation. Man and machine have become entwined, married to each other in their quest for immediate communication. When such a symbiosis occurs, who can tell what is real and what is not? More to the point, does it even matter?

Here's to Dariel, White Russian, Dr. Murko, and Mark Baskerville, who all depict some facet of myself. They are all digital clones, yet they are all so different.

My gratitude goes to Professor Doctor W.M. Verhoeven for his patience and knowledge. He gave me the opportunity to finish this last academic hurdle in what proved to be a difficult year.

Y. was instrumental in guiding me through this project. I owe more to her than I care to admit. A lot of accolades go to my friends and family for feedback and support. Many hours have been spent discussing the vague definitions of perceived reality. A final thanks goes to the big H., for making this effort possible. And, of course, all errors are entirely my own.

Mark Murkes, September 2004
mark@murkes.com

Chapter 1: Introduction

Videogames have existed for nearly thirty years. In those years, the associated industry has grown from small enterprises to a multi-billion dollar industry. Software sales for the USA amount to more than 7 billion dollars for the year 2003.[1] Research analysts estimate this figure will dramatically rise in the coming years. Furthermore, the Forrester research institute predicts that in 2005, more than 70% of American homes will have a video game console. In 2001, this figure was nearly 50% (49 million).[2] These figures indicate that electronic entertainment industry at least equals the motion picture industry in size and revenue. It can be expected that this new industry will eventually have the same influence on American society as the motion picture industry currently has.

In this paper, the terms *videogame* and *computer game* will be used. Although both terms might allude to the same thing, there is a traditional difference between the two. Computer games are those games that are played on a Personal Computer. This implies that these pieces of software are played on hardware which differs from consumer to consumer, with the ability to upgrade their capabilities as hardware technology progresses. In addition, internet capabilities are added to the possibilities as well, making computer games suitable for multiplayer games over the internet. However, these abilities come at a certain cost. Due to the inherent nature of PCs, being a collection of components which differ with each user, programs such as computer games need to be installed and configured to the specifics of each user's machine. This means that users of computer games need at least some degree of knowledge regarding the inner workings of their machine. Games played on PCs sacrifice ease of use for more powerful technological capabilities. Videogames are those games which are played on videogame consoles. These pieces of hardware are standardized, with no deviation in component configuration among the product range. This means that a single type of videogame console is the same as another console of the same type, so no individual configuration is necessary. These devices are meant to be played on a television screen instead of a computer monitor. By their ease of use, these consoles are more accessible, and cater more toward children than personal computers traditionally do, often inhabiting a space under the living room television. Videogame consoles are commonly sold in toy stores.

At this moment of writing (mid 2004), the three major companies that make videogame consoles are Nintendo, Sony, and Microsoft, with their consoles being called Gamecube, PlayStation2, and Xbox respectively. Older systems like the Playstation 1 are still available, but since the average public attention span for a console lies around 4 years, these are slowly fading to the background. Although the handheld videogame consoles like the Nintendo Gameboy Advance are a completely different market, their games are also referred to as videogames. It is not unheard of that a popular videogame title is released for all formats, with each version uniquely tuned for each specific piece of hardware. For example, the game *Splinter Cell* was released for the PC, all videogame consoles, and for the handheld Gameboy Advance. Although it would be too easy to

---

[1] Rob Fahey, "US software sales top $7 billion for 2003," *Gamesindustry.biz* (January 27, 2004), http://www.gamesindustry.biz/content_page.php?section_name=ret&aid=2879

[2] Mike Snider, "Game industry unaffected by unstable world," *USA Today Online* (May 19, 2001), http://www.usatoday.com/tech/techreviews/games/2001-05-19-e3-review.htm

become puzzled by the fact that this game could be called a videogame *and* a computer game, the definitions refer to not to the type of game, but to the kind of machine onto which it is being played. Since this paper concerns itself with the reactions of the American society regarding electronic games with the highest visibility and accessibility, the term videogame will most often be used.

It was during the early and mid 1970s of the previous century that the first home videogame consoles appeared on the market. These machines were primitive, but conceptually a totally new phenomenon: the ability to play electronic games at home.

During the early eighties the videogame rage peaked for the first time, with consumers widely accepting this new entertainment concept. Companies like Atari became household names. This wave of popularity came to an end around 1983, when the whole videogame market crashed. The main reason was an over saturation of the market, combined with an uncontrolled outpour of bad software titles. Suddenly, consumers were not interested in home videogame systems anymore. With the attention for home videogame consoles gone, microcomputers took over the attention of the consumer. These machines made rudimentary processing power available to the consumer at a reasonable price, paving the way for the personal computer. It goes without saying that these machines became the new home for games with better graphics and gameplay. This period introduced the distinction between the terms computer- and videogames. During the late eighties and early nineties, consumer interest in the videogame market was single-handedly revived due to the Japanese game company Nintendo. In spite of American skeptics, who pronounced the market for videogames dead after the previous crash, this company introduced new products with great success, paving the way for the next wave of popularity. It was during this time that the names of companies like Nintendo and Sega entered the national language as synonyms for playing videogames in general. The year 1995 was the year that Sony entered the playing field with their Playstation videogame console. This was during a time that the attention in videogames was waning again. Just like Nintendo did in the late eighties, Sony revitalized the videogame industry by introducing an innovative product. Sony has dominated the videogame business ever since, consolidating their success with the PlayStation2, which was released in the year 2000. Until today, Sony still has the largest user base among console owners. The latest newcomer is Microsoft. Their console, the X-Box, was released in 2001. Although initially greeted with a certain skepticism and viewed as a metaphorical extension of American imperialism, the console has entrenched itself by the means of a firm commitment from Microsoft. At the time of writing (mid 2004), the struggle for market share is still going strong. The financial and managerial commitments that Sony, Microsoft, and Nintendo are willing to make are indications that the videogame console business is a profitable one.

The average age of a computer or video game player is twenty-nine years old.[3] This can be explained by the fact that, although videogames are seen as children's toys by a general audience, their players have grown with the maturing of the industry. Current young adults have grown up with videogames, accepting them as part of their normal entertainment options. In addition, these consumers now have something they did not have as children, which is a disposable income to spend on entertainment. Furthermore, current generations of young adults have grown up with technology in

[3] Entertainment Software Association, http://www.theesa.com/pressroom.html

general. One of the best examples are new communication channels like internet and mobile phones which cannot be perceived as "new" technology by those who have grown up with it.

With this growing mature audience, it is no surprise developers try to cater toward mature themes. It is only natural that a young medium experiments with its capabilities, just as it is natural for a public to respond to this new trend. It takes some time for a new medium to become accepted. Again, a comparison can be made with the development of the motion picture-, rock music-, and comic book industry. All these artistic venues were once thought to be irrelevant. Eventually they have become accepted in American society, enabling them to incorporate and showcase a variety of themes, from young to mature ones. One could see a similar pattern emerging regarding the growth of the videogame industry. Although becoming more widely accepted by the American public, this medium is still capable of sparking a public and political debate. Given the popularity of videogames during the 1980s and the 1990s, the emergence of such a debate seems curious.

The definition of the medium videogame is a complicated one. Several scholars have struggled with task of defining videogames. The medium is unique in its sort, combining technology, art, storytelling and cinematography, among other things. This combination of different fields makes it hard to study the phenomenon, let alone define it. Mark J.P. Wolf argues that the term "game" alone is confusing, since there are a lot of educational programs which are labeled as games. He eventually decides that the mode of exhibition, the technological manner in which games are presented, could be the defining factor.[4] By their nature, a strict definition of video games seems impossible. After all, it is software used by hardware. Given technological progress and a desire of manufacturers to bring out new products, it seems that a definition based on a distinct application of current technology will eventually become obsolete. The boundary between a game and an educational application can sometimes become very indistinct. Although Wolf points to the existence of a lot of grey areas, the scope of this paper does not permit a deep study into these definitions. [5] In a broad sense, one could say video games are electronic entertainment, displayed through some means of imaging technology.

Videogames nowadays have come a long way from the Pac-man and TV-Tennis games from nearly 30 years ago. With technology progressing at an amazing rate, the possibilities are almost limitless and only bound by the creator's mind and technology at hand. This progress can be illustrated by Moore's law. Originally put forward in 1965, this theory describes the doubling of data density on computer chips roughly every two years. In other words, in roughly every two years, computer chips will have doubled the amount of transistors they are able to accommodate. This theory has been relatively sound since 1965, as the number of transistors on a computer chip rose from 2250 in the year 1971 to 42 million in the year 2000.

For videogames, this progress in computational power has several consequences. First, there is the level of graphical presentation. Videogame consoles are commonly being sold to the consumer on the basis of their graphical performance, meaning that a lot of effort in being put into this area. Was the first generation of consoles only capable

---

4 Mark J. P. Wolf, ed., *The Medium of the Video Game* (Austin: University of Texas Press, 2001), 19.

5 Ibid.,16.

of presenting large colored blocks on a television screen, nowadays consoles have the power to graphically represent almost anything in detail. Although 100% photo-realism is still not feasible, close representation of "real" looking images is certainly possible. The Federal Trade Commission, in a study conducted in the year 2000, even talks about "near lifelike detail."[6] Given the fact that these remarks were made before the current generation of consoles, one could only wonder how the researchers would have described the current standards. As these graphical benchmarks are constantly being pushed higher, photo-realism in videogames might in the foreseeable future be a viable option.

New videogame consoles have better processors and more memory, giving programmers more flexibility and opportunity to create new stories and experiences, as the new hardware can accommodate a more complex artificial intelligence, and the game can be set in a more intricate gameworld, also known as the diegetic world. Furthermore, more advanced hardware means that the potential capabilities of these machines are growing. For example, recent consoles have added broadband internet access to their list of capabilities. Although consoles will always be one step behind the PC in terms of technological performance (due to their non upgradeable nature), each new generation embodies a next step in technological evolution.

Then there is the growing diversity within the developer community. Was a single programmer sufficient to create a videogame during the 1980's, today games are being made by multi-disciplined teams with budgets in excess of several million dollars. This multi-disciplined approach means that more time and energy can be devoted to other fields than just programming, like cinematography and story-telling. As time progresses, developers come more to grips with the medium, enabling them to experiment with all possibilities, maturing the medium not only from technological and chronological point of view, but from an artistic perspective as well.

The combination of better graphical representation, more complex interactivity, and a more artistic approach have evolved the videogame into a medium which almost merits an artistic license of its own. It should be understood that modern videogames have the ability to achieve a greater suspension of disbelief than any product ever before. This advancement comes at a certain price. Videogames have been at the center of several controversies in the United States. During the first era of videogames in the early eighties, parents already expressed their concern regarding potential side-effects due to playing videogames. At this point, graphical representation was very abstract, consisting of nothing more than colored cubes, arranged in some symbolic pattern to mimic objects. Even so, this new mode of entertainment was found to be so compelling to children, that newspapers ran articles describing videogames as addictive, although studies showed no evidence to support this theory.[7] The second era of videogames, which was at its peak in the early nineties when Nintendo and Sega reigned supreme, saw the arrival of the famous hearings of the Lieberman Committee. The advent of CD-ROM technology and other technological advances made it possible to have real camera

---

[6] Federal Trade Commission. Marketing Violent Entertainment to Children: A Review of Self-Regulation and Industry Practices in the Motion Picture, Music Recording, & Electronic Game Industries (Washington, D.C.: Federal Trade Commission, 2000), 39, http://www.ftc.gov/reports/violence/vioreport.pdf

[7] Patricia Marks Greenfield *Beeldbuis kinderen: over de effecten van televisie, computers en computerspelen* (Nijkerk: Uitgeverij Intro,1986), 83.

footage inserted in videogames. Although this footage mostly consisted of non-interactive movieclips, they set a new standard in the display of videogame imagery. Many games experimented with this new form of display, but the videogame playing public found the inclusion of these movieclips boring and unnecessary. One of these games, *Nighttrap*, featured movies of scantily-clad women under attack by vampires. Although the game was not considered a good one and sold poorly, it garnered attention due to its depiction of these helpless young women. In addition, the martial arts game *Mortal Kombat* pioneered the boundaries of graphical representation by featuring controllable videogame characters which consisted out of photography created by incorporating pictures from real models. Up to this point, characters in videogames were always very cartoon-like, and could never be mistaken for something other than real. *Mortal Kombat* changed this view, showing realistic looking combatants violently fighting each other to a gruesome death. Violence in videogames was, at the time, not something new, but the realistic display as shown in the *Mortal Kombat* games was a different sort of violence than the cartoon-like fighting people were used to. These advancements in the fields of representation combined with the portrayed violence were the cause of a new controversy. Listening to the concern of parental groups, the Subcommittee on Juvenile Justice held official hearings in 1993.[8] These widely publicized hearings were chaired by Senator Joseph Lieberman, who was a strong proponent for age regulation in the motion picture industry. He was planning to have the videogame industry regulated as well. Although the hearings did not yield any conclusive regulations, the videogame industry decided to adopt a self-governed ratings system as a direct result. This organization, the Entertainment Software Rating Board (ESRB), is now responsible for rating every videogame on the American market according to a standard set of parameters.

Now that we have entered the third era of videogames, another controversy is taking place. The videogames *Grand Theft Auto: III* and *Grand Theft Auto: Vice City* have taken center stage in a public debate surrounding videogame violence. Video Game developer DMA and publisher ASC Games published the first Grand Theft Auto title in 1997 for the Personal Computer and Sony's Playstation 1 videogame console. This first publication gave the player a bird's eye view of the game world, a fictional American city. This city was populated with roaming cars and pedestrians, mimicking a typical American downtown area. The player was cast in the role of a criminal, with the goal of accomplishing certain (criminal) tasks, with the ultimate goal of becoming the head of a criminal organization. The game was considered "different" by allowing the player to put the storyline "on hold," and drive or walk through a city full of virtual life. Before *Grand Theft Auto*, most games only allowed players act in the game world as long as these activities fit the pre-scripted storyline. In this case, not only was the player given freedom to explore the city, but the player could also choose to engage in other activities than just following a pre-plotted storyline. These activities ranged from catching other criminals to joyriding, but would almost always take some form of violent behavior, as players had the ability to kill pedestrians by driving over or shooting them. Regardless of the chosen activity, the programming of the game would always try reflect the rules which one could expect from a "real" city environment. The game's reactions to player

[8] Subcommittee on Juvenile Justice. Rating Video Games: A Parent's Guide to Games: Joint Hearings before the Subcommittee on Juvenile Justice, 103rd Congress, 1st Session.

actions were such that criminal behavior was off-set by law-enforcement presence; when a player engaged in criminal acts, the police would try to apprehend the player. Virtual bystanders would also behave accordingly, running away when confronted with violent behavior in their immediate vicinity. The game was a huge success, and garnered many accolades from the specialists' press. Mostly cited reasons for its popularity were the sense of freedom, combined with the ability to engage in violent activities.

Although most articles in the specialist press refer to a public controversy surrounding the game, mainstream newspapers at that time do not seem to have covered this issue. What was clear was that questions regarding the game and the violent themes were asked in the British House of Lords, although no official action was taken. [9] Surprisingly, American family oriented organizations did not seem to have noticed this single game. The National Institute on Media and the Family issues a yearly video game report card, which gives an overview of electronic media deemed unfit for children. This report is widely followed by other organizations and the mainstream press. The institute did not mention the game in their annual report card at all.

In 1998 the publisher Take-Two Interactive bought the videogame developer, re-christening it RockStar Games. Subsequent projects with the franchise were *Grand Theft Auto: London 1969* (1998) and *Grand Theft Auto II* (1999). These games further developed the franchise, without any real evolutions in presentation and gameplay. Public response surrounding the release of these sequels was negligible. RockStar games presented the official third installment of the series*: Grand Theft Auto III* (GTA: III) in 2001. This game became a huge success on the PC and Playstation2. Figures released by its publisher, Take-Two Interactive, indicate that the number of sales up to November 2004 have been over 9.5 million units, with a suggested retail price of 40 dollars each. [10] These figures make the game one of the best selling video games ever released. The gameplay of GTA: III ran along the same lines as the previous versions, but was deepened, with even more freedom for the player. Players were urged to explore even more activities in addition to following the storyline. Delivering pizza, fighting fires, and driving a taxicab were some of the possibilities added, giving an alternative to the violent activities of the previous games. The real evolution, however, was in the presentation, as the new game world was presented as a three-dimensional environment. From a previous bird's eye view which presented the gameworld in two dimensions, the new perspective was more immersive, since it gave the player the sense of "being there." This new level of presentation brought a level of realism to the game which gained more interest from several groups. Although the potential violent nature had stayed the same, the presentation was perceived as perhaps too realistic. The National Institute on Media and the Family took note, and the game appeared in their sixth annual Video and Computer Game Report Card 2001, as the number one game for parents to avoid. [11] As the mainstream media picked up on the debate, the issue became public, with some

---

[9] The United Kingdom Parliament; House of Lords (May 20, 1997), http://www.parliament.the-stationery-office.co.uk/pa/ld199798/ldhansrd/vo970520/text/70520-01.htm#70520-01_head2

[10] Take Two-Interactive, *Journalist Presskit* (January 2004).

