

*PARADIGM SHIFT: HOW THE EVOLUTION OF TWO GENERATIONS OF HOME
CONSOLES, ARCADES, AND COMPUTERS INFLUENCED AMERICAN
CULTURE, 1985-1995*

By

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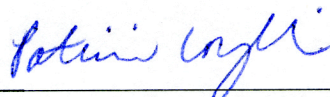
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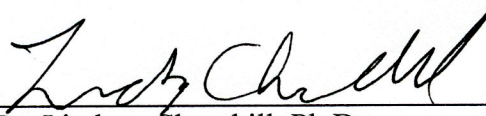
THESIS APPROVAL

The abstract and the thesis of Jason Terence Wiley for the Master of Arts in History was submitted to the graduate college on May 6, 2016 and approved by the undersigned committee.

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Abstract

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Abstract:

As of 2016, unlike many popular media forms found here in the United States, video games possess a unique influence, one that gained its own a large widespread appeal, but also its own distinct cultural identity created by millions of fans both here stateside and across the planet. Yet, despite its significant contributions, outside of the gaming's arcade golden age of the early 1980s, the history of gaming post Atari shock goes rather unrepresented as many historians simply refuse to discuss the topic for trivial reasons thus leaving a rather noticeable gap within the overall history. One such important aspect not covered by the majority of the scholarship and the primary focus of thesis argues that the history of early modern video games in the North American market did not originate during the age of Atari in the 1970s and early 1980s. Instead, the real genesis of today's market and popular gaming culture began with the creation and establishment of the third and fourth generation of video games, which firmly solidified gaming as both a multi-billion dollar industry and as an accepted form of entertainment in the United States.

This project focuses on the ten-year resurrection of the US video game industry from 1985 to 1995. Written as a case study, the project looks into the three main popular hardware

mediums of the late 1980s and 1990s through a pseudo-business, cultural, and technological standpoint that ran parallel with the current events at the time. Through this evaluation of the home consoles, personal computers, and the coin operated arcade machines, gaming in America transformed itself from a perceived fad into a serious multi-billion dollar industry while at the same time, slowly gained popular acceptance. Furthermore, this study will examine the country's love-hate relationship with gaming by looking into reactions towards a Japanese-dominated market, the coming of popular computer gaming, the influence of the bit-wars, and the issue of violence that aided in the establishment of the Entertainment Software Rating Board (ESRB).

In order to undertake such a massive endeavor, the project utilizes various sources that include newspapers, magazine articles, US government documents, scholarly articles, video game manuals, commercials, and popular websites to complete the work. Furthermore, another vital source came from firsthand experience playing several of these popular video games from across the decades in question, which include such consoles as the Nintendo Entertainment System, Super Nintendo, Genesis, home computer, and several notable arcade titles.

The project's goal and its four main chapters serve as a historical viewpoint of towards neglected video game industry during the third and fourth generation of gaming and the influence it possess in the United States. For far too long, historians have ignored this area of discussion as a viable topic. Perhaps this case study will encourage further exploration and help curb the rampant imbalance between the pure but nearly non-existent historical accounts versus the ubiquitous non-historical accounts. Nevertheless, for this project's primary contribution this project it takes the numerous sources available and expands upon the already written upon history, or in this case the period of video rebirth and regrowth after the North American video game crash of 1983.

In *Paradigm Shift: How the Evolution of Two Generations of Home Consoles, Arcades, and Computers Influenced the United States* examines the often-overlooked early modern history of video games from 1985-1995 and how they would go on to become a larger part of American culture. Each chapter attempts to explain the growing influence gaming has had via home console, computer, and arcades in the US market, and in turn show the origins of today's modern gaming market.

Chapter one, "Bleeps, Glitches, and Literature: The Varied Historiography of Video Games" reviews the unique but varied literature surrounding gaming. With such a controversial field, the chapter's investigates the many facets of such an unusual topic that includes exploring the bias nature of non-historian academics to the unusual situation surrounding its primary and secondary sources makes researching video games both an interesting and frustrating endeavor.

Chapter two, "Resurrection: The Unexpected Success of Nintendo and the Rebirth of Video Game Media" focuses on the resurrection of gaming post Atari shock to 1990. Covering the importance of gaming's unexpected return to provenience, a heavy portion of the chapter features the struggle, role, and influence Nintendo played during the mid to late 1980s and their leadership in turning a dead market back into a multi-billion dollar industry. Also featured includes a study of the early computers from inception to the Microsoft operating systems, and how these developments in technology influenced computer gaming during the 1980s and 1990s through both its shareware and the numerous retail games available. Finally, the chapter looks into the growth and resurgence of the late 1980s arcades went on to a unique impact on the video game industry. While the chapter does look into some of the titles made at this time, the bulk of the discussion follows the influential video game developer id Software and how their games

Wolfenstein 3D and *Doom* became catalysts for the niche market's growth as well as a source of controversy.

Chapter three, "For a Few Bits More: The Bit Wars and Video Gaming in the Early 1990s" reviews one of the industry's most turbulent times. Coined from the bitter console war between Nintendo and Sega from late 1991 until 1995; the chapter covers video games shifting from its perceived family friendly image cultivated during the 1980s to embracing a much wider demographic consisting of transitioning teenagers and adults as well as creating games with themes more suited towards their tastes. The chapter also continues the trend of looking into the three popular mediums as in the case of its largest at the time, the home console market, was embroiled in a brutal internal war. Splitting dedicated gamers into brand loyal camps, the battle between Nintendo, Sega, and several other minor console creators served as the major marquee attraction as each company attempted to sway potential customers through flashy advertising, better games, and claims of possessing the superior product.

On the other hand, the home console war only encompasses one side of this history as the chapter also explores the unexpected success of the arcades, which climaxed with the fighting game craze and launched many third party licensee games into the national spotlight such as *Street Fighter II: The World Warrior* and *Mortal Kombat*. In addition and occurring parallel to the growth of the console machines, computer gaming also slowly picked up speed with exclusive edgier games featuring more violent and inappropriate themes not seen with the more family friendly consoles at this time.

The final chapter, "Games on Trial: The Issue of Violence in Video games, the Hearing on Violent Video Games and the Creation of the Video Game Rating System" discusses the pressing issue of violence in video games during the early 1990s. Perceived as a major problem,

after years of questionable video games and marketing tactics, the United States Congress finally forced the issue and confronted the major gaming companies. Under Senator Joe Lieberman's inquiry over such games as *Mortal Kombat*, *Night Trap*, *Lethal Enforcers*, and coupled with growing public concern over the popular influence video games had over their children resulted in the creation of a unified rating system and cemented their reputation of being forever associated with controversy.

Finally, the significance of *Paradigm Shift: How the Evolution of Two Generations of Home Consoles, Arcades, and Computers Influenced American Culture, 1985-1995*, comes down to one word, acceptance. Despite the controversy it generated before and during the ten critical years of its rebirth, what the gaming industry did right was breaking the notion that video games were simply a popular craze. Unlike the second generation that only fed this belief, the third and fourth generation of gaming proved this assumption wrong. With countless successful launches of influential games across the decade, video games slowly gained the acceptance of both gamers and non-gamers alike allowing gaming to ingrain itself within the American culture. By 1995, the foundation of both the modern gaming industry and culture came into existence, and it would only become greater as the years progressed thanks to the efforts of Nintendo, Sega, and countless other developers and licensees that kept video games from falling to the wayside during this period of growth and uncertainty.

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Introduction

A long time ago during my time as a Bachelor's student at the University of Central Oklahoma, I wrote a non-published historical paper in the summer 2012 for Dr. Patricia Loughlin discussing video game violence and the events surrounding the creation of the Electronic Software Ratings Board. In the paper, I stated at the time, "Rarely do the worlds of video games and history come together. Like two parallels they never cross, except in satire." Thinking back to what now serves as the early prototype for chapter four and with nearly four years of research under my belt, I once again look into this electronic phenomenon as see how video games have influenced the American people.

Many critics ranging from journalists, popular writers, the online masses, and scant few video game historians, all seem to argue when video games became such a popular medium to the American consumer market. Some historians consider the years between 1978-1983 as the pinnacle and origin of video game interest. Their argument here focuses on the arcade boom at this time with games *Pac-Man*, *Donkey Kong*, *Space Invaders*, *Pole Position*, and *Galaga* taking top honors. In addition, the huge home console market dominated the early 1980s with names like the Atari 2600, Mattel Intellelevision, and Coleco acting as the undisputed kings in a sea of knockoffs, store brands, and other electronic goods.¹ Even the computer market, with the likes of Atari, Texas Instruments, and the popular Commodore also possessed a fair share of games made especially for the medium, but they did not have the significant pull as their counterparts at this time.²

¹ Roberto Dillon, *The Golden Age of Video Games: The Birth of A Multibillion Dollar Industry* (Boca Raton, FL: A K Peters/CRC Press, 2011), 25-40.

² *Ibid.*, 47-55.

While the golden age of arcade games does make for a compelling case, but the argument does have some significant flaws in the logic. For example, while the early arcades and home consoles did make billions in profits especially from 1980-1982, one-word derails this entire growth period, fad. Only being around roughly six years when *Space Invaders* came out in 1978, video games were still in its infancy when the market crashed in 1983.³ The reasons for this remain numerous, but what essentially ended the second generation of video games came down to quality versus quality. With numerous poor quality video games, numerous consoles, and a general oversaturation caused the North American market to collapse.⁴ After the crash, this would go on to justify the popular claim linking gaming to many popular toys like the slinky or Hula Hoop as they get profitable quickly at then when interest fades, their profits tank, thus gaining the stigma of being called a fad, but enter the Japanese.⁵

Proven through the immediate fallout many video game companies struggled in the aftermath. Atari, the former industry leader, fell on hard times after record profit drops occurred between the years of 1983 and 1985.⁶ Mattel with its Intellelevision completely pulled out of the market while Coleco's only form of income came from their lineup of Cabbage Patch Kids dolls as both their Adam home computers and console failed to sale.⁷ Many third party console developers and game makers also fell into bankruptcy during this dark time as their poor quality

³ Steven L. Kent, *The Ultimate History of Video Games: From Pong to Pokémon and Beyond-The Story Behind the Craze That Touched Our Lives and Changed the World* (Roseville, CA: Prima Publishers, 2001), 116-9.

⁴ Dillon, *The Golden Age of Video Games*, 70-8.

⁵ For further reference, please review *The Los Angeles Times* and *The New York Times* from January 1983 to December 1985.

⁶ For further reference, please review Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; *The New York Times* from January 1983 to August 1985, Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

⁷ Dillon, *The Golden Age of Video Games*, 77, 79-80.

titles helped expedite the second generations of gaming's downfall.⁸ By 1985, the US video game market was complete ruin and many speculated that the fad called video games had ended.

On the other hand, critics and fans argue that the video game market that emerged in the early 2000s became the basis for gaming's mass popularity. Coming out of the 1990s, popular consoles such as the PlayStation 2 and X-Box as well as the ascendance of home computer gaming became huge successes with such games like *Call of Duty*, *Grand Theft Auto 3*, *The Elder Scrolls V: Skyrim*, *Metal Gear Solid 3: Snake Eater* gaining popular favoritism within their respected fan groups.⁹ Furthermore, with the integration of the casual gaming market that emerged during the Internet boom of the late 1990s, both personal computer (PC) and console game developers have worked to bring in those titles as well with titles including *Farmville*, *Plants versus Zombies*, *Minesweeper*, and *Candy Crush Saga* are all popular examples of this growing market.¹⁰ Finally, for the more serious hardcore gaming, E-Sports events like EVO (Evolution Championship Series), and Capcom Cup alongside the growth popular online gaming has grown tremendously with popular shooters like *Team Fortress 2* and *Call of Duty* alongside fighting games like the *Street Fighter IV* series taking top marks and making frequent appearing many of the above contests.¹¹

Another popular but less recognized era, 1995-2001 or the fifth generation of home consoles and games serves as a prime candidate for sparking the video game transformation from

⁸ Ibid., 77-8.

⁹ Bethesda, "The Elder Scrolls V: Skyrim" (PlayStation 3 Game), Bethesda, 2011; DMA Design, "Grand Theft Auto III" (PlayStation 2 Game), Rockstar Games, 2001; Infinity Ward, "Call of Duty" (Microsoft Windows Game), Activision, 2003; Konami, "Metal Gear Solid 3: Snake Eater" (PlayStation 2 Game), Konami, 2004.

¹⁰ King, "Candy Crush Saga" (iOS Game), King, 2012; Microsoft, "Minesweeper" (Windows XP Game), Microsoft, 2001; PopCap Games, "Plants vs. Zombies" (Microsoft Windows Game), PopCap Games, 2009; Zynga, "Farmville" (Adobe Flash Game), Zynga, 2009.

¹¹ "List of esports Games," *Wikipedia*, last modified April 21, 2016, accessed April 22, 2016, https://en.wikipedia.org/wiki/List_of_esports_games; "List of esports Leagues and Tournaments," *Wikipedia*, last modified April 20, 2016, accessed April 22, 2016, https://en.wikipedia.org/wiki/List_of_eSports_leagues_and_tournaments.

fad to significant technology. Changing from 2D sprites to 3D rendered graphics, for example, titles like *Super Mario 64*, *Sonic Adventure*, and *Crash Bandicoot* all meeting popular praise.¹² Furthermore, after 1994, this particular era saw the rise of the Sony PlayStation who by 2003 would go on to sell over 102.49 million consoles worldwide.¹³ This huge market allowed many third party licensees to shift from Nintendo and Sega, and make games for Sony, which had much fewer development regulations allowing for the diversifying of games especially those with violent themes on their platform.¹⁴

The period also marks the beginnings of popular online gaming via console and home computer. With the explosion of mass Internet thanks to companies like America Online (AOL), they began spreading the infrastructure needed for intercontinental Internet access. Gaining the interest of the video game industry, many console developers began integrating limited Internet access into the consoles. Sega was technically the first major video game company to do this with the Sega Channel for the Genesis, but they also integrated it into Sega Saturn with the NetLink and the Sega Dreamcast itself could do it without the need of an external peripheral. Sony and Microsoft followed suit with adding online access to their home consoles the PlayStation 2 and X-Box during the sixth generation of home consoles and games from 2001-2006. Nintendo was the last of the major video game companies to integrate Internet access with

¹² Kent, *The Ultimate History of Video Games*, 523, 530-1, 534, 536-8, 563.

