Look Who's Pulling the Trigger Now: A Study of Girls'/Women's Relationship with Video Games

Christine Daviault

A Thesis

in

The Department

o f

Communication Studies

Presented in Partial Fulfillment of the Requirements for the Degree of Master of Arts at Concordia University

Montreal, Quebec, Canada

May 2000

© Christine Daviault, 2000



National Library of Canada

Acquisitions and Bibliographic Services

395 Wellington Street Ottawa ON K1A 0N4 Canada Bibliothèque nationale du Canada

Acquisitions et services bibliographiques

395, rue Wellington Ottawa ON K1A 0N4 Canada

Your file Votre référence

Our file Notre référence

The author has granted a nonexclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-54260-2



ABSTRACT

Look Who's Pulling the Trigger Now: A Study of Girls'/Women's Relationship with Video Games

Christine Daviault

Video Games are rich social and cultural texts, often dismissed by academics as children's toys not worth much study. However, they are starting to be taken seriously for several reasons. First, they account for a fast increasing share of children's leisure time, especially that of boys. Secondly, they are seen as a portal to the larger field of computer and communication technologies, as a way to acquire the necessary skills, particularly in the case of girls/women who only represent a dismal proportion of students and workers in technical and computer-related fields.

This has led to a lively debate as to what should be done to encourage girls/women to play video games. A number of software companies, run and staffed mostly by women, have dedicated themselves since the early 1990s, to designing games that answer the expectations of young girls. In contrast, female gamer groups, such as "Quake girls", started appearing and competing on-line. These women believe that it is the adaptation of existing games, allowing for the inclusion of more female characters, that will lead to an increased number of female video game players. These two views are at the core of the present thesis which highlights their arguments and contradictions.

TABLE OF CONTENTS

INTRODUCTION	1
CHAPTER 1:	
Video Games: Who Pulls the Strings?	
An Overview of the Industry and the Market	1 2
CHAPTER 2:	
Same Old, Same Old	
Have Video Games Become the New Television?	3 1
CHAPTER 3:	
The Transgendered Gamer Body	
How Female Gamer Groups are exploding Gender Stereotypes	50
CONCLUSION	68
BIBLIOGRAPHY	76
APPENDIX A	8 5
APPENDIX B	88

INTRODUCTION

When I started looking for a possible topic for this thesis, I only had two criteria. I wanted it to be about new media and women. As a journalist and graphic artist, I thought I could provide some insight into women's relationship with new technologies and their often male dominated environments. Although, women can be seen making inroads into such fields as multimedia, production for the Web, and other areas, often characterized by their need for creativity, it is still unclear what kind of impact they are having on this new economy and how they are helping shape these new modes of mediation.

As I searched for a topic, I kept coming back to the margins, to small groups of women who use seemingly "masculine" media to express themselves and answer some of their needs; women who have chosen to explore, learn about and, ultimately, claim new technologies for their own purposes; women who defy the stereotypes that say they are either incapable of mastering, or simply uninterested, in new technologies.

First, I thought of studying how women use the Internet to effect social change. I was particularly interested in understanding why women have taken such a liking to that medium, as well as electronic mail, establishing parallels between women's long time use of correspondence to communicate and their definite interest for e-mail today. But during the course of my research on the Internet, I became aware of several groups of women, featuring such names as Psycho Men Slayers or Hell's Belles, who seemed to have reclaimed the chauvinistic world of video games to fulfill their own pleasuristic needs, blasting each other's butts into oblivion. I was hooked! These so-called "Quake girls" — women who have a common interest for the action/adventure game *Quake* — play on-line against each other or against male clans.

Although I only started playing video games on-line recently, I have been playing at home on my computer for years. I have played all sorts of games from *Tetris* — a game in which different puzzle pieces fall from the top of the screen while you try to turn and flip them to embed them into each other — toQuake and *Tomb Raider*. So, I felt an almost automatic kinship to these women.

My initial interest in these groups, also called clans, led to a larger research on the video games industry. Video games, as we know them today, are derived from arcade games. Although arcades still exist, they are not as popular as they were in the 1980s, and are usually the realm of older boys. For those who would rather play in the comfort of their living room, there are two kinds of home games systems: video games and computer games. The Nintendo 64 Entertainment System, the Sega Dreamcast and the Sony PlayStation are console systems, and are played on the television set with the help of a converter box. They are sold for about \$300.00. The games, which retail for an average \$50.00, come on CD-ROMs that are inserted into the console. These games are mostly the realm of children and teenagers, with a majority of the players being males. But games can also be played on the computer. In this case the games are loaded into the computer and can be launched much like any other software. The retail price of a video game for the computer varies between \$39.99 and \$79.99. According to Brenda Laurel of Purple Moon, a game software developer, research has shown that girls perceive video game consoles as "boy things" and computers as gender-neutral (Cassell and Jenkins, 1998: 121).

Further research highlighted deep divisions within the industry as to the types of games that should be designed. In a field essentially run by men for the pleasure

of other men, and mostly interested by profit, video game software companies have traditionally opted to produce games that appeal to the larger market of teenage boys.

But in the early 1990s, a number of women, concerned with young girls' lack of interest for video games, and the industry's lack of response to this, started their own game software and electronic toys companies, such as Purple Moon, HerInteractive, Girl Games and Girl Tech¹. What do these women have in common? They have extensive technical experience as researchers, designers and marketers for major game developers.² They perceive boys have an advantage when it comes to computers because of their familiarity with the video games. As a consequence, they strongly believe that one of the best ways to ensure that girls become involved with new technologies, is to get them interested in playing video games at a young age. That is why they have chosen to target girls between the ages of seven and twelve.

The launch of these companies, and the rationale behind it, is one of the main aspects of my intervention on the subject of women's relationship with video games. As we will see in Chapter 1, the arrival of "girls' games" producers shook-up an industry, which until then, had been quite content catering to the needs of teenage males. Although not the only factor — major video games companies

¹Purple Moon is located in Silicon Valley in California, HerInteractive is in Bellevue Washington, while Girl Games and Girl Tech are both in Texas, in Austin and Dallas respectively.

²Brenda Laurel, co-founder of Purple Moon worked at Atari Research Laboratory, where she explored artificial intelligence as a means of creating theatrical plots and characters in interactive media. She then joined Interval Research, another software research company, before launching Purple Moon. Janese Swanson, founder of Girl Tech, worked at Broderbund Software, as a production manager for the popular educational CD-ROM, Where in the World is Carmen San-diego?

had reached saturation of the male market — the advent of video games designed by women for girls forced the industry at large to reassess their view of the market, leading to the creation of a greater number of female characters in mainstream games.

According to Justine Cassell and Henry Jenkins³, the "girls' games" movement has emerged from an unusual and highly unstable alliance between feminist activists (who want to change the "gendering" of digital technology) and industry leaders (who want to create a girls' market for their games) (1998: 4). Do these women consider themselves feminists? Brenda Laurel of Purple Moon calls herself an "equity feminist"⁴, believing in diversity and equal opportunity.

My position is that if you want to make a difference in a major way, you have to do it at the level of popular culture. I could build great radical stuff for PBS parents, but it wouldn't change the culture, it would change the things that are currently marginalized and make them more mainstream. (Jenkins, 1998: 131)

These women believe in a brand of feminism based on the creation of equal opportunity through better representation. As we will see, they think that by creating games appealing to girls, they might get interested in the idea of using technology in general, which will better prepare them for the job market of the future. This also exposes their desire for indirect social action.

³Cassell, an academic technologist and Jenkins, a cultural theorist edited *From Barbie to Mortal Kombat: Gender and Computer Games* in 1998, a fascinating look at the debate raging in that industry and the push for the use of video games as an educational tool.

⁴ This is in reference to the book *Who Stole Feminism?* (1994) by Christina Hoff-Sommers, in which the author highlights schisms in feminism.

It is quite obvious, however, that reconciling their political and economic goals will not be easy. According to Cassell and Jenkins, this vision has been criticized for involving a "commodification of gender" that will necessarily work against any attempts to transform or rethink gender assumptions within culture (1998: 4). It is also quite clear, in light of the "Quake girls" movement, that the "girls' games" developers' view of the market is not shared by all women.

In fact, the discourse is reminiscent of past feminist debates, pitting two distinct theoretical approaches against each other. "Girls' games" developers have a gender-specific view of the market. They favor doing research to assess what girls/women want in a game leading to the creation of very market-specific products. On the other hand, such groups as "Quake girls", who obviously have no problem playing a game that is primarily designed and marketed to men, favor a gender-neutral approach to gaming. Rather than ghettoizing female consumption of video games, they argue that it is the existing games that should be adapted to better fulfill the needs of the female market.

Although there are several other views about video games and how they should be marketed, this particular division is at the core of the present thesis, to try and explore both visions and highlight the pitfalls and the contradictions that exist in both approaches. This is particularly important because it might have a tremendous impact on the industry, confining, among other things, the female market to a limiting niche. Indeed, "girls' games" proponents favor products with complex narratives from the point of view of the second person, which they say is what girls between the ages of seven and twelve want. For example, the player might be asked to help a character through her first day at a new school. Female gamer groups, however, prefer to play first-person shoot-em up games.

A melting pot of influences

Video games are the product of a melting pot of influences, including, but not limited to, popular culture, new advances in technology and the personal bias of their designers. I considered using several theoretical approaches in order to study women's relationship with them.

At first, I thought of using a feminist approach. After all, my personal view of the video game industry is informed by my own brand of "hard-core" feminism, as Chapter 3 will testify. It also seemed logical that feminist scholars would have something interesting to say about a field dominated by men in which groups of women are trying to map a course of action. I was especially curious as to what they might say about female gamer clans.

But most of the research I found using a feminist approach to analyze video games was heavily dominated by a binary gender model. In other words, video games are seen in a negative light and are accused of reaffirming sexist ideologies and circulating misogynistic images. Christine Ward Gailey (1993), for example, found that characters in video games are constructed according to traditional gender stereotypes, including the good but passive princess which motivates the action, and bad, eroticized women as competitors who must be beaten back by the protagonist (Cassell and Jenkins, 1998: 8).

Although invaluable to understand the context within which female players have to experience the game, this view of the market has its limitations because it does not address other important aspects of women's relationship with video games, such as feelings of intense pleasure expressed by female gamers when they beat men at their own games. It assumes that these representations automatically have a negative impact on female players.

Moreover, on a personal note, I have always found the essentialist feminist view—the whole nurturing mother concept—, or best-sellers such as Women are from Venus and Men are from Mars, viscerally offensive. To suggest that men and women are pre-programmed to be a certain way and that there is nothing they can do about it, always rubbed me the wrong way. Maybe that is why the idea of females playing violent, gory games where the ONLY goal is winning—echoing some of my own preferences—, automatically appeals to me. I want to know what they are about, why they have chosen that path despite, and probably in total ignorance of, studies repeatedly making the point that women simply are not attracted to shoot-em up games. So, I decided to keep looking for a theoretical approach that would better suit my needs and although I did not reject the feminist contribution to the analysis of video games, I definitely decided to be critical about it.

Secondly, I considered enlarging the scope of my analysis by using the cultural studies approach⁵. Video games are a product of today's fast moving, intricately commercialized society. Because of this, I thought a cultural studies perspective might be more useful to assess all the various factors that have an impact on the production of video games. For example, a cultural approach might raise questions such as: since more boys play video games than girls and since

⁵Because it encompasses such fields as feminism, sociology, psychology, educational theory, politics of gender, and economy of production and consumption, the field of cultural studies seems very appropriate in this case.

sociologists argue that video games teach skills that are important in other areas of life — skills such as the ability to imagine shapes in space, logical thought, memory, hand-eye coordination — should parents and educators worry? And if this is a concern, should they try to encourage girls to play video games by praising the benefits of such an activity? Or should games software companies create products that answer their needs more specifically, like "girls' games" developers have done?

Although, they are often discarded by academics in other fields as children's toys, not requiring much study, cultural theorists view video games as rich social and cultural "texts" that can be read and interpreted on a number of different levels. The Media Analysis Laboratory at Simon Fraser University, for example, maintains that if we do not start paying attention to children's experience with video games, we might be missing one of the most important forces shaping their culture today. They believe that game playing is not so much a sign of the coming information revolution as it is a sign of an entertainment and cultural one. The cultural studies approach, as defined by Jenkins et al., has the advantage of looking at a wide range of influences on a particular text, which is very fitting in this case. Also, since a lot of the discourse I encountered centered on societal pressures discouraging girls/women from experiencing video games, I thought it might also be useful to draw some insight from the behavioral model.

Comparing Apples to Oranges

No matter what theoretical approach I choose to study women's relationship with video games, there are obvious limitations to this thesis, mainly imposed by the scope and amount of research done on game playing so far. I will review

existing studies (Greenfield, 1984; Kinder, 1991; Provenzo, 1991) which often look at children's usage and perception of video games. Unfortunately, it is a bit like comparing apples to oranges, because most of the research centers on children as a whole, while "Quake girls" are adult women. To overcome this disparity, I have decided to look at studies done on television and other technologies, since there are strong similarities between video games and other media. For example, Ann Gray's (1992) assessment of women's perception of technology offers an interesting comparison with female gamers' highly sophisticated understanding of video game and Internet technology.

Furthermore, it is important to understand that all research is biased by definition, especially market driven research like the studies on which "girls' games" software companies base their entire philosophy on. As a journalist, I am well aware that to get a certain answer one only has to ask a certain question. But despite these limitations, I still think that the case of "Quake girls" raises important questions about the direction video game production has taken in the last ten years. These problems make a strong case for added research on the topic of video games and, especially, girls'/women's relationship with them.