[11] David Walsh, *Sixth Annual Video and Computer Game Report Card* (National Institute on Media and the Family: December 13, 2001), http://www.mediafamily.org/research/report_vgrc_2001-2.shtml

American politicians proposing a law to prohibit the sale of Mature rated Video Games to minors.[12]

The latest installment is *Grand Theft Auto: Vice City* (GTA: VC), which sets the series in a Miami inspired city in the eighties. When released in 2002, this game also sold millions. Total sales figures up to November 2003 indicate more than 10.5 million units sold worldwide for the PC and the Playstation2, with the publisher, Take-Two Interactive, claiming the game being the fastest selling game of all time.[13] Critics from the specialist and mainstream press consider the game to be one of the best video games of all time. In addition to PC and Playstation2 version, the game is currently also for sale for the XBox videogame console as well, widening its audience even more. This particular game caused the most controversy of all, as more non-governmental and political organizations took note of the existence of mature video games. The National Institute on Media and the Family named the franchise in their introduction of their seventh annual report card.[14] The next year, this was followed by another inclusion with the release of the eight annual report.[15]

Meanwhile, more stories regarding GTA: III and GTA: VC were covered in the mainstream press. On the 25th of November 2003, a protest rally was held in from of New York City Hall, when the Haitian Centers Council and Haitian Americans for Human Rights issued a statement stating that Take-Two Interactive "advocates the killing of Haitians as entertainment."[16] The reason for the protest was that the game features a storyline in which a Haitian street gang has to be eliminated. Mayor Bloomberg intervened, which the result that the dialogue pertaining to the elimination of the Haitian nationals will be removed in future releases. After the protest, the New York Post ran a column describing the game as “digital snuff porn.”[17] At the same time, Washington congressman Towns urged national retailer Wal-Mart to stop selling the game.[18] The issue has since evolved into a lawsuit against Rockstar games and several retailers, in which Haitian organizations ask compensation for damages.[19] This case is yet to be presented to court. Recently, the Cuban community joined the Haitians by also issuing statements condemning the game.[20] More serious was the incident occurring on June 25, 2003, when two teenagers started to randomly fire their guns at driving cars.

---

12 Margaret Kane, “No ID, no video game?,” *C-Net; News.com(* May 6, 2002), http://news.com.com/2100-1040-899563.html

13 Take Two-Interactive, Journalist Presskit.

14 David Walsh, *Eight Annual Video and Computer Game Report Card* (National Institute on Media and the Family: December 8, 2003), http://www.mediafamily.org/research/report_vgrc_2003-2.shtml

15 David Walsh, *Seventh Annual Video and Computer Game Report Card* (National Institute on Media and the Family: December 19, 2002), http://www.mediafamily.org/research/report_vgrc_2002-2.shtml

16 Merle English, “Haitians To Protest Video Game,” *NY Newsday* (November 24, 2003), http://www.nynewsday.com/news/education/nyc-game1125,0,325367.story?coll=nyc-manheadlines-education

17 Associated Press,” Suit seeks to ban sales of popular video game,” *CNN Online* (Januari 1, 2001), http://www.cnn.com/2004/TECH/fun.games/01/01/videogame.suit.ap/

18 Ed Towns, “Towns Blasts Grand Theft Auto Video Game,” *Ed Towns Press Release* (December 29, 2003), http://www.house.gov/apps/list/press/ny10_towns/pr122903videogame.html

19 Christopher Byron, “Give Back Take-Two,” *New York Post Online Edition* (December 29, 2003), http://www.nypost.com/business/14640.htm

20 NBC 6 News Team, “Haitian, Cuban Leaders Denounce 'Grand Theft Auto',” *NBC6 News* (December 15, 2003), http://www.nbc6.net/entertainment/2706043/detail.html

One person was killed, and another seriously wounded. After their arrest, the boys (16 and 14 years of age) claimed they got their inspiration from GTA: III. As a result, the family of the deceased victim decided to sue Rockstar Games, Sony Inc. and Wal-Mart for the amount of 246 dollars in damages.[21] The case is yet to be presented to court.

It would be all too easy to ascribe the actions of these teenagers to an influence gained while playing videogames. Although studies regarding violent tendencies in children and teenagers as a result from playing videogames have been conducted from the 1970s, there still has not been any conclusive evidence of linking the two.[22] Still, a lot of educational organizations are concerned with videogame violence. Several non-governmental organizations aimed at child education use GTA: III and GTA: VC as examples of excessive violence in videogames. These messages are aimed at parents, with the intention of warning them of mature rated video games. The National Institute on Media and the Family is the most visible, with the most press coverage. Their annual report card on video games has already been discussed. In December 2003, as a result of the GTA: VC issues, they proposed a new word for "the graphic depiction of brutal violence": killographic. The reasoning is that excessive sex is called pornographic, hence the proposition of a new word concerning excessive violence.[23] Other organizations also use the game for exemplary purposes. National TV-station PBS uses GTA: VC as an example for violent videogames.[24] The parental organization Mothers Against Violence showcases the game as a prime warning for parents.[25]

The video game industry has adopted a rating system which has been in force since 1993. The system, modeled after the motion picture industry, indicates the age limits for a product. Since this is a self-enforced system, there is no legal reinforcement. GTA: III and GTA: VC have been set for an M rating, which indicates suitability for players at least seventeen years of age. Since this system is not a legal measure, some retailers continue sell these products to minors. A survey by the Federal Trade Commission, held in October 2003, indicated that minors are still able to buy mature rated games, although this number is decreasing. [26] Another recent study showed that more than 70 percent of American teenage boys have played an installment of the Grand Theft Auto series, despite the mature content of the game.[27] Several politicians are examining laws which could prevent the sale of mature rated games to minors.[28] Similar proposals, however,

---

[21] Associated Press, "Lawsuit filed against Sony, Wal-Mart over game linked to shootings," *CNN.com* (October 23, 2003), http://www.cnn.com/2003/LAW/10/22/videogame.lawsuit.ap/index.html

[22] Nick Wadhams, "Research divided on impact of games," *MSNBC News* (The Associated Press, July 04, 2004), http://www.msnbc.msn.com/id/5351971/

[23] Reuters, "Group warns parents about 'killographic' games," *CNN.com* (December 9, 2003), http://www.cnn.com/2003/TECH/fun.games/12/09/warning.videogames.reut/

[24] Bob Abernathy, "The Values in Video Games," *Religion & ethics Newsweekly* (May 30, 2003), http://www.pbs.org/wnet/religionandethics/week639/cover.html

[25] Mothers Against Violence. *Campaign for a Game Smart Community*. http://www.mavia.org/gamesmart/video.html

[26] Federal Trade Commision, *Results of Nationwide Undercover Survey Released* (October 14, 2003), http://www.ftc.gov/opa/2003/10/shopper.htm

[27] Take Two-Interactive, Journalist Presskit.

[28] Reuters, "Florida City targets Computer Game Violence," *C-Net; News.com* (January 16, 2004), http://news.com.com/2100-1043-5142757.html ; Reuters, "Calif. Legislator to Introduce Games Bill on Monday," *Reuters.com* (January 2, 2004), http://www.reuters.com/newsArticle.jhtml?type=industryNews&storyID=4066918

have been previously blocked by the courts of law.[29] One of the post prominent public proponents of legislation is democratic senator Joseph Lieberman. After the subcommittee hearings in 1993, he has taken a strong stand regarding the prevention of selling of mature entertainment products to minors by legal means. In recent years, senator Lieberman has tried to get the rating system legally binding, singling out the Grand Theft Auto series as the prime example of violent games.[30] During his bid for the 2004 presidential candidacy, he referred to the series frequently, coinciding with the controversies regarding the Haitian and Florida issues.[31]

At this time of writing (mid 2004), the whole Grand Theft Auto series is available for PC, Playstation2 and Xbox. The company, Take-Two Interactive, has posted more than 1 billion dollars in sales for the 2003 fiscal year.[32] It is believed that the bulk of these sales comprise of video games from the Grand Theft Auto franchise, which in total sold more than 25 million units worldwide.

The controversy surrounding the GTA series is unheard of in videogame history. The major concern is the ability to engage in a random, violent behavior. An often cited example is the ability to have sex with a prostitute, and then kill her afterwards to get your money back. Although this style of play can be pursued, it is not a specific goal of the game. It merely showcases the freedom the player has in the gameworld. In videogames, violence has always to be a means to reach a certain goal, from shooting UFOs to beating up the bad guys. With the advances in technology and the maturing of the medium, this part of videogames has progressed as well, cumulating in a realistic display of gore. The First Person Shooter genre consists only of violence, showing the player a targeting rectangle, a choice of weapons, and hundreds of virtual entities to kill, from demons to foreign military soldiers. Although Doom, one of the first games in this genre, generated some negative attention, it pales in comparison with the public debate surrounding the GTA series. Some videogames can be considered more morally deprived that the series. The game *Manhunt*, for instance, forces the player to kill people for entertainment. In the *Hitman* series, the player assumes the guise of a contract killer, and by giving the player a large freedom of approach, is essentially a murder simulator. Most of them look more realistic in their representation of violence. However, these games have never had the same impact GTA: III and GTA: VC generated within the American public. Even games which put its players in the role of combatants of the Second World War or the Vietnam War have not caused much upheaval, even when their presentation of the gameworld is more realistic. Although the GTA series are less graphically violent and realistic than other videogames, it has become a rallying flag for organizations, politicians, and civilians concerned with videogame violence. What is striking is that the public debate favors biased sentiments over a constructive dialogue.

---

[29] Lisa M. Bowman, "Judge: Violent-game law stifles speech," *C-Net; News.com* (July 11, 2003), http://news.com.com/2100-1028-1025032.html

[30] Joseph Lieberman, "Lieberman, Brownback to Propose Legislation Creating New Federal Research Program on Media and Children," *Lieberman Press Release* (April 9, 2003), http://lieberman.senate.gov/newsroom/release.cfm?id=207586

[31] Paul Alongi, "Lieberman vows to fight violent video games," *Greenville News* (November 3, 2003), http://greenvilleonline.com/news/2003/11/03/2003110318170.htm

[32] National Institute on Media and the Family, "Gallup poll: more than 70 percent of teenage boys have played "Grand Theft Auto" Video Games," National Institute on Media and the Family (September 2003), http://www.mediafamily.org/enews/9_23_2003.shtml

Although the GTA series is at the center of this debate, the manner and magnitude of the public discussion points toward a larger issue at hand. It seems that American society is struggling to understand the concept of, and interaction with, virtual environments. At the same time, these environments are already relatively commonplace in American society. In addition, several trends can be discerned which point to an increase in the application of these environments. What is America's disposition towards videogames and virtual environments, and how should the emergence of increased use of these alternate realities be resolved in the future? To determine this, the American perception of virtual reality should be explained, together with the perception of reality itself. Furthermore, the integration of virtual environments in American society should be addressed. The proposed thesis to resolve this question is the assumption that the GTA discussion points towards an inability of the American society to cope with virtual environments.

Chapter 2: The difference between reality and virtual reality

The question of what exactly constitutes the definition of reality has concerned scholars for ages. From Plato's theories surrounding his cave and onward, mankind has continuously questioned his perception of his surroundings. The advances made in the production of images, from painting to photography, have fueled this discussion even further. Representation, whether through paintings, motion pictures, or videogames, has given rise to new theories regarding our perception of our surrounding world. Although this paper will not delve into the history of the philosophical questions regarding the perception of reality, there are some theories which can be used to facilitate the discussion the perception of reality in videogames. In essence, reality is a multi-sensory perception, combined in the brain to make a coherent assessment of out surroundings. These surroundings are mediated through the five senses.[33] To explore this further, and to connect this with virtual reality and simulations, I will focus on two French post-modernist thinkers, Jean Baudrillard and Paul Virilio.

Baudrillard's ideas regarding representation and simulation differ from the definitions laid down by the more systematically inclined academics. His definition of representation concerns the inherent relationship between sign and referent. He states that representation is defined by the fact that sign and referent should be equal. When representing an object, the representation tries to be as accurate as possible in depicting the original object. Hence, there is a connection between the two, since their relationship is verifiable. In Baudrillard's words: "it is this balance of equality that defines it."[34] The balance and relationship between the two components are considered more important than the individual components itself, since this relationship gives meaning to the separate entities. The sign has a certain value, since it tries to represent an original entity. In simulation, as opposed to representation, there is no referent, but is based on the utopia of total equivalence, in which the original entity and the copy are exactly the same. Both components are therefore interchangeable. There is no hierarchical relationship of original and copy between the two components. In a simulation, the so-called original (if there is such a thing) can be discarded, since there is no need for a referent or signified. In fact, the concept of referent and sign disappears altogether. It could be said that the sign has taken over the referent, but that would give prominence to one of the two entities, valuing one above the other. But since a simulation is always created from a source, it can be placed in a specific context. Although the concepts of original and copy disappears, there is always at least a historical context, as the actual definition of the term signifies the existence of a source. Baudrillard distinguishes three orders of simulacra. The first order consists of creations that try to imitate reality. These simulations are obviously faked, and the original source is still visible. The second order sees an abundance of simulative entities, which are mass-produced. As the number of these copies or simulations becomes more abundant, the signified is slowly pushed back. Due to the overabundance of the sign, the need for the signified is rapidly eroding. The

---

[33] The sense of awareness also referred to as the sixth sense, will be omitted, since its existence has not been proven yet. Although there are more forms of reality, from physical to spiritual, the present concern is perceived reality.

[34] Jean Baudrillard, *Simulacra and Simulation* (Ann Arbor: University of Michigan Press, 1994), 6.

last and third order of the simulation can be found when entities have no original source, as the sign becomes all important, and becomes an entity on its own. The need for a signified has been lost altogether, as the simulation transcends the meaning. This state can be called the hyperreality.[35] A hyperreality is one-dimensional, has no context, and has no referent.

The concept of simulation is harder to define from a more technical point of view. What exactly a simulation entails depends on the source consulted. Academics of New Media will probably state that simulations try to emulate a given situation or environment through artificial means. Most authors write from a point of view that a simulation should be a reflection of a "real" situation. Jan Simons, for instance, writes that a simulation should give the user the impression that he should be in a real space or real situation.[36] He claims that, when representing any environment, a simulation should strive to be real as possible, from representational accuracy to the sense of scale of the simulated environment.[37] But the question regarding the validity of the term "real" remains. The perception of reality of a situation or space depends not only on the representational capabilities and the senses which are being addressed; it also depends largely on what a user expects. With the advent of fictional movies and television series, together with the increase and acceptance of otherworldly videogames, the question of what is real is debatable, since the expectations of the viewer have expanded beyond the regular input he gets from his ordinary life. For instance, a person who watches a lot of science fiction movies would more easily adapt to a simulation featuring a science fiction world. Another issue is the degree of expectation. One principle of the Gestalt psychology is “closure.” This term refers to the human tendency to see patterns.[38] The human mind tends to “fill in the blanks” based on common expectations. When simulating an environment, the goal of completeness does therefore not have to be a full hundred percent, since people will mentally fill in any perceived gaps that they encounter. Since closure is based on expectation, the effectiveness will also differ with each individual. A science fiction aficionado will be more likely to mentally enhance a virtual science fiction environment than a person who is not used to these settings.

Manovich writes that a simulation should have a same scale of representation as the scale of the “real” world.[39] This not only implies that there should be a comparable sense of scale, but that there must be some tangible reality to compare the virtual one with. On the other hand, a simulation in which the aim is presentation without a referent, like a fictional environment, could be harder to define. There are some authors who leave the door open for this interpretation of a simulation as well. Simons, again, also points out the feasibility of simulating imaginary worlds. He even goes so far to say that the utilization of ergodic, multi-causal media-objects (like objects in a computer program) has no other purpose than to create simulations, whether they should be facsimiles from real or imaginary worlds.[40] One could argue that with this reasoning, all

---

35 Baudrillard, Simulacra and Simulation ,121.

36 Jan Simons, *Interface en Cyberspace: Inleiding in de nieuwe Media* (Amsterdam: Amsterdam University Press, 2002), 244.

37 Lev Manovich, *The Language of New Media* (Cambridge: The MIT Press, 2001), 112.

38 James F. Engel, Roger D. Blackwell, and Paul W. Miniard, *Consumer Behavior* (Orlando: The Dryden Press, 1990), 379.

39 Manovich, New Media, 112.

40 Simons, Interface en Cyberspace, 205.

computer programs are by definition simulations of a certain reality. Manovich goes even further by saying that all synthetic computer generated imagery is by definition a representation from a different reality.[41] But in what way is digitized imagery different than imagery captured on celluloid? Digitized imagery is data, which can be altered to suit the owner's wishes, but this ability does not change the fact that imagery in any form is nothing but an artificial imprint of reality. If Manovich claims digitized imagery come from a different reality, then all representational media should herald from a similar reality. In other words, all representational media are essentially simulations. Furthermore, a simulation cannot be a hundred percent accurate reflection of the reality as we know it, but can be an accurate reflection of an imaginary reality. From this perspective, a simulation can only be an approximate facsimile of reality.

