

THE ATARI CRASH: HOW VIDEO GAMES BECAME GENDERED

by

Matthew K. McMahon

A Thesis

Submitted to

Laura J. Moore

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Bachelor of Arts at George Mason University

by

Matt McMahon

History Dept. Chair: Jennifer Rittenhouse
College of Humanities and Social Sciences

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DEDICATION

This is dedicated to my loving mother Susan, grandmother Sara Jane, and my dogs Louie and Raph.

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I would like to thank the many friends and relatives who've made this happen. My supportive friends who've assisted me in my research. My warm roommates who've tolerated my late nights and pacing. And Dr. Laura J. Moore who gave me many encouraging comments and guidance. Finally, thanks go out to the Fenwick Library for providing a clean, quiet, and well-equipped repository in which to work.

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ABSTRACT

THE ATARI CRASH: HOW VIDEO GAMES BECAME GENDERED

Matthew K. McMahon. Bs., Ba.

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Thesis Advisor: Dr. Laura J. Moore

This thesis describes how video games became a masculine hobby. Originally video games were played by both genders, and marketed towards families. In 1983-84 the video game market shrunk and many developers went out of business. The surviving developers and game studios redoubled their efforts making games for boys.

CHAPTER ONE

Introduction

In the modern world video games are a cornerstone of recreational activities. Since their introduction to video-arcades during the 1970s video games have continued to rise in popularity. Either publicly or privately, across ages and demographics, people enjoy playing video games.

Video game's appeal has increased across political borders and social boundaries. Video games are played in every country, by all ages and portions of society. Video game revenue growth has outpaced movie box-office revenue growth for two decades¹. Despite their increased appeal and adoption, today video games are most popular among men².

Currently video games are marketed mostly towards men and boys. Games glorify traditionally male topics such as war and sports. Advertisements use aggressive music and quick paced cinematography that appeals to teenage boys. In the video game industry during 2015 over half of sales came from shooting or action games³. Taken together, these points demonstrate an effort within the video game industry to market towards men and boys. Contrastingly, there are few games marketed directly to women or include women-centric themes.

¹Entertainment Software Association. Distribution of computer and video gamers in the United States from 2006 to 2016, by gender. <https://www.statista.com/statistics/232383/gender-split-of-us-computer-and-video-gamers/> (accessed December 13, 2016).

² Ibid.

³ Entertainment Software Association. n.d. Genre breakdown of video game sales in the United States in 2015. Statista. Accessed 13 December, 2016. Available from <https://www.statista.com/statistics/189592/breakdown-of-us-video-game-sales-2009-by-genre/>.

Continuing this trend, few video game reviewers, columnists, or thought-leaders are women; women engineers are not equally represented in game development companies. In movies and television, video games are associated with teenagers and testosterone. These representations permeate Western culture at-large to produce a general sentiment that videogames are a male domain.

Video games have not always been dominated by traditionally male themes. Early video games were not explicitly gendered. These early games were not seen as exclusively, or even predominantly, marketed to either boys or girls. Video game magazines did not write specifically to boys or focus on male-centered themes. Some early games were explicitly female and catered to women players.

Women and gaming has recently become a popular subject in mainstream culture, but has not been thoroughly studied in an academic setting. Authors have investigated the link between violent games and violent behavior⁴. Others have compared how men and women play video games to determine if there is a difference⁵. The few historians who have published on video games have explored how video games could be used to teach history, not focusing on the history of gaming itself^{6,7}.

⁴Anderson, Craig A., and Christine R. Murphy. 2003. "Violent Video Games and Aggressive Behavior in Young Women." *Aggressive Behavior* 29 (5): 423–429. doi:10.1002/ab.10042.

⁵ Beck, Victoria Simpson, Stephanie Boys, Christopher Rose, and Eric Beck. 2013. "Violence against Women in Video Games: A Prequel or Sequel to Rape Myth Acceptance?" *Journal of Interpersonal Violence* 27 (15): 3016–3031. doi:10.1177/0886260512441078.

⁶ Rejack, Brian. 2007. "Toward a virtual reenactment of history: Video games and the recreation of the past." *Rethinking History* 11, no. 3: 411-425. *America: History & Life*, EBSCOhost (accessed December 14, 2016).

⁷ Price, John A. 1985. "SOCIAL SCIENCE RESEARCH ON VIDEO GAMES." *Journal Of Popular Culture* 18, no. 4: 111-125. *America: History & Life*, EBSCOhost (accessed December 14, 2016).