Finally, for the purpose of this thesis, I will use both "girls" and "women" to describe the female gender. When they are interchangeable I will use girls/women. When the context demands more specificity, I will either use girls when describing females between the ages of seven and eighteen or women in the case of adult females. I will also be using the terms "video game" to describe

⁶Gray studied the domestic environments of thirty female subjects in England, to show that technologies are embedded with symbolic meaning, some technology like the computer being considered "masculine" while sewing machines, washing machines, etc. are considered "feminine".

all the different types of games produced. A differentiation of video console games and computer games would not really serve any purpose in this argument.

CHAPTER 1

VIDEO GAMES: WHO PULLS THE STRINGS?

AN OVERVIEW OF THE INDUSTRY
AND THE MARKET

In order to understand how girls/women relate to video games, it is important to first have a look at the video game industry from political, economic and sociological points of view. How did it come to be? How does it work? How powerful is it economically and culturally? Who are its key players? How does it influence the larger field of new technology? It is also crucial to assess the place and role women play in that market or industry, first as consumers, but also as producers of technology and generators of discourse within the video game industry itself, and in society at large.

Indeed, like other social agents in western, developed countries, women are increasingly surrounded by discourses and texts in the public domain which assume a familiarity with the personal computer, multimedia and the Internet. But is it a fair assumption? Despite the fact that a 19th century woman, Ada Lovelace⁷, invented the binary code at the root of all computing systems, women still only hold a dismal proportion of higher positions in the computer industry and computer science departments.

According to the most recent (1996) CRA Taulbee Survey⁸, only 16% of the bachelor's degrees in computer science were awarded to women while 20%

⁷Although she wasn't fully credited for it, Ada Lovelace participated in the elaboration of Charles Babbage's Difference Engine, a machine capable of performing calculations, in the mid-19th century. This mathematician, daughter of Lord Byron, later saw endless possibilities in Babbage's Analytical Engine, a machine with the power to perform complex arithmetic. Although the machine was never built, because it was so far ahead of its time that the components did not exist, it established Ada Lovelace as one of the great minds of her time (Plant, 1997: 5-32).

⁸The CRA Taulbee Survey, conducted by the Computing Research Association (CRA), is the primary source of information on North American faculty and Ph.D. production in computer science and computer engineering. It is one of the most complete and accurate surveys of its kind in the science and engineering fields and reveals issues and trends affecting the computing research pipeline. The CRA is an association of more than 180 North American academic departments of computer science and computer engineering; laboratories and centers in industry,

received master's degrees, and 12% Ph.D.'s. In all the universities surveyed, only 19% of assistant professors, 10% of associate professors and 6% of full computer science professors were women (Cassell and Jenkins, 1998: 12). In Canada, the Society for Canadian Women in Science and Technology reveals that women only account for 16% of the work force in the computer and technology industry. Can we assume then that women have as much influence as men when it comes to the production of technologies? Furthermore, is it fair to say that they are as encouraged to explore and enter a field which, by all accounts, will be at the core of our daily existence — if it isn't already — from now on?

A number of researchers and psychologists (Subrahmanyam and Greenfield, 1994) have offered an interesting rationale to explain why the participation of women is important. They think that video games are an easy and pleasant way to experiment with new technologies and develop skills that can later be transferred to other fields. Unfortunately, they have found that girls/women are often turned-off by the sexist ideology, the misogynistic images and the violence found in video games. This might explain why a majority of women seem disinterested in them, although very few quantitative studies (Kinder, 1991; Gill, 1996; Cassell, 1998; Le Diberder, 1998) have actually been done on the subject. The existing ones often adopt an essentialist position arguing that men and women simply do not have the same expectations when it comes to video games. This argument has often, in turn, been used by the industry to justify their gender specific view of the market, and their contention that women simply are not attracted to video games, so why spend millions of dollars to pursue them? This raises a number of questions: if women are indeed rejecting

government, and academia engaging in basic computing research; and affiliated professional societies.

video games, what is it about them, and new technologies in general, that they find offensive? Do they ignore video games because they feel they are embedded in the masculine identity, thus creating an environment in which women feel uncomfortable, or simply because they haven't been exposed to their appeal? A look at the birth and development of the video game industry can help us answer these questions.

1.1 From ball-and-paddle to state of the art technology

The first video game console was built at a time when a single computer could fill-up an entire room and cost tens of thousands of dollars. In 1966, the American military asked Ralph Baer, a consultant for a military electronics firm, to design a computer simulation to "help refine their soldiers' military prowess by teaching strategy and magnifying reflex skills" (Hart, 1996). The system had to be compact enough to be portable — which in those days meant something lighter than eighty or so pounds — and use relatively inexpensive equipment, such as an ordinary television screen. With the help of 500 engineers and technicians, Baer designed a ball-and-paddle game which, although primitive by today's standards, was the precursor of many things to come. The first home video game system, *The Odyssey*, also created by Baer, was released by Magnavox a few years later.

Through the 1970s, the video game market slowly grew to become a sizable industry, relying heavily, at that time, on the existing infrastructures of the television manufacturing and home electronics sectors. The systems were distributed through television appliance stores and retail stores. The release of *Pong* — remember the little white ball bouncing back and forth across the TV

screen? — by Atari in 1976 can be seen as the defining moment of that period. After signing an exclusive sales contract with Sears, Atari's sales climbed to \$40 million that year and the video game industry was catapulted on the mainstream map, capturing the attention of Japanese companies.

This period of initial growth was, however, followed by a much darker time, between 1981 and 1984, prompted by Atari's decision not to include a disk drive in its latest console. The software company argued that it would be too fragile for the consumer to handle adequately. This led to a gap between home game and arcade game quality — the latter having a storage capacity ten to forty-five times greater than home systems — and would mark the end of Atari's reign of the video game market, allowing today's key manufacturers to flood the market with more sophisticated software and hardware. In 1986, Nintendo introduced an eight-bit⁹ home console, the Nintendo Entertainment System (NES) — which captured 90% of the U.S. gaming market — and the *Super Mario Brothers* characters. Three years later, it was Sega's turn with its 16-bit Sega Genesis Home console. In the late 1980s, Toys R Us attributed 17% of its sales and 22% of its profits to the NES system and its games.

The number of bits refers to the "power" of the chip at the core of the video game console. The more bits is has, the more data it can process. The more data it can process, the better the graphics look and the faster the gameplay is. "Whether they are gathering information, telecommunicating, running washing machines, doing sums, or making videos, all digital computers translate information into the zeros and ones of machine code. These binary digits are known as bits and strung together in bytes of eight. The zeros and ones of machine code seem to offer themselves as perfect symbols of the orders of Western reality, the ancient logical codes which make the difference between on and off, ... white and black, good and evil, ... [and] man and woman: 1, the definite, upright line; and 0, the diagram of nothing at all: penis and vagina, thing and hole... A perfect match." This interesting interpretation by Sadie Plant in zeros + ones (1997: 34-35), seems to be the ideal illustration of women's perceived role in the computer industry.

Today, more than fifty million households around the world own video games — 2.5 million in Canada alone. In 1997, the industry's estimated global revenues reached an all-time high of US\$16 billion. A successful video game, like *Donkey Kong Country* released by Nintendo in 1994, has sold 7.4 million copies, raking in US\$450 million. More recently, the new Sega Dreamcast system — equipped with a built-in 56K modem and a 128-bit chip, allowing it to grow and change to match advances in technology and the needs and desires of the consumer — sold a record 1,550,000 units in just a little over three months. In its first 24 hours of availability, Sega Dreamcast netted over \$97 million at retail and during the last month of 1999, 10 were sold every minute on average in North America.

1.2 The Global Context

No matter how much or how little you know about the video game industry, I'm sure we can all agree on two things: The industry produces way too much junk, and the industry can never realize its true potential as long as its products are regarded by the mainstream media as children's toys.

—Youichi Miyaji, president of Entertainment Software Publishing and GameArts

We do not need statistics to know that video games and home game consoles often find their way to the top of children's Christmas lists, and that the possession of the latest game brings with it recognition and envy. Therefore, it is not surprising to find out that the video game industry commands tremendous power. In fact, it is probably one of the most powerful segments of the media/entertainment industry today and it has grown hand-in-hand with the development of new technologies. Some have argued that without video games, we would still be using black and white computer monitors with poor resolution. Because of the demands for superior quality graphics, speed and intricate plots,

the video games industry has pushed the development of the computer industry to new heights. J. C. Herz, author of *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Revived Our Minds* (1997), is one of them. She says that all the advances that made the computer industry possible happened first in video games. "Video game designers have to solve a lot of problems before people in other areas of the software industry, just to survive" (The Globe and Mail, 1997: C 19). Propelled by these technological imperatives, the video-game industry is reshaping most forms of entertainment. Herz also believes that video games will be a very important factor in how things are designed from now on, from banking programs to virtual malls. "You're going to find yourself in a Ralph Lauren environment. Little robot salesmen will have their avatars and it's going to feel like a video game" (The Globe and Mail, 1997: C19).

But the most determining factor of the industry's young history is definitively its marriage with another male dominated field: the film industry, a perfect match according to observers.

Suddenly a new medium — and a new market opportunity — has opened up in the place where Hollywood, Silicon Valley and the information highway intersect. Games are part of a rapidly evolving world of interactive amusements so new that nobody knows what to call them: Multimedia? Interactive motion pictures? The New Hollywood? (Elmer-Dewitt, 1993: 68)

Are video games changing the face of entertainment? The Pokémon phenomenon seems to testify to this. In its first two days at the box office, *Pokémon: The First Movie* raked in \$25 million in the U.S. alone! Before Christmas 1999, Nintendo expected to sell one million electronic Pokémon games in Canada and 1.5 million in Europe (Chua-Eoan and Larimer, 1999: 62). And that's just one example of cross-platform marketing strategies devised to enhance the revenues

of one outlet by stimulating its exposure in another. Even movies which do only moderately well at the box office, such as the long-awaited *Star Wars* prequel *The Phantom Menace*, can ensure high profits thanks to the release of video games — the *Star Wars: The Phantom Menace* video game set an industry record when it was released with sales of \$28 million in its first day — and other paraphernalia associated with the characters and plot lines in the movie.

It might have been foreseeable that the video game and new technology industries would find comfort in each other's company, after all they are led by a pack of young men who have made fortunes out of what only seemed a distant dream twenty years ago. What may surprise, however, is that despite popular belief, the average buyer is not your garden variety pimply teenager, but rather a 31 year old with an annual household income of US\$68,000. According to a study by American magazine Computer Gaming World¹⁰, buyers of computer games — one segment of the video game market — "are evenly distributed between "X-ers" (25 to 34 year-olds), and "boomers" (35 to 49 year-olds). They are also overwhelmingly male (92%) and well-educated, with 77% having a college education" (Computer Gaming World).

To understand why video games are the way they are and how they have been marketed, one must first understand how they come to exist. There are about a dozen major game manufacturers around the world today but a large part of the

¹⁰The study was designed to draw a portrait of today's computer gamers and explore their attitudes about the games they purchase, the likelihood that they will purchase similar games, their favorite types of games, and other computer products used in their homes. According to the results, computer gamers devote much of their time to computing. In fact, they spend 22 hours per week on their household computer, on average, with half of those hours spent on gaming. Computer gamers will buy a game per month on average. They are experienced computer users who own the most-up-to-date and powerful technology available.

market is controlled by Sega, Nintendo and Sony, three Japanese companies. Brand names such as Playstation and GameBoy — a portable version of the home game console — are now part of the developed world's cultural frame of reference. Have we not all sat in a bus looking over a teenager's slouched shoulder feverishly pressing on the buttons of his/her Gameboy?

The creation of a video game involves many people with different skills. Programmers, designers, artists, musicians and writers all contribute to create appealing plots and a certain ambiance based on graphics and sounds. But the best designers — only eight or 10 have track records for making video-game hits — are a small and rare elite group. Part of their job is "to know how to design puzzles that are hard but not too hard. They have to pace the dangers and rewards and have an intuitive feel for the nature of the medium" (Elmer-Dewitt, 1993: 72). Mostly, the great majority of them are men, in an industry that has been criticized for not creating games that appeal to women. In fact, the industry's biggest defeat has been their inability to attract women both from a marketing and human resources point of view.

1.3 Another Gender Divide: The Female Market

The new focus on creating the "girls' market" also reflects another significant and broader trend in the American economy, the emergence of what has been called "entrepreneurial feminism." It has been estimated that by the year 2000 nearly half of all American businesses will be owned by women (Moore and Butler, 1997). (Cassell and Jenkins, 1998: 16)

Since the early 1990s, industry figures have shown repeatedly that women make up about 30% of the video game market. Industry analysts estimate that the number of "serious" game players, might be even lower: "Only 5% of the

readers of *GamePro* magazine are female. And only 8% of the players who return product registration cards to Electronic Arts, a leading game maker, are female" (DeBare, 1996). It's easy to conclude, according to these figures, that women are simply not interested in video games.

But the video game industry didn't set-out to exclude women from their market right off the bat. When it started, in the 1970s, the games it released were not particularly "masculine" (*Pong, Pac Man*). According to Le Diberder it was the brutality of the economic crises in 1977, 1983 and 1993 that pushed game developers to play it safe, concentrating their efforts on their surest market, that of teenage boys. As Le Diberder suggests:

Les fabricants disposant d'un marché à peu près stabilisé, en particulier Nintendo, ont souvent misé sur des programmes plaisant aux filles (la série des *Mario*, par exemple). Mais les outsiders, Sega, et la quasitotalité des éditeurs sur le marché très risqué des micros ont eu tendance à limiter les aléas de leur métier en se concentrant sur la partie du marché la plus rassurante pour eux. (1998: 194)

Why should the industry change its mind today and invest millions of dollars to create products that appeal to women? The answer might be as simple as profit. Indeed, the video game industry has managed to penetrate the male market so well — 80% of American boys play video games on a regular basis and between 30 and 50% of families in America own or rent game systems and buy or rent games — that the competition between the big three, Sony Playstation, Sega and Nintendo is heating up. The only way for these companies to avoid stagnation is to expand the market by reaching out to new consumers, and turn their attention towards the female market. The problem is that few researchers and game developers agree on what it is exactly that might attract girls/women to

the game, in great part due to a difficulty in understanding why it is they do not play in the first place.