The question arises whether videogames can be called hyperrealities. Even when diegetic worlds depict other realities, like science fiction or fantasy settings, the need for a common sign-signified relationship is necessary. Otherwise, videogames could not be played. Even though sign conventions of motion pictures and other visual media are employed, videogames have created their own unique sign convention in order to guide the player through a game. The first computer game *Spacewar*, which was employed in public spaces, failed massively because the public did not understand the concept of interacting with such new technology. People had to be taught to actively engage in telepresent activities. The successor, *Pong*, did become a huge success, which could, for a large part, be contributed to the instructions given to prospective players. These instructions consisted of one line only, and read: "Avoid missing ball for high-score." The machine also gave players only one dial to operate. Through the gradual development of the medium, the specific sign system of videogames has expanded, and has been universally adopted. This means that when entering a diegetic world, a player knows how to interact with this world, even if this world might not reflect a known environment. Due to these common sign conventions, it can be argued that videogames are not hyperrealities, since they employ some sort of relationship between the sign and the signified. This relationship is closely tied to the virtual environment which is represented, as these signs are laid and integrated over the virtual environment. Following these conventions, a sign denoting a passable doorway would always point toward a doorway, whether it would be used in a science fiction or realistic environment. This would mean that videogame environments, even when set in fantastic otherworldly environments which have no real counterpart, are not hyperrealities, since they are obligated to adhere to the standards as directed through the sign conventions of videogames. Otherwise, no one would be able to play the game. This does not mean that the possibility for the creation of hyperreal videogames does not exist. Since these simulations are built based on data objects, a hyperreal environment can easily be created. But in order to have the game appeal to a user, a conventional meaning of the sign has to be incorporated. The necessity for players to interact with this hyperreality forces any creator to adopt an approach which resembles the conventions of a simulation. On the other hand, this relationship has been built on conventions which are hyperreal themselves. After all, the concept of interaction in videogames had to be created since there was no existing source to simulate from. The mode of interaction and the accompanying signs themselves can be considered hyperreal, but the worlds in

[41] Manovich, New Media, 292.

which they are incorporated cannot, since these worlds always need to refer back to the hyperreal signs. It could be said that these hyperreal conventions have to be super-imposed in a videogame, and have become the source through which a simulation can be realized. Videogames should be considered mere simulations, since their context and sign conventions create their need for a referent. In the case of the GTA series, this is even more apparent. Since the diegetic environment of these games is modeled after existing American cities, players will tend to recognize the environment, associating them with their real counterparts. In this case, the sign has not taken over, since the link with the signified is too obvious.

Although the diegetic environments of videogames cannot adopt the state of the hyperreal, it certainly is able to host objects which can be considered hyperreal. The online computer game *Second Life* is perhaps the best example of this statement. Although the diegetic world has been built to conform to the simulation of a real open air environment, the structures inhabiting this environment do not conform to any standard. Players are given the freedom to create anything they desire by using the built-in editing program. This program enables them to create, alter, and copy objects to be placed inside the simulation. Save for the technological boundaries as laid down by the program, this power of creation has no limits. The creations are, from a philosophical perspective, purely one-dimensional, as they have no context in any manner, and do not need to conform to any referent. They have become the ultimate sign, a display of an image created out of data without the need of representation. Hyperreal objects in videogames can also be measured by the amount of effort it takes to acquire them. Typically, a player can acquire new usable items in a game by some form of effort. In GTA: VC, a player is able to acquire an Apache helicopter after some considerable effort. The helicopter becomes a measure of his successful negotiation of the game. It does not matter that this object is a helicopter, what matters is the acquisition of that certain object. The sign refers to itself, and does not refer to a real helicopter. These types of acquirable objects can be found in all kinds of videogames, and can be considered hyperreal, since the sign has become the referent.

One could wonder whether there is a distinct difference between an image and a virtual environment. In essence, a virtual environment is no more than the display of an image with the ability to engage in a form of remote activity related to that image, with visual feedback for verification. Since this activity necessitates the need for some form of interaction, the image will often be a collection of images, enabling a visual feedback regarding the reaction upon an action. It could be said that every image is a miniature simulation of its own. An image is a reflection of reality, which at the same time, masks reality. Therefore it also masks any absence of that reality, which means that there is not any necessary relation with that reality.[42] In the end, every picture is a simulation of its own, a unique entity and miniature reality, which corresponds to Baudrillard third order of the simulacra.

America leads the world in the application and usage of imagery. With television news coverage so prevalent during the last half of the twentieth century, American society has become increasingly dependent on the pictures shown on their television screens. As news shows and television stations are proliferating, the outlook on the world is being shaped more and more according to the imagery seen. These images

---

[42] Jean Baudrillard, *America* (London: Verso, 1988), 98, 109.

should show reality, but can never be considered totally real. After all, these images are mere representations of the reality they are supposed to reflect. It is already possible to manipulate imagery. Either through cinema editing techniques like montage and juxtaposition, which alters the way we process a given message, or through computer manipulation, which alters the image that we actually see. These alterations aside, one could also open the discussion surrounding the validity of presented images as they are. Armitage and Robert find that the abundance of images detract from the reality of the event. As simulations, or images, are more frequent than the reality it displays, it eventually supplants the event itself.[43] As an example, they cite Baudrillard's concerns regarding the first Gulf War. This war was massively covered by all American television networks, yielding more images of combat than ever before. Baudrillard states that with the overabundance of images, the imagery itself became more important than the acts they were supposed to represent. The war almost became a mis-en-scene for the images.[44] The same conclusions can be drawn after the terrorists attack on the World Trade Center at November 11, 2001. Baudrillard states that the images have consumed the events, and are offering it for public consumption.[45] Again, the images seem to hold more importance than the event itself. It seems apparent that the images have taken over reality in such a way that the real event does not apply anymore. If we consider these thoughts, and reflect back on the images that we have seen regarding the WTC attack, we can find some truth in this statement. After the attack, all that the American public was shown their television screens were the same images over and over again, always from the same angle, and always as part of the same footage. In this sense, our perception of the event has been shaped by this imagery in such a way, that we cannot think of the event without seeing those specific images. The presented images are all that we have in order to believe the illusion. It is an illusion, because what was shown is a series of choreographed images, which can never contain the real event, but show only a passing glance or interpretation of the attack. It tries to mimic the event, but it can never do so. If images are simulations of reality, and are taking over the actual events depicted, they become hyperreal. Through this process, the images attain a certain value system, by which they will always be associated.

If images are hyperreal, and are signs unto themselves, they need to be imbued with a value system. The WTC disaster already showed that the imagery surrounding the event has become a sign imbued with symbolic values. By definition, a hyperreal sign has to be enhanced with a certain value, otherwise it has no meaning. Nowhere is this example more prominent than in advertising. The marketing term for imbuing signs with images is branding. By adding certain values to images and icons, marketing strategists are creating hyperrealities with every advertisement they make. This not only affects the realms of photography and film, but also iconic signs like the Nike Swoosh. The same applies to certain videogame characters. During the nineties, the videogame characters, as represented through their icons, conveyed powerful associated values through their advertising. Nintendo's Mario became the hallmark of a fun videogame experience,

---

43 John Armitage and Joanne Roberts, ed. *Living with Cyberspace: Technology and Society in the 21st Century* (New York: Continuum, 2002), 27.

44 Ibid.

45 Jean Baudrillard, *The Spirit of Terrorism and Requiem for the Twin Towers* (London: Verso, 2002), 27.

while Sega's mascot, Sonic the Hedgehog, stood for a more juvenile, cutting-edge attitude. It is these values that make a hyperreal sign more powerful, and gives significance to its existence. An effect these duplicate images have is that they, due to their similarity, achieve the effect that society has turned into a large billboard, united by the same signs.[46]

The specific usage of imagery by the American media has concerned other authors as well. Newman and De Zoysa find that the American media often sanitizes its message in order to no to offend the sponsors or the general public, altering realism to some degree.[47] This concern is shared by Naomi Klein, who quotes Disney CEO Michael Eisner as saying that he would like Disney-owned network ABC to refrain from airing a negative news item concerning the Disney Corporation.[48] Furthermore, Newman and De Zoysa see this media usage as an extrapolation of American imperialism, as it does not show that there might be alternatives.[49] Generally speaking, one could say that the message is drastically altered, or that image messages have been enhanced in such a way that they become simulations on their own, brandishing the values of the American ideals. Since all American mass-media adhere to the same standards, Newman and De Zoysa might not be so far from the truth when they say that this usage of the media "binds without chains."[50] The self-imposed censorship by not showing interviews of captured American solders during the second Gulf War is testimony to that effect. This sanitation of the message has not escaped other writers.[51]

Both Gulf Wars clearly indicate a paradigm shift in the way the American media is using the images at their disposal. It is at this junction that videogames and images of supposed reality intersected. When the first Gulf War was in progress, the American military often used to show videos of bombs hitting their targets. These movie clips showed the same images that the pilot would see in order to verify whether the intended target was hit. The images showed the targets in bright outlines, with a large crosshairs superimposed over it. However, videogame technology had at the time progressed to such a point that these images almost reflected those which the public was used to see in their games. The videos even ran parallel with their expectations, since the black and white camera, combined with the nightvision view, gave the picture a more authentic feel. The military profession had achieved what videogames were doing for entertainment purposes, which is to provide telepresence. The airforce was able to guide bombs onto their targets by means of a videoscreen. At home, videogames provided the same experience in terms of visual feedback and interface mechanisms. Due to their similarity of videogames, these images coined the phrase "Nintendo" war.[52] This sentiment was further enhanced by the use of computer graphics and animations to display the action on the battlefield. Although the American media was condemned for

---

46 Simons, Interface en Cyberspace, 44.

47 Otto Newman and Richard de Zoysa, *The American Dream in the Information Age* (London: MacMillan Press Ltd., 1999), 174.

48 Noami Klein, *No Logo* (London: Flamingo, 2000), 143.

49 Newman and de Zoysa., The American Dream, 174.

50 Ibid.

51 Mia Consalvo, "It's no videogame: news commentary and the second Gulf War," *Level Up: Digital Games Research Conference*, ed. Marinka Copier and Joost Raessens (Utrecht: Utrecht University, 2003), 316.

52 Simons, Interface en Cyberspace, 150.

making the war too videogame like, they repeated this approach when the second war came along.[53] Mia Consalvo has found that during the second war, the videogame theme was again used by the American media to describe the events and images shown. Just like during the first Gulf War, videogame-like graphics were used in order to translate the actions on the battlefield for the television screen.[54] However, at the same time, the military stressed that this was a real war, and not a videogame.[55] It seems that at this intersection, the difference between the real and the virtual can no longer be made. Just as both Gulf Wars were so extensively covered that their display of imagery almost ran parallel with war movies, the application of computer graphics ran parallel with the imagery used in videogames. It is almost impossible to make a distinction between an image which represents something real, and one which does not. Virilio believes that televised images cannot represent the truth, since they have been processed by the media. This eventually leads to a perceptual disorder, since the American public is overwhelmed with imagery.[56] Baudrillard adds that due to this overflow of information we are incapability of even recognizing the real.[57] This idea is also shared by Virilio, who wonders whether the human mind, being attuned to artificial imagery in a media age, is even capable of distinguishing between a real environment and simulated one.[58]

The lines of the real and virtual begin to fade when we become dependent on imagery. This is certainly true when computer simulations are being used to train operators for certain tasks, and when those tasks are solely dependant on visual feedback. For example, American tanks are equipped with a host of electronic displays, getting almost all of their information from data being fed to them from the outside. Subjective verification of the exterior environment is kept to a minimum. During a war, a tank driver will get exactly the same sensory input as he got during his training. The mediated information, the manner of display, and the interface are virtually identical. From a logical perspective, it could be said that the operator knows whether he is partaking in an exercise or a real combat situation. But while this distinction is made on a logical level, the subconscious level is unable to make that distinction. Without the ability to verify his input, the operator essentially resides within his own hyperreality. The only ability to make a distinction between different sets of sensory inputs is his logic. This arbitrary decision-making process is all that separates the real from the virtual, with the only difference being a subjective projected value system.

The same application of this logic was shown in the movie *The Matrix*. This motion picture shows a world where humanity lives inside a huge computer program. Since they have no knowledge of or any reference toward another outside reality, their environment is taken for granted as being reality. The simulation encompasses everything, turning it into a hyperreality, as the signified has completely disappeared. The only human beings able to make a distinction are the ones, who have crossed the boundary into the real world, giving them the ability to verify and compare both realities. Still, this distinction is made only on a logical level, since there is no way of verifying whether this other world is real as well. When returning toward the simulated

---

53 Consalvo, It's no videogame, 319.
54 Ibid., 317.
55 Ibid., 318.
56 Paul Virilio, *Open Sky* (Verso: London, 1997), 90.
57 Jean Baudrillard, *Impossible Exchange* (London: Verso, 2001), 78.
58 Virilio, Open Sky, 37.

reality, only the logical knowledge of being able to create an artificial sign-signified relationship gives them the ability to make a distinction between the real and the virtual.

The logical ability to make a distinction between a simulation and reality seems to be the only divider between a game and social behavior. In the case of certain military activities, this boundary is hard to define. With computer- and videogames, the boundary is more visible, due to the fact that the player knows he is playing a game. And although his experience would be more immersive he would still know he is playing a game. The surrounding environment is also a factor. A game played in the living room would never be mistaken as an interaction with a real environment. But due to the increased internet proliferation, sometimes the distinction between a game and telepresent activities in a real environment is hard to make, as was shown in the 1983 movie *Wargames*, in which a student thinks he is playing a network based game, while in reality issuing commands for the launch of NORAD's ballistic missiles. Although the storyline of the movie is fictional, it does point out the similarity of consumer and professional software. In this case, the visual representation of the game was exactly the same as its military counterpart. Since the military program enabled remote operations, the physical environment of the user was irrelevant. The relevance lies in the virtual space. As long as this space, with the ability to be active in that space, can show no difference between a game and a real task-related computer program, the ability to distinguish lies purely in the logical acknowledgement of knowing what is real and what is not.

From a philosophical point of view, the division between the real and the virtual is hard to define. As American society becomes increasingly dependant on imagery for information gathering and communication, the advances in electronic mediation and communication methods is also increasing. Furthermore, the entertainment industry is using exactly the same methodology of presentation. A convergence of the two worlds of reality and virtual seems inevitable, with distinctions only being able to be made through subjective acceptance of a value system.

Chapter 3: Entering the virtual environment

With new technological advances being introduced at an increasing rate, it is only natural that these advances become integrated in modern societies. These features come in the form of new technological interfaces, new modes of information display, and new modes of interactivity. With each new consumer device, new implementations occur, and with it, public acceptance. From the realm of videogames and virtual realities, one can only point to the myriad of different forms of interactions which have invaded American society. As such, the role of videogames is no longer that of an eccentric pastime, but one that makes use of an already integrated acceptance of technology. In order to identify these different modes of interactivity, we have to explore some of the theories of defining the way users interact with these technologies, which are, in essence, a form of virtual realities. Although Virtual Reality is often used to describe human interaction with three-dimensional computer generated models, it is not the definition that will be discussed here. There are more possibilities to engage in a virtual reality environment than the traditional three-dimensional computer space. Instead, virtual environments could also be described as manifestations of a non-tangible environment that can be considered to be real due to the level of engagement in that virtual environment. In a sense, virtual environments are about being able to project a person's senses to a remote location. In these environments, this location is not real in the sense of being a part of the known physical world. The ability to project one's senses onto a physical or real environment is traditionally referred to as telepresence.

The term telepresence was widely debated when first introduced by Marvin Minsky in 1980. The term refers to the activity of engaging in remote-controlled manipulations in a remote environment, like guiding a robot across the surface of the moon. Since there is a lot of academic debate surrounding this subject, this paper will use the works of a selection of scholars in order to facilitate the discussion. Jan Simons defines three requirements for telepresence:

1) Sensory feedback should be such, that the user gets the feeling that he or she is actually present at the remote location.
2) The user should be able to manipulate the external sensors (the one giving the sensory feedback at the remote location) or be able to navigate through the external location.
3) The user should be able to manipulate the environment, and bring about real changes. [59]

Simons' first comment regarding the necessity of the user to actually feel himself present at the remote location can be considered a debatable one. Feedback can be provided for in different ways. Usually, the feedback comes in the form of aural, visual, or tactile stimuli, since these senses are paramount in task related activities. Feedback can be as elaborate as in the forms of tactile Datasuits and three-dimensional visualizations or very iconographic in the form of just numbers on a screen. Although

[59] Jan Simons, *Interface en Cyberspace: Inleiding in de nieuwe Media* (Amsterdam: Amsterdam University Press, 2002), 289. Current author's translation.

the sense of smell can also be artificially produced, usages of these methods are not yet commonplace. The sense of taste, although also able to be artificially produced, has never received much attention in simulative environments. With many tasks related activities, representation is less important than the ability to perform the task assigned. If plain numbers on a screen are sufficient to display the necessary information, more feedback would not be necessary. In this case, telepresence is not dependent on visual simulation. This means that the degree of willingness to believe in being in another environment is highly dependent on the suspension of disbelief of the user, which is more a mental state than anything, in relation to the manner of representation.[60] Since mental states are highly subjective, this requirement seems hard to measure. Other scholars define Simon's requirement, the feeling of being there, with the term "presence." Although also widely debated, the agreed upon definition of this term is described by Lombard and Ditton as "the perceptual illusion of nonmediation." They explain this as follows:

> The term "perceptual" indicates that this phenomenon involves continuous (real time) responses of the human sensory, cognitive, and affective processing systems to objects and entities in a person's environment. An "illusion of nonmediation" occurs when a person fails to perceive or acknowledge the existence of a medium in his/her communication environment and responds as he/she would if the medium were not there.[61]

In other words, the person engaging in activities which can be labeled presence should not be aware of any technological or mediated interface during the state of telepresence. With "suspension of disbelief" being exclusively concerned with the mental abilities to immerse oneself in an illusionary environment, illusion of nonmediation depends on the ability of the mediating interface to be invisible for the user. It should also be noted that in this definition, presence does not describe the state of a person's perceptions being present at a remote location, but her non-awareness of the separation of senses and body. Janet Murray calls this phenomenon "immersion," describing it as "a metaphorical term derived from the physical experience of being submerged in water…the sensation of being surrounded by a completely other reality."[62] This sensation occurs when a player reaches a mental state where he is able to suspend his disbelief. Scholar Alison McMahan has a somewhat different view: "The player is caught up in the world of the game's story (the diegetic level), but it also refers to the player's love of the game and the strategy that goes into it (the non-diegetic level)."[63] Although this statement refers to videogames, it could also be expanded to include any kind of telepresence. This wording implies that immersion mainly emerges through the existence of a storyline and the emotional bond and effort a player has with the game.