¹³ Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time* (Boston, MA: Focal Press, 2014), 246.

¹⁴ For further reference, please review Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., Harmony, 2014; Mark J.P. Wolf, ed., *Before the Crash: Early Video Game History*, Wayne State University Press, 2012; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

their consoles starting with limited access with the GameCube and later implementing it further with the Wii.¹⁵

Home computers, on the other hand, managed to handle online gaming much better than the consoles. Already acquainted with online gaming starting in late 1980s and early 1990s, with the coming of Window 95 and the migration towards people going online in the late 1990s and early 2000s, many on the fence alongside many hardcore computer gamers jumped at the chance to play games with their friends and foes across the world. For example, popular shooting games like *Quake*, online *Doom* WADs, and even early massively multiplayer online games such as *Ultima Online* made computers a popular alternative to consoles.¹⁶

Arguably, the fifth generation of gaming was a clear revolution when it came to gaming as it brought in more mature audiences, helped push certain genres to the forefront, streamline the overcrowded console market and began integrating the Internet and online play. The sixth generation bore the fruits of its predecessors and from it built their empires of technology that rivals modern television, movies, and online streaming. While the fifth and sixth generations did push video games into the modern mass media, this however does not explain why they received such a broad appeal or why people even reaccepted them after the 1983 crash when consumer

¹⁵ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Brad King and John Borland, *Dungeon's and Dreamers: The Rise of Computer Game Culture from Geek to Chic*, McGraw-Hill, 2003; Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., Harmony, 2014; Mark J.P. Wolf, ed., *Before the Crash: Early Video Game History*, Wayne State University Press, 2012; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010. Winnie Forster, *Game Machines: 1972-2012: The Encyclopedia of Consoles, Handhelds, and Home Computers*, 2nd English edition, ed. Heinrich Lenhardt and Nadine Caplette, GAMEplan, 2011.

¹⁶ For further reference, please review Brad King and John Borland, *Dungeon's and Dreamers: The Rise of Computer Game Culture from Geek to Chic*, McGraw-Hill, 2003; Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

confidence was at an all-time low. No, to understand how American culture accepted gaming, a look into the third and fourth is required.¹⁷

Thirty years ago, Nintendo entered the US video game market with its new machine, the Nintendo Entertainment System or NES. Scoffed by critics and analysts, they believed that the video game industry was dead, the stigma known as video games too powerful to overcome and Nintendo, a Japanese company no less, had no place in American society as fears grew about Japanese takeovers of American industries spread during the 1980s. Despite numerous odds against them, Nintendo pulled off the impossible, helped resurrect a near dead industry, and walked into a proverbial gold mine all at the same time. For five years, Nintendo gained a monopoly with its nearest competition Sega not having the influence to compete until late 1991. Afterwards, the two would engage in a nearly three-year tug-of-war for control of the US market, which divided gamers into rival camps. Alongside the much smaller but no less significant consoles these makers would go on to reshape the image of console video gaming as well as finally breaking its association with the word fad.¹⁸

On the other hand, home computer niche grew during the 1980s and 1990s. Pushed by such names as Apple, IBM, and Commodore many brands would go on to make a name themselves, but it would be a software company that helped unify the majority of the computer industry. Pushed by now famous billionaire, Bill Gates, Microsoft's MS-DOS and later the Windows operating systems became the exclusive choice for computer manufactures. While not happening overnight, the success of the company really came into its own in 1995 with the

¹⁷ For further reference, please review Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

¹⁸ For further reference, please review David Sheff, *Game Over: Press Start to Continue*, CyberActive Publishing, 1999; Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

universally acclaimed Windows 95 solidifying Microsoft's product as the primary operating system used by nearly all computers used today outside of Apple and Linux.¹⁹

With the beginnings of unified operating's system, this proved fruitful for many developers interested in making games for the home computer. The 1980s and early 1990s offered two forms of acquiring games. The first came from getting the computer software via retail stores, which mainly consisted of the major PC game developers like Brøderbund, Sierra, MicroProse, and Papyrus. The second way called shareware offered a software program or game free of charge and if the consumer liked what they experienced, they could call the creator or consult a catalog to buy the full version or next installment. Therefore, in a way, shareware acts much like a glorified demo, giving people a small taste of the program or game, but not grant access to the full version unless they pay.²⁰

On the other hand, while having two ways to get a game, the computer game developers did not slouch as home computers featured games and even genres exclusive to it creating a unique experience all its own. The rise of the modern simulator, popular educational games, real time strategy, and the early predecessors of the massive online multiplayer and more all laid the groundwork for the modern market. Most importantly, what distinguished the home computer games from any other medium was its informal wild west like image. Unlike the popular home consoles with heavy restrictions put into the games, the computer could literally get around them, as they did not have to go through a major console publisher to release their game. This meant

¹⁹ For further reference, please review Brad King and John Borland, *Dungeon's and Dreamers: The Rise of Computer Game Culture from Geek to Chic*, McGraw-Hill, 2003; James Wallace and Jim Erickson, *Hard Drive: Bill Gates and the Making of the Microsoft Empire*, John Wiley & Sons, 1992; Martin Campbell-Kelly and William Aspray, *Computer: A History of the Information Machine*, Basic Books, 1996; Matt Nicholson, *When Computing Got Personal: A History of the Desktop Computer*, Matt Publishing, 2014.

²⁰ For further reference, please review; Brad King, and John Borland, *Dungeon's and Dreamers: The Rise of Computer Game Culture from Geek to Chic*, McGraw-Hill, 2003; David Kushner, *Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture*, Random House, 2004; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

nudity, sex, gore, adult language, and risqué humor and other taboo themes could literally be in a computer game. Though meant for all audiences, the computer gaming scene gained a reputation for catering more towards adult audiences as this image remains persistent even today with today's modern games.²¹

Conversely, a third market also reopened during the 1980s and early 1990s. Not missing a beat, after the successful rebuilding of the North American video game market, people surprisingly returned to the coin operated arcade games, though in limited numbers. Yet, what enticed these people to these bewitching machines came from a three-fold approach. First, the arcade cabinets were much more powerful than the home consoles and computers at the time. With bolder graphical capabilities, higher quality sound, and some games allowing four people or more to play, these games gave the players a truly unique experience that they could not replicate anywhere else. Secondly, both the arcades and home consoles worked well with one another as many of the video game developers who created games for the arcades also created games for the home consoles. Just to name a few Capcom, Konami, Midway all did this as a way to capitalize on the growing video game market as well as have an experimental environment free of console the developer's strict regulations. Finally, these machines at the time made millions of dollars of income especially during the fighting game craze of the early to mid-1990s. Seen as highly profitable, these companies began port their successful arcade games onto the consoles, ensuring the continued success of this medium for a time.²²

²¹ For further reference, please review Brad King and John Borland, *Dungeon's and Dreamers: The Rise of Computer Game Culture from Geek to Chic*, McGraw-Hill, 2003; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Matt Fox, *The Video Games Guide: 1,000+ Arcade, Console and Computer Games, 1962-2012*, 2nd edition, McFarland, 2013; Tony Mott, ed., *1001 Video Games You Must Play Before You Die*, Universe, 2010.

²² For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Mark J.P. Wolf, ed., *The Video*

Now in the context of this project, why does the video game industry of the 1980s and 1990s matter? Strangely enough, these electronic gizmos and fictional tales unveil a unique story in American history. Creating a unique blend of pop culture, business, and technological history in the United States, video games came in the package of controversy and newness that the few entertainment companies could even compare. Scared parents seeing images of shooters, violence in the streets, and the military industrial complex somehow got associated back to video games thus making them afraid of the product their children interacted with on a daily basis. Soon a battle over identity came afoot. Were video games meant solely for children? Were video games meant for adults to play as well? Whom was that little man jumping from platform to platform? Why were video game makers peddling violence to children? Finally, was all this success merely a re-glorified fad that would crash a few years later or had video games become a legitimate form of media similar to the status of radio, television, or movies? The answer however would not come easy as much pain and growth came from these short ten years; however, from its rebirth under the now Japanese influenced market, video gaming would become the juggernaut that it is today and lead many ask this question, how was this major feat accomplished.

In *Paradigm Shift: How the Evolution of Two Generations of Home Consoles, Arcades, and Computers Influenced the United States* examines the often-overlooked early modern history of video games from 1985-1995 and how they would go on to become a larger part of American culture. Each chapter attempts to explain the growing influence gaming has had via home console, computer, and arcades in the US market, and in turn show the origins of today's modern gaming market.

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The final chapter, "Games on Trial: The Issue of Violence in Video games, the Hearing on Violent Video Games and the Creation of the Video Game Rating System" discusses the pressing issue of violence in video games during the early 1990s. Perceived as a major problem, after years of questionable video games and marketing tactics, the United States Congress finally forced the issue and confronted the major gaming companies. Under Senator Joe Lieberman's inquiry over such games as *Mortal Kombat*, *Night Trap*, *Lethal Enforcers*, and coupled with growing public concern over the popular influence video games had over their children resulted in the creation of a unified rating system and cemented their reputation of being forever associated with controversy.

Finally, the significance of *Paradigm Shift: How the Evolution of Two Generations of Home Consoles, Arcades, and Computers Influenced American Culture, 1985-1995*, comes down to one word, acceptance. Despite the controversy it generated before and during the ten critical years of its rebirth, what the gaming industry did right was breaking the notion that video games were simply a popular craze. Unlike the second generation that only fed this belief, the third and fourth generation of gaming proved this assumption wrong. With countless successful launches of influential games across the decade, video games slowly gained the acceptance of both gamers and non-gamers alike allowing gaming to ingrain itself within the American culture. By 1995, the foundation of both the modern gaming industry and culture came into existence, and it would only become greater as the years progressed thanks to the efforts of Nintendo, Sega, and countless other developers and licensees that kept video games from falling to the wayside during this period of growth and uncertainty. Now, let us dive in to a world where an 8-bit plumber captivated a nation, where MS-DOS was important to opening computer files, and an evil SNK villain stole so many of our quarters.

Chapter 1

Bleeps, Bloops, and Literature: The Varied Historiography of Video Games

What if everything you see is more than what you see - the person next to you is a warrior and the space that appears empty is a secret door to another world? What is something appears that shouldn't? You either dismiss it, or you accept that there is much more to the world than you think. Perhaps it is really a doorway, and if you choose to go inside, you'll find many unexpected things.²³ - Shigeru Miyamoto

Featured on the back of the retail box used for storing the Nintendo GameCube, the quote by famed Japanese video game creator Shigeru Miyamoto surprisingly acts as a perfect metaphor for this particular historiography. As a topic spanning multiple generations, the history of video games as a form of entertainment encompasses over sixty years of technological advancement, iconic characters, and a dash of heartbreak. Starting in the late 1950s and 1960s, *Tennis for Two* and *Space Wars* serve as the earliest examples of pre-modern gaming before cementing itself into popular favor with *Pong* in 1972.²⁴ Leading to the Golden Era of gaming for the next ten years, Americans embraced the rise of the arcades and eagerly pumped millions of dollars into new companies such as Atari, Coleco, and Activision. These good times did not last as poor control and an oversaturated market killed off the US controlled video game market in 1983 dropping consumer and resulting in a three-year depression. Despite many believing the industry had died stateside, from 1986 onwards, Nintendo and other Japanese corporations rehabilitated and restructured the market, restored strong popular opinions about electronics, and made billions in the process.²⁵

²³ Quote found on back of the Nintendo GameCube Retail Box.

²⁴ Leonard Herman, *Phoenix: the Fall & Rise of Videogames*, 3rd ed. (Springfield, NJ: Rolenta Press, 2001), 5-6, 14-6.

²⁵ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Brad King and John Borland, *Dungeon's and Dreamers: The Rise of Computer Game Culture from Geek to Chic*, McGraw-Hill, 2003; Martin Campbell-Kelly

Today, the fruits of this endeavor helped revolutionize how we work, play, and socialize in the modern world. Unlike thirty years ago, most everyone owns a console, handheld device, home computer/personal computer (PC), or all three. Modern home systems such as the Microsoft X-Box One, Sony PlayStation 4, and Nintendo Wii-U serve as the vanguard of home console gaming. on the other hand, retro systems such as the Nintendo Entertainment System or NES, Sega Genesis, the Atari 2600, Neo Geo, coin-operated arcade machines still possess a dedicated fan base, whose timeless titles and adventures keeps players coming back for more. The home computer also evolved to meet increased demand. Starting with the Apple's and Commodores of the 1970s through the 1990s, as technology cost lowered and demand for the product heightened, video games began to flourish. This especially became possible when Microsoft Windows helped create a unified operation system, which nearly all computers adopted by the late 1990s, allowing developers to mass-market games for this medium and creating a unique community with PC gamers. This in turn has created a petty war between console and computer gamers who bitterly argue who possesses the better gaming machine. Furthermore, even high profile events such as the yearly Electronic Entertainment Expo (E3) draw the analyses of armchair critics who take their opinions to online forums, *YouTube* or amongst friends to see who "won" the event. Despite these trite arguments, the impact of these machines still holds a major significance in how people entertain themselves during the latter half of the twentieth and early twenty-first centuries.²⁶

and William Aspray, *Computer: A History of the Information Machine*, Basic Books, 1996; Mark J.P. Wolf, ed., *Before the Crash: Early Video Game History*, Wayne State University Press, 2012; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Matt Nicholson, *When Computing Got Personal: A History of the Desktop Computer*, Matt Publishing, 2014; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

²⁶ Ibid.