These issues, among others, led to the creation of several companies, such as HerInteractive, Girl Games, Girl Tech, and Purple Moon, dedicated to serving the female market. They are led by women and are largely female-staffed. "Their founders fit the profile of female entrepreneurs in other industries — women who had struggled to get their ideas accepted within the male-dominated fields, which they found largely closed to female-oriented products" (Cassell and Jenkins, 1998: 16-17). These companies' interest in the female market is both fueled by a desire to take control over the production of content for video games and a desire to tap into a practically brand-new market, in an industry that has reached saturation.

1.4 Techno-Literacy and Cultural Pedagogy

Despite pressures to create a video game market for girls/women, many, among them parents and educators, argue that it's a good thing girls do not spend their time riveted to a computer or TV screen for hours on end. However, there is a common desire among researchers to give girls/women a chance to familiarize themselves with the computer and new technologies in order for them to be competitive in the current and future job-market. The belief is that there is a direct link between the fact that boys play video games more than girls and the fact that men hold a large majority of positions in computer-related fields. This is accompanied by a certain panic, a necessity to correct the problem before it is too late.

It is not just that girls seem to like today's computer games less than boys do, but that these differential preferences are associated with differential access to technological fields as the children grow older, and this threatens to worsen as technological literacy increasingly becomes a general precondition for employment. (Cassell and Jenkins, 1998: 11)

Video games are seen by many as a child-friendly path to computer literacy (Loftus and Loftus, 1983; Greenfield, 1984; Greenfield and Cocking, 1996; Kiesler et al., 1985), a painless way to get acquainted with new technologies and to acquire the cultural background associated with them, aspects which are even more significant in the case of girls/women considering their lack of involvement until now.

Psychologists, who have often contributed to a better understanding of video games through a study of the behavior of its consumers, are proponents of this position. They have posited that children learn important cognitive skills by playing video games, such as "the ability to maintain attention and to orient things in space, and these skills differ between boys and girls, apparently because of their differential exposure to this medium (Subrahmanyam and Greenfield, 1994)" (Cassell and Jenkins, 1998: 11). These issues have led to the creation of odd associations between social agents (software companies, educators, parents, the government, etc.), with varying agendas, but a common goal to get women interested in technology at a young age. Ultimately, this has led to the emergence of a new group of consumers and users.

And it seems to be paying off, at least in certain areas. Women's increasing use of the Internet — analysts say they represent about 35% of the estimated 10 million users (DeBare, 1996) —, for example, would seem to indicate that they can indeed be attracted to interact with new technologies. A study by Interactive

Digital Software Association, found that 45% of all U.S. computer users are female, with one-third of those users under the age of 18. These numbers suggest a definite interest in certain aspects of new technologies so, why is it that girls/women are still rejecting video games? And what can be done to change that?

Several people in the "girls' games' industry, as well sociologists and cultural theorists, believe that one of the main obstacles is access. The desire to play with video games seems closely linked to the spaces within which they are purchased or played, spaces which are rarely girl-friendly. As Sheri Granier Ray of HerInteractive put it, "girls are no more comfortable in computer stores that they would be in a men's underwear department."

When studying the pedagogical value of computers at home, educational theorists, Giacquinta, Bauer, and Levin have shown that home computers are most often the "property" of men and boys, with the hardware residing in either a boy's bedroom or the father's den. This situates the technology within male territory, potentially greatly limiting access for girls/women. As Karen Orr Vered points out, the home is not the first or only gendered site limiting girls/women interactions with video games. "Ethnographies of game arcades also document the maleness of public gaming spaces, dating back to the days of pinball's predominance (Conn and Marquez)" (1998a: 173). As for point of purchase intimidation, one only has to step into a computer store to understand why women feel uncomfortable in an environment run by men, where women are either ignored or treated like they do not know the first thing about technology.

A look at the content and packaging of video games also goes a long way to explain why women are reluctant to buy them. Alain and Frédéric Le Diberder surveyed video game catalogs in France in 1992. Their conclusions speak for themselves. As they explain: "La plupart du temps, le rôle de la femme y est secondaire. Elle est la princesse qu'il faut libérer (Mario), la récompense finale du héros habile (Double Dragon). Elle y est souvent représentée sous des traits négatifs" (1998: 194). Among games whose central character is a humanoid hero (human being, humanized animal, like Mickey Mouse, or robots), they have found that 85% are male, women share the glory about 10% of the time and they are the main character in only 5% of cases. Advertising is even worse. As they put it: "Les revues spécialisées utilisent assez souvent l'image de la femme pour séduire l'acheteur d'une manière plutôt primaire." One game, Barbarian, was promoted in the United Kingdom using one of the Sun's page 3 pin-up girls. "De telles publicités confirment les filles dans leur idée que ces jeux ne sont pas pour elles" (1998: 193).

Michelle Goulet of Game Girlz, a Web site that offers, among other things, reviews of games by women and profiles of women in the gaming industry, calls it plain old sexism.

You see girls everywhere in games. They are the bouncing blondes holding your trophies at the end of the race, the scantily clad heroines who wiggle and wear next to nothing, and the models in magazine ads wearing thigh-high black boots, holding a game box between their legs and a devilishly flirtatious look on their faces. (Jenkins, 1998b: 340)

She goes on to say that "respecting the female characters is hard when they look like strippers with guns and seem to be nothing more than an erection waiting to happen" (Jenkins, 1998b: 341).

1.5 Boys will be boys, and girls will be girls...

Responding to an ad for an undergraduate research position on the topic of gender and computer games, this young man's reaction perfectly illustrates the essentialist trend that has been leading the "girls' games" market for the last few years.

Take my girlfriend and I for instance: I buy mostly combat/fighting games, which she doesn't really care for. But, I have a game called *Donkey Kong Country* that she just loves to play. I think that it's not so much video games that girls/women don't want to play, it's the kinds of games they want to play that make the difference. (Cassell and Jenkins, 1998: 8-9)

Indeed, several game manufacturers have based their entire creative process on the theory of a gendered market where boys/men and girls/women simply expect different things from video games: boys being more interested in action and competition while girls favor cooperation and problem solving. It has been said, for example, that boys/men are more likely to play games, to program, and to see the computer as a playful recreational toy while their female counterparts tend to view the computer as a tool, a means to accomplish a task, such as word processing or other clerical duties (Ogletree and Williams, 1990) (Cassell and Jenkins, 1998: 14). This would certainly explain the division of labor in the job market, where women often represent a majority in clerical positions while men dominate entertainment-related fields such as software design.

Other researchers argue that it is the violent content, featuring death and destruction, in the existing video games that turn women off. "In a survey reported by Bowman and Rotter (1983), 85% of games that were examined

involved participants in acts of simulated destruction, killing or violence" (Griffiths, 1996: 49). This is supported by more recent research done by Provenzo (1991), who analyzed the 47 leading Nintendo games, and found that only seven of them did not involve violence. "He reported that computer games were populated by characters like terrorists, prize-fighters, SWAT teams and robotic cops, and that women were casts as 'victims' and foreigners as 'baddies'" (Griffiths, 1996: 49).

It is this dichotomous view of player preferences that has prompted producers of video games to design, time and time again, games that only appeal to boys, according to "girls' games" proponents, because designing for girls/women just seemed a lot more complicated and thus, less profitable. Ironically, it is the quintessentially anti-feminist Barbie who finally made them eat their words with the launch of the hugely popular CD-ROM *Barbie Fashion Designer* released by Mattel Interactive in 1996. Pulling in over \$500,000 in its first two months of sales, it prompted industry experts and monitors of popular culture to declare that girls will buy computer games. But despite Barbie's initial and ensuing digital achievements — in 1997, seven of the 10 top-selling girls' programs were Barbie titles, according to *PC Data* —, Karen Orr Vered likes to nuance the significance of this success.

The software's success should not be attributed so readily to technotendencies, — phobic or — philic. The software sold as "Barbie", not as technology. Little girls did not write to Santa: 'Please bring me some girl-friendly technology'; they asked for more Barbie stuff... (1998a: 169-170)

Sociologist Barrie Thorne is not surprised by the industry's chosen path. According to him, the creation of a distinct market for girls simply reflects the "history of sex difference research that is driven by stereotypes and results in reinforcing these stereotypes" (Vered, 1998a: 170), and journalist Rebecca L. Eisenberg agrees when she writes that certain games for girls take advantage of "well-established cultural stereotypes about the appropriate roles for men and women to create a new market" (Vered, 1998a: 170). Because video games are considered to be toys they are subjected to the marketing rules of the children's market, says Vered. Dolls are for girls, action figures (dolls) are for boys.

Why should software be any different? On the one hand, a need was identified: computer games for girls. On the other hand, when the products appeared, with sugar-and-spice story lines and purple-and-pink packaging, they were assaulted for being just that, games for girls wrapped in all the gender stereotypes that are typical of children's consumer culture overall. (1998a: 170)

This suggests that a same toy, or game, can be imbued with a variety of configurations and cultural meanings, making it, in essence, a different toy. Obviously, this has a lot to do with the perception of the player/user. As Erica Rand suggests in *Barbie's Queer Accessories*, the attributes of the Barbie doll can be seen in different ways. Commenting on a consumer's question received by Mattel, the producers of Barbie, asking why her doll had come without panties, Rand says: "for me, this question immediately brought to mind bad-girl sex" (1995: 25), proving conclusively that everything is a matter of interpretation. To further this argument, Chapter 3 of this thesis explores how a typical shoot-em up video game, *Quake*, can be perceived by both men and women in very different ways and played for a number of reasons that have little to do with the game content itself.

1.6 What a girl wants

There are a lot of things [girls] actively dislike. They hate to die and start over. They are not interested in climbing a real steep learning curve just to be able to say they've achieved mastery of something. They demand an experiential path, and something has to happen right away. They hate being stuck behind an obstacle or a puzzle that you must solve in order to move forward.

Brenda Laurel, co-founder of Purple Moon

Since the early 1990s, many game developers, led by women, have tried to create games for girls arguing that since women have different expectations, they should have games specifically geared towards them. But the makers of such games as Rockett's New School by Purple Moon, where the player is a new girl in eighth grade and has to navigate her way to the end of the day, have been criticized for narrowing the exploratory space open to girls. Heather Gilmour, a student at the University of California, has researched how girls relate to interactive games, shedding some light, in the process, on the way the video game industry responds to a gendered market. She says that despite a lot of discussion about girls' expectations, few products have materialized and that much of this speculation centers on categories of gender. Men are supposed to like action, solving puzzles, lots of definite and rigid rules, competition and challenging gameplay, while women are expected to prefer solving problems among characters, getting credit for trying, encouragement and support from the game, few and simple rules, winning through cooperation and quitting when they get bored.

The binary structure of this list essentializes women as neo-Victorian subjects who have short attention spans, prefer interpersonal relationships to competition, require encouragement to proceed with gameplay, don't get as involved with games as men, prefer not to follow rules, value competition over cooperation, and are easily bored. (1998)

Mark Griffiths, who reviewed the existing literature on computer game playing in children and adolescents, leans in the same direction. He says that society discourages women from displaying aggression in public and are unlikely, as a consequence, to feel comfortable playing combat or war games (1996: 42-43). He mentions a study by Morlock, Yando and Nigolean (1985) of 117 undergraduate video game players in which males reported that they play for competition and to master the games while females liked more whimsical, less aggressive and less demanding games.

These behavioral conclusions, according to Karen Orr Vered, are more likely the result of how a question is framed rather than an accurate assessment of the many ways in which girls play. She criticizes researchers for asking questions in terms of lack rather than expectations. Questions such as: why do girls not play computer games? or why are girls not interested in computers?, predestine, according to her, the answers turned out by researchers (1998a: 172).

Faced with these contradictions, it can be difficult to select a course of action in order to further the apprenticeship of new technologies by girls/women. While several sociologists, educational and feminist theorists seem to agree that there is a need for further involvement and a desire to better understand the needs of girls/women, most of the research on video games so far has been done with marketing objectives in mind. A survey of the limited non-market based research in Chapter 2, may lead us in the right direction.

CHAPTER 2

SAME OLD, SAME OLD...

HAVE VIDEO GAMES BECOME THE NEW TELEVISION? Understanding girls'/women's relationship with video games would be greatly facilitated if more research had been done on the subject. As it stands, most of the research is market-based, that is it was financed and accomplished to support the existence of a dichotomous view of the market. Although it provides some insight into what girls/women expect from a video game, I thought it might be useful to complement market-based research by looking at studies done on other media to see if parallels can be drawn to bridge the gap between "girls' games" software developers and female gamer groups' dissenting views of the girls/women and gaming issue. For example, a wealth of cultural, behavioral, sociological and educational information has been gathered on television and the consumption patterns of its viewers, research that can be used, thanks to the similarities between television and video games, to better understand the cultural significance of this technology for girls/women.