---

[60] Alison McMahan , "Immersion, Engagement, and Presence," *The Video Game Theory Reader*, ed. Mark J. P. Wolf and Bernard Perron. (New York: Routledge, 2003). 75.

[61] Matthew Lombard and Theresa Ditton , "At the Heart of It All: The Concept of Presence," *Journal of Computer-Mediated Communication*, Vol 3, Issue 2 (September 1997). http://www.ascusc.org/jcmc/vol3/issue2/lombard.html

[62] Janet H. Murray, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (New York: The Free Press, 1997), 98.

[63] McMahan , Immersion, Engagement, and Presence, 68.

This is in sharp contrast with the description given by Janet Murray, who is concerned with sensory perception, which convinces a player or user that she is in another environment. McMahan, however, uses her definition to show that immersion also occurs outside the virtual environment. In her opinion, there is no suspension of disbelief, since a player acknowledges the existence of a virtual world not being real. After all, the love for a game and the application of a certain strategy point toward a player knowing he is playing a game. In this sense, the realization that there is real world outside the virtual one defines the immersive experience. This theory could also be applied to technological facilitators of telepresence. This would mean that immersion through tele-operations would come from the fact that the user explicitly knows that he is part of an activity involving telepresence. In other words, the more visible the interface is, the more intense the feeling of immersion can be. These views are in sharp contrast with the views of Lomard and Ditton, who claim that telepresence hinges for the most part on the illusion that there is no discernable interface. Other authors also lessen the importance of sensory input, with James Newman stating: "It is my assertion here that the degree of parcipative involvement and engagement with any specific game is not contingent upon the mode of representation."[64] The author could be alluding to Baudrillard's theories that images are hyperrealities, and are therefore dependent on the value associated to the sign. This would make the degree of graphical representation irrelevant. A player would have the sense of involvement independent of the representation of the avatar, whether it is a small vertical line, like in *Pong*, or a digitized martial artist like in *Mortal Kombat*.

Either way, if the feeling of "being there" is a mental state, then the importance of (technological) sensory feedback becomes more nuanced. Additional sensory feedback can certainly enhance the immersive sensation, but the manner and the amount is dependent upon the individual user. One could even go so far to say that some persons can mentally immerse themselves in such a vivid manner, that they only need the most basic of feedback. This would be reflected in the American creation of the Role Playing Game, which used to be very popular among American university students in the seventies and eighties.[65] By using their imagination, groups of people would collectively create an imaginary world, based on the verbal instructions of the game's leader. Each player would have a place in this collectively shared world. Players would issue their intentions to the group's leader; activities in this imaginary environment would be resolved, with the leader replying the reaction from within the gameworld. This mental game would be the basis for a whole separate genre of future computer and videogames. The existence of such a collective mental exercise points to an idea that virtual worlds can exist with a minimum of sensory feedback. These collective imaginary worlds have the same status as technological virtual worlds, since they are both imaginary and authored. The only differences lie in their representation (imagination versus text or graphics) and their persistence (technological virtual worlds can still exist after a player leaves). Since all virtual worlds need is a suspension of disbelief, whether technological or mental, it could be reasoned that the definition of immersion is merely the willingness

---

[64] James Newman, "The Myth of the Ergodic Video Game," *Gamestudies.org* volume 2, issue 1 (July 2002). http://www.gamestudies.org/0102/newman/

[65] Brad King and John Borland, *Dungeons and Dreamers: The Rise of Computer Game Culture From Geek to Chic* (McGraw-Hill: Emeryville, 2003), 27.

to accept a telepresent state of being. The French philosopher Paul Virilio is not even sure this willingness is voluntary, as he wonders whether the human mind, being attuned to artificial imagery in a media age, is even capable of distinguishing between a real environment and simulated one.[66] This would suggest that not only have users readily accepted telepresence as an active state of being, but that they might not even be aware of it.

Simon's second requirement of telepresence, regarding the ability to navigate through an environment, defines the essence of telepresence. The user should be able to assert control over her telepresent state at the remote location. In a manner of speaking, she is projecting some of her senses toward a remote location through a medium by means of an interface. Her senses are telepresent, but her cognitive brain, which coordinates, assesses, and reacts, is still in the original location. In digital environments, the ability to manipulate or move through the environment is conducted through a data object which functions as a proxy for the user. In videogames and other digital environments, this object is referred to as an avatar or character. The avatar is the role the player assumes when entering a game or simulated environment. Through the avatar, the player or user is able to interact with the environment. This means that the avatar has to embody a physical presence in the diegetic world, and that any player-induced actions have to have a definite impact on the environment. It goes without saying that an avatar styled after the human form would generate more immersiveness than one which is not, just as we feel more connected to another human being that with an inanimate object. On the other hand, since an avatar is a hyperreal object, the immersiveness depends largely upon the player's value association with that object. Avatars come in many guises, depending on the game involved. For instance, in historical videogames, the avatar can be a soldier, fighting in a historical war. In other cases, the avatar is being presented as an athlete. In many cases, however, the avatar is more like an icon. Nintendo's Mario and Sega's Sonic are cartoon-like figures, to be controlled by the player. These icons have no counterpart or context. They could be considered hyperreal, as they have no signified, while still be recognizable as a sign. That these videogame signs can become very prominent was shown in 1990, when a study revealed that more than 96 percent of American children could identify Nintendo's Mario.[67] From this perspective, avatars can be considered hyperreal.

The third telepresent necessity to bring about real changes in the environment is open for interpretation. Simons is of the strict opinion that the remote environment should be real[68]. If the manipulations do not affect reality, but computer programs instead, it should be called virtual reality. His assertion is that even when an environment seems lifelike and real, this space can never be considered a host to a telepresent state. With this definition, he clearly puts virtual realities outside the boundaries of telepresence. Other scholars do not always agree. Although he initially describes telepresence as "to enable the viewer to manipulate other reality through technical representations", Lev Manovich also states that these realities can be virtual

---

66 Paul Virilio, *Open Sky* (Verso: London, 1997), 37.

67 David Sheff, *Game Over, Press Start To Continue: The Maturing of Mario* (GamePress: Wilton, 1999), 400.

68 Simons, Interface en Cyberspace, 285.

ones as well.[69] But in what way does a virtual environment differentiate from a real one? If we change Simon's requirements to suit non-physical environments, like virtual ones, does this mean that these same requirements can then be applied to a virtual reality? After all, remotely controlling a robot on the surface of the moon is being verified by video feeds or other electronic feedback. Simons himself finds that visual feedback in the form of imagery is vital for telepresence.[70] But how can these images be verified? Shown imagery could just be coming from a videotape instead of a live video feed. Additionally, imagery can be altered. If telepresence is about technically manipulating other environments by means of technological feedback, and this feedback is the only verification one has, how can one assess whether this feedback is real? In this case, reality is what a user perceives it to be, instead of what really can be.

The same applies to the requirement of the ability to manipulate the environment. This statement seems open to debate. In the case of remote controlling robotic machinery, the reasoning behind the statement seems apparent. But situations are not always as clear-cut as this example. For another example, consider a videoconference in progress. By using video cameras, voice and image are simultaneously transferred from one boardroom to another and vice versa. This set-up seems to fit the description of telepresence, as one speaker is telepresent inside another location: he gets aural and visual feedback from the other location, and is perhaps able to electronically tilt the camera and microphone as well. He is able to extend his senses to this other location. What amounts to manipulation from the user is seeing and hearing the reaction his tele-actions (his verbal and nonverbal communication) have on the other persons. According to Simons and his peers, this is not an example of manipulating the environment. Telling a person to throw a switch on a remote location is also not part of the telepresence definition. But pushing a button which electronically activates a switch in remote location *is* part of the telepresence definition, according to Simons. Another example would be a situation in which an operator has to manipulate the actions of a robot arm in remote location. Suppose this robot were to manipulate a program on a computer. For this example, suppose the program shows a green square on a screen. The job of the operator would be to manipulate the robot arm in such a way, that instead of a green one, the program displays a red square. The action of manipulating a robotic arm to press buttons on a keyboard to change a computer program is what Simons calls telepresence. After all, the "real" environment is being manipulated. However, logging directly into the computer on the remote location through a network and change the program ourselves is not a form of telepresence, according to Simons. Although the exact same result has been achieved, the latter solution was brought by modification of certain data objects (the computer program) and not by manipulating the environment. Furthermore, manipulations are always carried out through a medium. When an operator remotely controls a vehicle, he is not manipulating reality, but a machine or other medium which does the manipulation *for* him, since all he does in control the proxy or avatar. Is this sense there is additional layer between reality manipulation and the operator. In addition to a control interface, this adds another boundary to the remote environment. This means that the operator can never have a direct connection between the other environment and his own, since there is a separation of two layers, being the control interface and the

---

[69] Lev Manovich, *The Language of New Media* (Cambridge: The MIT Press, 2001), 156.

[70] Simons, Interface en Cyberspace, 285.

proxy. In this regard, the user will never be able to manipulate reality, since he is only manipulation an array of output mechanisms which do the manipulation for him. To stretch this issue further: even a telephone call could be considered manipulation. Being able to make yourself known by projecting your voice toward an external location is a type of manipulation. After all, at the remote location, the status quo is being challenged, as a new active participatory manifestation has been introduced.

In other words, the assumption can be made that telepresence can also exist in virtual environments, since:

1) The verification of the manipulations on external locations cannot be verified to be real itself. As telepresence is a mediated activity, so is the feedback we derive from it. Since, during tele-operations, there is no reliable way to verify this mediated feedback, there is no telling what is "real" or not.

2) Following from the statement above is the question of *what* we manipulate. If this cannot be verified, the manipulation might be real objects, or data objects (computer programs). Whatever the object manipulated, it should not and cannot matter to the operator, as he cannot distinguish between real and virtual. This means that the distinction between what is real and what is virtual cannot be made from a user's point of view.

Furthermore, believable telepresence hinges for a large part on the ability for the user to mentally immersive herself in the external environment. This would mean that virtual reality can have multiple forms, which do not necessarily have to be mediated through technological means. As long as the user is willing to invest mental energies to actually believe into an environment, and as long as this environment acknowledges this presence, a state of telepresence can be reached. The matter of whether the remote location should be real or can be a virtual one becomes irrelevant, since it is tied up with willingness of the player to believe in the environment. This assumption that telepresence can also exist in virtual environments is not as implausible as it might seem. If one can ascribe to the notion that even making a telephone call is a form of telepresence, this issue becomes clearer. As discussed, telepresence is essentially the real-time manifestation of one's senses to any location with the ability to get real-time feedback from that location. This means that watching television, operating an ATM, or writing a letter are not activities which involve telepresence, since there is no feedback pertaining to another environment. But accessing virtual environments like videogames are able to put the user in a state of telepresence, since he is directly controlling an object (extending his senses), which has real-time influence on the digital environment.

With regard to the GTA: III and GTA: VC videogames, the immersiveness of the world is enhanced by the recognition of a simulated American society, albeit one which is limited by technological constraints. One could argue that the solistic play of these games, meaning that every person encountered in the game is not a real person, limits the social aspects, and therefore the immersive experience. On the other hand, immersiveness does not depend on social interaction alone; the willingness and the ease of suspension of disbelief are far more important. The combination of a consistent gameworld with believable action-reaction sequences accounts for a large portion to the immersive experience. The fact that this diegetic world is modeled after real environments merely enhances the already immersive experience. The sense of agency, which refers to a suitable reaction after an action has been performed, enhances the

telepresence factor even more. One can only feel present inside a virtual environment when one's actions have an effect. In this case, the avatar becomes an extension of the player. In the GTA series, the decision to deviate from the storyline gives a sense of freedom which is lacking in most other videogames. This means that telepresence is not merely the ability to remote control an extension in other environments, but to have to ability to choose the actions of the avatar.

Paul Virilio's theories regarding telepresence center on the concept of tactile feedback. Citing the examples of the Datasuit and the Dataglove, he foresees mankind in a state of perpetual telepresence, also called teletopia.[71] The Datasuit is an invention of NASA, which gives the wearer tactile feedback which derives from his telepresent double at the remote location. Although this might be regarded as a technological marvel, similar products have been present for a long time in the videogame consumer market. For example, joysticks which give off powerful vibrations in accordance with the actions on-screen have been around for more than a decade, if not longer. Force feedback devices exert counter pressure when pushed or pressed, like in a steering wheel of a car. The NASA's Dataglove was adapted for the videogame consumer market more than 10 years ago, called the Powerglove.[72] The early nineties saw a tremendous amount of interactive peripheral devices, from motion sensors to dancing mats, all to be used in conjunction with a videogame console.[73] It seemed that all varieties of telepresence were explored. Even the sex industry has experimented with these devices, as Vivid Entertainment was found developing a Datasuit for remote sexual stimulation over the internet in the 1990's, also called Teledildonics.[74] The product never came to market, but the fact is that tactile telepresence devices are more a reality than they appear to be. The reason why these devices are not more common is the lack of consumer demand. Perhaps, given advances in technology and changing demands of the marketplace, tactile telepresence devices will be more commonplace in the future. It seems that audio-visual stimuli are well enough developed to give the user a sense of telepresence, although manufacturers are still trying to extend that horizon. Digitized scenting devices have recently been introduced. Another company introduced a game which responds to the biological signals of the body, like muscle pressure and heartbeat.[75] Although audio-visual stimuli can never replace the real body experiences, it does not appear to have halted the growing use of facilities which enable telepresence. Where videoconferencing was once an event exclusively found in office meeting rooms, it has now becomes a normal mode of conversation. The integration of webcam facilities in consumer computers, not to mention in Microsoft's Messenger chat program, coupled with the low costs of said webcams, enable anyone with internet access to be telepresent through audio-visual means. Judging by the abundance of telepresent enabling devices, Virilio's insistence on tactile feedback seems to be a very limited factor in his reasoning.

In 2003, Sony released the Eyetoy, a peripheral for its PlayStation2 videogame

---

71 Virilio, Open Sky, 16.

72 Mark Pesce, *The Playful World: How technology is transforming our imagination* (Ballantine Books: New York, 2000), 183.

73 Sheff, Game Over, 226.

74 Joel Stein, "Will Cybersex be better than real sex?" *Time Online edition* (2004), http://www.time.com/time/reports/v21/tech/mag_sex.html

75 Jack Cox, "'Divine' a game for mind," *The Denver Post* (October 05, 2003), http://www.wilddivine.com/ktml2/images/uploads/PressReleases/den_post_10_03.doc

console. The Eyetoy is a small camera, which attaches to the videogame console. It enables players to literally project themselves into the game. The camera films the player, showing her simultaneously at the TV screen, inside the videogame. The device detects the body motions of the player, so that the TV projection of his real arm interacts with the game object on the same television screen. This manner of telepresence goes beyond the Dataglove Virilio mentions, since instead of equipping the player with an interface device, the player literally becomes the interface himself. Although the feedback from the Eyetoy is audio-visual, and not tactile, the innovation is that a player does not even have to don a glove of similar piece of hardware in order to interact with the virtual environment. In February of 2004, more than a reported 2.4 million of these devices have been sold worldwide.[76] Since the PlayStation2 has the largest userbase among the "general" public, and with marketing geared toward family style games, it can be theorized that this camera is even further lowering the threshold for telepresence acceptance. Just as the webcam has become an accepted phenomenon in computer chatrooms, the Eyetoy holds the same potential for the living room, as Sony already created the possibility of PlayStation2 consoles connecting with each other over the internet. Although video message services are as yet not offered, the hardware in the form of Eyetoy and Network adapters is already there. The Eyetoy demonstrates the ability to be telepresent in a way Virilio has never fathomed. By projecting a player literally inside a simulation, external hardware devices have almost become absolute. The digital clone has become reality.

If there is a latent incapability of being able to distinguish between the real and the simulation, then the way we interact with both of these environments only confuses the issue further. The proliferation of digital media has forced society to adapt in order to be able to receive it, as interfaces had to accommodate the new possibilities of these new media types. This change in interface has mimicked the interface used by videogames, since in these games were the first generic type of digital media present. Mobile phones, audio-visual equipment, and car navigational systems all employ interfaces which have been derived from videogame methodologies, since all these devices force the user to interact with some form of simulated environment. Interactive communication through computers or other electronic devices invoke a more playful feeling with the user. This can have an effect on the reception of media viewed though the same devices.[77] Again, the American military is using these interface methodologies as part of their research program. The military has been increasingly researching methods of remote controlling their moving equipment. It is known that reconnaissance missions over enemy territory have been conducted by remote controlled aircraft, employing the technology and concepts of telepresence. The controlling interfaces of these aircraft need to be different than those which are flown by real pilots. In effect, the control mechanism of this type of telepresence runs parallel to those of videogames, which have the same goal. Although the details of this specific control interface are not known, it is known that a remote-controlled truck, the Dragon Runner, employs an interface based on the PlayStation controlpad, since the military assumed that soldiers operating the device would already

---

[76] Sony Computer Entertainment Europe Ltd. *Ever dreamt of starring in a videogame…?* (London: Sony Computer Entertainment Europe Ltd Press Office, 2003). http://www.digimask.com/downloads/SCEE_Digimask_release.pdf

[77] Simons, Interface en Cyberspace, 150.

be familiar with it.[78] Even modern tanks are being equipped with more electronic information gathering systems and corresponding displays, with weapon controllers also created to be a facsimile of the PlayStation controlpad.[79] But videogames also borrow conventions of real environments, so that the player is able to focus on the game's goals, instead of having to decipher the interface schema. For instance, the first person perspective if often used in videogames, enabling the player to interact with the environment through its own telepresent eyes. In the American military, the reverse seems true. The usage of videogame conventions mean that solders already accustomed to this type of interface can more effectively focus on real world tasks.