Noteworthy to expand upon, in addition to the above, with the rise of video game culture has also led to the assemblage of numerous fictional gaming icons. Consisting of hundreds of thousands of potential candidates from both good and bad titles, many of them do not break out from obscurity. Such unknown stars like F-Type from *Stunt Race FX* or the title character *Dr. Muto* often go ignored thanks to either poor sales, eclipsed by other popular characters, or people simply not knowing the game existed.²⁷

In contrast, the most famous of video game characters seem to reach superstardom as they somehow influenced gaming in some way, defined their respective console, or stood out amongst the crowd. Such classic characters who embody the above the likes of Super Mario who many claim saved the US gaming industry, Sonic the Hedgehog, Sega's answer to Nintendo's Mario, and even Dracula whose claim to fame reaches both in literary canon and the *Castlevania* series.²⁸ Even modern titles also can reach these levels of success which such men and woman like the god killer Kratos from *God of War*, *Portal's* insane supercomputer GLADoS, the titular third party genie heroine *Shantae*, and the cartoonish raccoon master thief Sly Cooper.²⁹

As for standing out from the crowd, only a few characters can fit into this category. Consisting of breakout stars, they often stand out as popular cult favorites. Falling into this category includes such protagonists as *Psychonauts'* Raz and *Oddworld* series star Abe.³⁰ While not in the lime light like some of the more influential icons, they manage to stick around long

²⁷ Midway Games, "Dr. Muto" (Nintendo GameCube Game), Midway Games, 2002; Nintendo EAD, "Stunt Race FX" (Super Nintendo Game), Nintendo, 1994.

²⁸ Konami, "Castlevania" (Nintendo Entertainment System Game), Konami, 1986; Nintendo, "Super Mario Bros." (Nintendo Entertainment System Game), Nintendo, 1985; Sonic Team, "Sonic the Hedgehog (1991 video game)" (Sega Genesis Game), Sega, 1991.

²⁹ SCE Santa Monica Studio, "God of War" (PlayStation 2 Game), Sony Computer Entertainment, 2005; Valve, "Portal" (Microsoft Windows Game), Valve, 2007; WayForward Technologies, "Shantae" (Gameboy Color Game), Capcom, 2002.

³⁰ Double Fine Productions, "Psychonauts" (PlayStation 2 Game), Majesco Entertainment, 2005; Oddworld Inhabitants, "Oddworld: Abe's Oddysee" (PlayStation Game), GT Interactive, 1997.

enough to create positive sentiment towards that game or fictional individual. This even works in the reverse as negative notoriety can also create publicity. One such case happened in the Neo Geo game *King of Fighters '94* with its main antagonist Rugal Bernstein. Designed as the "Mightiest (Most Violent) and most evil boss character ever," Rugal quickly gained a reputation as one of the most brutal opponents in any fighting game to date.³¹ This reputation coupled with a ludicrous boss difficulty created an identity for the character and even chief game developer SNK that eventually gave birth to the unofficial term SNK Boss Syndrome.³²

Finally, while important, the image of a video game character does not guarantee success let alone run a successful business. In order to survive, both American and Japanese video game companies hire good designers, put near inhuman hours working a project, and spend millions of dollars in order to create the best possible product possible. Furthermore, while thousands of game development studios exist, only a few from both Japan and America move on to icon status. For example, most if anyone can identify and recognize such iconic video game companies such as Nintendo, Sega, Namco, Tecmo, Capcom, Konami, and Atari but few may never heard about such studios Irem, Data East, or even Papyrus.³³

Based on the above information, one may think that this field may have an abundant historiography, but surprisingly this is not the case. In this unique history, many modern historians, in the writers opinion, have neglected the history and casted it aside. How could this happen? This apparent lack of historical analysis stems from several factors. First, many historians consider the topics as too modern and lacks a historical memory to work upon.

³¹ "KOF Successive Characters: Rugal Bernstein," *THE KING OF FIGHTERS: OFFICIAL WEB SITE*, accessed September 4, 2015, <http://kofaniv.snkplaymore.co.jp/english/character/index.php?num=rugal>.

³² "SNK Boss Syndrome," *Giant Bomb*, accessed September 4, 2016, <http://www.giantbomb.com/snk-boss-syndrome/3015-2788/>.

³³ For further reference, please review Matt Nicholson, *When Computing Got Personal: A History of the Desktop Computer*, Matt Publishing, 2014; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

Normally, the history field likes a thirty-year window in order to gain a more accurate perspective of the chosen topic. In this case in one were to take their word literally, then the cut off point for video game history would end at 1986-7 making anything afterwards unadvisable to work with. On the other hand, other old guard historians may take it upon themselves to call the video game movement as an extended fad, which bared little to no importance to the significant events at home and abroad.

While a major problem since the 1970s, many historians opinion, though rapidly shrinking, claims video games serve no purpose to the overall American history. Unlike the television, movies, and more recently the Internet, modern gaming has received little historical attention over the past few decades. While no good explainable reason exists, the author of this thesis once again believes that with the lack of writing from historians and the pigeonholing of video games as part of the larger irrelevant pop culture of the 1970s onward effectively silenced the history. Finally, while elaborated later the chapter, the current scholarly information currently focuses upon a set few topics. Limited, these ideas are ubiquitous, are easily locatable, and form the majority of talk surrounding gaming today creating a one sided argument, which few refuse to argue against, and rapidly support as the actual history is buried underneath the piles of "popular scholarship history."³⁴

This leads to the main crux of chapter one Bleeps, Bloops, and Literature: The Limited Historiography of Video Games by asking what type of historiography video games possess as of

³⁴ For further reference, please review Craig A Anderson and Karen E Dill, "Video Games and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life," *Journal of Personality and Social Psychology*, vol. 78, no. 4 (2000); Lawrence Kutner, Ph.D., and Cheryl Olson, Sc.D., *Grand Theft Childhood: The Surprising Truth About Violent Video Games*, Simon & Schuster, 2008; Nicholas L. Carnagey, Craig A. Anderson, and Brad J. Bushman, "The Effect of Video Game Violence on Physiological Desensitization to Real-Life Violence," *Journal of Experimental Social Psychology*, vol. 43, no. 7 (May 2007); Tracy Deitz, "An Examination of Violence and Gender Role Portrayals in Video Games: Implications for Gender Socialization and Aggressive Behavior," *Sex Roles*, vol. 38, no. 5 (March 1998).

2015-2016. Despite the quantity of available information, this chapter takes a new approach at the sources, by looking at them in an inverted pyramid style. Starting from the ubiquitous and moving downward through the most popular scholarships by looking at some resources it helps expand upon the chapters' two main objectives. First, through looking at the vast number of papers, documents and perceptions available, it shows how little scholars have paid attention to the influence of gaming in the past thirty years leading to the hijacking of the topic of video games by other scholarly fields. Conversely, by looking at the other additional information such as the newspapers and magazines and the secondary source authors, the "historians" of the field become apparent as these authors chronicled this history of video games from its earliest inception up until today. Secondly, finally, and contra, through the discussion of video games and by looking into its unique historiography, a completely new territory opens up to the scholarship. Journeying outside the accepted notions of gaming scholarship by looking at magazines, newspapers, video game manuals, and strategy guides and evaluating their setbacks leaves the possibilities for expanding the historiography nearly infinite. Through this exploration, while brief, it is the writer's hope that it will open up a doorway for future scholars and historians to look at the concept of video games differently and more fairly than past generations.

In the sea of current literature available, the "scholarship" aspect of video games comes as one of the most abundant fields around. Using a simple Internet search, a researcher can find a plethora of credible topics from leading professionals about gaming. Despite the numerous choices, quite surprisingly, few if any deal with the vast history surrounding the video game industry as the topic takes a backseat to other agendas. Starting in the 1980s and only progressively getting worse in the 1990s and 2000s, other fields quickly moved in and claimed the topic as part of their niche. In just twenty-five short years, professional scholars from

psychiatry, sociology, philosophy, medical analysis, and gender studies, have interoperated video games according to their understandings and essentially hijacking the field. Peer reviewed journals such as the *Journal of Experimental Social Psychology*, *the American Journal of Preventive Medicine*, *Sex Roles*, and surprisingly *Game Studies* all feature studies such as “An Examination of Violence and Gender Role Portrayals in Video Games: Implications for Gender Socialization and Aggressive Behavior,” and “Video Games and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life,” but few if any pure historical video game articles. Why did this happen or why do these fields seem to reappear in the scholarship.³⁵

Beginning in the 1950s and investigated further in chapter four, American culture seemed to go on a protection kick, targeting threats, which they believed, harmed children with such early examples going as far back as the 1950s as the US congress looked into the impact of comic book, and television violence had on children. Once video games appeared on the market, they often were the targets of these investigations by both parental groups and eventually congress. While the attention mainly came from parent groups like the Parent Teach Association during the 1980s, the barrage officially started circa 1992 during the iconic war between Nintendo and Sega in full swing, the popular outcry of the first *Mortal Kombat* and the Senate Subcommittee's Hearings on rating violent video games.³⁶

³⁵ For further reference, please review Anderson and Karen E Dill, “Video Games and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life,” *Journal of Personality and Social Psychology*, vol. 78, no. 4 (2000); Lawrence Kutner, Ph.D., and Cheryl Olson, Sc.D., *Grand Theft Childhood: The Surprising Truth About Violent Video Games*, Simon & Schuster, 2008; The New York Times 1992-1994; Nicholas L. Carnagey, Craig A. Anderson, and Brad J. Bushman, “The Effect of Video Game Violence on Physiological Desensitization to Real-Life Violence,” *Journal of Experimental Social Psychology*, vol. 43, no. 7 (May 2007); Tracy Deitz, “An Examination of Violence and Gender Role Portrayals in Video Games: Implications for Gender Socialization and Aggressive Behavior,” *Sex Roles*, vol. 38, no. 5 (March 1998).

³⁶ For further reference, please review Lawrence Kutner, Ph.D., and Cheryl Olson, Sc.D., *Grand Theft Childhood: The Surprising Truth About Violent Video Games*, Simon & Schuster, 2008; Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., Harmony, 2014; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; *The New York Times* 1992-1994; “Video Game Controversies,” *Wikipedia*, last modified April 22, 2016, accessed April 26, 2016, https://en.wikipedia.org/wiki/Video_game_controversies#Public_debate_in_US.

Spreading quickly, the preverbal genie leapt out of the bottle and an onslaught of articles surrounding violence, gender, and education emerged from the chaos. This only got worse as tragic events seemed to link video games with obscene and violent behavior. One such event, the 1999 Littleton shootings at Columbine High School encourages a flood of opinions from scholars claiming that video games and other forms of popular culture encouraged increased aggression. Now with such events becoming the rather unsettling norm, many scholars in the psychology, sociology, and medical professions to question the growing influence of gaming thus leading countless study after study from the late 1990s onward on video game violence and other topics surrounding the electronic medium.³⁷

With a basic of understanding of the discrepancy of the scholarship, let us quickly describe what type of work these scholars produce. Despite spanning into the tens of thousands of articles and influencing future writers, the ubiquitous scope subdued itself through the limited number of topics discussed. From 1973 to 2016, three main topics that dominated the video game scholarship included the themes of violence in video games and its connection to aggression, gender studies, and the impact gaming had on children. Therefore, where is the problem, as stated above there are thousands of articles to choose from and discuss. The problem surprisingly lies in the quality of the scholarship.

Noted in the December 9, 1993, Senate Hearing, Dr. Parker Page, President of the Children's Television and Resource Center summarized that video game studies did not have the scholarly attention like their TV brethren.³⁸ His concern was if they did not take action soon and

³⁷ For further reference, please Lawrence Kutner, Ph.D., and Cheryl Olson, Sc.D., *Grand Theft Childhood: The Surprising Truth About Violent Video Games*, Simon & Schuster, 2008; Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., Harmony, 2014; *The New York Times*, April - December 1999; *USA Today*, April - December 1999.

³⁸ US Senate, *Joint Hearings before the Subcommittee on Juvenile Justice of the Committee on the Judiciary, Rating Video Games: A Parent's Guide to Games* (Washington D.C., Government Printing Office, 1995), 11.

look into this field, with video game manufactures constantly evolving their product since the 1980s, it would make studying this technology even more difficult.³⁹ Dr. Eugene Provenzo, a professor of education at the University of Miami adds to Page's comments by stating that when he was writing and researching for his book *Video Kids*, all the information he found on video game studies conducted came from the early 1980s when such games as *Space Invaders* was new on the market.⁴⁰ Furthermore, between 1993 and 1999, video game studies remained rather sparse, but after the events of the Columbine High School shooting, studies in video game skyrocketed from a few hundred into the thousands, as popular media seemed to connect violence with video games creating potential bias towards gaming.⁴¹

While the argument that aggression and video games interconnected with one another was gaining traction, another camp of scholars states the claimed the reverse by stating that there exists no proof that video games causes aggressive behavior in people and in some cases these types of violent games can decrease aggression. This point was brought up back in the 1993 senate subcommittee hearing as Dr. Provenzo stated that the research at the time did point towards video games decreasing aggressive behavior, but these studies were inconclusive and needed more testing to prove or disprove this theory.⁴² Despite stated in 1993, contemporary scholars such as Lawrence Kutner, PhD and Cheryl Olson, ScD in 2004 conducted a two year, \$1.5 million dollar study back up by the US department of Justice over violent video games and children.⁴³ Even with such team members that included experts from a multitude of

³⁹ Ibid., 11-12.

⁴⁰ Ibid., 16, 27.

⁴¹ Again, this generalization came from looking into the works of quite of few scholars of child psychology, women's studies, and studies on video game violence during the research process across the University of Central Oklahoma various databases and online journals.

⁴² US Senate, *Rating Video Games: A Parent's Guide to Games*, 29.

⁴³ Lawrence Kutner, Ph.D., and Cheryl Olson, Sc.D., *Grand Theft Childhood: The Surprising Truth About Violent Video Games* (New York: Simon & Schuster, 2008), 16-7.

psychological fields such children, developmental, clinical, adult, and criminal, and they concluded that there exists no real connection between violent video games and them causing violent or immoral behavior in children.⁴⁴ Furthermore, in their 2008 book, *Grand Theft Childhood: the Surprising Truth About Violent Video Games and What Parents Can Do*, they also address some of the fallacies of numerous studies conducted in past forty years, pointing out their misconceptions and showing how video games became an easy scapegoat for scared parents, state officials, and media outlets.⁴⁵ However, despite evidence from both sides, the debate still rages on as more games feature themes revolving around graphic violence. Full citation of *Grand Theft Childhood* needed the first time you introduce the book to the reader.