2.1 Are Video Games Replacing Television?

In 1992, American Hip Hop band, The Disposable Heroes of HipHoprisy coined the phrase "Television, the Drug of the Nation" in a song criticising the addictive properties of television, how it destroys other cultural pursuits such as reading and the impact it has on children¹¹, But the band is not alone harboring critical impulses about television. Indeed, many researchers have studied its impact on viewers in general, and on children particularly. According to Provenzo (1991), since the early 1950s, young people in America have become increasingly surrounded by an electronic environment. For example, the average child will have viewed approximately 16,000 hours of television between the ages of six

¹¹See lyrics in Appendix B.

and eighteen. This means that they will spend more time with these media than in school or talking with parents. "Children today are presented with an extraordinarily wide range of electronic media options — ones that are constantly expanding and growing" (Provenzo, 1991: 31). Among these media, video games account for an increasingly important part of children's leisure time. Are they slowly replacing television as "the drug of the nation"? That remains to be seen because very few studies have been done to measure the impact of video games. In comparison with the considerable body of research addressing such issues as addiction, isolation, aggressiveness and the lack of educational value of television programming and its impact on young people, there is only a dismal amount of work done on video games.

There is, very little reliable public data on the distribution of video games, on their use, or the reasons why children choose to play them let alone their implications. Stone attributes this oversight to the feeling on the part of many academics that computer games are inherently educational, or on the other hand, as an entertainment medium beneath serious contemplation. (Video Game Culture, 1997)

The Media Analysis Laboratory at Simon Fraser University also believes that the excitement surrounding the Internet and computer literacy, seems to have produced a naive faith among many that interactive media are simply signs of the inevitable and empowering age of digital communication. "But in talking to kids we are convinced that video gaming is not so much the harbinger of an "information revolution" as an entertainment and cultural one" (Video Game Culture, 1997). They argue that unless we start listening to their experience, we might overlook one of the most important and influential forces shaping children's culture today. The significance of this phenomenon has special resonance in the context of women's involvement with new technologies. Indeed, if people at the Media Lab are right and we are on the verge of

overlooking one of the most determining cultural aspects of youth today, then what does it say about young girls' chances for the future?

Furthermore, television being an established medium, it has been subjected to continuous scrutiny by parents, groups and agencies concerned with children's welfare. But so far, video games haven't really been put to the same test. Perhaps that will change as they become more established.

That said, a number of issues regarding the spaces in which video games are played, and the relations within these domains, have been raised. Researchers have highlighted, among other things, the fact that since video games and other electronic technologies are played or enjoyed mostly at home nowadays, they are subjected to the pressures of that environment. Ann Gray (1992), for example, offers an interesting study about the introduction of new technologies, such as the VCR in the home. She found that technologies have been either feminised or masculinised according to assumptions of what constitute appropriate female and male domains. According to her, women seem to have a less problematic relationship with technologies when knowledge or expertise has not been rendered masculine. Once again, this would seem to support the division of labor outside the home where women are often confined to more clerical and less decisional positions, especially in technology-laden fields of expertise.

David Morley (1986), who has conducted several studies on television, the viewing patterns of its audience and its cultural significance, agrees with Gray. "Television ... it is still largely conducted within, rather than outside of, social relations — in this case the social relations of the family household" (Morley,

1986: 14). This is also true of video games. A survey of who plays them and how many times doesn't really answer the deeper questions raised by a sociological approach. One cannot overlook the relations of power and gender at play within the home or in the public arena.

As we have seen in Chapter 1, the video game industry emerged at the point of convergence between the computer and television; what the Media Analysis Lab calls the twentieth century's two most important communication technologies.

There can be no doubt that this hybrid technology is poised to change the way children play and learn. Industry sources claim that video games have already been incorporated into the daily routines of 65% of all US households, and 85% of those with male children. When US figures for game systems are measured against recent Statistics Canada estimates that PC's have penetrated just 40% of Canadian households (the Internet into 20%), the video game appears to be by far the more important children's communication medium rivaling television in its acceptance into children's lives (Statistics Canada, 1997). (Video Game Culture, 1997)

Indeed, according to Provenzo (1991), the real significance of video game technology for contemporary childhood is that it represents the first stages in the creation of a new type of television — an interactive medium as different from traditional television as television is from radio (Video Game Culture, 1997). He further argues that the future will see the emergence and definition of this new media form in the same manner the late 1940s and early 1950s saw television emerge as a powerful social and cultural force.

In fact, this process may have started over twenty years ago. After decades of predominance by television in the hearts and homes of media consumers, a new generation of children, must have been starved for novelty and a way to distinguish themselves from the cultural environment of their parents. Indeed, as

early as 1984, Greenfield found that video games were slowly replacing television. Of the four children, between the ages of eight and fourteen, she interviewed about what they used to do with the time they now spend on video games, three out of four mentioned television. Two of those three mentioned only television, the third a number of other activities. When asked if they preferred television or video games, and why, the four interviewees were unanimous in preferring the games to television. They were also unanimous about the reason: active control (Greenfield, 1984: 101-102).

A survey by Scotland's Herald newspaper done in 1997, seems to confirm that highschoolers are indeed slowly switching from television to computer games. Although the study doesn't show a direct link between the two, it points in that direction. It showed that girls are spending three hours less in front of the television compared to two and a half hours less for boys, than ten years ago. Have they [computer games] taken over from the television as the new "thief" in the corner of the teenage bedroom rather than the living room?, ask researchers. Boys who play computer games (81% of all boys surveyed) spend an average of seven hours a week on them while girls interested in games (46% of all girls surveyed) will spend three hours and 40 minutes at the console (Media Matters Education Consultancy, 1998).

Are video games replacing television simply because they are the new kid on the block? In Complete Freedom of Movement: Video Games as Gendered Play Spaces (1998), Henry Jenkins points to deeper social changes to explain a move from television to video games. He explains how he sometimes feels nostalgic about the large empty spaces of suburban Atlanta, where he grew up in the 1960s. He says that these play spaces provided him and his friends with "countless"

imaginary kingdoms" inspired by the heroes of television. He then compares his childhood with that of his son, whose only natural escape from the concrete predictability of the city is an occasional visit to the local park, and he argues that video games allow home-bound children to explore a richer variety of imaginary places and escape from adult supervision (1998a: 263). "Watch children playing, their bodies bobbing and swaying to the on-screen action, and it's clear they are there — in the fantasy world, battling it out with the orcs, pushing their airplanes past the sound barrier" (1998a: 265). Have video games picked up where television left off by providing a more complete experience of imaginary places?

2.2 The Marriage of Television and Computers

McLuhan's recognition that games are media is an extremely important issue to take into account — one that is emphasized even more by the evolution of games into increasingly sophisticated electronic formats. (Provenzo, 1991: 70)

A move from television watching to video game playing cannot come as a total shock considering the strong similarities between the two, highlighted by several studies interested in children's leisure activities. Both television and video games are sedentary, take place indoors — except in the case of the now marginal video game arcades — and engage the viewer/player through screen images and sounds. Greenfield (1984), who studied the psychological and developmental effects of television and video games on children, also found that the games seem to build upon and utilize certain skills developed by television. Indeed, if moving visual imagery is important in the popularity of video games, then perhaps the visual skills developed through watching television are the reason children of the television generation show so much talent with the games (1984: 100). This suggests a definite complementarity between the two media or, as

Marsha Kinder proposes, "an ordinary TV set can become a point of entry into video games" (1991: 110).

Furthermore, such conclusions would seem to indicate that there is no apparent cultural or physical obstacles to girls having as much abilities with video games as boys. Since girls/women are just as immersed into today's television culture as their male counterparts, and have seen or experienced the same programs or technological advances that have marked this medium, then they should also possess the skill requirements to enjoy video games.

Some researchers (Selnow, 1984) have also come to the conclusion that adolescents will play video games for many of the same reasons they watch television.

They are temporarily transported from life's problems by their playing, they experience a sense of personal involvement in the action when they work the controls, and they perceive the video games as not only a source of companionship, but possibly as a substitute for it. Heavy users of video games may be "satisficing" their companionship need with video games rather than with less readily available (less fun, less exciting) human companions. (1984: 155-156)

But the similarities between television and video games go beyond the physical attributes of both media and also encompass content. Most media analysts, such as the Media Analysis Lab, will concede that video games are more dynamic and engaging than television programs, however, they are not so positive about their content. According to their research, the contents and themes found in video games often appear to be extensions of escapist TV fare at its worst. This, they say, leaves people wondering whether "we really have transcended television in this new digital playground when so much of the contents promote

testosterone fantasy and grotesquely cartooned violence" (Video Game Culture, 1997).

Provenzo (1991) agrees and wonders if video games are simply extending TV culture into the future:

If the video game industry is going to provide the foundation for the development of interactive television, then concerned parents and educators have cause for considerable alarm. During the past decade, [they have] developed games whose social content has been overwhelmingly violent, sexist, and even racist. (Video Game Culture, 1997)

2.3 A Monster with Two Heads?

Although television and video games share a lot of the same characteristics, they seem to be subjected to different levels of scrutiny, at least until now. As Comstock notes, children and young people are without a doubt the most studied population when it comes to television. He identifies a number of reasons for this such as public concern over their welfare, and scientific interest in socialization and child development.

Concern about television's possibly deleterious effects derives from the extensive amount of time devoted to television by young children. Such concern has focused research on television's impact on other activities including use of other media; television's influence on behavior, and especially aggressive and antisocial behavior; and television's influence on beliefs, values, and attitudes. (1975: 20)

But since their appearance on the market, video games have not been subjected to the same scrutiny. Indeed, while there are rules and codes of ethics regarding children's television and several studies arguing against too much unsupervised exposure to the medium, the same cannot be said for video games. It certainly is not because video games have not fallen prey to dubious content, as pointed out by Provenzo above. Is it then because video games involve the computer which is seen as a positive tool in our society? Or is it because video games being more interactive, they appear to allow aggressive behavior to be dealt with? It may be a possibility according to Greenfield. Although her research has shown that violent video games that are solitary in nature (such as *Space Invaders*) seem to have harmful effects, stimulating further aggression, it appears that a two-person aggressive game (such as boxing) may provide a cathartic or releasing effect for aggression. She wonders if perhaps the effects of television in stimulating aggression will also be found to stem partly from the fact that TV viewing typically involves little social interaction (1984: 104).

Whatever the level of involvement Tim Gill maintains that "computer games actively involve children; the games demand choices, develop certain kinds of skill, foster competition (and sometimes cooperation) between players and in some cases encourage tactical and strategic awareness" (1996: 38). Games are also explicitly aimed at children while television, as a whole, targets mostly adults, despite extensive research on children and television.

Provenzo also sees important distinctions to be made between the two media arguing that television is a passive medium and that viewers have virtually no control over what takes place on the screen. He says that video games, on the other hand, represent an active medium.

Television does not require the viewer to pay constant attention to it, whereas video games require total concentration. Finally, television presents actual acts of violence (as in news reports) or detailed simulations of violence (as in detective shows), while video games represent violence

at a more abstracted level (space invaders marching in rows across the video screen). (1991: 66)

This point of view, however, has been repeatedly criticized. Several researchers, among them feminist theorists, have argued that although television appears to be a passive medium, its influence can be significant. Media analyst James Lull (1980), of the University of California, for example, has shown that television can have a bonding effect on viewers. He found that television's characters, stories and themes are employed by viewers as ways of illustrating experience — common references which other people can be expected to understand. As he points out, people often use television programmes and characters as references known in common, in order to clarify issues that they discuss.

2.4 "Microworlds"

As a type of computer, video games create a culture of rules and simulations. In doing so, they represent microworlds complete unto themselves. The images they present are easy to fall in love with, often narcissistic in nature, allowing the player the potential to function within a self-selected and artificial microworld. (Provenzo, 1991: 38)

The notion of "microworld" is an important one when studying video games. Indeed, games being played in different spaces, both public and private, are subjected to varying rules and social relations prevalent in these spaces and fulfill a variety of needs for the players.

In the late 1970s and early 1980s, video game-playing was not a home-based activity. Arcades were the environment where game-playing took place and they were mostly populated by adolescent males (Cunningham, 1995). Today, although the home video game market has exploded, video games are still being

played in arcades and, more and more, in entertainment complexes like the 30,000 square-foot Sega Gameworks in Seattle, a US\$15 million adventure. The developers hope that these spaces will be changing the face of entertainment and will become the gathering places of the "Nintendo generation." Such environments provide the users with an alternative social and cultural space, in the public arena. "Like the pool hall, the video game arcade is generally off limits to parents and adults. For teenagers this means the ability to establish a separate and autonomous culture" (Provenzo, 1991: 58).

Lull (1980) has shown how television viewing contributes to the structuring of the day, punctuating time and family activity — such as meal times or bed times, for example, thus contributing, in essence to the construction of a microworld or environment.

TV is a companion for accomplishing household chores and routines. It contributes to the overall social environment by rendering a constant and predictable assortment of sounds and pictures which instantly creates an apparently busy atmosphere. The activated television set guarantees its users a non-stop backdrop of verbal communication against which they can construct their interpersonal exchanges. (1980: 202)

The same is true of video games, especially for young people. More than the hot television show of the moment, children today seem to be talking about the latest video game or the imminent arrival of the next Sega console. The Pokémon phenomenon certainly illustrates this, but mostly, it shows that video games, just like television, provide players with a frame of reference, a common ground for social interactions.

In Satellite Television and Everyday Life: Articulating Technology (1996), Shaun Moores raises questions about the practices and politics of domestic

consumption, the meanings of "home" and "community", and the role of communication technologies in mediating between private and public domains. Again, television comes as the readily available tool of comparison with video games. Although television is situated within the private realm, it "serves to forge collective links with formerly remote events or happenings in the public world" (1996: 1-2), according to Moores, suggesting that television is also part of the public space. In fact, the merging of the private and the public is a popular topic in an increasingly global environment where we can share someone's everyday life on the Internet at the buzz of a modem.