When we engage in telepresence, we are, in effect, extending our senses, and create digital clones of ourselves.[80] The extent of this cloning aspect differs according to the facilities granted. In most videogames, users are limited to the number of avatars they can select. In most cases, this avatar takes the form of the videogame's hero, like Sonic the Hedgehog or Mario. But is other cases, there might be a choice of which avatar to use. This selection is limited by the programmer, but it gives more freedom to the user. Usually, these choices concern race, gender, and style. Some games even go further. Microsoft's tennis game *Topspin* features an avatar modeling program, which is quite extensive for a console videogame. Since the player is put in the role of a tennisplayer, the game lets the player choose what he wants to look like, giving him a broad range of facial and physical options to choose from. This way, a player is able to mold an avatar exactly to their specifications, even creating a digital clone of herself. Since the game is playable over the internet, other players have the opportunity to play tennis against a digital replica of the actual physical player. Sony has plans which even go beyond an approximate digital representation. At the beginning of 2004, Sony announced that it had acquired the technology of a company called Digimask.[81] This technology enables a computer or videogame console to create a three-dimensional face from frontal and side facial photographs. By combining this technology with the Eyetoy peripheral to make the pictures, Sony is able to create videogames in which the player can control a person which has the same photo-realistic face as the player himself, creating a near perfect visual clone. This approach differs slightly from the previously mentioned use of the Eyetoy, which enabled the player to put himself literally in the game. The Digimask technology merely pasts a near-perfect photograph over the avatar, turning it into a resemblance of the player. However, both approaches signify an important step in the literal cloning of players. The use of avatars is not only limited to videogames. Internet and other communications devices use avatars in increasing ways. Almost all web-based forums and chatgroups have the ability to show a picture of the actual person behind the message. In most cases, this picture will be of an avatar instead of an actual photograph, keeping the user anonymous. His name will also be some alter ego. The avatar is used to either portray some alter ego portrait or is a reflection of the user's mood or interest. The avatar in this type of telepresence is no longer a physical alter ego, but an iconic reflection of the user. As increasingly more devices will have an

---

78 Mia Consalvo, "It's no videogame: news commentary and the second Gulf War," *Level Up: Digital Games Research Conference*, ed. Marinka Copier and Joost Raessens (Utrecht: Utrecht University, 2003), 317.

79 Ibid., 310.

80 Ibid., 45.

81 Sony, Ever dreamt…

integrated camera, with the ability to share those pictures across different kind of networks, the proliferation of the image will only increase. As these images, avatars and icons can be shared, altered, and copied, the value of these personal clones will diminish, since they will undergo the same process as imagery in general.

The convergence of telepresence, morphable avatars and digital cloning has never been more apparent than in the concept of the Massively Multi Online Role Playing Games, or MMORPG for short. Using a Personal Computer or videogame console, players can log on into the virtual world, which resides on large computers from the company offering the service to its subscribers. These worlds are accessed through the internet, enabling thousands of players of simulations to meet, play, and interact with each other online. The key to these worlds is persistence, meaning that the environment continues to exist when a player logs off. In this regard, a player is present in the world for the amount of time he plays, with the ability to create more than one distinctive avatar. Previously, these worlds existed as Multi User Dungeons, or MUD's. The representation of these early virtual worlds was communicated through text, with a player reading the descriptions of the locations, and typing in commands in order to interact with it. With the advent of technology and consumer accessibility, these worlds became more graphic, depicting players and their environments instead of only describing through textual means. By graphically representing the digital environment, a higher degree of immersion was attained, as the text based MUD's were replaced with their more graphic-rich off-spring. At this moment, approximately 63 MMORPGs are accessible to the American consumer market.[82] The most popular is *Everquest*, a virtual world which started in 1999. In this game, players enter a world in medieval fantasy setting, playing a range of fantasy-like characters. When they stop playing, the game saves their progress, enabling them to return at any time, while the gameworld keeps evolving. One of the main attractions of these games is that due to their internet connectivity, players are able to meet other players to socialize and play with. At this moment, *Everquest* has roughly 400,000 paying subscribers, with at any given time 60,000 players being online. It should be noted that the themes of these worlds are as diverse as people's tastes. While most games enable some sort of science fiction or fantasy setting, other worlds represent modern day life. Recently, more MMORPGs have been created where socializing is the main theme, as opposed to the more competitive driven gameplay of the majority. *The Sims Online*, *There*, and *Second Life* are all games which have all been programmed with the increased ability for social interaction. These games place an increased emphasis on the appearance of the avatar, with elaborate polymorphic abilities for the player, in order to create an unique avatar. Furthermore, where other games need multiple avatars to display different types of personalities, *Second Life* avatars are able to change shape and appearance on a whim, creating a truly polymorphic clone of the player. Since these clones have no signified, they are true hyperreal entities. Although the appearance of the avatars of the GTA series cannot be changed, they are not icons either. The main protagonist in GTA: III is a non-descript New York-style person called The Kid. In GTA: VC, the character is a criminal called Tommy Vercetti. But since they are not cast as icons, and are devoid of any super-human or cartoon-like features, they become a kind of everyman. The

---

[82] Cyber Creations Inc., "Game List," *MMORPG.com* (Cyber Creations Inc.). http://www.mmorpg.com/gamelist.cfm/gameId/0

associated values thus come from the player, infusing the avatar with a subjective value system.

Although the diegetic worlds they inhabit are simulations, the avatars cannot be considered as such. With the advent of customizable telepresent clones, the relationship between any sign and signified has been lost. Sophisticated computer and videogames, especially those played online, enable its players to create an avatar which appearance has almost limitless visual possibilities. As most avatars are shaped like human beings, this humanoid shape is the only referent toward a signified entity. Aside from this aspect, the sign has completely taken over, as combinations of colors, sizes, and other details can create a clone which is completely unique. Furthermore, the ability to change these visual appearances gives room to the eventual loss of the sign as well. If a hyperreal entity incorporates both the sign and the referent, what should this entity be called when it has the ability to change its appearance at any given time?

Even actors are being cloned. With the convergence of movies and videogames, games based on popular movies or television series are a rather frequent occurrence. These games usually employ the likeness and voices of several of the real-life actors from the movie or television show. With the actors supplying their likeness and their voices, it becomes apparent that they willingly let themselves digitally be cloned. After a virtual clone has been created, control is out of their hands. This is becoming an increasing concern among actors. After all, their digital clone can engage in acts the real actor does not approve of, as their behavior is totally controlled by the programmers of the game in question.[83] It shows that the digital cloning as described by Virilio and Baudrillard is already taking place. However, Virilio talks about the cloning process with regard to telepresence, where this clone is used to project the user's manipulations into another environment. With regard to the electronic cloning described here, there is no control. To make matters worse, from an actor's point of view, his clone is being controlled by other people, being the players of the game. The concept of the virtual actor was explored in the film *Sim0ne* [Sic]. In this movie, a movie director played by Al Pacino employs a computer program in order to create a lifelike actress. The premise of the movie is that the American public is unable to cope with the fact that something like a virtual actress exists. The movie shows that viewers would like to believe in what they see to be real. It is ironic that their adoration and view of the actress comes from a movie screen, which is a virtual reality in itself. A similar situation already occurred in the movie *The Crow*. However, unlike the movie *Sim0ne*, which tackled the concept of virtual actors, this movie actually employed the concept in the real world. During filming, the lead actor was fatally injured, leaving an unfinished film. By using computer animation and scenes already shot, missing scenes were enhanced so that it looked like the original actor still played his part. When the movie was released, the audience was looking at the performance of the real actor during some scenes, while his digital clone was in some other scenes.

Clones are essentially images. In normal telepresence circumstances, the clone is used to be the proxy of the user in a remote location. But a true clone operates independently from the original. Speaking from a technological viewpoint, this is not yet truly possible. Although this method of digital cloning exists in videogames and motion

---

[83] Tom Loftus, "Stars seek more control over video games", *MSNBC Interactive* (12 March, 2004). http://msnbc.msn.com/id/4223361/

pictures, they do not operate on their own, as they can only behave according to the instructions given to them by their programmers or directors. We could define them as proxy clones. Although Virilio talks about the possibility of creating clones through the technical means of telepresence, these clones will never be true clones. First, graphical representation has not progressed yet to the point that perfect visual clones can be created. After all, the digital proxy is still an iconic representation of the original subject. Although the Eyetoy has pioneered the advance of the perfect clone, this representation is always limited to the viewpoint of the camera filming the player. A full three-dimensional clone cannot be achieved. The Digimask technology does enable a three-dimensional entity in the virtual space, but this entity remains an iconic interpretation of the user. Secondly, and more importantly, Virilio's clones are a result of telepresence, as they function as the remote proxy of a user. That means that there is no independence, just a temporary and virtual clone controlled by a user. What is left, however, is the iconic representation of the user. When we transpose this idea to the technological telepresent clone, it is no wonder that the polymorphic clone has come into existence. Due to technological means, each telepresent clone has the same attributes and features by default, which runs parallel to the essence of cloning. It is the presentation and value of each clone which enables it to distinguish itself from its peers. With telepresence technologies becoming more commonplace, it is only natural that users want to distinguish themselves. In doing so, they become more real, as they give meaning to the clone by creating a uniqueness. Furthermore, by adding more and more intrinsic values, they are actually creating an artificial sign system for their clone. This sign system applies to this specific clone, creating a situation where the sign overtakes any referent. What used to be a simulation becomes, due to the creation of artificial intrinsic referents, a unique entity, which is also hyperreal. On the other hand, how is cloning possible when there is no verification for any reality as Baudrillard states? That means that cloning gives meaning to any reality, since it leads to verification of the existence of the original. But since the concept of original and copy disappear after a cloning process, it needs the aforementioned addition of values to be relevant and unique.

Chapter 4: The Videogame and American Society

The conceptual ideas behind videogames and artificial environments have more effect on American society than most people realize. The whole concept of creating virtual or hyperreal objects and environments, combined with the ability to copy these entities have been an accepted part of American culture for some time now.

Baudrillard's concept of the simulation and the hyperreal was expanded in his book *America*. In this work, he describes the United States as a perfect utopia achieved, since, in his reasoning, the American society is "a utopia which has behaved from the very beginning as though it were already achieved."[84] Since the American society has no referent, Baudrillard argues that the whole of this society is a simulation of the third order, a hyperreality. As this society has no context in a sociological or historical sense, it resides in the perpetual present.[85] This hyperreal society has been so purposefully created, it has even been said that the American culture has been super-imposed upon the society.[86] If society as whole is a hyperreality, it is only natural that its inhabitants are culturally affected by this state. As a result, the American people are unable to see imagery or signs in any context as well. Images are taken at face value, since they are perceived as hyperreal signs without any connection to any signified. This leads to the situation that imagery is not being questioned for its validity. In American society, imagery equals reality, since they are all part of the hyperreality.[87] This view on imagery and reality has several consequences. If images are seen as truth, then the media will make use of this concept by employing imagery as the prime carrier of their messages. One only has to take a look at the American media to see that the image has penetrated the fields of communication in increasing ways. Baudrillard already stated that in America, the image alone counts.[88] A quick comparison of different media types already points this out. The United States has been the world's largest supplier of motion pictures, television shows, comic books, and videogames for the past century. All these media types use imagery as the principal communication device. This emphasis on image is also apparent in the American games industry. When Microsoft was developing its Xbox console, one of the major decisions was that it should have the best graphical capability available, aiming for the nearest approximation to realism possible.[89] Slow sales in Japan, traditionally the benchmark of the industry, show that the emphasis on graphical prowess, or the importance of the image, does not have to be a success outside American borders.

The application of imagery in the field of marketing also originated in the United States. This approach to advertising should not be discounted, as it represents the core of the American hyperreal situation. At first, pictures in advertisements were used to illustrate the use of a product. Eventually**,** this usage of imagery evolved toward the

---

84 Jean Baudrillard, *America* (London: Verso, 1988), 28.

85 Baudrillard, America, 76.

86 Larry L. Naylor, *American Culture: Myth and Reality of a Culture of Diversity* (Westport: Bergin & Garvey, 1998), 15.

87 Baudrillard, America, 85.

88 Baudrillard, America, 98, 109.

89 Dean Takahishi, Opening *the Xbox: Inside Microsoft's Plan to Unleash an entertainment Revolution* (Roseville: Prima Publishing, 2002), 199.

depiction of situations or persons which were unrelated to the product. By adding artificial values to these hyperreal symbols, products were sold on the basis of the consumer's association of these super-imposed values, also called branding. The Marlboro man is a perfect example of a deliberate hyperreal entity, where the image has taken over the signified. Eventually, even the image disappeared, with the abstraction of the logo as the sole communicator. The commercial message is artificially imposed by the creators. With the proliferation and recognition of logos, the hyperreal situation in the American consumer society is complete. The logo or icon is a sign, without any referent whatsoever, and is solely judged on the artificial values it has super-imposed. By skillfully educating the consumer, this unrelated value system becomes attached to the abstraction. As American marketing strategists are the world's leaders in the application of this technique, they can also be considered the most skillful in the creation of the hyperreal. This utilization of imagery can be found in all media, regardless of the nature of the message, with newspapers and television news programs resorting increasingly more to the use of infographics. Authors like Virilio and Baudrillard point out that the abundance of information in modern societies hampers the ability to make a distinction between the real and the virtual.[90] In the case of the American society, we could even state that this inability is further enhanced by the fact that this society itself is a hyperreality. Americans are not able to make this distinction on a subconscious level. Baudrillard adds: "Truth is no longer the reflexive truth of the mirror, but the presented truth through images."[91] Nowhere is this overlap between the real and the virtual more apparent than in the American military. With the increased focus on remote controlled operations, more information than ever is being communicated and mediated through computer screens.[92] The manner in which the feedback of military telepresent operations are presented closely resemble those as used by videogames. It is known that the American military has asked Atari to build a version of the 1980 videogame *Battlezone* for its training purposes.[93] This game simulates a tank battle, seen from the viewpoint of a driver inside a tank. Since the game was produced in 1980 on the Atari VCS videogame console, the representations were very iconic, hardly resembling a real environment. The soldiers using this simulation would have been able to make the distinction between real and virtual, since early tanks were not equipped with electronic input and feedback devices as they are now. As computer capabilities became more advanced, the they also became more utilized. Aside from the fact that occupants of a tank get their input almost exclusively electronically, computer power has progressed to such an extent that the feedback during a training simulation is identical to the real feedback which they would get inside a real tank, conducting real operations. That the military is aware of this level of realism videogames can offer has given rise to an increased use of electronic media in order to present itself more prominently. Recently, the American military has created an online computer game as a method of drawing young males to the recruitment office. This game, *America's Army*, resembles in every

---

90 Jean Baudrillard, *The Vital Illusion* (New York: Columbia University Press, 2000), 78.

91 Jean Baudrillard, *Simulacra and Simulation* (Ann Arbor: University of Michigan Press, 1994), 29.

92 Shenja van der Graaf and David B. Nieborg, "Together We Brand: America's Army," *Level Up: Digital Games Research Conference*, ed. Marinka Copier and Joost Raessens (Utrecht: Utrecht University, 2003),326.

93 Steven Poole, *Trigger Happy: Videogames and the Entertainment Revolution* (New York: Arcade Publishing, 2000), 208.

detail commercial shooting games, giving players the ability to train and fight under the same rules of engagement as American soldiers. The game was available free for download through the internet, and has been downloaded more than two million times.[94] In addition, the 2004 videogame *Full Spectrum Warrior*, casting players in the role of a squad leader conducting military urban operations, was recently adapted for the consumer market, being first developed as a training tool for the military itself. The American military is adamant is its use of simulations in order to train its soldiers, continuously developing new programs. Since consumer hard- and software matches or sometimes surpasses the resources of the military, consumer and military programs often use each other's developments.[95]

Telepresent activities in a virtual environment which has been created to reflect a real one would give the user ample possibilities to acquire new skills. This usage can be found in the different simulators which are being used for different areas of expertise. Training simulators are often used in the case were training with the real equipment would be too costly, like airplanes or military tanks. The same progress in technology that has enabled these professional simulators to create a convincing facsimile of real activities has enabled the consumer to do the same. Professional and consumer software are often related to each other, not only in the capabilities of graphical representation, but also in the skills one can employ and acquire. Jan Simons is under the impression that videogames can be used to learn new skills, but does not believe these games are "not about dramatic experiences, emotional confrontations, or the enabling of catharsis."[96] With videogames employing cinematic conventions to tell their story in the form of small movieclips at certain points during the game, also known as cut-scenes, the threshold for emotional immersion is drastically lowered. Add the fact that the player is active within the environment in the form of his telepresent self, and emotional and dramatic experiences can be achieved. One of the most famous examples is the storyline of the game *Final Fantasy VII*, in which the murder of an innocent character prompted a flood of player responses on the internet. The same can be seen with the GTA series. The storyline has of these games been elaborately scripted. But these storylines are seen differently then when they would be employed in other fictional works, like movies or literature. The volatile reaction of the Haitian community in New York to the spoken words of one of the videogame characters in GTA: VC, being "kill the Haitians," points toward a conviction that videogames are considered a different breed than other fictional works.[97] Recently, digital art projects regarding the terrorist attacks on the World Trade Center have slowly started to see the light.[98] These projects depict the details of the

---

[94] Mia Consalvo, "It's no videogame: news commentary and the second Gulf War," *Level Up: Digital Games Research Conference*, ed. Marinka Copier and Joost Raessens (Utrecht: Utrecht University, 2003), 321.