However in mainstream culture people are talking about women and gaming. Anita Sarkeesian rose to meteoric fame with her "Tropes vs. Women in Gaming" webseries. Sarkeesian was one of the most successful people to use kickstarter.com raising over \$100,000 for her series⁸. The controversy her videos created was known as 'gamergate' and attracted attention from major news outlets like CNN, NBC, and CBS⁹. During this period Polygon Magazine published a brief history of women in video games¹⁰. The Polygon piece is the most comprehensive to cover the history of female themes in video games. The Youtube series 'Adam Ruins Everything' also presented a history of women in gaming but the show is a reflection of the points in the Polygon article. Currently no author has expanded the points raised in the Polygon article; the Polygon article is without sources or specific details. While the Polygon article cites the video game crash as a turning point in video game marketing, it doesn't explain how or why the crash occurred or detail games released during this period. Both sources use general terms and do not feature primary source material.

How have video games become dominated by male themes? How did men come to be the target demographic for video game manufacturers? Video game magazines and cover art show video game producers initially marketed to families and women much more heavily before the North American video game crash of 1983 than after. The same sources show the console manufacturers and game developers who survived the crash had produced games and advertising appealing to boys. Together

⁸ Cupaiuolo, Christine (June 21, 2012). "Not Just Playing Games: The Benefits of Failure and the Power of a Supportive Community". *Spotlight on Digital Media and Learning*. John D. and Catherine T. MacArthur Foundation. Retrieved October 23, 2014.

⁹ Dean, Paul (May 31, 2013). "Tropes vs Women in Video Games: Why It Matters". *IGN*. Retrieved March 25, 2014.

¹⁰ No Girls Allowed <http://www.polygon.com/features/2013/12/2/5143856/no-girls-allowed>

video game covers and video game magazines of the 1980s present a timeline of how video games and consoles were initially marketed to families, girls, and boys but after the Atari crash, game and console producers directed their marketing exclusively to boys.

'83 Crash

Never could an economic downturn be attributed to one source or factor, and what happened to the North American video game market was not unique. There were a multiplicity of factors, each of varying significance. A ranking of these causes is not in the scope of this paper. Instead, here are some of the most commonly attributed causes.

One of the most popularly cited explanations for the North American video game crash, which is also known as the Atari crash, was a flooded console market. A saturated console market led to a collapse in prices. The crash saw the end of the second generation of home video game consoles. The first generation of home consoles were produced by nine firms. These nine firms produced the entirety of the world's supply of video game consoles.

Name	Release	Manufacturer	Country
Magnavox Odyssey	1972	Magnavox	USA
Ping-O-Tronic	1975	Zanussi	Italy
PC-50X Family	1975	General Instruments	1975
Tele-Spiel	1975	Philips	Netherlands
Video 2000	1975	Interton	Germany
Philips Odyssey	1976	Philips	Netherlands

Coleco Telstar Arcade	1977	Coleco	USA
Color TV-Game	1977	Nintendo	Japan

First Generation Consoles

The first generation of video game consoles were spartan. Discrete transistor-based digital game logic meant simple games. Games consisted of a single screen, composed of simple lines, dots, and blocks. Displays offered dichromatic or trichromatic color schemes. Games used single channel audio if they offered sound at all. The most noticeable difference to consumers between first and second generation consoles were with games. First generation systems featured games that were built into the consoles, not as removable media¹¹.

Second generation consoles offered dramatic improvements to consumers. Microprocessor-based game logic created more complex games that included sprite-based and multi-color graphics. Sprites are small bitmaps that are embedded within and move around, a playfield¹². With multi-color displays, sprites were a dramatic improvement over the simple lines and dots of first-generation consoles. The increased computing power of microprocessors also allowed for games with a flip-screen design¹³. Instead of players being confined to a single screen, a flip-screen design enables players to 'flip' through screens. Instead of watching pacman run the maze players could walk down the hall and turn the corner themselves.

¹¹ <http://www.atarimagazines.com/cva/v1n1/vgupdate.php>

¹² http://www.atarimagazines.com/st-log/issue22/16_1_SPRITE_PROGRAMMING.php

¹³ COMPUTE! ISSUE 23 / JUNE 1986 / PAGE 11
<http://www.atariarchives.org/c2bag/page191.php>

In combination these advances made the second generation of video game consoles substantially different, and dramatically superior in almost every dimension, to their predecessors. The third generation of consoles were produced from '83-'87 and ended with the introduction of the 8-bit Famicom by Nintendo. The system is also known as the Nintendo Entertainment System (NES)¹⁴. Nintendo is rumored to have named their product both a computer (Famicom is an abbreviation of family computer) and an entertainment system (Nintendo Entertainment System) to distance themselves from the dwindling video game console market. However the Atari 2600, a second generation console, was manufactured until January 1st, 1992, making the second generation of video games the longest lived generation of consoles. While many second generation video game consoles met their doom during the Atari Crash of 1983, some of the most successful and long lived consoles are from the second generation.