Just as video game arcades did twenty years ago, home video games can also lead to the creation of an adult-free zone because the technology is so new and constantly changing that many adults are excluded from it, thus making it a relatively secret and protected domain. The invasion of the home by video game consoles has also opened up the doors to girls and younger kids who were either unwelcome in arcades or simply too young.

As the context of games-playing has changed, female participation in games culture has increased. Young girls can now be found huddled around Gameboys in the playground, and girls as well as boys now talk of *Sonic* (Sega's trademark) and *Super Mario* (Nintendo). (Cunningham, 1995: 188)

Cunningham goes on to say that the move from "street culture" in the arcades to "bedroom culture" in the home has transformed the experience of game-playing for young girls. "This domestication of computer games has fed into girls' existing "bedroom culture", and now both boys and girls spend hours in their bedrooms playing computer games with friends" (1995: 192). Other researchers, such as Kafai (1996), have gone further in distinguishing between

the fantasy worlds of girls versus those of boys. He found that girls will often chose more familiar real-life settings for their journeys, such as a classroom, a ski slope or an airport, while boys will favor more imaginary cities, islands or countries.

According to Cunningham, however, this retreat into the bedroom has more to do with fear of strangers and fast cars than any addiction to *Sonic* or *Super Mario*. Indeed, this evolution was welcomed by many parents who were relieved that their children had taken up home-based activities rather than play in the streets (1995: 194). This is in reaction to the popularity of arcades in the early 1980s, as they became the collective point for youths to hang around and video games were blamed for delinquency.

From his perspective, Morley doesn't see the invasion of the home by electronic media as an automatically negative phenomenon.

The dominant image of the relationship between the family and television (or the media in general) is one in which the media are seen as having a primarily disruptive effect on household routines and family relationships... (1986: 22)

He maintains that we should look at it the other way around and examine the ways in which television provides family members with different schedules for gathering or acceptable zones for private pursuits. Rather than simply think of television as having a disruptive effect on the household, he suggests we examine the ways in which television programming does not so much intrude on existing family activities as provide organizing centres or focuses for new types of communicative contexts (1986: 22). Or, as Kinder argues, video games

have actually brought families together for shared play and interaction, something they had not experienced since the appearance of TV (1991: 104).

But of all the social groups touched by the arrival of new technologies, women in general seem to have benefited the least. Indeed, as we have seen so far, women are often still confined to "feminine" work marked by a lack of agency, whether it is in the public or private spheres of their lives. Gray (1992), for example, highlights gender relations as they pertain to the introduction of new technologies, such as the VCR, in the home. She studied the domestic environment of thirty female subjects, to demonstrate that new technologies are just as embedded in stereotypes and relations of power within the home, as the so-called older technologies, such as television — think of the age-old battle for the supremacy of the remote control. "It would seem that there are decisions made by the women to remain in ignorance of the workings of the VCR, so that it is their husband or partner's job to set up the timer" (1992: 169). Whether they consciously or unconsciously chose to relinquish control, Gray sees negative repercussions stemming from that decision, since the women end up feeling stupid because of their lack of knowledge. Women's relationship with video games raises similar issues. Women would rather say they do not play because they do not like video games instead of admitting they do not know how, or learn in front of men.

In addition to spaces, issues of time are also at the core of women's interaction with new technologies such as the VCR, computers or video games. Gray mentions one woman who felt frustrated because the members of her family had more time to spend on the computer, while she had to attend to other duties, a situation that placed her on the margins of the learning process (1992:

170). She also points out that when the familiarization with a new piece of technology does not happen when it is first introduced into the home, there's a good chance that the woman will not learn how to use it. "This is not a simple matter of available time, but of the right to time which is claimed by the men, as if what they are doing is significant by virtue of the fact they are doing it" (1992: 171-172). This has far reaching implications for the organization of domestic life giving the males of the household a chance to become techno-literate much more quickly and effectively than the females.

2.5 A Redefinition of Children's Boundaries

In conjunction with the creation of microworlds, the emergence of cross-platform marketing (see Chapter 1) has had a blurring effect on the edges of the private, the public, the imaginary and the real world, as they become less and less defined, leading to the creation of a complex multi-layered environment. Kinder mentions the case of an NBC series titled "Captain N — The Game Master," in which the animated heroes (Mario and Luigi), the villains, spatial configurations, and music all come from *Super Mario Brothers* 3.

Although the episodes usually begin in the ordinary world of animation, the setting was identified as Brooklyn and called "the real world", the heroes find a warp that enables them to enter the spatial world of the video game. This double reality is then put within a third spatial realm: a frame where a teenager (the spectator-player in the text) plays the video game in his living room and then enters the TV set, which is his entry into the warp zone. (1991: 110)

This blurring of video game playing, television watching and reality is perhaps what makes video games so appealing to children. It might explain why they are so enraptured in the glow of the TV or the computer monitor. Indeed, as Sefton-

Green points out one of the most salient images of a contemporary child in western society is a picture of a rapt face staring entranced at, almost *into*, the computer screen. "This image is powerful not just because it encapsulates the hopes and fears within popular narratives of childhood but because it also tells a parallel story, the narrative of technological progress" (1998: 1).

Video games seem to have allowed children to take a more active role in the choices of entertainment offered to them due to a lack of supervision or control over the medium's content, and a lack of research done to highlight the consequences of extensive play. This has led some researchers like Sefton-Green, to suggest that new technologies are helping to redefine the boundaries of childhood. On the one hand they allow young people to act with "grown-up power" in the digital realm while, on the other, they seem to have continued the process of juvenilization associated with leisure pastimes (1998: 3). Even institutions like Standard and Poor, who publish several industry surveys, including one for toy manufacturers, indicate that there is no longer any reason why certain manufacturers should limit themselves to rigidly defined markets such as the under-12 segment or adult novelty products and board games. "A blurring of the distinctions among children, teens, and young adults has taken place as children become increasingly more sophisticated and mature in their choice of entertainment" (Kinder, 1991: 118).

Because the production of television for children is governed by numerous rules and regulations, the programming possibilities are limited and children have very little influence over what is actually produced. The video game industry, however, is not bound by such limitations and since it is highly driven by the

market, children — the biggest target market — have a better chance of actually having a say in what gets produced.

Provenzo provides us with a glimpse of where video games are ultimately going. He asked eight- and nine-year-old boys what they want in a video game.

They talked about wanting to be able to define the characters in their game, to shape the power that they had, and to design the settings in which the games took place. Such desires suggest that children are trapped in microworlds created by computer programmers, which, although highly appealing, are ultimately limited in terms of the needs and interests of the children who play the game. (1991: 48)

Perhaps this points to a time when video games will provide an even more multi-layered environment where the imaginary and the real world will be even more blurred. However, before imputing such flexibility into video games, software developers will need to deal with the female in gaming issue. Right now, "technology is used as a symbol of intellectual ability, of indisputably male territory to which a woman can only gain entry via her husband" (Gray, 1992: 174). Although women operate sophisticated pieces of equipment in the course of their daily domestic work: washing machines, cookers, microwave ovens, sewing machines, etc., they do not refer to or consider them as technology. In the majority of cases, their male partners had not staked their claim to this knowledge. The importance of this is two-fold. First, it is an indication of assumptions about appropriate "female" technology and second, when knowledge or expertise is not rendered "masculine", women seem to have a less problematic relationship with it (1992: 179).

This is important in the context of this analysis because it points to a possible cause for girls'/women's reluctance or inability to embrace video game playing.

It also highlights the fact that what happens in the domestic context can have significant consequences in the public domain as it pertains to women and new technologies.

Finally, it opens the door to our next chapter in which we will see that there are significant differences when women use technology in their daily professional lives. Indeed, women who have developed a certain knowledge and expertise of new technologies do not seem to get trapped as easily by the social limitations imposed upon them or, at least, engage with the technology from a different position, one in which they have more agency.

CHAPTER 3

THE TRANSGENDERED GAMER BODY

HOW FEMALE GAMER GROUPS ARE EXPLODING GENDER STEREOTYPES In Chapters 1 and 2, we have seen how market research in the video game industry has led to the creation of a gendered market. "Girls' games" software developers are convinced, based on their extensive studies of the seven-to-twelve year-old female segment, that it is through the design of gender-specific games that girls/women will become interested in playing, and ultimately, get acquainted with new technologies. As we will see, this view of the market has prompted a lot of criticism from very different groups of women, such as feminists and gamer clans.

Feminist theorist, Suzanne de Castell, for example, wonders: "How many of us harbor memories of dismembering our dolls, hacking off their hair, positioning them in compromising postures?" She sees a discrepancy between what "girls' games" companies are claiming and what her own memories tell her. She condemns gendered toys, calling them "feminized playthings that escort girls to their proper place in the gender order" (de Castell and Bryson, 1998: 231). Castell might have a point since the appearance of the "girls' games" companies does not seem to have had any positive impact on the female proportion of video game players. Its lasting impact seems to have been to push girls/women into the pink section of computer stores.

Moreover, the growing popularity of female gamer groups, such as the "Quake girls", who test their talents playing violent games on-line, and more recently the creation of Sissyfight 2000¹², raise even more questions. Cunningham's research, for example, suggests that:

¹²Playing Sissyfight (http://www.sissyfight.com) means reducing other schoolgirls, in their little schoolgirl outfits, to whimpering sissies. "Through a barrage of scratching, teasing, tattling and grabbing, players knock each other out of the game by chipping away at their opponents' self-esteem" (Spencer, 2000).

the gendered nature of game-playing is changing. A large number of girls appear to enjoy playing computer games. Female participation in games culture has significantly increased since computer game-play moved out of the arcades and into the home. (1995: 196)

These apparent contradictions highlight a definite need to do more research about the women who defy statistics and like video games? Do they exhibit a lot of masculine qualities? Do they assume a different identity when they play video games? And if so, is that part of the appeal? Studies based exclusively on identification can only go so far in explaining women's growing interest in games culture.

Cassell and Jenkins' From Barbie to Mortal Kombat (1998) — a collection of articles presented at a one-day symposium on gender and computer games at the Massachusetts Institute of Technology in 1998 — tries to draw a portrait of the female video game player. The experiences of women video game players, particularly those who have chosen to play within the context of gamer clans are key to better understand what makes them different and why they chose to reject society's boundaries regarding what is their "natural" place.

A study of activity cannot simply be limited to the dynamics between mouse control and movement of objects on the screen. It must also incorporate the social context in which play is both conceptualized and actualized. Given certain opportunities and constraints, children transform a game for one player into a group activity defined by a sophisticated social structure and activated through play. (1998b: 44)

Could it be that just like the children in the study mentioned here, women, if left to their own devices, will transform a limiting solitary situation into a social activity?

3.1 The Creation of a Virtual Community

As expressed by Aurora of GameGirlz, a Web site dedicated to offering female gamers industry news and profiles, as well as game reviews:

It wasn't until the beginning of *Quake* and the on-line playing that I actually realized that there were other female gamers out there. On-line gaming has brought me hundreds of new friends, both male and female, who all share a love of fragging, slaying, and taking over worlds. (Jenkins, 1998b: 336)

Aurora is not the only woman, or man for that matter, who has found a sense of belonging in the world of on-line gaming. In fact, gaming clans are sprouting everywhere because they offer players a sense of community. For a very long time, video games were, by the nature of the existing technology, a solitary experience. At best, you played against a friend in your living room. But with the marriage of the computer or game console with telecommunication capabilities — the Internet and local area networks — video games can now be a shared experience. Furthermore, belonging to a clan and gaming on-line transforms an often predictable — the computer can only surprise you so far — activity into an exciting and unpredictable group one. This is especially true for women who, as we have seen, are often excluded from more traditional playing grounds such as arcades.

Clan members have also developed their own lingo as they chat between games; GG for good game or GJ for good job. They also share personal information about where they live, what they do, about their families and pets, about how their day went, and develop a virtual relationship based on a common love for and extensive knowledge of the game. Since on-line gamers' play is often

dictated by their schedule, they often run into the same people which contributes to the community building effect.

Female on-line gaming has also led to the emergence of a sub-culture comparable to the development of the riot grrrl¹³ movement in the early 1990s. This feminist network first grew out of the underground music communities of Olympia, Washington, and Washington, D.C. to challenge sexism in the music scene and encourage girls/women to assert themselves (Leonard, 1998: 102). It then moved on to different areas of the country, and the world, and led to the creation of several zines¹⁴ and Web sites. The riot grrrl and female gamer groups sub-cultures share a number of characteristics. They unite disparately located participants who have a common interest. They give geographically isolated people a sense that they are not alone in identifying with a particular sub-culture, and that they belong to a community. But most of all, both riot grrrls and female gamers refuse to be thrown into a homogeneous category. Indeed, interviews with members of these groups show that they often do not pursue the same goals, and that they have different strategies for attaining them. "Attempts to contain riot grrrl within an explanatory grid ran counter to its very ethos as an expansive and changing network" (Leonard, 1998: 110).

According to Karen Orr Vered, the findings of several studies, conducted to try and define what girls want in a game, indicate that the social setting and

¹³The spelling of "grrrl" was chosen in order to differentiate riot grrl Web sites from pornographic Web sites who put the word girl in their names to facilitate Internet searches. Type the word "girl" into any search engine and you will understand why.