[95] Michael Soller, "Be all that you can be – virtually," *LATimes.com* (Los Angeles: Los Angeles Times, July 11, 2004), http://www.latimes.com/technology/la-ca-soller11jul11,1,878467.story?coll=la-headlines-technology

[96] Jan Simons, *Interface en Cyberspace: Inleiding in de nieuwe Media* (Amsterdam: Amsterdam University Press, 2002), 197.

[97] NBC 6 News Team, "Haitian, Cuban Leaders Denounce 'Grand Theft Auto'," *NBC6 News* (December 15, 2003), http://www.nbc6.net/entertainment/2706043/detail.html

[98] Jeff Cole, Mike Caloud and John Brennan, eds., "9-11 survivor," *kinematic.org* (2003), http://www.kinematic.org/; Brodaroda Software, *Taleban Attack* (2002), http://digilander.libero.it/brodarodasoft/taleban.htm

disaster in a videogame like environment. The project *9-11 survivor* had the user gain control of a victim, trapped inside one of the WTC buildings with the goal to escape. The catch was that escape was not always possible, confronting the user with a hopeless situation where death was inevitable. The project eventually had to be cancelled due to the negative press the developers were exposed to, showing that American society cannot accept the videogame environment as a platform for other messages than those concerning entertainment. [99]

The combination of cinematic conventions to invoke emotion, coupled with realistically simulated worlds, and the ability to interact within this world provide a powerful blend. Virilio describes virtual reality as a final relief of reality itself, as "a virtual reality that offers every one of us the considerable advantage of being both more "real" than imagination and more easily controlled than concrete reality."[100] This statement also points toward the assumption that simulations can be perceived to be more real due to the enhanced value they are imbued with. After the Columbine highschool massacre, the media was quick to point out that the killers had been playing the shooting game *Doom* quite frequently. They allegedly recreated the game so it would display the insides of their own school, digitally simulating their own real environment.[101] Inside this simulation, they would play and shoot anything that moved. Although scientific studies have shown no direct relationship between virtual and real violence, the fact remains that modern videogames can be seen as simulators, since they are both provide for the same acquisition of skill.[102] If the military uses the software to train their recruits the basics of urban combat, then why would the same software be considered applicable as a consumer product? The user is not interacting with the environment herself, but she is controlling a clone, which is infused with values which do not apply to the owner. An early American study in 1984 found that videogames, albeit primitive in their representational capabilities at the time, do have a certain influence on children. Aside from the ability of electronic media to teach children new skills, it also acquainted them with specific iconic imagery.[103] In other words, these children have learned to identify themselves with icons, and have learned to be telepresent inside a virtual environment. These children are now adults, and have the ability to relate to virtual environments more naturally. Given the relative widespread userbase of videogame consoles during that time, the number of these adults might be more prominent then most people realize. This sentiment is shared by Mark Pesce, who sees these developments as the birth of new culture, which is traditionally being discredited by an older generation.[104] Perhaps we should see Virilio's statements about perceptual disorder from this perspective.[105] Due to the overabundance of imagery,

---

99 Matthew Mirapaul, "New game technology lures artists," *International Herald Tribune Online* (September 17, 2003), http://www.iht.com/articles/110256.html

100 Paul Virilio, *Open Sky* (Verso: London, 1997), 66.

101 David Kushner, *Masters of Doom: how two guys created an empire and transformed pop culture* (New York: Random House, 2003), 263.

102 Nick Wadhams, "Research divided on impact of games*," MSNBC News* (The Associated Press, July 04, 2004), http://www.msnbc.msn.com/id/5351971/

103 Patricia Marks Greenfield Beeldbuis kinderen: over de effecten van televisie, computers en computerspelen (Nijkerk: Uitgeverij Intro,1986), 83.

104 Mark Pesce, The Playful World: How technology is transforming our imagination (Ballantine Books: New York, 2000), 272.

105 Virilio, Open Sky, 91.

Virilio argues that due to this disorder, the line between the real and the imaginary begins to blur. But given the fact that at least two generations have grown up with this image saturation, he forces himself into the role of the elder and therefore obsolete generation. American youth and pop culture has become increasingly centered on iconic images through logos, morphologic cloning capabilities, and associated image values. Although it might be too presumptuous to claim that videogames are the sole catalyst of this trend, it is true that this new media type enabled its users to get acquainted with the existence and capabilities of telepresent iconic clones.

Although the opinions concerning the extent to which users are being influenced by virtual environments differ by author, they agree that virtual environments offer a measure of freedom real environments cannot offer. Alison McMahan states that immersion, the mental act of being telepresent, implies that the user is forced to experiment, since he needs to explore his surroundings.[106] This indicates that a user will try to interact with his environments by definition. The degree of this interaction cannot be accurately measured. Some users will undoubtedly acquire new skills, as they are able to practice new ones without the fear of failure or retaliation. Simons is convinced that these skills are practiced due to the non-realistic rendition of the environment, meaning that although videogames may feature realistic-looking environments, the distinctive non-realistic elements, like changeable camera angles and options to retry after any failure, make it possible to keep trying.[107] Martti Lahti calls this "…utopian sense of liberation from real-life spatiotemporal constraints."[108] This sense of liberation becomes stronger as the simulation resembles a real environment. Freedom in a fictional setting is not really freedom at all, but an experience to interact with a new environment. When the simulation looks like a known environment, like in the GTA series, this freedom can be translated to the experience of activities which would otherwise be morally questionable. Any social restraints would not apply, and the player is free of any institutional reign.[109] The GTA series give a sense of freedom which was unprecedented before. As a simulation has more inherent value, it could therefore be considered more real.

Videogames give players to ability to enter simulated environments. The rapid success of the Massively Multi Player Online Role Playing games and the continuous application of virtual reality in training simulations of all kinds show that American society has readily accepted the concepts of the artificial space. This might be explained by the notion that the American society itself is a hyperreal model itself. Simulated environments of different orders already exist in the American landscape. Baudrillard points toward Disneyland as the ultimate example of a place which is build to enhance the status of the real America. It his mind, the theme park is a simulation of a hyper-reality. By deliberately being imaginary, it tries at the same time to be a reflection of how America should be. This place has the purpose of enhancing the reality of America, a "miniaturized pleasure of real America."[110] In other words: "Disneyland is not a

---

106 Alison McMahan , "Immersion, Engagement, and Presence," *The Video Game Theory Reader.* Edited by Mark J. P. Wolf and Bernard Perron. (New York: Routledge, 2003), 68.

107 Simons, Interface en Cyberspace, 306.

108 Martti Lahti, "As We Become Machines: Corporealized Pleasures in Video Games," *The Video Game Theory Reader.* Edited by Mark J. P. Wolf and Bernard Perron. (New York: Routledge, 2003), 163.

109 Paul Virilio*, Ground Zero* (London: Verso, 2002), 4.

110 Baudrillard, Simulacra and Simulation, 12.

metaphor of America, but America is a metaphor of Disneyland."[111] It actually holds more inherent value than American society itself. The same could be said for the recreation of famous urban landmarks in Las Vegas. Hotel New York, for example, features the most famous landmarks of that city all within the confines of a large hotel. The Las Vegas hotels often incorporate large casino areas. As most casinos are specifically tailored to some specific theme, the whole in- and exterior has been styled toward that theme as well. The Paris Las Vegas hotel, for instance, has almost life-size replicas of the Eiffel tower and the Arc de Triomphe outside the hotel. The interior is a simulated French street, including cobblestones, authentic storefronts, fountains, and a painted simulated sky which changes according to the night and day cycle outside. The Venetian hotel has almost perfect recreations of St. Mark's Square, Campanile Tower, the Doge's Palace and the Rialto Bridge. Real gondolas ferry passengers to their destination inside the hotel, which has a small stream running through its artificial streets. Other Las Vegas hotels use similar themes, like Caesar's Palace, which has a Roman theme. These exhibitions of simulation are visited by millions of people annually, who essentially are visiting an artificial model. Culture, architecture, and other unique features associated with specific international locations are being displayed as entertainment. But since these models, or simulations, have a value referent, they are considered to be more unique than the original sign. After all, a building is just a building, but a model of that building is a recreational achievement. The irony is that the real landmarks have probably less inherent entertainment value, since they are artifacts, while the models have been build with the specific goal of entertainment in mind. The simulation of some of these environments is very thorough. The recreation of the French and Venetian streets from the example above is such, that from a subconscious point of view, the distinction between real and virtual is hard to make. As the sensory feedback approximates reality at an alarming rate, only the logical notion that one is inside a simulation separates truth from fiction.

This example of a simulated physical environment is not unique within the American landscape. The last decade has seen an enormous increase in gated communities.[112] These housing projects are closed-off suburbs with security guards and barred gates, where its inhabitants can live in the knowledge that they are safe. As casual drivers are not permitted to enter these grounds, there is a sense of security. With facilities and other amenities catered for, the inhabitants do not need to leave the grounds. By excluding the outside world, and withdrawing in their own environments created by architects, these inhabitants live inside an environment which is essentially a simulation. Even more important, they have given up their freedom, as these communities can only be lived in when one adheres to certain standards, since no space in the community is considered public. So even though the acquisition of a house might be considered a private property, the area in which it is located is not. Some of these communities have even demanded a special tax treatment, citing that they need not pay for communal services since they do not need any. The comparison with medieval city-states is not a great mental leap to make. But even these gates communities pale in

---

111 Neil Gabler, *Life:The Movie: How Entertainment Conquered Reality* (New York: Vintage Books, 1998), 213.

112 Renaud Le Goix, "Fulbright Scholar Examines Gated Communities in Southern California," *UCLA International Institute* (August 8, 2003). http://www.international.ucla.edu/article.asp?parentid=4664

comparison with the town of Celebration, Florida, which can be considered the epitome of the virtual urban reality. This town was build by the Disney Corporation to be a reflection of the American suburb of the fifties, and tries to recreate the ideal of the wholesomeness of the suburban nuclear family. Celebration is an idealized re-creation of the livable America that existed before mass commercialization.[113] Adopting the same policies as the gated communities, its inhabitants also have to sign a contract detailing their behavioral standards. Not only has their environment become artificial and simulated, even their lives are recreated according to some ideal. Naomi Klein follows Baudrillard line of reasoning when she describes it: "Disney has achieved the ultimate goal of lifestyle branding: for the brand to become life itself."[114] But while the gated communities are simulated environments infused with the value ideal of safety, and are being built according as such, Celebration has been built according ideals which reflect what the American culture should be, giving it a much deeper meaning. With every detail of their environment planned controlled, these inhabitants literally live in a virtual reality. It is ironic that this corporate owned living environment is probably the only American community which has not been invaded by advertising, since it would detract from the physical image the town tries to project.

Even the American concept of the mall or superstore could be considered a virtual environment. The American shopping mall is becoming the quintessential reflection of the American desire to turn to an alternate reality, prompting both Klein and Simons to pronounce them non-places.[115] American malls are large enclosed structures, stocked with entertainment facilities and retail outlets. Superstores, like the large Wal-Mart stores, have incorporated the same facilities, albeit under one brand name. But they both serve the same purpose: to create a self-sustaining environment without the need to go out into the real world. Hence, both kinds of structures are from the outside often very bland, since most architectural attention needs to be spent on the inside of the structure. In most of them, no outside view in the form of windows is catered for, with controlled lighting and climate control regulated to perfection. One literally walks into another reality, as any reference to an outside or other reality is negated. Aside from this aspect, they are also uniform in atmosphere and presentation. Since most malls carry the same retail chains, and superstores are from the same chain, a shopper is greeted with the same iconography, the same atmosphere, and the same facilities irregardless of the actual location of the building. The environments are clones of each other, ready to be copied like digital assets. Even large office buildings share the same attributes, with climate control, air conditioning, and artificial lighting. There is no sense of location; no reference point of where you are; you are inside the world of an office complex. From leaving work to traveling to the shopping mall, the real world becomes a thoroughfare for the traveling from one virtual location to the next.

There are more commonalities between physical simulated environments and digitally simulated environments than one might think. The first one is that both environments are artificial on purpose. Both kinds are created to form a world on their own, and have been meticulously designed by outside planners. Changes in these environments are usually very hard to accomplish as they detract from the idealistic

---

113 Noami Klein, *No Logo* (London: Flamingo, 2000), 155.
114 Ibid., 155.
115 Ibid., 99. Simons, Interface en Cyberspace, 270.

image from which they were created. Secondly, these environments do not need a reference point to any reality. More and more entertainment complexes, shopping malls, factories, and offices do not give any indication of a world outside the environment the visitor is currently in. These physical manifestations have their own lighting, climate control, and often lack windows. The outside world could simply not be there. To enhance this aspect, facilities are often in abundance, diminishing the need to leave the environment. Virtual environments have the same facilitators, without any distance link to the physical world, save for the necessities of the physical body. Finally, when one considers that the American society is a hyperreality on its own, these simulations of a simulation have a referent in the form of the value which is projected unto them. The result is that they are more real than any hyperreality. Although one could argue that the logical realization of being inside such a simulated environment negates any associated value, it is the willingness to immerse oneself in the simulation which has the upper hand. In videogames, photo-realism is not necessary for immersion.[116] This could also apply to other types of simulations, where a facsimile of reality gives sufficient sensory input for a person to immerse oneself.

It seems that the conquest of space has been raging over multiple environments. When the first settlers came to the New World that was America, the physical space was both an obstacle and an opportunity. In this sense, it shaped the pioneering sense of these early settlers which would become Americans. Starting out from the East coast, they trekked westwards, always to be confronted with new lands to cultivate and populate. The Pacific Ocean was the first real barrier they ever encountered, ending their trek toward the West. This mindset of ever seeing new horizons, and therefore new opportunities, still resides in the American central consciousness. The physical open frontier gave emergence to a certain collective ideal, which we could call a more spiritual open frontier. All these vast expanses held potential opportunities. This constant influence of wide open space, combined with the ability and the will to interpret this as a potential opportunity has created a mindset unique to the American people: "Spirit of enterprise and endurance; plus curiosity toward modes and manners beyond one's own personal experience."[117] The mindset of a perpetual curiosity is one of the factors in the success of the American society. The drive to create something new, to go beyond the existing boundaries, is a trait this society has embraced. When the physical space was conquered, a new frontier emerged. With the emergence of the telepresence ability, through telephones and computer networks, distance was the next frontier to fall. When distance has been negated, the factor of time becomes more prominent.[118] Through the progressing abilities of telepresence, the American utopia is turning toward a chronotopia, a society where the factor of time will be negated as well, as people will be able to be instantaneously project themselves.[119] However, there is a paradox occurring when it comes to videogames. Since technology has progressed to such a point that computer- and videogames are capable of generating simulated worlds which become

---

116 Mark J.P. Wolf , "Abstraction in the video game," *The Video Game Theory Reader*, ed. Mark J. P. Wolf and Bernard Perron. (New York: Routledge, 2003). 68.

117 Otto Newman and Richard de Zoysa, *The American Dream in the Information Age* (London: MacMillan Press Ltd., 1999), 40.

118 Virilio, Open Sky, 20.

119 John Armitage and Joanne Roberts, "Chronotopia," *Living with Cyberspace: Technology and Society in the 21th Century*, ed. John Armitage and Joanne Roberts (Continuum: New York, 2002), 43.

larger as a result of those progressions, the factor of simulated distance becomes increasingly more important. For instance, the GTA series prides itself on the fact that the game features a complete city for the player to explore. As the game requires the player to move from one location to the next, distance becomes a factor. The same can be seen in the simulated worlds of the MMORPGs, as these games feature vast spaces of wilderness and are populated with more than a few cities. Traveling from one location to the next involves a lot of traveling in this digital environment. This time-consuming negation of virtual distances is conducted in real time, with some games even requiring a two-hour period of travel to reach a location. The paradox is that with telepresence, distance can be eliminated. But due to the creation of large virtual environments, the factor of distance has returned. Recognizing the time investment of having to travel in virtual environments, developers of such worlds have enabled its players to talk to each other across vast virtual distances, giving them telepresent abilities inside a telepresent situation. With telecommunication devices available in abundance, and multiple global communications networks in existence, Virilio's vision of the perpetual telepresent citizen may well hold true, albeit with less emphasis on tactile stimuli than he originally envisioned. Furthermore, if we hold true to the idea that telepresence can also be established in virtual locations, the physical body as we know it might become less important in society, as Virilio predicted. In his ground-breaking 2001 research document regarding the economics of the online society of *Everquest*, Edward Castronova ends with a vision that virtual environments might well replace real environments, since the facilities for social and work-related interaction are present in over-abundance, making travel obsolete for these purposes.[120] By combining the facilities offered by telepresence with the ability for multiple persons to simultaneously interact with each other, distance is a factor which completely disappears from the equation of having to organize a meeting between several persons. The only sense of distance which still matters is the artificial sense of distance in the virtual environment, also called the diegetic world or electrospace.[121] This increased emphasis on electrospace in favor of real space could mean the start of a renewed appreciation of time and distance. Since people will be able to project their senses in real-time, the actual dimension of real space will falter. Furthermore, as space in virtual environments is but a data object, it becomes a mediatype in itself.[122] The journey will end, and with it, the actual measure of distance as a factor in the structuring of human live: "Urbanization of space makes way to urbanization of time."[123] After the urbanization of space and time through telepresence, after the urbanization of the mental space through branding and the urbanization of privacy through the making of one's own life into entertainment, it seems that the urbanization of the electrospace has begun.[124] The networking capabilities

---

120 Edward Castronova, "Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier," *CESifo Working Paper Series No. 618* (December 2001). http://ssrn.com/abstract=294828

121 Phil Graham, "Space and Cyberspace; on the enclosure of consciousness," *Living with Cyberspace Technology and Society in the 21th Century*, ed. John Armitage and Joanne Robert. (Continuum: New York, 2002), 157.