Name	Release date	Manufacturer	
Fairchild Channel F	1976	Fairchild	USA
APF-MP1000	1978	APF	USA
RCA Studio II	1977	RCA	USA
Atari 2600	1977	Atari Inc.	USA
Bally Astrocade	1977	Midway	USA
VC 4000	1978	Interton	Germany
Magnavox Odyssey ²	1978	Magnavox/Philips	USA
APF Imagination Machine	1979	APF	USA
Intellivision	1980	Mattel	USA
PlayCable	1981	Mattel	USA

¹⁴ COMPUTE! ISSUE 73 / JULY 1986 / PAGE 10
http://atarimagazines.com/compute///issue123/P006_1_EDITORIAL_LICENSE.php

Bandai Super Vision 8000	1979	Bandai	Japan
VTech CreatiVision	1981	VTech	Hong Kong
Epoch Cassette Vision	1981	Epoch	Japan
Arcadia 2001 (Leisure Vision in Canada)	1982	Emerson Radio	USA
Atari 5200 (United States only)	1982	Atari Inc.	USA
ColecoVision	1982	Coleco	USA
Entex Adventure Vision	1982	Entex	USA
Vectrex	1982	Milton Bradley	USA
Compact Vision TV-Boy	1983	Gakken	Japan
Pyuuta Jr.	1983	Matsushita	Japan

Second Generation Consoles

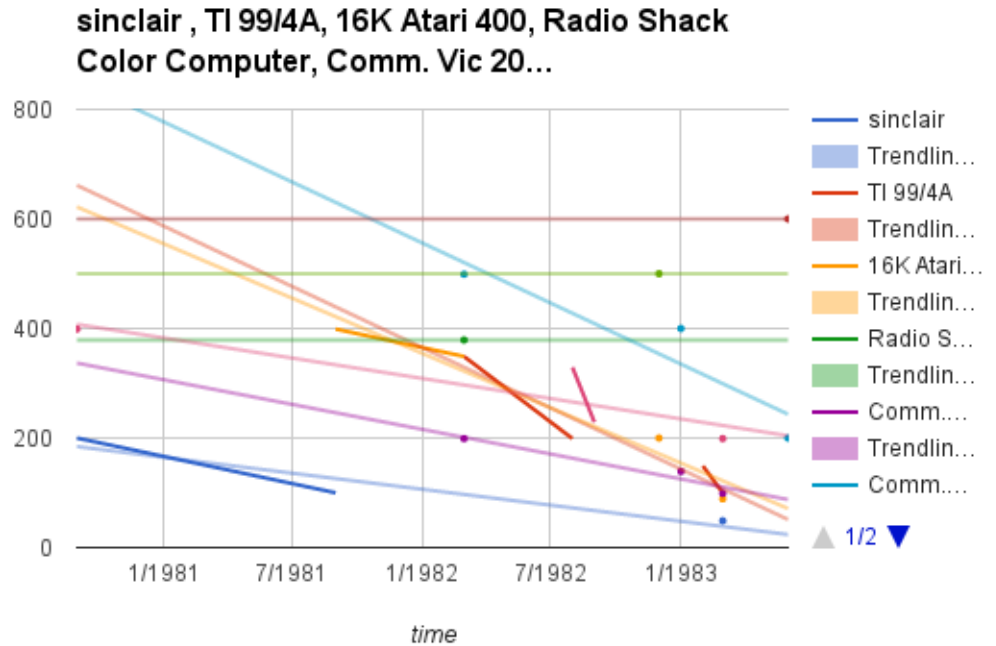
Aside from market saturation from a flooded console market, another commonly cited cause of the Atari crash is encroachment from the personal computer market. Personal computers have always held a share of the video game market. The first video games were text-oriented systems run on time-sharing mainframes¹⁵. Eventually these games transitioned to microcomputers and grew in complexity. 1977 was the first year it was cost effective to purchase a premade computer rather than buying a kit¹⁶. In the early 80s the home computer market was diverse. Some entry and consumer brands included Apple, Tandy, Exidy, and Commodore. Business and academic brands were North Star, Cromemco, Ohio Scientific, Intertec, Vector Graphic, Hewlett Packard, NEC, Midwest Scientific, and a large group of S-100 bus