¹⁴Marion Leonard (1998) wrote an interesting analysis about the riot grrls sub-culture. She describes zines as self-published, independent texts devoted to various topics including hobbies, music, film and politics. They are usually non-profit-making and produced on a small scale by an individual or small group of people.

interpersonal dynamics associated with group play significantly influence girls' choices and that the playing environment may actually be more important than the actual content of the game (1998b: 55) — a fact that raises further questions about content-driven "girls' games" companies. The advent of the Internet might then be considered a key factor in the development of female gamer groups. Indeed, women can now play in the privacy of their home and not be intimidated by the pressures of the socially charged and gendered environment of the arcades of yore. They may now find pleasure in the game itself without being distracted by the tensions of their surroundings.

In fact, the multiplication of female gamer groups has happened in conjunction with the creation of several Web sites dedicated to video games and catering to the needs of girls/women in that regard. The sites, such as GameGirlz, Cybergrrl and GrrlGamer, promote an ideal sense of community with sections for members to chat, editorials, reviews, profiles, etc. This does not mean, however, that women never get harassed on-line. "I had guys asking for pictures, or asking for intimate details about my anatomy and telling me what they'd like to do with it," says Amy Marie Hearn, a 29-year-old Vancouver artist, a.k.a. PMS Lady Death. Others got e-mailed death threats or men hunting down their real-life phone numbers (Thompson, 1998;, C11).

Today, there are about 20 active all-female clans devoted solely to *Quake*, and they bring a fresh outlook to the game. ¹⁵ They are called Psycho Men Slayer (PMS for short) with members such as Super Bitch, Medusa and Raven, Hell's Belles, Clan Chix and Clan Crackwhore. These names attest to the clans' sense of

¹⁵An all-female Quake tournament, organized in August, 1997, attracted 160 women.

humor and their obvious desire to send a message to other gamers, including men.

Possibly because of their outsider status, women *Quake* players have a scathing sense of self-parody. They particularly relish the wild disjunction between their bloodthirsty virtual lives and the stereotype of femininity — not to mention their otherwise normal, everyday lives, with jobs and, in many cases, kids. (Thompson, 1998: C11)

According to Thompson, there is a "perverse irony" in on-line gaming in that it "resocializes a game otherwise defined by its sociopathic aspects: run, hide, shoot."

Consciously or unconsciously, female gamers are making a political statement. Indeed, for a clan to declare itself all-female in the boy-heavy arena of video games, attracts without a doubt the attention of male players and draws some less than pleasant comments. Female gamer groups go even further in rejecting and exploding the notion — widely disseminated by girl software companies — and the gender stereotype that women will not or cannot display any signs of aggressivity. According to Nikki Douglas, editor of the GrrlGamer Web site, "this stuff about women not being aggressive is total crap" (Thompson, 1998: C11). Responding to a News Editor at *Computer Gaming World* who said that boys play video games to relieve their stress while girls like to solve problems, she answered:

Lord knows we, as women, don't need to relieve stress. We just go shopping or eat or color code our underwear drawers, right? And I want all my gaming to be about achieving goals, just like my life is, not some escape. Oh, no, why would I want to temporarily escape all the stress and problem solving that I'm faced with every day? (Jenkins, 1998b: 332)

Cunningham suggests that the aggression generated in game-playing and focused onto the machine can be seen as relieving stress, tension and pent-up aggression. "My own computer game-playing is my method of switching off from the day's pressures by focusing on *Super Mario* and how to get past the boss character at the end of the level" (1995: 195).

3.2 The Demographic Gap

Although "girls' games" companies are easy targets when it comes to criticizing the video games industry's essentialist view of the female market, blaming them for the contradictions already mentioned would not only be unfair, it would not be based on reality. Indeed, one of the main sources of contradiction comes from comparing the market targeted by the game software developers — mainly seven-to-twelve year-old girls — to adult female players. Beyond the fact that they are older, the members of female gamer clans also feel at home in the digital world. According to Jenkins, they do not want a space of their own but would much rather beat boys at their own games.

Their voices are nineties kinds of voices — affirming women's power, refusing to accept the constraints of stereotypes, neither those generated by clueless men in the games industry nor those generated by the girls' game researchers. (1998b: 329)

But who are these women exactly? In *Girl gamers battle bias*, Thompson interviewed several of them. Of the five women gamers quoted in his article, one is an artist, while the others are a game designer, a digital-imaging technician, a network administrator, and a Web site editor. Most of them are in their late-twenties. Is there a link then between the professional lives of these women and the fact that they are attracted to video games? Most probably, because they are

not afraid of technology in general which, in turn, brings us back to accessibility to new technologies. These women want to be taken seriously by the game industry, questioning the gender stereotypes at the roots of existing games and advocating greater access to computers for their younger sisters (Jenkins, 1998: 329). Female gamers may indeed be different in that they have usually discovered the games on their own. "They've certainly never seen an ad for *Quake* in *Seventeen*. How many other girls would discover they enjoyed destroying aliens if only informed that it was OK for them to play" (Brown, 1996a).

In fact, a lot of female gamers are very critical of software companies who design games specifically for girls. Stephanie Bergman of Game Grrlz, for example, argues that what "girls' games" companies have to understand is that although there is a market for games like *Barbie Fashion Designer*, there is just as big a market for girls who like to do the same things the boys do. She does not see anything wrong with girls/women who enjoy a first-person shooter game. "Barbie's not really a game. You point, click, do all sorts of things, but where's the competition? Where's the adrenaline rush of WINNING? It's not there... The concept of "girl games" is detrimental to the little girls who game" (Jenkins, 1998b: 330).

This is one of the main criticism these companies have had to face because their view of female consumers has led to a polarization of the market, at the expense of other possibilities. If the "girls' games" vision of the market had not emerged, perhaps existing software companies would have had to adapt future games to be more appealing to girls/women.

Aliza Sherman of Cybergrrl, for example, wonders why are there not games for girls/women on the market that teach them a new set of values such as competitiveness, assertiveness, and take advantage of a female's natural handeye coordination. "I think that as a society, we have a big taboo against strong women and a greater fear of women as warriors" (Jenkins, 1998b: 335). Instead of designing with Barbie, she suggests creating shoot-em up games such as a Western based on Annie Oakley, or a fantasy rough and tumble game based on Xena¹⁶, or a scary, evil "stab them in the heart with a stake" à la Buffy the Vampire Slayer¹⁷. She goes on to venture that studies and articles where experts say girls do not like shooting and blasting games but instead prefer quiet, contemplative games with well-rounded characters and storylines that stimulate their imagination, are a reflection of how we condition girls to be passive. "The image of a woman with a gun is too shocking, too disruptive and threatening to the male dominant order of things (Jenkins, 1998b: 335)¹⁸.

Female gamer's rejection of traditional expectations regarding their gender is particularly daring if we believe, as Vered argues that:

The social discourse and interpersonal dynamics developed in different play activities serve as practice for social actors and reinforce social behaviours which are generalized from one circumstance, computer game play, to others. In this way, computer game play does not merely

¹⁶Every week on television *Xena: Warrior Princess*, sporting the latest in gladiator "chic", battles warlords, gods and other mythical creatures. This series, produced in New Zealand, has triggered the creation of an important sub-culture of fans.

¹⁷Something evil is brewing in sunny Sunnydale, California. Golden-haired Buffy The Vampire Slayer, the chosen one, pits her skills against demons and vampires every week on television.

¹⁸One only has to look at the media coverage of acts of violence perpetrated by women, such as the brutal killing of a teenage girl in British Columbia last year at the hand of other female teenagers, to see that society just cannot conceive of women being violent.

replicate gendered behaviours and attitudes but actually functions to construct and maintain differences between boys and girls. (1998b: 43)

Indeed, these women reject the boundaries placed upon them, and chose to play in a male dominated world, an act probably made easier because it happens in the virtual world, where violence does not inflict any bodily harm. But according to some researchers (Jenkins and Cassell, 1998), the growing visibility of "Quake girls", suggests that there has always been a healthy degree of "crossover" interest in the games market and that many girls enjoy "playing with power." Indeed, girls can compete more directly and aggressively with boys in the video game arena than would ever have been possible in the real world of backyard play, since differences in physical size, strength, and agility are irrelevant. "And they can return from combat without the ripped clothes or black eyes that told parents they had done something "unladylike" (Jenkins, 1998a: 291).

The existence of an environment, albeit virtual, in which women can be who they want and act how they want certainly is a positive element in the growing popularity of female gamer groups on-line.

3.3 The Process of Identification: The Transgendered Gamer Body

Several feminist theorists have argued that women are socialized at a young age to embrace feminine traits and qualities, as defined by a patriarchal society. Women are taught, for example, to identify with "appropriate" toys designed and chosen along gender lines.

A girl given a doll is being told, "Girls play with dolls just like mommies take care of babies." A boy given a computer game is being told, "Boys play with computers just like daddies use them for work." A girl given

Barbie Fashion Designer is being told, "Girls play with computers just like girls play with dolls." A lucky few might get the message that, as some girls exchange dolls for real babies, others might progress from Barbie Fashion Designer to real-life fashion designer, or engineering systems designer, or software designer. But there's a good chance that many will not. (Ivinski, 1997: 28)

As a product of the marriage between toys, the computer and television, video games are imbedded with the same ability to trigger identification in the player. Indeed, just like television did it for the past decades, new media provide individuals with the possibility to identify with characters, situations and settings, thus creating a "safe" environment in which the viewer can interact with the medium. The Internet and video games go even further in allowing for the participation of the user. Indeed, identity on the Internet is as fluid as can be. The popularity of chat rooms testifies to this cultural taste for the masquerade. As for video games, they let the player pick a character and a name, a sure sign of identity definition. Moreover, Internet gaming, where players battle each other as opposed to the computer, allows for even more originality and for personality to shine through. Is it any wonder why Internet gaming is growing rapidly?

Moreover, the Internet and video games combine an added element of interest: space. Jenkins (1998) argues that spaces have an important influence on the formation of identity. He says that children's exploration of their surroundings allows them to "map their own fantasies of empowerment," particularly in the case of unsanctioned spaces such as the back alleys or the vacant lots, as opposed to the playgrounds. Video games provide such environments as well because of the generational gap between their knowledge and that of their parents.

However, he points out that play spaces are structured around gender differences, girls being given much less mobility than boys, mostly because of parents' concerns for their safety. These restrictions placed on girls' movements have a crippling effect on their sense of mastery over their environment, their freedom, and self-confidence (1998a: 267-268).

Although, no study has been done to see what impact video games have on the formation of identity, some psychological and sociological research has been done on the broader subject of play, shedding some light, albeit limited. According to Ivinski, play enables children to try out different roles, test boundaries, and formulate identities. It also establishes templates for adult behavior, especially in relation to the division of labor by gender. "The limited number of patterns for Barbie's clothing becomes a metaphorical template for the adult opportunities that will be available to the girls who play with her" (1997: 28).

The notion of transformation is an important one for children as they are trying to test their boundaries and are looking to form their own identity. According to Doug Glen, president of Mattel Media: "Boys and girls are all going through constant change — you see it in Cinderella, The Ugly Duckling. You also see it in toys that are designed to transform from one kind of vehicle into another" (Meloan, 1996). He argues, predictably considering Mattel's gender-specific view of the market, that for boys the process usually involves a move from less powerful into more powerful, while girls are more attracted to glamour and magic (Meloan, 1996).

In *Barbie's Queer Accessories*, Rand argues that the formation of an identity can also go against expected gender stereotypes. "Tomboyhood and dykehood can be seen to involve parallel mental activities: first you figure out that you do not want the toys girls are supposed to have; later you figure out that you do not want the object of desire girls are supposed to have" (1995: 111). Is the growing number of "Quake girls" a sign that female gamers are more in tune with their masculinity? Or do they adopt a more masculine personality in order to wield more power within the realm of the video game world?

Video games are a great way to adopt a different identity and to reclaim some of the self-respect and power women are barred from by adopting or exhibiting what are considered male qualities.

In most areas of society this violent and aggressive side of a girl/woman's nature has to be repressed in conformity to socially expected norms of what is acceptable 'feminine' behaviour. Playing violent games gives female players the chance to express this aggression in a safe context. (Cunningham,1995: 198)

Cunningham's research shows that when girls play video games, they often chose to operate the male characters because they have "better moves", and special skills and functions. Male characters being operated by female players, and vice-versa, could be seen as "transgender identification." She does not believe, however, that "identification" adequately describes players' relationships with the characters on the screen. "Future research on computer games should perhaps concentrate on the experience of playing these games and how 'pleasures' are created" (1995: 198). This might also suggest then that it is useless to spend so much time designing female characters that could appeal to women.

One interesting example of transgendering is the game *Metroid*, in which the heroic Samus turns out to be a female in warrior drag.

The main object of Samus' quest is to find and destroy the Mother Brain, a plot highly reminiscent of the movie *Aliens*. While comfortable playing this game because of its female hero, they [women] are nevertheless positioned to reject the monstrous maternal and to model themselves after the father — which can hardly be reassuring to feminists. (Kinder, 1991: 107)

Bryson and de Castell suggest that the way games for girls are marketed and the way girls have learned to "package their desires in pink boxes" has a lot less to do with what girls want then what adults want for girls. "Such desires surely have far more to do with the gender-identities developed by adult males than with those of children themselves, since it is masculinity that has always been the desired response to the question of what girls and women want" (1998: 251).

3.4 Role Models

Like many other women gamers out there, I dislike the image of females that many software companies have set. This image is a topic I have discussed at length with many women (both game players and women working in the industry). In the eyes of the computer gaming industry, if you are a young girl, your only interests are boys and make-up. If you are an adult female, you wear leather and a bra big enough to double as a dust cover for your monitor. (Jenkins, 1998b: 337)

—Aurora of GameGirlz

If the creation, definition and positioning of an identity is an important process in game-playing, then role models could be crucial to help girls/women develop their self-confidence and see the world without blinders. But, as in other fields such as commerce, science or academia, video games exhibit a definite lack of them. In fact, it is often mentioned as one of the reasons why girls/women are

not more interested in the games, and in new technologies in general. Although, some researchers have suggested that girls will play games without female characters more easily than the opposite for boys, the lack of character to identify with is seen as an obstacle to develop interest among girls.