122 Lev Manovich, *The Language of New Media* (Cambridge: The MIT Press, 2001), 251.

123 Virilio, Open Sky, 20.

124 Virilio, Open Sky, 20. Klein, No Logo, 66. Gabler, Life:The Movie, 241. Graham, Space and Cyberspace, 157.

of computers and the proliferation of the internet enabled more people to collectively set out in search of new and digital lands. The United States has always been at the forefront of adopting these new environments. From imaginary gameworlds as found in role-playing games to elaborate digital realities, America has been the nation which embraced the concept of simulated environments, propelling the theme further with each generation, through the combination of technological innovations, networking capabilities, and a pioneering spirit. Baudrillard finds that "Every society is looking to restore the real," and American society tries to do so by looking for environments that have more inherent values, which to them can be considered more real.[125] Simulated environments, whether physical or digital, are the safe havens for the American society. Baudrillard attributes a lot of the American utopia to the space that the vast land gives its inhabitants. The desert is endless, and gives the ability to create any reality that mankind craves for. This desert, in its vastness and unknown, defines reality, for it gives purpose to the patches of creation that dots this landscape. In the diegetic world of Vice City, this landscape can be viewed from the boundaries of the city. Vice City is an island, and the vastness of the desert is translated to the endless horizon of the ocean. Although a definite boundary of the game world, the illusion of a world behind these horizons is created by showing planes and ships traveling toward other places of civilization behind the horizons. It is through this vast emptiness that Vice City gets its purpose, as it invokes the feeling of centrality, the hub of life and civilization.

The recent success of commercial virtual environments in the form of Massively Multi Player Online Role Playing Games, or MMORPGs, has given rise to a new discussion surrounding the rights of virtual ownership, rights, and legislation. These online worlds attract hundreds of thousand of visitors per day, who pay for their right to enter a persistent virtual domain. Due to their internet connectivity, MMORPGs used to be the exclusive domain of Personal Computers. Home consoles used to lack this ability, which bars the possibility to meet other players on-line. There have been examples of console games which have tried similar formats, with the game *Animal Crossing* being one prime example. In this game, players are part of a village, where the other inhabitants are computer controlled characters. The developer, Nintendo, created some mechanisms to enable cross-pollination between villages of different players, but these efforts lacked the abilities that internet connectivity could offer. Recently, console manufacturers have made great progress with regard to internet connectivity. Microsoft's Xbox and Sony's Playstation2 now have the ability to go online through a broadband connection, and the videogame *Everquest* has already been modified to run on a Playstation2, with the ability to meet other people in the game through the internet. These efforts have only recently been introduced (2003/2004). One could still apply the reasoning that shared virtual environments are mostly exclusive to the Personal Computer. Virtual worlds as offered by consoles are still mostly a single player affair, but this situation can change rapidly.

With these online worlds being so popular among American computer users, it is no wonder that these games have hosted a number of real-world spin-off effects. Most of these effects concern the rights of virtual persons and goods. One could wonder what the rights of players are in these worlds. After all, a player is a paying subscriber to a service. The service in question is in this case the ability to start a virtual life in a virtual

---

125 Baudrillard, Simulacra and Simulation, 23.

world. Even if this world mimics reality, it is still corporate owned. This means that although a player may have certain expectations of the way the world should operate, this does not have to be the case. The virtual world is, after all, not a democracy, but a commercially driven one. Recently, several players of the medieval fantasy game *Everquest* became dissatisfied when the owning company, Sony Online entertainment, decided to alter some of their avatar's abilities, meaning they would be less efficient when playing the game. As a result, they called for a strike. Although the strike was not enforced (Sony Online Entertainment decided to address the issues), the signal was clear. The fact that players in a virtual world decided to call a strike as a result of a measure taken by the corporate owner of the virtual world was a new phenomenon. Another issue occurred in the game *The Sims Online*. In this game, players have to create virtual lives for their avatars, with the game being set in a "realistic" late 20th century American suburb. Within this environment, players use their avatars to create alternate lives. The lives of these "people" were chronicled on an independent website which featured articles about the gameworld and interviews with players. The writer was a professor of philosophy and linguistics at the University of Michigan, Peter Ludlow, who played the game for recreational means. Since he was writing independently from the company which was owner of this virtual world, he could write stories about subjects as he saw fit. When he wrote a story about a real world minor that was running a virtual brothel, employing other minors to perform cybersex services, the owning company, Electronic Arts, responded. The journalist's subscription was cancelled, prohibiting him from entering the world ever again, and losing all of his virtual assets.[126] This case illustrates the difference between real and virtual worlds. The writer expected his real-world rights of free speech to be applicable inside this virtual world. But since this virtual world is a commercial enterprise, Electronic Arts could make decisions based on the user agreement which every players agrees to. Under real world laws, it would be possible for a player to try to fight this decision in civil court, using the user agreement as the legal binding contract between seller and consumer. However, this is highly unlikely. It does, however, points to a situation were virtual rights are non-existent, and are only bound by a user agreement. In this case, a player expected that his right to freedom of speech applied to his virtual life as well. Other problems appear as well, as the existence of a Mob ring in *The Sims Online* reveals. This gang of players can be hired for virtual money to harass other players. This is being done by tagging a certain player with so many negative comments, that other players have no intention to deal or socialize with her on account of her bad reputation. In essence, the targeted player is being forced into social isolation.[127]

That companies are aware of the issue of avatar and virtual property rights, illustrates the following example. In the game *Second Life*, the players are able to construct their own houses and belongings in any way their imagination allows. The game is structured in such a way, that players are able to create a virtual dream world by creating buildings which seems like artist's expressions. The company behind this world,

---

[126] Farhad Manjoo, "Raking muck in "The Sims Online"," *Salon.com* (12 December 12, 2003). http://www.salon.com/tech/feature/2003/12/12/sims_online_newspaper/index_np.html

[127] Hiawatha Bray, "Justice has its price in Sim world," *Boston.com* (Boston: Globe Newspaper Company, 14 January 2004). http://www.boston.com/news/globe/living/articles/2004/01/14/justice_has_its_price_in_sim_world/

Linden Labs, has recently granted each player individual intellectual property rights to their own creations. This move is surprising, since these creations are usually owned by the company who created the world, covered by the user agreement. However, since players make their own creations in this world, Linden Labs would have been very vulnerable to potential lawsuits if they ever were to claim ownership of these creations. Even commercialism is creeping into these worlds, as in *Second Life*, a virtual plot of land was bought by an advertising agency. Although commercialism and sponsorships are a normal part of today's gameworlds, denizens of the *Second Life* world are concerned that real world commercialism and advertising will start to appear in their world as well. The example signals the slow but increasing influence of real world operations into virtual worlds. Although this trend is one which cannot be halted for commercial reasons, the fact that unclear or no legislation surrounding these issues exists could be a potential problem in the future. More worrisome are the financial gains these worlds are able to generate. Edward Castronova found in 2001 that the world of *Everquest*, Norrath, was ranked as the 77th richest country in the world, outranking China and India.[128] His findings were based on the fact that players sell their avatars and virtual goods through online websites for real world dollars. Although Castronova's research focused on *Everquest* alone, the selling of virtual personas and assets does not exclusively belong to this particular game. Apparently, the sale of virtual goods can yield so much profit, that recent stories have emerged of American people whose sole income depends on it. It is even known that for a short time, a Mexican sweatshop existed where low-income workers were expected to play the game *Dark Age of Camelot* all day. The virtual assets they generated were sold in America for large profits.[129]

Recently, Harvard University organized a legal symposium debating the rights of virtual inhabitants. From a legal and philosophical point of view, one can argue whether an avatar has the same rights as his or her owner/player. If so, does that also mean that these avatars have judicial restrictions as well? How binding is the player agreement they have to adhere to? Can this be judicially enforced? In the above example, a 16 year old boy was running a virtual brothel in the Sims Online, employing several girls of minor age as his prostitutes. If someone has a legal right to run a virtual brothel in a videogame, can or should an age-limit be enforced? These questions are now finding their way through American society, and can be extended to other forms of telepresence as well. When one creates an avatar to be displayed on an internet site, who has the rights to this creation? If a consumer takes a digital picture with his camera, to what extent can this be altered and copied to be considered part of the free intellectual domain? Images, virtual goods, and avatars are only data objects. A specific collection of certain data objects combined can form an entity which becomes a sign. This sign could be anything, but stands on its own, since there is no context, moving it into the realm of the hyperreal. With more American citizens passing the borders of the digital lands, American society finds itself on the threshold of a new era, in which they have to acknowledge the existence of the hyperreal and create a whole new system of legislation surrounding this hyperreality.

---

128 Castronova, Virtual Worlds.

129 Julian Dibbell, "Serfing the Web: Black Snow Interactive and the World's First Virtual Sweat Shop," *Scribble, Scribble, Scribble* (January, 2003). http://www.juliandibbell.com/texts/blacksnow.html

Chapter 5: Conclusion

Videogames are not capable of perfect photo-realistic presentation, although they are able to approximate it to some extent. The first videogames which experimented with this amount of realism became the subjects of the 1993 congressional hearings. After these hearings, it seems that the same techniques have not been used again. Although graphical representation has become better, realistic games are usually rated according to the behavior of the artificial intelligence and the manifestation of the physical environment. The aim for photorealistic representation seems to have been reduced. Although the level of graphical sophistication is still progressing, and modern videogames seem like an approximation of reality, the representation still looks like an artificial world. In this regard, the game *Mortal Kombat*, which is nearly ten years old, displays more photo-realistic imagery than the videogames of today. It would be too much of an assumption to claim that the commotion surrounding the hearings has deterred videogame publishers from pursuing photorealistic graphics, but the fact remains that the overwhelming majority of videogames do not even approach the graphical effect that *Mortal Kombat* tried to achieve. Even the most modern videogames are still distinctively discernable as videogames.

Then how can America's reaction toward GTA: III en GTA: VC be explained? Both games do not even approach the semblance to photorealism, even looking rather crude. Although other videogames are more realistic in their representation and degree of violence, they attract less public attention than the aforementioned games. The public reaction regarding the GTA series consists mainly of biased sentiments regarding the level of violence. GTA: III en GTA: VC offer an open game experience set in a fictional American city. Although the cities are fictional, every American will recognize the urban settings of New York and Miami respectively. As has been stated, the diegetic world of a videogame is a simulation, with referents necessary to convey the conventions of interacting with that environment. But the actual appearance of the environment can be considered hyperreal. A passable doorway in a game always has to be recognizable as a doorway to the player, but the appearance can differ. This appearance is part of the hyperreal, as it has no signified, especially in the more exotic fictional settings. A hyperreality is a sign which has lost its referent, as the sign has become all-encompassing. Objects in videogames can be considered hyperreal, as they have become mere signs and symbols. Representation is merely iconic. If we consider these objects to be hyperreal, then activities bound to these objects can be considered hyperreal too. If a player in a videogame picks up an apple, the whole activity merely becomes a symbol. Any contextual reference being associated with that activity can only be applied to the diegetic world of the videogame. It could be argued that, when hyperreality refers to another hyperreality, it automatically gains a referent, giving up its hyperreal status.

It is this paradox that GTA: III and GTA: VC have to deal with in their depiction of society. Since the objects and activities of their respective diegetic worlds reflect the American society, American players will desymbolize the sign by creating referents of the videogame entities. In other words, the hyperreal objects of the videogame lose their hyperreal status, since a referent is being created for them, even though the referent is

hyperreal itself. The sign loses its status as being self-referential, and becomes a simulation of the first order. This process can also be applied to activities in the videogame. Since the GTA series reflect American society in more than one way, the activities of violence and the process of the accumulation of wealth become de-symbolized as well, losing their hyperreal status. The signs get demoted to representations, as the relationship with the referent is restored. The uniqueness of the GTA series is the ability to enter a virtual environment which is a recognizable facsimile of American society, combined with a freedom of action which is not hampered by any moral constraints. This uniqueness seems to be the basis on which the whole discussion is founded, since the level of realistic representation is less than other games. That would mean that the actual existence of virtual environments, and the ability to interact with them, is at the core of the issue.

At the same time, we can identify several parallel trends occurring in American society. One trend is an emergence of technological advances in the field of digital cloning and the use of avatars in digital environments. Although iconic characters like Mario are still present, and have a strong following, the trend of avatar modification is strongly visible. Especially in Massive Multiplayer Online Role Playing Games, where players meet other players online in a persistent, never-ending virtual world, there is a strong urge to create uniqueness for the avatar in order to stand out from the crowd. Game developers have responded by giving players increasingly extensive control over their appearance. This control extends to even the smallest of details, from placement of the eyes to the color of optional earrings. Cloning thus becomes an extension of a player's actions, rather than of his appearance. In addition, the polymorphic abilities of the clone enable the player to create multiple hyperreal entities, infusing each one with a different value system. Furthermore, the increased use of telepresence through new communication devices will see a proliferation of the use of technological clones. As these new devices give the ability to present a user as an iconic interpretation, users will make their presence known through iconic avatars and anonymous callsigns or nicknames. Like the superheroes in comic books, users have multiple identities, which they express through icons, imagery, and codenames. The digital clone can morph into several different aspects, and the human form no longer has to be synonymous with a real person or personality. Reality does not have to conform to the physical representation. Advances in communication and telepresence technology have made polymorphy, which is the ability to change ones' shape into another one, a feasible occurrence. One can wonder whether this is a new phenomenon exclusively brought about by these new facilities. Don Ihde considers this assumption of multiple forms more a revival than an innovation, since the concept of transmutation or metamorphosis already existed in pre-modern times.[130] In the history of mankind, the concept of polymorphy has always been present in religion, mythology, and folktales. If we look at comic books, motion pictures, and television shows, this concept has been utilized in modern times as well. With digital communicative possibilities at our fingertips, the polymorphic clone will be increasingly used in telepresent activities, whether in real or virtual environments. In addition of questioning the validity of imagery, we will eventually start to question the validity of the identity of users engaged in telepresence. Just as the verification of telepresent feedback is non-verifiable, there is no certain

[130] Don Ihde, *Bodies in Technology* (Minneapolis: University of Minnesota Press, 2002), 12.

method of verifying the clone.

Due to the universal adaptation of values associated by icons, and the proliferation of these signs, it could also be stated that America is headed for a society in which the concept of cloning becomes the norm. The existence of retail chains and brand products give rise to a society in which conceptual cloning seems to become commonplace. The rise of the corporate brand in the nineties was a clear indication to that effect. Naomi Klein finds that due to this proliferation of clone branding, a cultural transformation of America has been in progress.[131] Not only is this cloning apparent in the usage of the same logos and store furnishings, but also in the lifestyles of its customers. Branding exists by attaching a given set of values to a certain product name, so that its buyers can associate themselves with those values. Brand logos are literal clones, infused with a certain set of artificial values.[132] When values get adopted by brands, and these brands become the sole proprietor of those values, a clone society becomes apparent, since all values will be the same. The American public is adopting certain values through imagery in the form of brands, as an iconic logo can invoke the same set of ideals as any image. Videogames have contributed to the acceptance of icons by enabling the player to actually feel attached (through telepresence) to iconic representation. With the universal adaptation of these brands come the universal adaptation of associated values, so that even the ideals behind the cloning are being cloned, which Naomi Klein describes as the "colonization of mental space."[133] The concept of cloning has even turned into entertainment, with a recent television show enabling plastic surgery on willing contestants, turning them into look-alikes of famous celebrities.

As America becomes more homogenous due to the proliferation of simulated environment and nationwide branding, either through imagery or architecture, the virtual world of videogames offer more extended environments than can be found in the physical world. Since computer capacity is growing by the year, virtual worlds can be built out of more components than previously thought of, often surpassing American architecture in their offering of unique environments. It is from this physical perspective that virtual environments have surpassed reality.

Another trend is a looming convergence of the simulation and the real, a marriage of digital and real environments. Simulators have to conform to reality, and try to represent it, in order to teach new skills. On the other hand, videogames give an entertainment option in a visual display which has the same capabilities of a simulator. A distinction can only be made on a subjective level, since there are no other factors from which we can discern a difference. Digital simulations do not aim for a total illusion, since they merely address the senses necessary for a suspension of disbelief. But even this sense of disbelief is not always required. Professional training simulators try to mimic the real world in appearance and behavior, but still only to an approximate degree. There is always the realization that the user is telepresent in a simulation. But with the increased use of mediated information, the real is behaving and being presented more like a simulated environment. With airline pilots, who use training simulators as well, this convergence will not happen yet, since they have verification of the real environment during their work. In the case of a tank driver, the convergence has already

---

131 Noami Klein, *No Logo* (London: Flamingo, 2000), 131.

132 Ibid., 21.

133 Ibid., 66.

taken place, as there is no manner of discerning real and virtual truth. Other examples of convergence can be seen as well. The media present digital representations more frequently as the truth. Incidents previously confined to virtual environments spill over to the real world. Communication increasingly is conducted through digital manners. Mankind and machine have become entwined.