¹⁵ COMPUTE! ISSUE 73 / JUNE 1986 / PAGE 11

http://www.atarimagazines.com/compute/issue90/Feedback_Mainframe_Vs_Micro.php

¹⁶ "First Decade of Computing" Atari Magazine ISSUE 56 / SEPTEMBER 1985 / PAGE 36

manufacturers. This began to change as a result of an announcement on August 12, 1981 at "the largest press conference hosted by IBM since the introduction of the 360 in the mid 60's"¹⁷



1983 was a volatile year in the personal computer market. Between January and September competitors spent \$101.6 million on advertising¹⁸. The '83 personal computing price war spelled disaster for Texas Instruments, the largest computer manufacturer before the crash. Milton Bradley, invested heavily into voice recognition add-ons for the Atari and TI computers, was bought by competitor Hasbro. Other victims of the maelstrom were Osborne, Computer Devices, Vector Graphic, Victor,

¹⁷ Ibid.

¹⁸ <http://www.atarimagazines.com/hi-res/v1n4/shakeout.php>

OSI, and Exidy¹⁹ By January 1st 1984 the personal computer market had changed dramatically from one years past.

While the PC Price War was bad for PC manufacturers, it was good for consumers. The price of an entry level PC almost halved in the course of 18 months. In addition to computer games, software vendors were creating productivity software to create tables and write documents. In the early 1980s a PC could be used for work during the day and entertainment at night. Until this moment video game manufacturers did not face direct competition from the personal computing market. The large number of consoles meant each company was earning just a sliver of the total revenue in the market. Competition from personal computers meant the video game market was also being impinged from the outside.

Effects

When a market becomes saturated advertisers identify a demographic within that market to which they try to sell more of their product. After the crash of '83 developers saw the plethora of puzzle and arcade style games gave families numerous options. These game companies identified boys a demographic with growth potential. Soon they began creating and marketing games targeted to boys.

Video game magazines and covers illuminate this monumental period in video game development when not only were the first video games being played, but video gaming culture was developing contemporaneously. The release of games, magazines and reviews were a continuous feedback loop. The importance of each aspect of that loop was compounded by the infancy of the market.

¹⁹ COMPUTE! ISSUE 112 / SEPTEMBER 1989 / PAGE 6
http://www.atarimagazines.com/compute/issue59/next_generation.php

The first section described a crash in the video game industry in 1983. The second section uses video game magazines, covers, and the career of one of the most famous developers of the time an increase in male focused titles and male-oriented imagery after 1985. This analysis corroborate the magazine articles primary sources evidence.

Sid Meier

The career of Sid Meier can be used to show a larger trend in the video game industry. Meier sold his first video game during the summer of 1982. Unlike other developers who lost their jobs in '83 or '84, Meier continued to receive work. Beyond staying employed in the industry, Meier was able to grow his career and become one of the most prominent names in the industry.

Meier was able to maintain and grow his career while others did not because of the type of games Meier made, particularly during the stress years of '83-'85. Meier sold his first video game, Formula One Racing, to ACORN during the summer of '82. His next game was Floyd of the Jungle; the inspiration for which was the '82 Tarzan movie with Bo Derek. Meier developed HellCat Ace, a 3D fighter pilot simulation game, in '83 and the game was released in '84. In a '83 interview Meier said the future plans of Microprose, his software company at the time, were "to continue with some of the mainstream games, but also to get into some educational software."²⁰ Here Meier implies mainstream games are games that appeal to teenage boys. The educational software may also have broader appeal to children than adults.

²⁰ COMPUTE!'s Gazette October 1985
<http://www.atarimagazines.com/rom/issue3/interview.php>

Together his statement shows Meier and Microprose were targeting a younger, as well as more male, segment of the market than other companies advertising in Compute! Or Creative Computing Magazine. By focusing on a masculine teenage target Sid Meier was able to become one of the largest names in video games while scores of other developers were going bankrupt.

Magazines

Each company manufacturing a game console produced a newsletter to promote the console and upcoming games. The newsletter was generally sent to previous and existing console owners as a means of direct advertising. Over time these newsletters became more developed and mature. The articles became longer and covered topics other than reviews. Game descriptions turned into reviews.

The earliest video games were gender neutral and the first video game magazines clearly show this. They are devoid of aggressive fonts or explosive imagery. A 1979 review 432 K programs details How to read data from a cassette tape and write it on to your own disc. They are reserved with muted colors and san-serif font; they more closely resemble a computer hobbyist magazine than youth advertising.