But what about existing female heroines? Are they perceived as a step in the right direction? The launch of Tomb Raider, an action/adventure game along the lines of Indiana Jones, by Eidos in 1997 imposed such a female character in Lara Croft, a 5'9", 126 lbs, 34D/24/35 archeologist whose turn-ons are motorcycles and M-16's, according to an ad in a computer magazine. Alain and Frédéric Le Diberder caution against seeing here a feminization trend in video game production. According to the developers of the game, the goal was to create a character that's easy on the eye. Indeed, in an interview with Time Magazine to mark the launch of Tomb Raider IV: The Last Revelation, in 1999, Adrian Smith, the creator of Lara Croft was happy to report that "she's got a bottom now" (Taylor, 1999: 50). Cal Jones, Reviews Editor for PC Gaming World says that the problem with Lara is that she was designed by men for men as proven by her thin thighs, long legs, a waist you could encircle with one hand, and knockers like medicine balls. "Show that to a guy and although he may not admit it, deep down he finds Lara pretty sexy." Women, on the other hand, will complain that she is anatomically impossible (Jenkins, 1998b: 338). However, despite the fact that Lara Croft obviously was not designed to be a role model for girls/women, she does appeal to a lot of them. Jones says this is due to Eidos' marketing strategy.

Obviously her figure will appeal to blokes (the straight ones any way), but apparently women will like her because she's tough enough to climb up rock faces, shoot men in the face, and wander around in the freezing cold in only a pair of shorts and a vest without so much as a pointy nipple in

evidence. Lara, you see, has gone from being a female character in an entertaining game to (post-Eidos marketing campaign) Girl Power incarnate. (Jenkins, 1998b: 336)

The Lara Croft example is interesting because it raises questions about the importance of identification with the characters in female play. If girls are more inclined to play games devoid of female characters, as stated above, maybe it is because they have gotten used to it. Is it possible then that female players have transcended the need for female characters and female role models? Are they capable of constructing their own heroines no matter what the game reflects back at them? Or is it possible that women take pleasure in identifying with male characters because they embody power and confidence? Only more research can answer these questions but Michelle Goulet of Game Girlz has her own interpretation on the subject. "I do not think I would want to play a homely looking three-hundred-pound female anymore than I would want to play a 105 pound blonde with enormous breasts." She says that the point of contention is deciding whose ideal body image it is. Most male characters fit the ideal body image of guys, but female characters fit men's ideal image of a woman. "I think this is the reason why the bimbo with big lips and a matching set of bazooms upsets a lot of gaming girls" (Jenkins, 1998: 340).

But just as there are several types of female bodies, should there not be several types of game character bodies? And is it not unrealistic to expect that video game producers will agree on a specific body type that will appeal to all women? After all, fashion magazines have been projecting "twisted" images of women by women for centuries despite criticism. Is it realistic to expect that an industry dominated by men will succeed where women have knowingly failed? Probably not. The answer might then be somewhere else.

According to Goulet, the key word is respect. She joins "girls' games" companies, at least partially, in arguing for more female participation in the design of female characters. Where the two differ is that she does not want to change the games' content, only the characters.

This doesn't mean that the girls in games have to be some kind of new butch race. Femininity is a big part of being female. This means that girls should be girls. Ideal body images and character aspects that are ideal for females, from a female point of view. I'd be willing to bet that guys would find these females more attractive than the souped-up bimbos they are used to seeing. (Jenkins, 1998b: 341)

This position, adopted by feminists in the 1960s, proclaiming that a more equal representation of women in fields dominated by men will eventually lead to content more appealing to women did not have the desired effect however. Cultural studies, among other fields of media analysis, have gone a long way to show that there are other factors to consider. Women in positions of power will not automatically transform their environment into a more female-friendly one. If that is their goal, and it might not be, they also have to deal with, among other factors, corporate, economic or social pressures that might prevent them from having any real impact.

CONCLUSION

In an industry dominated by giant software companies — Sega, Nintendo and Sony — who have made a fortune catering to the most basic of teenage male fantasies, is it any wonder that women only account for 30% of the video game market? When women are represented in video game marketing and content, they are either the tantalizing banshees to be slayed or the demure yet "overly busty" princess to be rescued.

Most researchers, educators and parents interested in gender and video games agree that something must be done to better prepare girls for the challenges of the increasingly technologically sophisticated work market, and world in general. However, as we have seen their interventions on the subject vary greatly, which has triggered a lively debate. Like in most other areas concerned with the empowerment of women, some argue that it is the social context in which girls are brought-up that needs to be addressed in order to convince them that it is all right to be aggressive and to want to win. Would girls/women be more attracted to video games if these conditions were to change? Others see in the under representation of women in technology-based disciplines a problem of inequity in education, while others still, see in girls'/women's absence from the culture of computing a problem of untapped markets by industry (de Castell and Bryson: 1998, 237).

The emphasis placed by "girls' games" software companies on responding to the expressed tastes and needs of the girls market — Brenda Laurel of Purple Moon said many times that she would respect the results of focus-groups even if it meant sending products in pink boxes — seems to go against the general desire to effect change in getting girls better acquainted with new technologies. Indeed, by catering to the existing predilections of girls, are these companies not simply

reinforcing stereotypes? A quick look at the products released by these game developers over the years shows that they have stuck almost exclusively to very traditional female interests such as journal writing, reading, gossiping and beauty, resulting in slow-paced, linear stories, that are a far-cry from the fast-paced, graphically complex products offered by the rest of the video game industry. Once again, is this not counterproductive if the goal is to prepare young girls for the speed and complexity of the technological world in which they will live and work in the future?

Furthermore, is it realistic to expect that empirical studies will yield results devoid of the social and cultural pressures imposed on children at a very young age? Can we expect that a seven-year-old girl will be able to express what she really wants in a video game or will she simply regurgitate what she has been taught she should want? Girls and boys receive gender-specific signals as soon as they are born — pink for girls and blue for boys —, and are constantly being pinned against each other when it comes to their socially expected desires.

"Girls' games" designers have argued that in a market dominated by giant software companies, they have no choice but to stick to market research in order to have a fighting chance of surviving. Several interviews with female game designers in From Barbie to Mortal Kombat (1998) highlight the difficulties some of them have with the narrow creative window they have been dealt. They often tell of moments where their own political commitments, to provide information about birth control or queer sexuality, for example, ran up against the expectations of the market or the threats of boycott by schools and parent groups (Cassell and Jenkins, 1998: 20). These women then, are making a

conscious decision to stay away from contentious issues, bowing under market pressures to conform instead.

The Trials and Tribulations of Barbie

As can be expected, feminist theorists have had a lot to say about the gender-specific view of the video game market, over the last few years. Sherry Turkle of MIT, for example, wonders if "girls' games" developers are not simply reinforcing existing stereotypes.

If you market to girls and boys according to just the old stereotypes and don't try to create a computer culture that's really more inclusive for everyone, you're going to just reinforce the old stereotypes... We have an opportunity here to use this technology, which is so powerful, to make of ourselves something different and better. (Cassell and Jenkins, 1998: 18)

Turkle's intervention reflects the overarching feminist rhetoric on the topic, which is that toys play a crucial role in socializing children to conform to gender-specific and highly restrictive social roles, and that something needs to be done to change that. Although idealistic, her vision of the market raises important questions. Do girls really need to be pushed into their corner of the stores where they will find, yet again, the symbols — make-up, shopping, etc. — of paternalistic gender dichotomy revamped in a digital format? Kate Bornstein, author of *Gender Outlaw* (1994), sees it as a double-edged sword. "It's good that we're looking for something beyond blood-and-guts. But who's judging what the girls want, and why do we have to label that specifically 'girl'?" (Brown, 1996b).

Others warn that perhaps we should not be so quick in rejecting girls preferences as trappings of a patriarchal society. In fact, according to Cassell and Jenkins (1998), much feminist scholarship in recent years has centered around reclaiming and re-evaluating women's traditional cultural interests and competencies, recognizing, for example, the political power of gossip or the community-building functions of quilting.

Ellen Seiter (1993) has suggested, that broad-based criticism of "sweet and frilly" girls' shows such as My Little Pony and Strawberry Shortcake, which have been called "insipid", often resemble earlier dismissals of adult women's genres such as melodrama, romance, or soap opera. It is her contention that these attacks are grounded in a distaste for women's aesthetic preferences toward character relations and emotional issues, and they are rooted in the assumption that nonprofessional women are mindless and uncritical consumers of patriarchal culture.

But, as Radway (1984) shows, if one examines not just the content but also the social event of reading, one finds that for many romance readers reading itself is a combative act, carried out during stolen moments of privacy, and contesting the usual self-abnegation of their lives. (Cassell and Jenkins, 1998: 21)

Even Barbie, who triggers knee-jerk feminist horror, might need some reevaluation, according to some (Spigel, 1994; Cassell and Jenkins, 1998). Erica Rand (1995), for example, has tried to reappraise the doll from a queer perspective. In the end, she concluded:

One thing I learned from talking to people about Barbie is that we need to be very humble about our own ability to inscribe meaning in objects, to discern the meanings that others attribute to them, or to transfer conclusions about resistance, subversion, and hegemony from person to person, object to object, context to context. (1995: 195)

Moreover, it could be argued that the mimetic process by which young girls develop their identity by purchasing Barbie dolls or games might not be the root of all evil. After all, not all the little girls who worship the Spice Girls will end-up looking like their idols.

Look Who's Pulling the Trigger Now

The "Quake girls" — some of whom probably have a few disheveled Barbie dolls in their childhood closets — phenomenon which has added, in the last few years, an interesting element to the whole debate would seem to testify to that. These women's avowed enjoyment of the game Quake, a fast-paced and violent game whose sole goal is to blow your opponents into oblivion in order to win — each level ends with an Olympic-style podium displaying the three highest ranking characters — throws the notion that girls/women will not play mainstream games into question. The fact that these women are older and more in-tune with new technologies only goes so far to explain their attraction for video games.

Indeed, if we follow the logic that says it is because of their experience with technology that these women are attracted to video games, then it could be argued that in a few years all the little girls who got acquainted with the computer through "girls' games" will switch to more action-oriented games. Are companies producing games for girls doomed to disappear once this process has been accomplished? The demise of "girls' games" software company Purple Moon — who had managed to gain an estimated 5.7% of the girl's market —, on February 19, 1999, certainly puts the gender-specific view of the market into

question. Was it realistic to expect girls to be excited at the idea of playing games that are so close to their everyday reality (helping a new student at school, exchanging gossip, etc.)? Is the discovery of new environments not a main attraction of game-play?

Although female gamers agree with critics arguing that video games display negative images of women, they refuse to let that deprive them of the enjoyment of the game. Does that mean they are capable of transcending the visual cues of the games to get what they want?

Further study of the social, educational and cultural background of female gamers would be invaluable to better comprehend why these women, as opposed to the girls described in market research, have embraced play habits usually associated with boys/men. What factors, other than the fact that they are familiar with the technology, have contributed to their desire to explore the inhospitable world of on-line gaming?

We can only imagine at this point in time that the games allow them to fulfill needs and desires different than those of men. Since most of these women insist they discovered the game on their own, does it mean that they were looking for something that was absent from their daily lives? It is also difficult to evaluate if it is under the pressure of "girls' games" companies or that of female gamers, among others, that industry has been slowly introducing more female characters in their products.

I started this project with a vague interest in women and their relationship with new technologies. I conclude it with dozens of questions, an even greater interest, and a firm belief that more research needs to be done to understand the contradictions present in the "girls' games" market.

Recently, as I was working on a project to develop a mentoring Web site to encourage high school girls to choose studies and, ultimately, a career in science and technology, I was surprised, and delighted, to see that similar sites are going up all over the world. This suggests that the concerns highlighted in this thesis are not limited to North America. Food for thought.

BIBLIOGRAPHY

Alderman, John. "Mattel's New Barbie Talks and Learns." Wired. At www.wired.com/wired

Almqvist, Birgitta. (1989). Age and Gender Differences in Children's Christmas Requests. *Play and Culture*, Vol. 2, 2-19.

Brown, Janelle. (1996a). Girl Games Unite, Sans Guns. Wired, 4.11.

Brown, Janelle. (1996b). Girl Gamers: Sugar, Spice, Everything Profitable? WiredNews, November. At

http://www.wired.com/news/news/culture/story/516.html

Cassell, Justine and Jenkins, Henry. (1998). Chess for Girls? Feminism and Computer Games. In Cassell, Justine and Jenkins, Henry (Eds.). From Barbie to Mortal Kombat: Gender and Computer Games. Cambridge, Massachusetts: MIT Press.

Chua-Eoan, Howard and Larimer, Tim. (1999). Beware of the Pokémon Mania. *Time*, November 22, 60-67.

Computer Gaming World. (1997). Who Plays Computer Games? Computer Gaming World study dispels long held myths, Feb. 14.

Comstock, George. (1975). *Television and Human Behavior: The Key Studies*. Santa Monica: Rand.

CRTC. (1986). Role Stereotyping in the Broadcast Media: A Report on Industry Self-Regulation. Ottawa.

Cunningham, Helen. (1995). Mortal Kombat and Computer Game Girls. In Bazalgette, Cary and Buckingham, David (Eds). *In Front of the Children: Screen Entertainment and Young Audiences*. London: British Film Institute.