There is bound to be an increase in the American public discussion surrounding videogames and the application of virtual environments. As the boundaries of mature themes get even pushed further, the de-symbolization of the hyperreal objects and activities in videogames and simulators will occur more frequently. The popularity of the GTA series already has spawned another sequel, *Grand Theft Auto: San Andreas*. This game is scheduled for an October 2004 release, focusing on the imaginary city of San Andreas, modeled after Los Angeles. With a focus on urban society and street culture, including related criminal activities, this game is bound to provide for another round of discussion surrounding violence in videogames. One can wonder why violent games regarding both Gulf Wars are being ignored in this public discussion. With the wars being depicted as hyperrealities through American media, the subject matter has no context for many Americans. In the end, the GTA series give Americans a glimpse at their own model of a hyperreal society, to which they would be blind otherwise.

The lack of an overall concept to describe the virtual environment leads to an inability to understand and accept this media type. Virtual environments are classified as either videogames or simulators. In this context, simulators are considered virtual environments which try to emulate an existing situation, like training or scientific simulators. This means that entities which reside in the electrospace will be labeled as belonging to either one of the two categories. In the case of professional simulators, American society rightfully expects them to be simulative environments, reflective of reality, in order to train specific skills. At the same time, videogames are labeled as entertainment, and are seen as part of the realm of fiction. But when these two types of virtual environments have the same sign systems, visual presentation, and abilities for telepresence, a distinction can be hard to make. This distinction is further clouded by the existence of flight simulators which are offered as videogames. These entertainment products bear an uncanny resemblance to the professional training simulators, making a distinction even more difficult. The *9-11 Survivor* project illustrates that American society is unable to cope with manifestations in the electrospace as something other then either for entertainment or training purposes. In the case of *9-11 Survivor*, which was an art project, neither label sufficed. But since there is no overall terminology defined, it was being pushed in one of the two categories. This lack of definitive concept has the negative effect that the media type of the virtual environment cannot evolve, since extrapolations or products will always fall in either the entertainment or simulatory categories.

The increasing population of digital environments will present further incidents. Virtual online environments like MMORPGs and chatrooms yield a proliferation of telepresent clones in the form of digital avatars. Even the production and selling of virtual goods is booming, spilling over to the real world in the form of real money. But legislation surrounding the rights of avatars and virtual assets are still undefined. With more Americans taking to the digital lands by day, this is something that needs to be addressed on very short term. When this happens, legislation will have to struggle with

the definition of reality, not only in the sense that assets are non-tangible, but also in the sense of the relationship of the users and his telepresent clone. Furthermore, one could wonder whether a difference should be made between entertainment and simulation. The abilities these telepresent environments give are nearly on par with the abilities of the real world. The difference is that in electrospace, there is no judicial system. To realize Virilio's vision of the ever-telepresent man, the rights of users, their telepresent clones, and their assets have to be described. Without a defining concept of the electrospace in place, this can not happen yet.

American society needs to accept and embrace the existence of virtual environments, as it has been emerging for several decades. Whether these environments come in the form of videogames, online worlds, or professional simulators, the truth is that they have already been integrated. These realms of electrospace, combined with the ability to conduct telepresent operations in or through them, are part of the modern American society. Just like Disneyland can be thought of as a metaphor of that society, virtual environments have the ability to attain a status which has more value than the hyperreal society itself. When that happens, the ever-telepresent man will become reality, a true ghost in the machine.

Bibliography

Aarseth, Espen J. *Cybertext : perspectives on ergodic literature*. Baltimore: Johns Hopkins University Press, 1997.

Abernathy, Bob. "The Values in Video Games," *Religion & ethics Newsweekly*, May 30, 2003, http://www.pbs.org/wnet/religionandethics/week639/cover.html

Alongi, Paul. "Lieberman vows to fight violent video games," *Greenville News*, November 3, 2003, http://greenvilleonline.com/news/2003/11/03/2003110318170.htm

Armitage, John and Joanne Roberts. "Chronotopia," *Living with Cyberspace: Technology and Society in the 21st Century*, edited by John Armitage and Joanne Roberts, 43 Continuum: New York, 2002.

Associated Press. "Lawsuit filed against Sony, Wal-Mart over game linked to shootings," *CNN.com*, October 23, 2003, http://www.cnn.com/2003/LAW/10/22/videogame.lawsuit.ap/index.html

Associated Press. "Suit seeks to ban sales of popular video game," *CNN Online*, Januari 1, 2001, http://www.cnn.com/2004/TECH/fun.games/01/01/videogame.suit.ap/

Baudrillard, Jean. *America*. London: Verso, 1988.

Baudrillard, Jean. *Impossible Exchange*. London: Verso, 2001.

Baudrillard, Jean. *Simulacra and Simulation*. Ann Arbor: University of Michigan Press, 1994.

Baudrillard, Jean. *The Spirit of Terrorism and Requiem for the Twin Towers*. London: Verso, 2002.

Baudrillard, Jean. *The Vital Illusion*. New York: Columbia University Press, 2000.

Bowman, Lisa M. "Judge: Violent-game law stifles speech," *C-Net; News.com*, July 11, 2003, http://news.com.com/2100-1028-1025032.html

Bray, Hiawatha. "Justice has its price in Sim world," *Boston.com*, Boston: Globe Newspaper Company, 14 January 2004, http://www.boston.com/news/globe/living/articles/2004/01/14/justice_has_its_price_in_sim_world/

Byron, Christopher. "Give Back Take-Two," *New York Post Online Edition*, December 29, 2003, http://www.nypost.com/business/14640.htm

Castronova, Edward. "Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier," *CESifo Working Paper Series No. 618*, December 2001, http://ssrn.com/abstract=294828

Cole, Jeff, Mike Caloud and John Brennan, eds. "9-11 survivor," *kinematic.org*, 2003, http://www.kinematic.org/; Brodaroda Software, *Taleban Attack*, 2002, http://digilander.libero.it/brodarodasoft/taleban.htm

Consalvo, Mia, "It's no videogame: news commentary and the second Gulf War," In *Level Up: Digital Games Research Conference*, edited by Marinka Copier and Joost Raessens, 312-322. Utrecht: Utrecht University, 2003.

Copier, Marinka, and Joost Raessens, eds. *Level Up: Digital Games Conference*. Utrecht: Utrecht University, 2003.

Cox, Jack. "'Divine' a game for mind," *The Denver Post*, October 05, 2003, http://www.wilddivine.com/ktml2/images/uploads/PressReleases/den_post_10_03.doc

Cullen, Jim. *The American Dream: A Short History of an Idea That Shaped a Nation.* New York: Oxford University Press, 2003.

Cyber Creations Inc. "Game List," *MMORPG.com* (Cyber Creations Inc.). http://www.mmorpg.com/gamelist.cfm/gameId/0

Der Derian, James, ed. *The Virilio Reader*. Oxford: Blackwell Publishers Ltd., 1998.

Dibbell, Julian. "Serfing the Web: Black Snow Interactive and the World's First Virtual Sweat Shop," *Scribble, Scribble, Scribble*, January, 2003. http://www.juliandibbell.com/texts/blacksnow.html

Engel, James F., Roger D. Blackwell, and Paul W. Miniard, *Consumer Behavior*. Orlando: The Dryden Press, 1990.

English, Merle. "Haitians To Protest Video Game," *NY Newsday*, November 24, 2003, http://www.nynewsday.com/news/education/nyc-game1125,0,325367.story?coll=nyc-manheadlines-education

Entertainment Software Association, "Top Ten Industry Facts," Entertainment Software Association, http://www.theesa.com/pressroom.html

Fahey, Rob. "US software sales top $7 billion for 2003," *Gamesindustry.biz*, January 27, 2004, http://www.gamesindustry.biz/content_page.php?section_name=ret&aid=2879

Federal Trade Commission. *Marketing Violent Entertainment to Children: A Review of Self-Regulation and Industry Practices in the Motion Picture, Music Recording, & Electronic Game Industries*, Washington, D.C.: Federal Trade Commission, 2000, http://www.ftc.gov/reports/violence/vioreport.pdf

Federal Trade Commission. *Marketing Violent Entertainment to Children: A Twenty-One Month Follow-Up Review of Industry Practices in the Motion Picture, Music Recording, &Electronic Game Industries*. Washington, D.C.: Federal Trade Commission, 2002. http://www.ftc.gov/reports/violence/mvecrpt0206.pdf

Federal Trade Commision. "Results of Nationwide Undercover Survey Released," *Federal Trade Commission for the Consumer*, October 14, 2003, http://www.ftc.gov/opa/2003/10/shopper.htm

Federman, Joel. *Rating Sex and Violence in the Media: Media Ratings and Proposals for Reform*. Kaiser Family Foundation, 2002. http://www.kff.org/content/2002/3278/media_ratings_report.pdf

Gabler, Neil. *Life:The Movie: How Entertainment Conquered Reality*. New York: Vintage Books, 1998.

Graaf, Shenja van der and David B. Nieborg. "Together We Brand: America's Army," In *Level Up: Digital Games Research Conference*, edited by Marinka Copier and Joost Raessens, 324-337. Utrecht: Utrecht University, 2003.

Goix, Renaud Le. "Fulbright Scholar Examines Gated Communities in Southern California," *UCLA International Institute*, August 8, 2003, http://www.international.ucla.edu/article.asp?parentid=4664

Graham, Phil. "Space and Cyberspace; on the enclosure of consciousness," In *Living with Cyberspace Technology and Society in the 21th Century*, edited by John Armitage and Joanne Roberts, 157. Continuum: New York, 2002.

Ihde, Don. *Bodies in Technology*. Minneapolis: University of Minnesota Press, 2002.

Kane, Margaret. "No ID, no video game?," *C-Net; News.com*, May 6, 2002, http://news.com.com/2100-1040-899563.html

Kent, Steven L. *The First Quarter; A 25-Year History of Video Games*. Bothell: BWD Press, 2000.

King, Brad and John Borland. *Dungeons and Dreamers: The Rise of Computer Game Culture From Geek to Chic*. McGraw-Hill: Emeryville, 2003.

Klein, Naomi. *No Logo*. London: Flamingo, 2000.

Kushner, David. *Masters of Doom: How two Guys created an Empire and transformed Pop Culture*. New York: Random House, 2003.

Lahti, Martti. "As We Become Machines: Corporealized Pleasures in Video Games," In *The Video Game Theory Reader.* Edited by Mark J. P. Wolf and Bernard Perron, 157-170. New York: Routledge, 2003.

Lieberman, Joseph. "Lieberman, Brownback to Propose Legislation Creating New Federal Research Program on Media and Children," *Lieberman Press Release*, April 9, 2003, http://lieberman.senate.gov/newsroom/release.cfm?id=207586

Loftus, Tom. "Stars seek more control over video games," *MSNBC Interactive*, 12 March, 2004, http://msnbc.msn.com/id/4223361/

Lombard, Matthew and Theresa Ditton. "At the Heart of It All: The Concept of Presence," *Journal of Computer-Mediated Communication*, no. 2, Vol 3 (September 1997), http://www.ascusc.org/jcmc/vol3/issue2/lombard.html

Manjoo, Farhad. "Raking muck in 'The Sims Online'," *Salon.com*, December 12, 2003, http://www.salon.com/tech/feature/2003/12/12/sims_online_newspaper/index_np.html

Manovich, Lev. *The Language of New Media*. Cambridge: The MIT Press, 2001.

Marks Greenfield, Patricia. *Beeldbuis kinderen: over de effecten van televisie, computers en computerspelen*. Nijkerk: Uitgeverij Intro,1986.

McMahan, Alison, "Immersion, Engagement, and Presence," In *The Video Game Theory Reader,* edited by Mark J. P. Wolf and Bernard Perron, 67-86. New York: Routledge, 2003.

Messner, Steven F., and Richard Rosenfeld. *Crime and the American Dream*. Belmont: Wadsworth Publishing Company, 1994.

Mirapaul, Matthew. "New game technology lures artists," *International Herald Tribune Online*, September 17, 2003, http://www.iht.com/articles/110256.html

Mothers Against Violence. "Campaign for a Game Smart Community," Mothers Against Violence, http://www.mavia.org/gamesmart/video.html

Murray, Janet H. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. New York: The Free Press, 1997.

National Institute on Media and the Family "Gallup poll: more than 70 percent of teenage boys have played 'Grand Theft Auto' Video Games," *National Institute on Media and the Family*, September 2003, http://www.mediafamily.org/enews/9_23_2003.shtml

NBC 6 News Team. "Haitian, Cuban Leaders Denounce 'Grand Theft Auto'," *NBC6 News*, December 15, 2003, http://www.nbc6.net/entertainment/2706043/detail.html

Newman, James. "The Myth of the Ergodic Video Game," *Gamestudies.org*, no.1, Vol 2 (July 2002), http://www.gamestudies.org/0102/newman/

Newman, Otto, and Richard de Zoysa. *The American Dream in the Information Age*. London: MacMillan Press Ltd., 1999.

Naylor, Larry L. *American Culture: Myth and Reality of a Culture of Diversity*. Westport: Bergin & Garvey, 1998.

Pesce, Mark. *The Playful World: How technology is transforming our imagination*. Ballantine Books: New York, 2000.

Poole, Steven. *Trigger Happy: Video Games and the Entertainment Revolution*. New York: Arcade Publishing, 2000.

Reuters, "Group warns parents about 'killographic' games," *CNN.com*, December 9, 2003, http://www.cnn.com/2003/TECH/fun.games/12/09/warning.videogames.reut/

Reuters. "Florida City targets Computer Game Violence," *C-Net; News.com*, January 16, 2004, http://news.com.com/2100-1043-5142757.html ; Reuters, "Calif. Legislator to Introduce Games Bill on Monday," *Reuters.com*, January 2, 2004, http://www.reuters.com/newsArticle.jhtml?type=industryNews&storyID=4066918

Sheff, David. *Game Over, Press Start To Continue: The Maturing of Mario*. GamePress: Wilton, 1999.

Simons, Jan. *Interface en Cyberspace: Inleiding in de nieuwe Media*. Amsterdam: Amsterdam University Press, 2002.

Snider, Mike. "Game industry unaffected by unstable world," *USA Today Online*, May 19, 2001, http://www.usatoday.com/tech/techreviews/games/2001-05-19-e3-review.htm

Soller, Michael. "Be all that you can be – virtually," *LATimes.com*, Los Angeles: Los Angeles Times, July 11, 2004, http://www.latimes.com/technology/la-ca-soller11jul11,1,878467.story?coll=la-headlines-technology

Sony Computer Entertainment Europe Ltd. "Ever dreamt of starring in a videogame…?" *Sony Computer Entertainment Europe Ltd Press release*. London: Sony Computer Entertainment Europe Ltd Press Office, 2003, http://www.digimask.com/downloads/SCEE_Digimask_release.pdf

Squire, Kurt. *Cultural Framing of Computer/Video Games*. Game Studies, Vol 2, Issue 1, July 2002. http://www.gamestudies.org/0102/squire/

Stein, Joel. *Will Cybersex be better than real sex?* Time Online Edition, 2004. http://www.time.com/time/reports/v21/tech/mag_sex.html

Subcommittee on Juvenile Justice. *Rating Video Games: A Parent's Guide to Games: Joint Hearings before the Subcommittee on Juvenile Justice*, 103rd Congress, 1st Session.

Takahashi, Dean. *Opening the Xbox: Inside Microsoft's Plan to Unleash an Entertainment Revolution.* Roseville: Prima Publishing, 2002.

Take Two-Interactive, *Journalist Presskit*, January 2004.

Towns, Ed. "Towns Blasts Grand Theft Auto Video Game," *Ed Towns Press Release,* December 29, 2003, http://www.house.gov/apps/list/press/ny10_towns/pr122903videogame.html

United Kingdom Parliament, The; House of Lords, "'Grand Theft Auto': Computer Game, "*House of Lords*, May 20,1997, http://www.parliament.the-stationery-office.co.uk/pa/ld199798/ldhansrd/vo970520/text/70520-01.htm#70520-01_head2

Virilio, Paul. *Ground Zero*. London: Verso, 2002.

Virilio, Paul. *Open Sky*. London: Verso, 1997.

Wadhams, Nick. "Research divided on impact of games," *MSNBC News*, The Associated Press, July 04, 2004, http://www.msnbc.msn.com/id/5351971/

Walsh, David. "Sixth Annual Video and Computer Game Report Card," *National Institute on Media and the Family*, December 13, 2001, http://www.mediafamily.org/research/report_vgrc_2001-2.shtml

Walsh, David. "Seventh Annual Video and Computer Game Report Card," *National Institute on Media and the Family*, December 19, 2002, http://www.mediafamily.org/research/report_vgrc_2002-2.shtml

Walsh, David. "Eight Annual Video and Computer Game Report Card," *National Institute on Media and the Family*, December 8, 2003, http://www.mediafamily.org/research/report_vgrc_2003-2.shtml

Wolf, Mark J. P., ed. *The Medium of the Video Game*. Austin: University of Texas Press, 2001.

Wolf, Mark J. P., "Abstraction in the video game," In *The Video Game Theory Reader,* edited by Mark J. P. Wolf and Bernard Perron, 47-65. New York: Routledge, 2003

Wolf, Mark J. P., and Bernard Perron., eds. The *Video Game Theory Reader*. New York: Routledge, 2003.

Žižek, Slavoj. *Welcome to the Desert of the Real*. London: Verso, 2002.