With the above arguments made, where does this leave the article section's context with the historiography? For the sake of clarity, four articles from the post 2000 period will be used to show how such previously mentioned themes of violence in video games and gender's association with gaming. However, it needs to be noted that since children meshes tightly with the other two, this type of study will be seen it seen in the below examples. Again, while numerous in examples, the below four articles serves more on the line as an introduction rather than a complete discussion.

Starting with the issue of violence in video games, in his article "Playing with Death" author Michael Brody quite vividly states,

The world of video games is Darwinian, paranoid and controlled. There is no empathy. Studies have shown that kids who play video games contribute less to classroom charities. There is no altruism in *Twisted Metal* or *Resident Evil*. You only win by killing. Is it any wonder that the military use these games to simulate combat? Video gaming requires a Zen-like approach: One shot per kill; no time to

⁴⁴ Ibid., 16-18.

⁴⁵ Ibid., 7-11.

celebrate a score or curse a miss. You have to go on to the next obliteration. This just serves to desensitize the, often, first-person shooter.⁴⁶

What does he mean by this? In his belief, video games serve more on the lines of a detachment tool. In the above-mentioned games, the player needed to quickly take out a zombie or rival driver and move on to the next target to complete a stage or move on to the next section of the game.⁴⁷ The nature of these games does not allow the player to connect to any of the characters and with repeated exposure; it becomes much easier for a person to kill.⁴⁸ Finally, the author also comments unlike board games and toys, which promote family interaction and problem solving, gaming on the other hand, "compresses time and promotes kills."⁴⁹

In another study done by Nicholas L. Carnagey, Craig A. Anderson, and Brad J. Bushman on violent video games called "The Effect of Video Game Violence on Physiological Desensitization to Real-Life Violence" also agreed that gaming promoted violence. According to research done in 2005, indicated that over 85% of the software on the market had some form of violent overtones in them and over half of those titles contain graphic violence.⁵⁰ Even the ESRB's E rated games contained some degree violent actions that parents found repulsive.⁵¹ The authors also claim that studies have proven that this type of entertainment tended to lower IQ,

⁴⁶ Michael Brody, "Playing with Death," *Brown University Child and Adolescent Behavior Letter* 16, no. 11 (November 2000): 8, accessed December 5, 2013, <http://web.ebscohost.com.vortex3.uco.edu:2050/ehost/detail?sid=eb054133-4f29-43d2-af41-7965cff12aba%40sessionmgr4004&vid=2&hid=4106&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=tfh&AN=3717121>.

⁴⁷ Capcom, "Resident Evil" (Sony PlayStation Game), Capcom, 1996; Sony Interactive Studios America, "Twisted Metal 2" (Sony PlayStation Game), Sony Interactive Studios America, 1996.

⁴⁸ Michael Brody, "Playing with Death," *Brown University Child and Adolescent Behavior Letter* 16, no. 11 (November 2000): 8, accessed December 5, 2013, <http://web.ebscohost.com.vortex3.uco.edu:2050/ehost/detail?sid=eb054133-4f29-43d2-af41-7965cff12aba%40sessionmgr4004&vid=2&hid=4106&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=tfh&AN=3717121>.

⁴⁹ Ibid.

⁵⁰ Nicholas L. Carnagey, Craig A. Anderson, and Brad J. Bushman, "The Effect of Video Game Violence on Physiological Desensitization to Real-Life Violence," *Journal of Experimental Social Psychology* 43, no. 7 (May 2007): 489, accessed September 30, 2013, <http://www.sciencedirect.com/science/article/pii/S0022103106000825>.

⁵¹ Ibid.

create anti-social behavior, and promote desensitization, which they defines as, “a reduction in emotion related physiological reactivity to real world violence.”⁵² In addition, after taking 257 college students and subjected those to both violent and nonviolent games, they concluded that games did in fact desensitize them to the effects of real life violence to the point of becoming less empathic to the suffering of others.⁵³

Another issue that causes problems in the scholarship of gaming is women. In American culture, a generalization of women tends to view the gender as delicate. On the other hand, many critics tend to see the gaming industry capitalizing on this by exaggerating popular fictional tropes in their games such as pushing them into the roles of damsels in need of rescue, as eye candy to seduce men, or playing a secondary role to the protagonist. Since the feminist movement during the 1960s, issues surrounding the empowerment and equality of women directly conflicts with video games. In Adrienne Shaw's article, “Do you identify as a gamer? Gender, Race, and Gamer Identity” she discovered that fewer women tended to identify themselves as gamers.⁵⁴ The reason for this comes from the stereotyping of video games, calling them an activity primarily played by a "white, heterosexual, and male."⁵⁵ From this, women often avoid this form of electronic entertainment as this perception as well as females who did play games, were expected to lose do to their supposed "lack of experience" to males and gamers in general.⁵⁶ Finally, through these ideas, according to the author, this explains why she believes male monogyny has a dominating grip on the market today, which directly comes from the lack of female players and thus more games geared to men.⁵⁷

⁵² *Ibid.*, 489-90.

⁵³ *Ibid.*, 492, 495.

⁵⁴ Adrienne Shaw, “Do You Identify as a Gamer? Gender, Race, Sexuality, and Gamer Identity,” *New Media and Society* 14, no. 1 (February 2012): 34, accessed September 30, 2013, <http://nms.sagepub.com/content/14/1/28>.

⁵⁵ *Ibid.*, 28-9.

⁵⁶ *Ibid.*, 34-5.

⁵⁷ *Ibid.*, 39-40.

In a second study on women, this time done by Dr. Victoria Simpson, evaluates the “objectification of women and violence against women in video games, during game play, influence rape-supportive attitudes.”⁵⁸ Through the growth of the gaming industry, a new consensus now encourages players to kill and rape women.⁵⁹ This according to the authors created the idea of the rape related myths surrounding the belief all women actually fantasize about rape and thus making it acceptable to perform such actions in real life.⁶⁰ Furthermore, studies on violent situations and sex supposedly prove that both men and women are inclined to believe these myths after playing violent video games.⁶¹ After experimenting with these said myths with a several college age students who played these types of games, the authors concluded that by increasing graphical detail and realism of the game, it has now allowed players to become active participants in fictional rape.⁶² Furthermore, the authors also suggest that further regulation on games be implemented by calling them the “equivalent of pornography,” and the need for drastic regulation to protect the young and old from sexual aggression against women.⁶³

This leads to the final question surrounding this part of the historiography, should historians call these articles as part of the overall history of video games or even call them historical? While a rare blend of so many fields, these scholarly articles in question are a part of the overall history of video games, but not in a historical sense. Conversely however, they do add a unique depth to the history, unlike many other historical events, that has the opinions of

⁵⁸ Dr. Victoria Simpson Beck et al., “Violence Against Women in Video Games: A Prequel or Sequel to Rape Myth Acceptance?” *Journal of Interpersonal Violence* 27, no. 15 (October 2012): 3017, accessed December 6, 2013, <http://jiv.sagepub.com.vortex3.uco.edu:2050/content/27/15/3016.full.pdf+html>.

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*, 3018.

⁶¹ *Ibid.*, 3019.

⁶² *Ibid.*, 3027.

⁶³ *Ibid.*

psychologists, philosophers, and sociologists all looking at these key moments and trying to discover why video games are both popular and controversial. Yet, these are not historians, and more often than not, they ignore this aspect, to focus on the present than look to the past. This once again leaves one final question; with no real historical scholars for video games, then who can be considered as the scholars for this unusual, but intriguing topic? The answer to this question lies in the words of journalists, books, and the video game industry itself.

Another major source present in the scholarship surrounding video games comes from the writings of both newspapers and gaming magazines. One may inquire on why the author calls these primary sources as scholars and historians. In any other historical topic, the writer in question would utilize them in building the body of the paper and creation of the endnotes or footnotes, however in the case of video games; these particular sources deserve special mentioning. Why do these two mediums need this recognition? Outside books and few journals, the history found here is the history of video gaming from the 1980s onwards.

In many historiographical analysis scholars consider two major sources as the prime candidates. We already discussed one of them in the above paragraphs as many scholars and researchers turn to scholarly articles and journals for peer reviewed opinions on a variety of topics. The other not yet mentioned category, books, also fall into the above as their author's condense information down from multiple sources and reflect upon that information for both a scholarly and non-academic audience. On that note, video game history seems to be in a middle ground that the history field seems to ignore, yet others find it not scholarly enough and lump it into the larger popular culture history. This rather split scholarship leads to even more extreme literature with topics ranging from the impact of violence to books solely dedicated to chronicling the lives of fictional characters. Yet, what can be said about the history of these

culture-changing icons of hardware and software? While one may turn to the aforementioned sources, one question arises, are they the true scholars of the field?

What does the author mean by saying that the scholars may not be scholars? As mentioned earlier, the problem of the articles seem to be the authors getting their influences from recent events and focusing their interests on psychology, sociology, and the influence gaming has on a person. Conversely, the books do cover a wide spectrum of topics that include looking at the pure history; however, while dissed later in the chapter, these sources seem to skim on sources and footnotes leading to questions about their accuracy and what information did the author create versus what they borrowed. Therefore, if the historian cannot trust the "experts" than what can they turn to for an accurate historical view? For one to find a truly historical picture on video game history, one must turn to two uncanny sources, newspapers, and magazines.

Newspapers in the context of a historiography seem quite farfetched, but looking at the larger picture, the logic presented seems to work. Why does a primary source of all things serve as a better marker for gaming history? Much of it has to do with their basic coverage they provide in the context of the years utilized for this thesis.

Unlike the books that mainly keep up with the information in general, and academic journals, which often provide a non-historical opinion, while somewhat biased, newspapers provide the best coverage than any other medium. Going as far back as the 1970s, journalists managed to keep their thumb on the pulse of the video game industry since its infancy. With a rather rosy disposition, many journalists often referred to the first game movement of the 1970s-1980s as simply a fad, something that came and went with the times. While proven right between 1983-5, after the rise of Nintendo however, game journalism resumed with new vigor with the

rise of video game journalism. From the 1980s and up to today, many newspapers still cover numerous topics and featuring headlines revolving around court cases, new hardware releases, opinions on the health, various video game controversies such as the issue of violence, information surrounding business aspect of the gaming industry, and even opinion pieces found their way to print.⁶⁴

The other benefit that newspapers provide to the historiography comes from the sheer abundance of this particular source. Why does the above statement connect to the historiography? Much like academic journals, newspapers come in multiple varieties and cover a wide amount of opinions. From across the country, top newspapers such as the *Los Angeles Times*, *The New York Times*, and the *USA Today* provide a national viewpoint on any given topic.⁶⁵ Authors of books and journals usually utilize them as they can provide numerous primary source materials to the writer. On the other hand, local newspapers such as the *St. Louis Dispatch*, *The Seattle Times*, *The Dallas Star*, *The Washington Star*, *St. Augustine Record*, and the *Atlanta Journal-Constitution* all serve as barometers for local opinions and be useful in getting regional opinions on any given major event.⁶⁶ Finally, unlike some sources mentioned in this historiography, many of the above newspapers can easily be located in numerous archives and on-line. This ease of access makes them both a vital primary source and valuable contribution to the overall historiography.

Though noteworthy, the various newspapers in question do in fact have some flaws that need mentioning. While many complaints are mostly minor, vary across numerous sources and

⁶⁴ The following paragraphs main points come from a variety of national articles seen from *The New York Times* from 1980 to 2014.

⁶⁵ For further reference, please review *The Los Angeles Times*, *The New York Times*, and *USA Today* articles span from 1980 onwards.

⁶⁶ For further reference, please review *St. Louis Dispatch*, *The Dallas Star*, and *The Washington Star* from 1980 onwards for examples.

open to interpretation, one major problem in particular that deserves mentioning, bias. Not unlike most media or information sources, depending on the author, bias exists in all forms, yet video games suffer greatly. One such example of the above bias stems from the Nintendo dominance during the 1980s and early 1990s. After emerging from the chaos of the North American Video Game Crash of 1983, Nintendo slowly began rebuilt the gaming market and using these policies the image of a Japanese company overtaking the once American dominated turned some newsmakers to print rather skewed information against them.

In a May 24, 1989, article “NEC Tries to Zap Nintendo in the Video Game Market” writer Douglas C. McGill tries to tot the superiority of the NEC TurboGrafx-16 over the Nintendo Entertainment System through its more superior technology and graphics.⁶⁷ On the other hand, he paints Nintendo as a bit of a bully with its Nintendo's representative William White calling the console unimpressive and not worth the investment.⁶⁸ Another author Andrew Pollack in his article, "Nintendo's Dominance in Games May Be Waning" urged people to abandon Nintendo in favor of Sega's upcoming console, the Genesis.⁶⁹ Giving examples from experts, he used them to claim that Nintendo was falling behind technologically and with their stocks falling in Japan, he advises that people needed to start avoiding the company and look towards the future like Sega and NEC.⁷⁰ Even the medical field got in on the act as in a 1989 *Toronto Star* article “Add 'Nintendo Neck' to list of high-tech ills,” the term Nintendo Neck was unofficially used to describe unnecessary strain on the neck after playing video games by sitting or lying on the ground with the head looking at the TV.⁷¹ While just a small sampling, this kind

⁶⁷ Douglas C. McGill, “NEC Tries to Zap Nintendo In the Video Game Market,” *The New York Times*, May 24 1989.

⁶⁸ Ibid.

⁶⁹ Andrew Pollack, “Nintendo's Dominance in Games May Be Waning,” *The New York Times*, April 23, 1993.

⁷⁰ Ibid.

⁷¹ Robert L. Steinback, “Add 'Nintendo Neck' to list of high-tech ills,” *The Toronto Star*, July 29, 1989.

of bias can be seen in numerous articles surrounding video games, however, let us leave and turn our attention to its counterpart, the video game magazine.