DeBare, Ilana. (1996). *Most girls tuning out video games*. Sacramento, California: Sacramento Bee. At

http://www.sacbee.com/news/projects/women/index.html

de Castell, Suzanne and Bryson, Mary. (1998). Retooling Play: Dystopia,
Dysphoria, and Difference. In Cassell, Justine and Jenkins, Henry (Eds.). From
Barbie to Mortal Kombat: Gender and Computer Games. Cambridge, Massachusetts:
MIT Press.

DiManno, Rosie. (1987). Barbie Lives! And She's, Well, She's a Doll! *The Sunday Star*, September 13, A6.

Elmer-Dewitt, Philip. (1993). The Amazing Video Game, *Time*, September 27, 67-71.

Gardner, H. (1983). When Television Marries Computers: A review of Pilgrim in the Microworld by Robert Sudnow. *New York Times*, March 27, 12.

Gill, Tim. (1996). Introduction. In Gill, Tim (Ed.), Electronic Children. How Children are responding to the information revolution. London: Biddles Ltd.

Gilmour, Heather. What Girls Want: Female Spectators & Interactive Games. At http://www-cntv.usc.edu//heim/girlga.html

Gray, Ann. (1992). Video Playtime. The gendering of a leisure technology. London: Routledge.

Greenfield, Patricia Marks. (1984). *Mind and Media: The Effects of Television, Video Games, and Computers*. Cambridge, Massachusetts: Harvard University Press.

Greenfield, Patricia Marks. (1996). Video Games as Cultural Artifacts. In Greenfield, P. M. and Cocking, R. R. (Eds.), *Interacting with Video*. Norwood, N.J.: Ablex Publishing.

Griffiths, Mark. (1996). Computer game playing in children and adolescents: A review of the literature. In Gill, Tim (Ed.), *Electronic Children*. How Children are responding to the information revolution. London: Biddles Ltd.

Hart, Sam. (1996). *Guns, Games, and Glory: The Birth of Home Video Games*. At http://newton.physics.arizona.edu/~hart/vgh/main.html

Helper, Malcolm M. and Quinlivan, Mary Jean. (1973). Age and Reinforcement Value of Sex Role Labels in Girls. *Development Psychology*, vol. 8 (1), 142.

Herz, J.C. (1997). *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Revived Our Minds.* New York: Little Brown.

Ivinski, Pamela A. (1997). Design & Media. Print. 24, 28, 115, 166.

Jenkins, Henry. (1998a). Complete Freedom of Movement: Video Games as Gendered Play Spaces. In Cassell, Justine and Jenkins, Henry (Eds.). From Barbie to Mortal Kombat: Gender and Computer Games. Cambridge, Massachusetts: MIT Press.

Jenkins, Henry. (1998b). Voices from the Combat Zone: Game Grrlz Talk Back. In Cassell, Justine and Jenkins, Henry (Eds.). From Barbie to Mortal Kombat: Gender and Computer Games. Cambridge, Massachusetts: MIT Press.

Kafai, Yasmin B. (1996). *Constructionism in practice: designing, thinking, and learning in a digital world*. Mahwah, N.J.: Lawrence Erlbaum Associates.

Kantrowitz, Barbara. (1994). men, women, computers. Newsweek, May 16, 48-53.

Kaplan, David A. and Brown, Corie. (1997). Goodbye Pac-Man. *Newsweek*, March 10, 72-73.

Kiesler, S, Sproull, L. and Eccles, J. (1985). Poolhalls, Chips and War Games: Women in the Culture of Computing. *Psychology of Women Quarterly* (4), 451-62.

Kinder, Marsha. (1991). Playing with Power in Movies, Television and Video Games. From Muppet Babies to Teenage Mutant Ninja Turtles. Berkeley: University of California Press.

Kline, Stephen C. (1995). The Empire of Play. Emergent Genres of Product-based Animations. In Bazalgette, Cary and Buckingham, David (Eds). *In Front of the Children: Screen Entertainment and Young Audiences*. London: British Film Institute.

Kline, Stephen. (1993). Out of the Garden: Toys, TV, and Children's Culture in the Age of Marketing. London: Verso.

Le Diberder, Alain and Frédéric. (1998). L'Univers des jeux vidéo. Paris: Éditions La Découverte.

Leonard, Marion. (1998). Paper Planes: Travelling the New Grrrl Geographies. In Skelton, Tracey and Valentine, Gill (Eds.), Cool places: geographies of youth cultures. London: Routledge.

Liss, Marsha B. (1983). Learning Gender-Related Skills Through Play. In Liss, Marsha (Ed.), Social and Cognitive Skills: Sex Roles and Children's Play. New York: Academic Press.

Livesey, Bruce. (1995). Blastzapkill. Financial Post, October 28, 22-23.

Loftus, G.R. and Loftus, E.F. (1983). Mind at Play. New York: Basic Books.

Lull, James. (1980). The Social Uses of Television. *Human Communication Research*, Vol. 6 (3), Spring.

Mayes, Sandra and Valentine, K.B. (1979). Sex Role Stereotyping in Saturday Morning Cartoon Shows. *Journal of Broadcasting*, vol. 23 (1).

McNamee, Sara. Questioning video game use: an exploration of spatial and gender aspects of children's leisure. Ph.D. thesis, University of Hull, England.

Media Matters Education Consultancy. (1998) Herald Media Survey of 1000 Scottish Teenagers. At

http://www.netcomuk.co.uk/~media/matters/HeraldSurvey.html

Meloan, Michael. (1996). Gender Blender. Wired, 4.11. At www.wired.com/wired/

Moore, Lynn. (1994). Gender zap: Experts say violence, sexism turn girls away from video games. *The Chronicle Herald*, January 17, B6.

Moores, Shaun. (1996). Satellite Television and Everyday Life: Articulating Technology. Luton, UK: John Libbey Media.

Morley, David. (1986). Family Television: Cultural Power and Domestic Leisure. London: Comedia Publishing Group. Plant, Sadie. (1997). Zeros + Ones: Digital Women + the New Technoculture. New York: Doubleday.

Provenzo, Eugene F., Jr. (1991). Video Kids: making sense of Nintendo. Cambridge, Massachusetts: Harvard University Press.

Rand, Erica. (1995). Barbie's Queer Accessories. Durham: Duke University Press.

Rheingold, H. and Cook, K.V. (1975). The Content of Boys' and Girls' Rooms as an Index of Parents' Behavior. *Child Development*, Vol 46, 459-63.

Richards, Chris. (1995). Room to Dance. Girls' Play and The Little Mermaid. In Bazalgette, Cary and Buckingham, David (Eds). In Front of the Children: Screen Entertainment and Young Audiences. London: British Film Institute.

Roberts, Elizabeth J. (1982). Children's Sexual Learning: An Examination of the Influence of Parents, Television and Community Service Providers. *Dissertation Abstracts International*, vol. 43 (5-A), 1400-01.

Schwartz, Lori A. and Markham, William T. (1985). Sex Stereotyping in Children's Toy Advertisements. Sex Roles, vol. 12 (1/2), 157-70.

Sefton-Green, Julian, (Ed.). (1998). Digital Diversions: Youth Culture in the Age of Multimedia. London: UCL Press Ltd.

Seiter, Ellen. (1995). Toy-Based Video for Girls. In Bazalgette, Cary and Buckingham, David (Eds). In Front of the Children: Screen Entertainment and Young Audiences. London: British Film Institute.

Selnow, G. W. (1984). Playing videogames: The Electronic Friend. *Journal of Communication*, vol. 34, 148-156.

Spencer, Russ. (2000). Wanna piece of me? A nasty, soul-destroying — and addictive — new game is becoming the Internet's latest big craze. *The Globe and Mail*, May 3. At www.globeandmail.com

Streicher, Helen White. (1974). The Girls in the Cartoons. *Journal of Communication*, Spring, 126-37.

Subrahmanyam, K. and Greenfield, Patricia Marks. (1994). Effects of Video Games Practice on Spatial Skills in Girls and Boys. *Journal of Applied Development Psychology*, 15(1), 13-32.

Takashi, Dean. (1999). Purple Moon eclipsed by Barbie. WSJ Interactive Edition, February 19. At www.znet.com/zdnn/stories/news/0,4586,2268020,00.html

Takashi, Dean. (1999). Software firm crushed by Barbie. *The Globe and Mail*, February 27, C11.

Taylor, Chris. (1999). The Man Behind Lara Croft. Time, December 6, 50.

Thompson, Clive. (1998). Girl gamers battle boy bias. *The Globe and Mail*, June 6, C1-C11.

Valle, Dwight. (1998). Beyond Barbie. Family PC. March.

Vered, Karen Orr. (1998a). Beyond Barbie: Fashioning A Market in Interactive Electronic Games for Girls. In Inness, Sherrie A. (Ed.)., Millenium Girls: Today's Girls Around the World. Lanham, Maryland: Rowman & Littlefield Publishers, 169-191.

Vered, Karen Orr. (1998b). Blue Group Boys Play Incredible Machine, Girls Play Hopscotch: Social Discourse and Gendered Play at the Computer. In Sefton-

Green, Julian (Ed.)., Digital Diversions: Youth Culture in the Age of Multimedia. London: UCL Press Limited, 43-61.

Verna, Mary E. (1975). The Female Image on Children's TV Commercials. *Journal of Broadcasting*, vol. 19, 301-8.

Winn, Marie. (1977). The Plug-In Drug. New York: Penguin.

(1983). Blow 'em up' video games could provide ticket to jobs. *The Montreal Gazette*, March 12, F1.

(1997). Nostalgia hits joystick generation. The Globe and Mail, August 23, C19.

(1997). Video Game Culture: Leisure and Play Preferences of B.C. Teens. A report from the Media Analysis Laboratory. Burnaby, B.C.: Simon Fraser University. At www.sfu.ca/media-lab/research/vgsummary.html

APPENDIX A

Interesting Internet Addresses

Girls' Game Software Companies

HerInteractive www.herinteractive.com

Girl Games www.girlgamesinc.com

Girl Tech www.girltech.com

Mattel Interactive http://www.mattelinteractive.com/

Other Software Companies

Id Software: http://www.idsoftware.com/ Creators of *Quake*

Eidos http://www1.eidosinteractive.co.uk/ Creators of *Tomb Raider* and Lara Croft

• Girl Gamers Web Sites

These are community-oriented Web sites, with bulletin boards, advice columns, contests, pen pals, interviews with mentors, and on-line games.

GameGirlz http://www.gamegirlz.com/

Cybergrrl http://www.cybergrrl.com

GrrlGamer http://www.grrlgamer.com

PlanetGirl.com A subsidiairy of Girl Games Inc.

Purple Moon Place http://www.purple-moon.com/cb/laslink/pm?stat+pm_place

• Female Gamer Clans Web Sites

http://www.clanpms.com

http://crackwhore.com/main.html

http://www.grrlgamer.com/

APPENDIX B

Television, the Drug of the Nation

One nation under God has turned into One nation under the influence of one drug Television, the Drug of the Nation Breeding ignorance, Feeding radiation T.V.

it satelite links

Our united states of unconsciouness

Apathetic therapeutic and extremely addictive

The methadone metronome pumping out

150 channels 24 hours a day

You can flip through all of them

And still there's nothing worth watching

T.V. is the reason why less than ten percent

of our nation reads books daily

Why most people think Central America means Kansas

Socialism means unamerican

And apartheid is a new headache remedy

Absorbed in its world it's so hard to find us

It shapes our mind the most

Maybe the mother of our nation

Should remind us that we're sitting too close to...

Television, the Drug of the Nation

Breeding ignorance, feeding radiation

T.V.

is the stomping ground

For political candidates

Where bears in the woods

Are chased by grecian formula'd bald eagles

TV

is mechanized politic's remote control over masses

Co-sponsored by environmentally safe gases

Watch for the PBS special

It's the perpetuation of the two party system

Where image takes precedence over wisdom

Where sound bite politics are served

To the fast food culture

Where straight teeth in your mounth

Are more important than the words that come out of it

Race baiting is the way to get selected

Willie Horton or will he not get elected on...

Television, the Drug of the Nation

Breeding ignorance, feeding radiation

T.V.

is the reflector or is the director

Does it imitate us or do we imitate it

Because a child watches 1500 murders

Before he's twelve years old

And we wonder how we've created A jason generation that learns to laugh Rather than abhor the horror

T.V.

is the place where armchair generals and quarter backs

Can experience first hand

The excitement of video warfare

As the theme song is sung in the background

Sugar sweet sitcoms that leave us with

A bad actor taste while pop stars methamorphosize

Into soda pop stars, you saw the video

You heard the sound track

Well now go buy the soft drink

Well, the only cola that I support

Is a union C.O.L.A. (cost of living allowance) on

Television, the Drug of the Nation

Breeding ignorance, feeding radiation

Back again, New and Improved

We return to our irregularly programmed schedule

Hidden cleverly between heavy breasted beer and car commercials

CNNESPNABČTNT but mostly B.S.

Where, oxymoronic language like:

"Virtually spotless" "Fresh frozen"

"Light yet filling" and "Military intelligence"

become standard

T.V.

is the place where phrases are redefined

Like recession to necessary downturn

Crude oil on a beach to mousse

Civilian death to colateral damage

And being killed by your own army

is now called friendly fire

T.V.

is the place where the pursuit of Happiness has become

the pursuit of trivia

Where toothpaste and cars

Have become sex objects

Where imagination is sucked out of children

By a cathode ray nipple

T.V.

is the only wet nurse

That would create a cripple

ON TELEVISION

The Disposable Heroes of HipHoprisy from the album Hypocrisy is the Greatest Luxury. Island Records Inc. (1992).