Atari Age was one of the first widely published video game magazines. Atari Age was available by subscription as part of membership with the Atari Club. First published were two black and white newsletter issues. A full color magazine launched in 1982. Each issue was 20-30 pages in length and covered Atari's game consoles, featuring news, previews, contests, tips, and more.

The first 1982 color issue of Atari Age was not marketed directly to boys. The issue includes an interview with pac-man (Pac-man was asked if he received any special

training to become a video game star and he replied he had a well rounded education). The innocuous humor is indicative of the general mood of the article. The next page declares "World Asteroid Champion Declared" and tells of how Andy Breyer (15) beat Gary Wong (18) and Dirk Mueller (22) in Washington D.C. to become the world champion. The page shows a graphic with many of the world's flags. A non-gendered robot holds a Puerto-Rican flag while playing Atari.

There are subtle indications of the future change in video games. There are no girls mentioned in the video game competition or named as champions. Even though these two features may show male attributes present in the culture, in no way was video game culture overtly male-gendered.

The Magnavox Odyssey was introduced in 1979. The consoles enjoyed relatively widespread commercial success despite not being remembered. The advertisement depicts a stereotypical family in front of a television. There is a father, son and daughter playing in what looks like a living room.

Canyon Runner was released for the VIC-20, Commodore 64, Atari and Apple. It's 3D graphics were lightyears ahead of its counterparts. Though the game centered on piloting a spacecraft through a canyon, undoubtedly a high-octane experience, the game was not explicitly gendered. If Canyon Runner were released later, it would have been more explicitly gendered like Star Fox or insert racing game. Instead Canyon Racer features little if no overt gender styling. Instead of aggressive explosive font a more sleek type is used.

The most telling artifacts of the changing perceptions surrounding video games can be found on their covers. Early graphics did not allow for complex depictions of characters. Cover art of the games is not restricted by technological

limitations. Therefore video game covers allow for one to view the game as the creators envisioned it, not as the engineers were able to have the concept implemented. Many times covers feature much more complex, detailed characters. Covers.

Who creates a video game? How do we know what the 'authentic' vision is? Do covers, screenshots, or reviews best describe the content of a game? The cover art may not be the authentic or true version of the game. Rather the cover is a way for historians to compare games across different time periods. Covers are not limited by the current technology of the time. Especially during the time period analyzed in this paper, the late 70s to late 80s, video game technology was not advanced enough to offer realistic characters. Cover designers relied on artists to paint their own interpretation of characters based off of sample character designs. Video game covers are not limited by contemporary technology.

A careful study of video game covers from 1982-1986 shows the majority of games were not overtly marketed to either gender. If the video game cover featured a weapon or scantily clad woman the game was coded male. The two games coded female showed stuffed animals and a baby. Over 90% of the cover art for Atari 2600 and 7800 is coded neutral: it does not explicitly show a weapon or sexualized woman.

Conclusion

From the late 1970s to the early 1990s video game culture became more masculine. More games were marketed directly and exclusively to boys. This trend of increased masculinity in games entered a new phase with the popularity of GTA3. Grand Theft Auto 3 was the best selling game from the year 2000. GTA3 is the first

best-selling game of the year to feature a cover with a protagonist with a gun²¹. Before GTA3 the best selling game of the year were side-scrolling games. While aggressive, these games featured cartoon violence. Post crash games more heavily focused on violent themes. These themes escalated until we reached the photo-realistic violence present in the 1990s in games such as GTA3.

We can see video games were not always the domain of teenage boys. Initially video games were marketed to both boys and girls. Following a 97% contraction in the video game market, video game developers refocused their aim to target boys. This trend continued and reinforced itself until we have the video game market of today.

Primary Sources

Antic Magazine. 1982-1990.

Antic Magazine has serialized articles. These articles were useful for following trends. I would not have known how people thought of video games during this period without the magazines. This magazine was especially helpful because of the serialized articles.

STart Magazine. 1986-1991 (<http://www.atarimagazines.com/start/>).

This magazine helped give me a greater feel for the period. I did not use any articles from this magazine.

Creative Computing Magazine. 1974-1985

²¹Brown, Mark (15 December 2011). "[Grand Theft Auto 3: 10th Anniversary Edition review](#)". [Pocket Gamer](#). Steel Media. [Archived](#) from the original on 8 April 2016. Retrieved 9 April 2016.

This was the most helpful of the magazines. Creative Computing has longer articles than the others.

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BIOGRAPHY

Matt McMahon graduated from James Madison HS in Vienna Virginia in June 2009. He attended Chapman University and studied economics and chicano history. After finishing over 80% of the necessary coursework to graduate in 2013 he transferred to George Mason University to study history and economics.