Much like newspapers, game magazines also deserve mention in this type of history, but what is a gaming magazine and what do they provide? Until the popular use and mass marketing of the Internet in the late 1990s, magazines alongside a few select books provided gamers an inside look into the world of video games. Divided into two major categories, one-half solely dedicates their services to one particular brand. Chiefly seen in the 1990s, popular staples such as *Nintendo Power*, *PlayStation Magazine*, and *Sega Visions* serve as prime examples. Dedicated on serving their brand, the creators and editors solely focus on products and games for that particular company while ignoring the competition. This may include spotlighting a console exclusive game or promoting their version of a multi-platform title over the rivals. On the other hand, some magazines cover all aspects of video gaming and not just one brand. Seen throughout the 1980s and continuing into today publications, sources that fall into this category includes *Game Informer* and *Electronic Gaming Monthly*. Unlike the above, this type of magazine covers a wide spectrum of topics across platforms. Including a mix between PC and home consoles, depending on the popularity, publisher, and release dates of certain games, some game may receive more attention from other. Nevertheless, despite the sheer volume of new titles and previews each month, the creators of these magazines attempt to show everything the gaming industry has to offer.⁷²

With one explanation out of the way, what content do these magazines provide? The main reason why this medium so important comes from the reviews revolving around the games that came out at that particular time. As noted before, up until the late 1990s, outside of friends

⁷² For further reference, please review *Electronic Gaming Monthly*, *Game Informer*, *Nintendo Power*, *PlayStation Magazine*, or *Sega Visions* from the years 1988-1996.

who played the game, the magazine was the only way for someone to get an outside opinion about a prospective title. However, for its time, the reviews also play a vital role for the historiography as it gives a relatively unbiased viewpoint of that game without today's nostalgia blindness. Depending on the individual reviewer and magazine publication, a title could easily be overrated, underrated, or maintain a contain opinion. For example, when it first came out in 1994, *Donkey Kong Country* for the Super Nintendo received universal praise from multiple publications. Today many contemporary "historians," often question if the game received unnecessary overhype for its gameplay. In 2003, now defunct GameSpy.com came out with the top 25 most overrated video games of all time, *Donkey Kong Country* placed ninth for its rather ugly graphics and simplest level design according to one review named Ben.⁷³ Despite fluxing opinions, the magazines themselves cannot change. In Volume 66 of *Nintendo Power*, out of a 1-5 point system, the game achieved high marks ranging from 4.9 to 4.1 from its' four reviewers.⁷⁴

Other unique benefits that these magazines give to the historiography come from the interviews and articles given and sometimes written by both famous and sometimes unknown video game creators. In reviewing the literature, many of these interviews revolve around either a particular game or asking about their career. As an example, in issue 234 of *Game Informer*, Dan Ryckert questioned Nintendo's famous game creator Shigeru Miyamoto and developer Takashi Tezuka. While mainly lighthearted and not pressing on any many issues, the interview chiefly revolves around Nintendo's famous mascot Mario.⁷⁵ In the article, Miyamoto answers some of

⁷³ GameSpy Staff, "Top 25 Most Overrated Games of All Time," *GameSpy*, September 15-20, 2003, accessed August 27, 2015, <http://web.archive.org/web/20060505211346/http://archive.gamespy.com/articles/september03/25overrated/index18.shtml>.

⁷⁴"Now Playing: Look for These Releases Soon," *Nintendo Power*, November 1994, 107.

⁷⁵ Dan Ryckert, "Mario's Creators Answer Burning Questions about the Series," *Game Informer*, September 10, 2015, accessed September 7, 2015, http://www.gameinformer.com/b/features/archive/2012/09/24/miyamoto-tezuka-interview.aspx?wptouch__12.

mysteries surrounding the series lore that include why Bowser keeps kidnaping Princess Peach, is Mario's last name Mario, and why is their mascot billed as a plumber despite having other occupations such as doctor and an athlete.⁷⁶

Contrasting the above paragraph, sometimes these same men can also touch upon key issues of that time. In the December 2001 edition of the *Official U.S PlayStation Magazine*, Ryan Lockhart an insider for Seven Studios questioned the potency of online line gaming.⁷⁷ Summing up the power of Internet gaming as disturbing, he believed that going online would harm the video game industry.⁷⁸ Using the RPG genre and at the time most popular online game *Everquest*, he stated that this type of media threatened to harm a potential game's main story and instead replace it with weak glue trying to hold a community, which in turn not be able to keep up and "evolve with the players."⁷⁹ Lockheart also feared that companies would take advantage of the potential online gaming craze, as many companies were looking into online at the time.⁸⁰ Worrying about developer charging a monthly fee to play and companies working less on a single player campaign, he warned that this money grab could backfire costing the companies who tried to push people online both monetarily and in poor quality titles.⁸¹

In the end however, both good and bad, these arguments are key to understanding the world of video games. With access to such creative voices, it can give any writer or even reader insight into the mindset of a developer or even explain questions that may or may not been distorted by fan theories via online forms and websites. However, despite this wonderful source of information, an unsuspected and quite alarming problem arises.

⁷⁶ Ibid.

⁷⁷ Ryan Lockhart, "Don't Stop Playing With Yourself!" *Official U.S. PlayStation Magazine*, December 2001, 64.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Ibid.

Unlike like most popular publications such as *Time* and *Newsweek*, the video game magazines suffer from a lack of availability. Now one may question why this happened or why could the author not procure these sources. The answer is not quite simple even after two and one-half years of searching; several factors still prevent the author from obtaining a majority the magazines.

When trying to get a hold of the elusive magazines, many Universities or even public libraries did not carry the older magazines. For this project, the writer of this thesis attempted to somehow procure roughly eight magazines types from 1988-2001, which included such names as *Nintendo Power*, *Sega Visions*, *PlayStation Magazine*, *Electronic Gaming Monthly*, *Dreamcast Magazine*, and *Game Informer*. Using both World Cat, interlibrary loan, and University of Central Oklahoma online databases, I discovered that the magazines in question did not exist in physical print, microfilm, microfiche, or have a digitalized version at many of these institutions. On the other had if they possess the said literature, they refused to loan out to the resource. This leads to an interesting question, why does many universities and library's exclude the video game magazine.⁸²

Looking inward, no correct answer exists, but the writer has theory on why this is the case. Unlike magazines like *Time* and *Newsweek*, a gaming magazine does not cover important moments in history. Existing in its own little niche, these publications rather focus on the games, walkthroughs, reviews, interviews, and events revolving around the video game industry such as the Consumer Electronic Shows or the Electronic Entertainment Expo (E3). While this may seem trivial to some, many may see these magazines as unimportant and bearing no importance to the

⁸² Please note that these factors came down to both experience and observations during the thesis creation process.

nation's overall history, thus are thrown away by many private and government owners who concenter them worthless. This surprisingly begins a cascade of new problems.

As the years progressed, popular magazines started to end their lengthy runs. An example of this occurred in August 2012 when Nintendo ended publication of the *Nintendo Power* brand with issue 285.⁸³ Overnight, this made the magazine series collectable causing prices even for older issues to increase in value. As of 2015 and depending on condition, the cost for one *Nintendo Power* can range from \$3 US dollars for the more common issues to over \$100 US dollars for the more valuable and popular issues.⁸⁴ With shipping tallied into the cost and roughly 130+ issues needed (from 1988-2001) to cover Nintendo history, this alone would cost anywhere from the high hundreds into the low thousands of dollars making it economically unfeasible for a college student and or some dedicated scholars to collect them all.

Outside *Nintendo Power*, many of the older magazines can be considered rare. Many older current brands such as *Electronic Gaming Monthly* and defunct magazines like *Sega Visions* do not possess back issues thus setting up another roadblock for the potential scholar. Furthermore, due to the phasing out of these brands and the popularity of video games, this makes them a popular target for collectors who snap them up at a moment's notice. Unfortunately, even bookstores such as Half-Price Books fail to possess any issue before 2001 and even early 2000s come as scarce. Finally, the last and ironically the first place for many potential historians use to find these issues falls into a legal grey area, the Internet.⁸⁵

⁸³ Luke Plunkett, "The Final Nintendo Power Cover Is Awesomely Nostalgic," *Kotaku*, November 29, 2012, accessed September 7, 2015, <http://kotaku.com/5964491/the-last-nintendo-power-cover-is-awesomely-nostalgic>.

⁸⁴ These prices came from *Amazon.com* on September 15, 2015.

⁸⁵ Please note that these factors came down to both experience and observations during the thesis creation process.

Unlike the already mentioned, the Internet serves as the best shot for anyone seeking out video game magazines outside of paying for the hard copies. The magazines found here often come as scanned images and put into PDF format and depending on the quality of the scans, they are word for word identical copy to the original. Yet, despite seeing these magazines online, it does not come without its problems. One issue that stems from searching online comes from the abundant trap web sites. These web sites often claim to have the PDF, but fail to deliver a link to the magazines, or state the person needs to subscribe to their website in order to access them. In contrast, some sites may provide a PDF with no strings attached, but these sites only provide one magazine and with a few rare volumes, the older and less popular magazines are often not available.⁸⁶ Finally, the legality of acquiring them online is also called into question as many of the previously mentioned ways to obtain the data are considered copyrighted material. One site called Retromags.com, the creators aim to preserve classic video game magazines. By signing up to the website, a person can read and download the magazines. Yet, what they do is illegal to a degree. On the home page, the creator states,

This site is set up to digitally preserve video game magazines from 1999 and earlier for current magazines. The rules for defunct magazines vary on a case-by-case basis. We do this because issues of these magazines are not readily available from publishers/content owners. While we don't have legal permission, we operate in a way where we do not release anything that will reduce any potential income for you, or magazines that are available from you, nor do we release scans that are of a quality that may reflect poorly on you. So far this has worked, with several publishers/content owners basically ignoring our existence. However, if you wish that we do not make content that you legally have ownership available on this site, just let us know and we will remove it. While we would prefer permission, we will fully oblige with your wishes concerning your content. This is a hobby we do out of passion and love for the video game magazines of yesterday, and not worth legal battles of any kind.⁸⁷

⁸⁶ Ibid.

⁸⁷ "A Note to Publishers and Content Owners," *Retromags*, accessed August 27, 2015, <http://www.retromags.com>.

Ultimately, the words “While we don’t have legal permission” raise major concerns.⁸⁸ One of the biggest problems, many video game magazines under US law are considered copyrighted material and illegal to obtain via online download.⁸⁹ On the other hand, you can use the same data for scholarship and review, which is protected by “fair use.”⁹⁰ Even in the F.A.Q. section, they specifically state that their database is technically illegal, but they claim their site it exists in a grey area because the magazines they provide are no longer around and they ask for no money outside donations.⁹¹ Despite the ambiguity, it raises questions on if it is academically acceptable to take such information from such a site.

This leads to a final note on the section. Despite the negatives on both newspapers and magazines, these two forms provide one of the best accounts of the history for gaming outside of books. What they contribute to the overall historiography are colorful accounts of both software and sometimes the men and women who made the game. Finally, when looking at our period from 1985-1995, it shows how Japanese, American, and other third party developers recaptured the attention of the young and old through the use memorable characters and its fair share of controversy. While the above remains important, the next section surprisingly shows how the software itself can indirectly affect the historiography.

Expanding upon the above question, how can software affect a historiography? Is a game just a game and nothing more? Why should software even be part of this overall discussion? Part of the thousands of games across numerous home consoles and home computers, one should not be dismissive of the included literature, namely the instruction manuals and the strategy guides

⁸⁸ Ibid.

⁸⁹ Vitaly Friedman, “Copyright Explained: I May Copy It, Right?” *Smashing Magazine*, July 7, 2007, accessed May 3, 2016, <https://www.smashingmagazine.com/2007/07/copyright-explained-i-may-copy-it-right/>.

⁹⁰ Ibid.

⁹¹ “F.A.Q: Is This Legal?” *Retromags*, accessed August 27, 2015, <http://www.retromags.com/faq#.Vd-rgnippFJ>.

that can be purchased at retailers. Simple at best, these textual documents while not technically classified as a "book" in a historiography sense do need a proper introduction and discussion. A beast in its own right, unlike today with online manuals and walkthroughs, back in the day, the manuals was the only way for the player to understand the story and main objectives of the game. Now why are these gaming inspired documents so important and what is their contribution to the field of video games?

First, we must ask, what is a video game instruction manual? According to Mark J.P. Wolf's *Encyclopedia of Video Games*, manuals are "a printed book of less than 50 pages that is packaged with the game."⁹² Its job consists of teaching the player several key concepts about the game. For instance, all manuals show such features as how to install the software, basic control settings, what items can the player collect during the course of the adventure, saving/deleting a file, small profiles about the characters and legal information about the games copyright.⁹³ Going into further detail, the mentioned above, while similar in design, will change for each game. For instance, one of the best examples that show the above principles comes from the 1994 Super Nintendo game *Super Metroid*.

In this thrilling third installment to the popular series, the player takes control of Samus Aran, a bounty hunter whose job in the game involved hunting down the Space Pirates and recovering the last Metroid from the Planet Zebes.⁹⁴ Placing the player in an isolationist position, their goal involved guiding the protagonist through the labyrinth areas of Crateria, Brinstar, Norfair, Maridia, the Wrecked Ship, and Tourian.⁹⁵ Along the way, they will also face both

⁹² Mario De Govia, "Game Manuals," in Mark J.P. Wolf, ed., *Encyclopedia of Video Games*, (Santa Barbara, CA: Greenwood, 2012), 233.

⁹³ Ibid., 233.

⁹⁴ Nintendo R&D1, "Super Metroid" (Super Nintendo Game), Nintendo, 1994.

⁹⁵ *Super Metroid: Instruction Book* (N.p.: Nintendo of America, 1994), 27-34.

common enemies and massive bosses such as skree, mochtroids, sidehoppers, the humongous Kraid, and Samus' infamous archrival Ridley.⁹⁶

Unlike modern titles, which explain the actions within game, many Atari 2600 era through 64-bit titles did not have such a luxury and *Super Metroid* was no exception. With only a brief explanation of the series history so far and a small plot based introductory stage to get the player acuminated with the basic controls, the game literally gives the player free control once they reach the landing point at Crateria.⁹⁷ In order to advance, the player needs to collect numerous power-ups like the Super Missile to blast through certain doors, the Morph Ball to squeeze through tight passages, and various other collectables that expands the character's energy and missiles count.⁹⁸ For first time players, this can be quite overwhelming. Without previous experience with the latter two games (or other future games for those who played a *Metroid* title post 1994), this force's an inexperienced player to use a tedious cycle of trial and error, but here is where the instruction manual comes into play.

As mentioned earlier, a manual's job involves informing the player with information on how to play that certain game. In the thirty-five-page booklet, it concisely provides information about certain menus and their operations like the title screen, how to use the map function, utilizing the Samus screen to manage weapons, and the general layout of the game screen.⁹⁹ In addition, the manual shows the button layout for the controller and what functions they possess like using the d-pad to move Samus, the L and R buttons to angle shots, and the B button to run faster.¹⁰⁰ Furthermore, it also gives a brief explanation of the games various power ups, how to

⁹⁶ Ibid., 27-9, 31-2.

⁹⁷ Nintendo R&D1, "Super Metroid" (Super Nintendo Game), Nintendo, 1994.

⁹⁸ Ibid.

⁹⁹ *Super Metroid: Instruction Book* (N.p.: Nintendo of America, 1994), 10-5.

¹⁰⁰ Ibid., 6-7.

use them, and how they are implemented such as the Varia Suit, which can high temperatures, and the Ice Beam, which freezes enemies and serves as the only weapon (alongside five missiles) that can harm Metroid's.¹⁰¹ Finally, the manual gives other helpful information such as showing what can be used to restore energy, how to get through certain doors, and give small examples of what enemies the player will face in the various depths of Zebes.¹⁰²

While the above is just a sample, many manuals stretch across numerous genres, such as fighting, puzzle, and racing titles thus making them a key literature for the software enthusiasts, but how does it apply to the overall historiography? Ultimately, the main purpose and reason why manuals are so important stems from an unusual aspect, the story.

Out of all the reasons available, why does a game's story have to pertain to the historiography? Unlike today's CD storage, technology back in the mid-1980s and early 1990s was at best limited. In order to fit an entire game into a cartridge, sacrifices such as lowering graphics and reusing enemy sprites occurred to save memory. One such technique used to save as much memory as possible was to cut the story out of many early games, especially in the consoles. Contrasting the PCs, which could save additional data on the hard drive, both the home consoles and handhelds did not have this luxury. This led to the question of how to create and build a game's basic plot story without actually telling it in game. The solution they discovered lied not in the technology, but both clever design and the written word.¹⁰³

Getting around the problem of telling a game story remained problematic during the 8-bit and 16-bit era. Before the technology advanced, developers possessed many ways they could use

¹⁰¹ Ibid., 20-5.

¹⁰² Ibid., 26-34.

¹⁰³ For further information, please consult Chris Kohler, *Power-Up: How Japanese Video Games Gave the World an Extra Life*, BradyGames, 2005; Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011.

to explain a games plot. For example, in more story driven games, developers used non-playable characters to describe key plot points of the story, simplistic text boxes, and still shot cut scenes to advance the in-game story.¹⁰⁴ For example, the 1989 Japanese Famicom exclusive *Mother* renamed *Earthbound Beginnings* for the 2015 release stateside uses only text based dialog and crude cut-scenes to progress the game's plot.¹⁰⁵ In some of the rarer cases, such as the 1989 Tecmo port of *Ninja Gaiden* combined both still shot scenes and pioneering animated-style cut-scenes making the game one of the first home consoles titles to accomplish this feat.¹⁰⁶

On the other hand, many early games from 1985-1995 focused on a minimalist style. In these titles, they only had a basic plotline or concept and developed the game from that logic. How did they get away with this? As stated before, some games possessed neither the space nor design for a complex story. Getting around this, game designers used the manuals as a way to explain the story without having to put in on the games internal memory. In the literature, the writers usually, in one or two pages, explain the protagonist(s) motivations, the goal of the villain, and sets up the circumstances surrounding the game events. A prime example of the above comes from the 1992 *Sonic the Hedgehog 2*.

The mysteries begin as early as the title screen, showing both the titular character Sonic alongside an unknown new character.¹⁰⁷ After selecting one player mode, the game immediately starts on Act 1 of Emerald Hill Zone and go on from there.¹⁰⁸ Throughout the entire game proper, it gives no information about the plot or the motivations of the villain leaving players in

¹⁰⁴ This would include mainly story driven games such as Role Playing Games as *Final Fantasy* and *Earthbound*; APE/Hal Laboratory, "Earthbound" (Super Nintendo Game), Nintendo, 1995; Square, "Final Fantasy" (Nintendo Entertainment System Game), Square, 1987.

¹⁰⁵ Ape, "Earthbound Beginnings" (Wii-U Game), Nintendo, 2015.

¹⁰⁶ Chris Kohler, *Power-Up: How Japanese Video Games Gave the World an Extra Life* (Indianapolis, IN: BradyGames, 2005), 219-20.

¹⁰⁷ Sonic Team, "Sonic the Hedgehog 2" (Sega Genesis Game), Sega, 1992.

¹⁰⁸ Ibid.

the dark. While the characters, villain, even the game is now common knowledge, back in 1992 this was not the case as some novice players may find the games characters and objective elusive. Here is where the manual becomes essential as it explains the backstory behind the new character Tails and his connection to the protagonist and the antagonistic ambitions of Dr. Ivo Robotnik, who wants to turn the worlds various animals into robots in order to create his super weapon, the Death Egg.¹⁰⁹ Finally it clearly explains and the game's goal, which involves finding the seven Chaos Emeralds, freeing the trapped animals, and crushing Robotnik's plans for world domination.¹¹⁰

While just one example, the above paragraphs give a great demonstration of why manuals are essential. First, they show the basic operations of how to play a video game. With this knowledge, a possible historian could see how a game is played and connect this to comments and opinions about the game. Secondly, while fictional in nature, with an understanding of a video game's story, we as historians can use it to show why it succeeded or failed to grab mass attention. What made it succeed, why did it appeal to the players, did it inspire a sequel, or did the plot manage change the outlook of a series are all valid questions. Finally, by combining the two we can see how games have changed in the past thirty-five years with just the manuals alone. From the glory days of the 8-bit consoles, the revolutionary Windows 95, and beyond, by looking at this particular set of literature, the evolution of gaming can all be found within these pages. Yet, this is not the entire story of literature solely dedicated to software. For that, one must look more deeply at the game itself and to accomplish this task, one must consult the use of a game guide.

¹⁰⁹ *Sonic the Hedgehog 2: Instruction Book* (N.p.: Sega, 1992), 3-4.

¹¹⁰ *Ibid.*, 4.

With a basic understanding of the importance of a game manual can do, the attention can now shift to its sister literature, game guides. What is a game guide? Also known as strategy guides, these booklets according to *Encyclopedia of Video Games: The Culture, Technology, and Art of Gaming* it is “a printed or digital manual with instructions on how to navigate the play of a specific video game.”¹¹¹ Consisting of a more detailed explanation than a manual, the guide breaks down the game into several chapters, which deals with different aspect of gameplay.¹¹² These manuals, in turn, help guide the player through the multiple levels and challenges thus making the game a bit easier to complete. However, much like the above, there exist some unique exceptions to this form of literature. Most notably, two forms of the same type book exist, the official guides and the unofficial guides.¹¹³

On one side, there exist the officially published game guides. In these forms of literature, they often require and include the authentication of both the creator of the guides, game developer, and publisher.¹¹⁴ For a small licensing fee to create the book, the publishers grant early access to the game (usually a beta/final copy) and official artwork provided by the game maker.¹¹⁵ Once acquired, the writers are tasked to create the overall presentation of the book, which includes writing, design, and organizational structure the guide will take.¹¹⁶ Working with a graphic design team, they explore each level providing both screen shots and maps created in house or given by the game's development team.¹¹⁷ Once finished, the guide publisher sends the product to the game maker for final authorization before printing.¹¹⁸

¹¹¹ Mario De Govia, "Game Guides," In Mark J.P. Wolf, ed., *Encyclopedia of Video Games*, 231.

¹¹² Ibid.

¹¹³ Ibid.

¹¹⁴ Ibid., 232.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

¹¹⁷ Ibid., 232-3.

¹¹⁸ Ibid., 233.

Taking what we learned, what does the final product look like? One great example comes from the 1996 guide for *Super Mario 64*. Created by the staff for *Nintendo Power*, the strategy guide serves as the prime walkthrough for those struggling with the game. Broken into digestible chunks, the writers cover the general information about *Super Mario 64*, the First Floor & Mezzanine, The Castle Basement, and the Upper Floors & Tower.¹¹⁹ Going further in detail, in order to acquire the games 120 power stars (6 per level +1 100-coin star & 15 hidden stars); they also break down the game into individual levels.

Level six, Hazy Maze Cave for example provides a difficult challenge for newcomers as the labyrinth makes getting turned around quite easy when seeking six stars within.¹²⁰ In addition, the map is the only level in the entire game that hides the vital metal cap level/switch entrance within the maze.¹²¹ This means without advance knowledge or spending hours memorizing the area, finding the stage's objectives, the cap switch, and navigation, proves rather daunting. Utilizing maps, screen shots, and well-written explanations, they take each of the six stars and individually explain their precise locations as for example, star six's location hint and title "Watch for Falling Rocks" is rather cryptic.¹²² Placed in a rather hidden alcove, it makes finding this particular star challenging, but the writers via the guide show its precise location thus allowing players to clear the mission with little trouble.¹²³ This problem is not uncommon as

¹¹⁹ For general information, minus the mentioned *Super Mario 64* section that includes a look at Mario's moves, the items he can get, the enemies the player will meet, and general tips the blow deals with the levels of the game. In the creation of the guide, the writers divided each section by how many levels it took before they and the player would get to the Bowser boss fights. In the First Floor & Mezzanine they looked at levels 1-4, tips on how to get the 100-coin star for said levels, the wing cap, five out of fifteen secret stars, and then Bowser in the Dark World (Major boss 1). In the castle basement they do the exact same thing which includes covering worlds six through eleven, the 100 coin challenges, find the invisibility and metal cap, cover five more secret stars, and then look at Bowser in the Fire Sea (Major boss 2.) Finally in the Upper Floors & Tower, the writers finish off levels ten through fifteen, the final 100 coin star challenges, the final four hidden stars, and the last Bowser battle; Nintendo, *Super Mario 64: Nintendo Player's Guide* (Redmond, WA: Nintendo of America, 1996), 2-3, synopsis of entire book.

¹²⁰ Nintendo EAD, "Super Mario 64" (Nintendo 64 Game), Nintendo, 1996.

¹²¹ Ibid.

¹²² Nintendo, *Super Mario 64: Nintendo Player's Guide*, 56-61.

¹²³ Ibid., 61.

other stages like Whomp's Fortress' "Blast Away The Wall" and especially Wet-Dry World's "Secrets in the Shallows & Sky" require the player to locate precisely hidden objects without any clues making completing these extremely difficult without a guide, luck, or hours of trial and error.¹²⁴

In addition, each guide may include certain extras to entice both collectors and gamers. Normally, this may include artwork used in the creation of the literature as well as concept drawings and early development stages.¹²⁵ Other's publishers may offer developer interviews and behind-the-scenes information about the game's creation along with material bonuses such as character figurines or posters.¹²⁶ Now with a basic idea of what a strategy guide is, we can look on the other side of the coin and look at its counterpart, thy unofficial strategy guides, but what is this type of literature?

Simply put, an unofficial game guide is a walkthrough that the developer or publisher of an individual game has not authorized the writer to create.¹²⁷ Starting in the 1990s, Prima began selling its' "Game Secrets" line of books in order to capitalize on the video game craze.¹²⁸ Overnight their brand of unauthorized copies began popping up in stores and inspiring others to follow suit.¹²⁹ While initially ignored, many of the major console and game developers frowned upon this practice as they were using the various companies' intellectual content to make money.¹³⁰ It was not until 1997 and a lawsuit between Nintendo of America and Prima over the unauthorized copy of *Goldeneye 007* ending the practice after strategy guide publisher settled out of court; however, case also built a bridge between unauthorized guide publishers and game

¹²⁴ Ibid., 28, 97.

¹²⁵ Mario De Govia, "Game Guides," In Mark J.P. Wolf, ed., *Encyclopedia of Video Games*, 233.

¹²⁶ Ibid.

¹²⁷ Ibid., 231-2.

¹²⁸ Ibid., 231.

¹²⁹ Ibid., 232.

¹³⁰ Ibid.

developers.¹³¹ Beginning working relations with one another, this became the turning point for many former unauthorized strategy guide publishers as the outcasts Prima, BradyGames, and other smaller companies became the main creators of officially licensed guides starting in 1998.¹³²

Finally, what with an understanding of the above, what does an unauthorized guide look like? Overall, the guide acts just like the authorized manuals, but with a few minor differences. A prime example of the above concept comes from the 1996 BradyGames *Totally Unauthorized Donkey Kong Country 2: Pocket Guide*. When creating the literature, the authors took a minimalist route for this 2D platformer, but unlike the detailed official *Super Mario 64* strategy guide, its counterpart refrains from potentially copyrighted material and remains quite concise. Instead of focusing on getting through each stage, the guide focuses on two major components of the game, the bonus room, and DK coins. While one can feasibly beat the final boss without entering a single bonus room or collect any of the DK Coins, however, the player will never see the games true ending as indicated by non-playable character (NPC) Cranky Kong.¹³³

In order to accomplish the above feat, the player needed to collect all forty DK coins and seek out the seventy-five bonus coins scattered across Crocodile Isle's forty-one levels.¹³⁴ Much like the *Super Mario 64* guide, the unauthorized version breaks down the game into different worlds and once again into individual levels.¹³⁵ Providing only vague screenshots, the writers

¹³¹ Ibid.

¹³² Ibid., 232.

¹³³ Rare, "Donkey Kong Country 2: Diddy's Kong Quest" (Super Nintendo Game), Nintendo, 1995.

¹³⁴ Ibid.

¹³⁵ *Totally Unauthorized Donkey Kong Country 2 Pocket Guide: Diddy's Kong Quest* (Indianapolis, IN: Brady Publishing, 1996), synopsis of book.

through locations a brief description that reveals the locations of the bonus barrels, DK coins and how to reach said collectable.¹³⁶

While just the tip of the vast publications from unauthorized strategy guides during the 1990-1997, the above serves as a rough example as these guides can vary from concise to mini-novels. One particular case of the latter comes from the *Doom Battle Book: Revised and Expanded Edition* by Rick Barba and Andrew Reese. Like and unlike previously mentioned guides, the *Doom Battle Book* blends the features of both the *Super Mario 64* guide and the *Unauthorized Donkey Kong Country 2 Pocket Guide*. On one hand, much like the former, the authors take the popular shooter and explain each level for *Ultimate Doom*. Giving a step by step walkthrough, the game guide starts off by giving a forty page general explanation, which focuses on the basic items & operations of the game, enemies, weapons, and even a couple of charts which show how many enemies are in the actual level.¹³⁷ Offering tips and tricks to get through the more difficult parts, the guide gives a detailed report on how to get through each stage and find all the various secret areas hidden across the games four episodes and thirty-six different missions. Despite this, as an unofficial work, it does come with the already mentioned problems such as only using vague screenshots and crude hand drawn maps, as the publisher did not have the licensing rights to make an official guide. Ultimately, both these and the official game guides made up a huge part of the overall literature of video games. Each book offers a glimpse into these fictional worlds, however even these forms of literature has own list of problems.

¹³⁶ Furthermore, in the book they also include what type of a vague description challenge the player will face in order to get the bonus coin, such as collect the stars or find the coin. However, since each bonus room is different, the guide fails as it does not explain how beat the bonus objective; Ibid., synopsis of book.

¹³⁷ Rick Barba and Andrew Reese, *Doom Battlebook: Revised and Expanded Edition*, rev. ed. (Roseville, CA: Prima Games, 1995), 21, 27-9.

While just scratching the surface, both manuals and guides serve as a key part of the expanding historiography of video games. Nevertheless, the subtopic possesses some risks when utilizing these sources. First, one must be wary when using both sources as video game canons tend to change from time to time as a franchise game creator can either tweak the story to fit an event or character into the game's lore or completely reboot the franchise starting fresh with a new game. One great example of the above principles comes from *Super Street Fighter II Turbo*.

Starting in 1987, Capcom's *Street Fighter* series has expanded and amassed a collection of numerous games and fighters over the years. From the *Street Fighter Alpha* series to *Street Fighter V*, each new installment brings both new features to the franchise, but also expands its continuing mythos as a continuous storyline unfolds. As of 2015-6, with only a few small definitive facts known about the series, as several different endings exist causing the players to speculate on whose ending is considered canonical as each fighter gets their own unique ending. Yet, how does this tie into errors in game guides and manuals?

In 1991, with its unique innovative gameplay and now iconic roster, *Street Fighter II: The World Warrior* became the catalyst for all modern fighting games and led to the creation of an entire subseries spanning both home consoles and coin operated arcade, yet, at the same time, it also tweaked a few features to keep gameplay fresh. *Street Fighter II: Championship Edition* included the four unplayable boss characters, Balrog, Vega, Sagat, and M. Bison from *World Warrior* to the roster jumping the number of playable characters to twelve.¹³⁸ *Super Street Fighter II: The New Challengers* expanded the roster further to sixteen with the inclusion of

¹³⁸ Capcom, "Street Fighter II: Champion Edition" (Arcade Game), Capcom, 1992; Capcom, "Super Street Fighter II: The New Challengers" (Arcade Game), Capcom, 1993.

Cammy, T. Hawk, Dee Jay, and Fei Long.¹³⁹ Despite the yearly updates, one thing about the series that remain constant, the story.

Continuing from the events of the first game and fleshed out more in the manga's, comics, and animated shows the original story remains quite simple.¹⁴⁰ In the manual for the Super Nintendo's version of *Street Fighter II: The World Warrior* states that eight warriors who specialize in different fighting backgrounds have come together to fight in a global tournament to determine who will challenge the mysterious grand masters.¹⁴¹ After eight battles, the player faces off against the games three penultimate bosses Balrog, a villainous boxer from the United States, Vega, a Spanish bullfighter with a background in Ninjitsu, and Sagat, a specialist in Muay Tai who served as the final boss from the original.¹⁴² If the player defeats the above, he or she faces off against the champion, M.Bison, a mysterious man who runs the underground criminal organization Shadaloo.¹⁴³ While the game diverts in further subplots such as fighters Guile and Chun-Li vendetta against Bison and Sagat's quest to defeat Ryu after humiliating him in the first tournament, the story remains constant throughout the sub series despite *Championship Edition* and *Super Street Fighter II* adding new characters and subplots.¹⁴⁴ In spite of the above summary, it still does not answer the above question of how does it tie into errors in game guides and manuals. The answer to this lies in the final game of the sub series and an April Fool's Day joke.

¹³⁹ Capcom, "Super Street Fighter II: The New Challengers" (Arcade Game), Capcom, 1993.

¹⁴⁰ This would later be retconned as the Street Fighter Alpha series takes place in between the events of the original *Street Fighter* and the canonical *Super Street Fighter II Turbo*.

¹⁴¹ *Street Fighter II: The World Warrior SNES Instruction Manual*, (N.p.: Capcom USA, 1991), 10.

¹⁴² Capcom, "Super Street Fighter II: The New Challengers" (Arcade Game), Capcom, 1993.

¹⁴³ Capcom, "Street Fighter II: The World Warrior" (Arcade Game), Capcom, 1991.

¹⁴⁴ Capcom, "Street Fighter II: Champion Edition" (Arcade Game), Capcom, 1992; Capcom, "Street Fighter II' Turbo: Hyper Fighting" (Arcade Game), Capcom, 1992.

In an April 1992 edition of *Electronic Gaming Monthly*, they published a now infamous article. Within its pages, the unknown magazine author told its' readers that if they did a specific, but intently hard set of challenges that included the use of Ryu throughout the whole game and sparring against Bison for 10 draws without hitting one another would result in the protagonist's mysterious mentor emerging to challenge the player.¹⁴⁵ While just a joke, the coverage of this character left such impact on the gaming community that this urban legend supposedly led to the creation of a real character in the *Street Fighter* universe.

In the final installment of the *Street Fighter II* series, the 1994 *Super Street Fighter II Turbo*, Capcom gave its players new features that included more balanced gameplay, a new super combo meter, four speed settings, improved air juggling physics, and a series defining character.¹⁴⁶ If a player could defeat both the eight preliminary fighters and defeat the four final bosses without using a continue or reaching Bison within 25 minutes, a brief cinematic occurs where the game's final hidden character emerges to KO Bison and challenge the player.¹⁴⁷ Known as Akuma in the US, he acts as the game's alternate final boss.¹⁴⁸ More powerful than any character in the game, his move set while similar to the series icon Ryu, features his own variation that includes faster fireballs, teleportation, and his signature move, the Wrath of the Raging Demon.¹⁴⁹

Going back to the earlier question, how does it tie into errors in game guides and manuals? The inclusion of Akuma did more than add a challenging foe it fundamentally changed the entire canon of the series. As mentioned, before the 1994 release the story's main official

¹⁴⁵ EGM Staff, "Tricks of the Trade," *Electronic Gaming Monthly*, April 1992, 60.

¹⁴⁶ "Super Street Fighter II Turbo," *Street Fighter II Wikia*, accessed September 10, 2015, http://streetfighter.wikia.com/wiki/Super_Street_Fighter_II_Turbo.

¹⁴⁷ Ibid.

¹⁴⁸ Capcom, "Super Street Fighter II Turbo" (Arcade Game), Capcom, 1994.

¹⁴⁹ Ibid.

storyline surrounded around Bison, after the appearance of Akuma, the story presented in *Super Street Fighter II Turbo* retconned the story and nullified anything that happened in the previous entries of the series up to that point. Even the games that followed such as Bison's arcade intro cinematic in *Street Fighter IV* shows that the *Super Street fighter II: Turbo* ending as occurred as it shows him recovering from the attack.¹⁵⁰

Reflecting upon the above information, why does the author go into such context when describing retcon as a part of errors? Using Akuma's attack on Bison, event shows how just one minor change can change the overall story completely. Normally this is not a problem, as video game themselves are not usually discussed in detail when looking at the overall history of the topic; however, the problem lies in the guides discussing them. During the creation of the player's guides, when published, the writers only know the story up to that point. Without some basic knowledge of the game series, if an untrained historian looks into these sources, they may mistake it as fact and use the information in the wrong context or mistake something that happened at the time the game guide was published only to find out that the company retconned the game. This ambiguous grey area created by retcons makes dissing the history of gaming both a challenging and rewarding process for those willing to muck through the world of fictional history.

The other major problem that these two sources present comes down to incorrect information from translating Japanese to English during the localization process and errors in the manuals themselves. One good example of the above problems comes from the instruction booklet for the first *Mega Man*. At first glance, the literature seems correct as it describes everything the player needs to know such as the main plot, the games enemies and characters,

¹⁵⁰ Capcom/Dimps, "Street Fighter IV" (Arcade Game), Capcom, 2008.

how to play, and the various features that appear in game, yet the manual has a glaring problem. After looking at it closely and then actually playing the game, the two sources do not match up correctly. For example, the name of the six antagonist robots better known as the Robot Masters in the original Japanese release were humorously renamed in the US as Dr. Wily's Evil Empire Leaders.¹⁵¹ Even in the following sequel, the manual commonly referred the enemy bosses as their in-game names rather than define them as a group.¹⁵² It was not until 1990 in the manual for *Mega Man III* did the accurate term come to fruition.¹⁵³

Localization errors aside, there exists other minor gameplay features that never made it into the game, but made it into the literature. An example comes from page 15 of the instruction booklet. In the text description, it states that two power ups found in the game would grant the player an increased life and weapon energy; but after playing the game all the way through, these items never once meaning that at one point they may have existed, but got taken out sometime during development.¹⁵⁴ Furthermore, one curious line in the manual also hints on other feature not seen in the finished product. Possibly an oversight, on page 8 it states "Controller *1 - Moves Mega Man in 1 player game."¹⁵⁵ While only speculation, it is possible at one point that the creators intended to include a two-player mode for the NES game, but at some point, the design team scrapped the idea after manual was created thus making the literature possibly incorrect.¹⁵⁶

Finally, sometimes the players guides themselves can contain errors that non-gamers or even historians may not catch on first glance. While often simple to catch through playing the

¹⁵¹ *Mega Man: Game Pack Instructions* (N.p.: Capcom USA, 1987), 10; "Plot," *The Mega Man Home Page*, December 11, 2002, accessed September 10, 2015, <http://www.mmhp.net/Original/Plot.html>.

¹⁵² *Mega Man 2: Instruction Manual* (N.p.: Capcom USA, 1988), 8, 14.

¹⁵³ *Mega Man 3: Instruction Manual* (N.p.: Capcom USA, 1990), 13-14.

¹⁵⁴ *Mega Man: Game Pack Instructions* (N.p.: Capcom USA, 1987), 17.

¹⁵⁵ *Ibid.*, 8.

¹⁵⁶ While there are only rumors hinting at this possibility, the game makers or evidence neither have confirmed nor denied this fact further.

game, reading an online walkthrough, or checking *YouTube* for an online play, many people often fail to double-check the suspected literature. However, while accurate most of the time, some guides or manuals may contain major errors that the editors did not catch. One of the more infamous examples happened to occur with the Prima version of the *Kirby 64: The Crystal Stars* game guide.

In *Kirby 64*, the player joins the titular Kirby, a jolly pink puffball, who protected planet Pop Star from various monsters and foes. Taking place after the events of *Kirby's Dreamland 3*, the titular character is joined by Ribbon, a fairy whose home planet Ripple Star was conquered by Dark Matter, the primary antagonists of the previous two titles.¹⁵⁷ Furthermore, in a bid to conquer the galaxy, the villains destroy Ripple Star's Crystal and scatters its' remains across the games six worlds.¹⁵⁸ Going on the offensive, Kirby, Ribbon, series anti-hero King Dedede, a Waddle Dee (a common enemy from previous titles), and Adeleine a possible former boss from the previous title ban together to collect the crystal shards, confront the enemy, and liberate Ripple Star.¹⁵⁹

With the plot out of the way, we can address the primary problem. In the Prima guide, it does a great job in accurately explaining the locations of the hidden collectables and assisting the player getting past the games many stages and boss through Shiver Star or world 5. Once it gets to world 6 or Ripple Star's primary boss, the major flaw of the guide comes into play. According to page 94, author Matthew K. Brady states, "Grab any last-minute items from the picnic. It's final battle time."¹⁶⁰ For the next two pages, he goes on to tell players how to beat the tricky

¹⁵⁷ HAL Laboratory, "Kirby 64: The Crystal Shards" (Nintendo 64 Game), Nintendo, 2000; Nintendo, 1995; HAL Laboratory, "Kirby's Dream Land 3" (Super Nintendo Game), Nintendo, 1997.

¹⁵⁸ HAL Laboratory, "Kirby 64: The Crystal Shards" (Nintendo 64 Game), Nintendo, 2000.

¹⁵⁹ Ibid.

¹⁶⁰ The "picnic" is a sub-mini game that appears at the end of completing a level; Matthew K. Brady, *Kirby 64: The Crystal Shards: Prima Official Strategy Guide* (Roseville, CA: Prima, 2000), 94.

Miracle Matter and wraps up the guide with a brief explanation of the "final" cut scene, yet where does the aforementioned problem of the source come into play. Quite incidentally, Brady missed an entire world and the games true antagonist. For those questioning how this could happen, the answer lies directly with the games two endings.

In this particular series, some of the early Kirby games possessed both good and bad endings. Tied with the collection aspect, if a player did not fulfill the secondary objective, they got the bad ending, which usually hinted a larger foe at work. This happens during the events of *Kirby's Dreamland 2* if the player fails to collect all the Rainbow Drops and again in the sequel if they miss any of the Heart Stars.¹⁶¹ In *Kirby 64*, the player got the bad ending if they did not collect all the crystal shards before beating Miracle Matter, which shows a possessed queen fairy after the heroes leave Ripple Star.¹⁶² On the other hand, if all the shards are collected then the player beats Miracle Matter, an alternate scene overrides the bad ending showing the final world and revealing the games true antagonist, Zero Two or 0².¹⁶³ Contrasting the above strategy guide, in the *BradyGames* version, on page 103, the unknown writer clearly discusses both endings and how to obtain them.¹⁶⁴ Furthermore, while only just one level, they guide also covers the final stage of the game, Dark Star, and show players how to defeat the final antagonist.¹⁶⁵

Finally, the Prima guide also gives two pieces of false information in regards to the above. First, he claims on both the front cover and on page three that the game has 100 Crystal shards for the player to collect, yet looking at the game's twenty-two normal levels with each

¹⁶¹ HAL Laboratory, "Kirby's Dream Land 2" (Game Boy Game), Nintendo, 1995; HAL Laboratory, "Kirby's Dream Land 3" (Super Nintendo Game), Nintendo, 1997.

¹⁶² HAL Laboratory, "Kirby 64: The Crystal Shards" (Nintendo 64 Game), Nintendo, 2000.

¹⁶³ Both the names Zero Two and 0² are technically correct ways to spell the boss' name; Ibid.

¹⁶⁴ BradyGames, *Kirby 64: The Crystal Shards Official Strategy Guide* (Indianapolis, IN: BradyGames, 2000), 103.

¹⁶⁵ Ibid., 103-5.

containing three crystals apiece and six bosses holding one per stage.¹⁶⁶ Doing the math, that means, in total, there exist only seventy-two shards, a clear contradiction to the one hundred the author boasts. Finally, within the pages of the guide, another error that further shows the guides flaw surrounding the game's final boss. On the character descriptions, he describes penultimate boss Miracle Matter as "The final boss of the game, Miracle Matter can take the form of any of the seven powers in *Kirby 64*."¹⁶⁷ On the other hand, he states that the game's true final boss 0² is "A benevolent creature, 0² rarely presents any trouble in the cloud levels of shiver star;" yet ironically, the level that takes place in the clouds on shiver star does not feature it anywhere.¹⁶⁸ Now, why did Brady write down these inaccuracies?

According to the thesis author's speculation, one of these scenarios may have played out during the guide's creation. While take notes for his work, the author may have played through the game once and failed to collect all the crystal shards on is first play through. After getting the bad ending, he went back and collected all eighty-one enemy cards found in each stage and the rest of the shards without refighting Miracle Matter, which would have unlocked Dark Star.¹⁶⁹ When he got card Zero Two's card, he may have thought the enemy came from the Shiver Star levels and in his description reflected this thought.¹⁷⁰ As for the 100 shards claim, this was obviously a careless error on the part of the author. Conversely, when working on the literature, in order to avoid spoilers, Brady may have foregone the Dark Star level thinking that it was a major spoiler and opted to keep it secret. However, this would defeat the point of a guide since

¹⁶⁶ Brady, *Kirby 64: The Crystal Shards: Prima Official Strategy Guide*, cover, 3; HAL Laboratory, "Kirby 64: The Crystal Shards" (Nintendo 64 Game), Nintendo, 2000.

¹⁶⁷ Brady, *Kirby 64: The Crystal Shards: Prima Official Strategy Guide*, 6.

¹⁶⁸ Ibid.

¹⁶⁹ Ibid., 5-17.

¹⁷⁰ Ibid., 6.

the BradyGames version included the information about Zero Two fight making it likely that the former argument seems more probable than the latter.

Finally, with the strategy guides and manuals out of the way, the historiography can once again shift focus. Spanning across four decades from the 1980s to today, various books make up a small, vital part of the historiography for the history of video games. Ranging from general history, psychology, sociology, gender studies, parent guides, biographies, and essays all make up the majority of various topics that can be found in books surrounding video game studies. However, each of the above genres for this particular topic possesses one major flaw.

In general, when looking at the various books regarding history, while vastly different in tone and topics, they mostly have one thing in common, they are often written by top scholars in the historical field. Taking clues from journals, logs, fieldwork, and other sources, these authors consisting of college professors, professional historians, or other "experts" with a vast knowledge on the topic build upon the written history by working off the ideas of past writers, but at the same time, adding their ideas to why an event occurred. This may include looking at a particular battle or event through a different perspective or using new sources to explain the mysteries or holes left by earlier scholars in their works. While many fields and topics looked upon by writers do this in earnest, in the case of video game scholarship however, historians seemingly ignore this particular field, despite garnering some interest in the 2000s and 2010s.

Why is this the case? The reason for this comes from the recentness of video games, which made their commercial debut with the release of *Pong* in 1972. This creates a problem that directly comes from these companies such as Atari, Nintendo, and Sega still exist in some form, which makes getting information from them nigh impossible. Due to fears of leaking secrets to the public, many businesses often refuse to allow historians into their archives. Furthermore,

because of the newness of this field, many scholars, and historians often reject the idea of videogames being a worthy topic, as some perceive not enough time has passed to make an unbiased opinion. Yet, why does the author suggest this notion of historians purposely dismissing this subject?

As earlier noted, roughly forty years ago, technology was advanced enough to make mass marketing of video games possible; however, this created a unique challenge for scholars. In the field of history, there exists historian etiquette that encourages researchers to avoid topics that are younger than thirty years from the present day. The reason for this comes down to allowing potential recent bias not to cloud a writer's opinion as well as giving a topic enough time to build a historical memory. Looking at the history of video games, if taken seriously, the cutoff point as of 2016 would be 1986. While bad for recent studies, this may explain why the golden age of video games from 1978 to 1983 has seen more historical interest lately as more books being published about the subject.

In addition, the labeling of games as pop culture has created a negative connotation to the topic and acted as an effective silencer in scholarly forums. On the other hand, in a strange twist, the common person, thanks to the online revolution, noticed the lack of information available and stepped into the role of the historian. As a result, thousands of online forums now crammed with bits of trivia, fan theories, and even legitimate discussions have filled the niche that the professionals had ignored. Even Video game journalists such as Steve Kent now take up the roles of the "scholars" and write entire books about the video game industry effectively becoming the historians and experts in the field.¹⁷¹ Yet, while these men and women are stepping up to the plate, this creates whole a new set of problems.

¹⁷¹ Kent, *The Ultimate History of Video Games*, back cover.

For instance, these men and women often fell into the traps of bias and not having creditable sources. This can mislead readers into believing that the information presented to them represents the truth, but in turn, this maybe not the case as information found on some online sources tends to change frequently. These conflicting ideas between the two ironically created a double edge sword of sorts with one side has to wait for sources to become available, while the other finds any source and presents it as the truth. Finally, a majority of books available often comes from journalistic writers and from non-academic publications, which depending on the publisher and writer, range in sources utilized, and these books containing little to no thesis. Instead, these stories tend to follow a predictable chain of known events, online or newspaper sources, oral histories, or a mix of the three. While not problematic for general readers, unless it is known to credible, it does create doubt in the minds of scholars as their writing style often creates a stalemate between the two sides.

Now with a basic understanding on why historiography is somewhat convoluted, let us look into the some of the prominent literature available on the subject. As noted in the above, many of these works were written mainly by journalists and non-academics authors, however they serve as some of the better examples of current video game scholarship. First, let us look at the significant general history books.

In *Phoenix The Fall and Rise Videogames*, Leonard Herman takes on the history of gaming by basing his research on "twenty years' worth of magazines, press kits, and personal encounters," in order to create the "*Dragnet* of videogame history."¹⁷² Focusing on over fifty years of gaming history, the author painstakingly chronicles the events surrounding the field, as he looks at the days of the early computers in the 1950s to the beginning of the sixth generation

¹⁷² Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd ed., xv.

of home consoles in 2000. In the text, Herman breaks down the key events surrounding the development of the industry by the year. This includes key moments as the rise and fall of Atari during the 1970s through the 1980s, the rise of Nintendo and Sega from third party developers into the titans of the gaming world in the 1990s, and the creation of the Sony PlayStation, which ushered in the fifth generation consoles.¹⁷³ The book also acts as treasure-trove of knowledge on the histories of the various consoles, peripherals, and accessories like the popular Atari 2600 and the Nintendo Entertainment System to some of the more obscure technology such as the Phillips CD-i, Panasonic 3DO, and the Virtual Boy.¹⁷⁴ Furthermore, Herman also gives a rich and detailed account of the history of the early home computers though the Commodores, Apples, and Macintoshes and showing how they evolved alongside the consoles as they competed for a share of the consumer market.

On the other hand, Steven Kent's work, *The Ultimate History of Videogames* takes a new approach by looking at the social history of gaming. Like the above book, Kent focuses on the history of games from its inception to the year 2000. The basic premise of the narrative is the same as Herman's, which both retell the events surrounding the shaping of the gaming industry. This once again covers the big name console companies, the formation of third party developers such as Electronic Arts, Activision, Rare, and the evolution of the home console and early computers.¹⁷⁵ Yet, the two main differences that distinguished this work comes from author's uses of oral accounts and its focus on social events. Throughout the narrative, Kent utilizes the experiences and interpretations from gaming's top leaders and designers. After exhaustive research, people like "Ralph Baer, the designer of the Magnavox Odyssey," Michael Katz, the

¹⁷³ Ibid., 31-98, 107-22, 217-220.

¹⁷⁴ Ibid., 25-7, 107-9153-4, 173-4, 213-4.

¹⁷⁵ Kent, *The Ultimate History of Video Games*, 192-5, 260-6, 350, 441-2.

former CEO and president of Sega of America, and "Shigeru Miyamoto, game designer, Nintendo co., ltd.," all tell their side of the story for their respected side.¹⁷⁶ Furthermore, through these ideas, he also looks at the memorable court cases that changed an industry. These cases in some way significantly affected gaming for the positive or drastically damaged their reputation. These litigations included the "Battle of the Kongs" where Universal Studios sued Nintendo for copyright infringement, but lost after Universal failed to prove that *Donkey Kong* was *King Kong* resulting in Nintendo winning 1.8 million in court fees and legal counsel.¹⁷⁷ Furthermore, in Galoob Toys versus Nintendo, the defendant successfully argued and proved that their use of the Game Genie did not infringe on Nintendo's copyrights and from this decision marked the return of unlicensed products onto the consoles.¹⁷⁸

Shifting gears, in *Replay: The History of Video Games*, Tristian Donovan covers much of what Kent and Herman looked at in their respected narratives. This includes events as the birth of gaming, the 1983 video game crash, the rise of the Japanese companies that include Nintendo, Sega, and Sony, and the problems surrounding violent games like *Mortal Kombat*. While redundant, the author does have one unique aspect that made him different from the others, a look at gaming across the world. In his book, while focusing his attention on mainly the Japanese and American histories, he also dedicates several chapters to how video games affected other markets during the 1980s. In chapter 11, the author covers gaming history in England, Spain, and Australia, which focused on the rise of the home computer.¹⁷⁹ Through Clive Sinclair's revolutionary low cost computer, the ZX80 sparked a gaming revolution in the European markets this spurred on competition from other competitors such as Commodore, Apple, and The

¹⁷⁶ Ibid., 200-1, 484, 530.

¹⁷⁷ Ibid., 210, 216-8.

¹⁷⁸ Ibid., 390-2.

¹⁷⁹ Donovan, *Replay: The History of Video Games*, viii.

Spectrum that all brought a rich library of games into Europe.¹⁸⁰ In the next chapter, Donovan assesses the impact of gaming in "French, West German, Dutch, and Italian states" during the 1980.¹⁸¹ Riding the wave of the computers at the time, these countries often chose more realistic titles than their English counterparts choose and had a keen interest in the American arcade classics.¹⁸² Later in Chapter 24, the author also describes the modern game craze in South Korea and China. Spurred on by the online revolution through games such as *StarCraft*, *Linage*, and *Maple Story*, the home computer in South Korea took off to massive popularity.¹⁸³ However, in communist China, the government's ban on video games, due to cultural reasons, has in the recent years led to a wave of free to play games and the tracking of online gaming by Chinese officials.¹⁸⁴

Furthermore covering a more individualistic case, in *Game Over: Press Start to Continue*, David Sheff created his third book to act as a successor to his previous 1993 *Game Over: How Nintendo Zapped an American Industry, Captured Your Dollars, and Enslaved Your Children*, and the 1994 *Game Over: How Nintendo Conquered the World*. Despite the names of these books, they all look at the same topic, the history of Nintendo up until 1992.¹⁸⁵ Yet, here in itself the author presents a unique viewpoint and situation showing how Nintendo became an international powerhouse, as he looks at the Japanese and American divisions of the company and how they created a juggernaut that spanned across the world.

¹⁸⁰ Ibid., 113-4, 116.

¹⁸¹ Ibid., viii.

¹⁸² Ibid., 125-37.

¹⁸³ Ibid., 312-4, 316-8.

¹⁸⁴ Ibid., 317-8.

¹⁸⁵ For further information, please consult David Sheff, *Game Over: How Nintendo Conquered the World*, Vantage, 1994; David Sheff, *Game Over: How Nintendo Zapped an American Industry, Captured Your Dollars, and Enslaved Your Children*, Random House, 1993; David Sheff, *Game Over: Press Start to Continue*, Cyberactive Media Group Inc., 1999.

On the Japanese side, he focuses on the Yamauchi family who would later create the electronics powerhouse we would know today. Starting in 1889 with Fusajiro Yamuchi, he would begin the company's long history from his home in Kyoto by making playing card known as *Hanafuda*.¹⁸⁶ Needing a name, he soon chose Nintendo, which in Japanese means "Leave Luck to Heaven."¹⁸⁷ Before his death, he would pass on his company to his successors, who continued slowly molding the business. After World War II, the Yamauchi's once again under Hiroshi secured his company, fired all his senior officers, and began looking into electronic entertainment.¹⁸⁸ As the years progressed and electronics became all the rage, alongside Hiroshi Imanishi and Gumpei Yokoi, the company profited by selling light gun games, which resulted in their first successful title, *Wild Gunman*.¹⁸⁹ This would lead to better and greater electronics such as their own *Pong* console known as the TV-Color 6 and later the release of the Famicom in 1983.¹⁹⁰ While these developments unfolded, their Research and Development team landed arguably one of the game designers to date, Shigeru Miyamoto. Under the leadership of Yokoi, Miyamoto helped with the creation of *Radarscope*, but his greatest work came a little while later with first success *Donkey Kong*, which according to Sheff, "'Donkey Kong,' released in 1981, became Nintendo's first super-smash hit."¹⁹¹ His success would lead to greater things such as the further development of his star character, Mario and his signature game, *Super Mario Brothers*.¹⁹² From here on out, the Nintendo's influence on American gaming market slowly grew and with the North American Video Game Crash of 1983, it opened the market for the company, but even before that a small team was already their working on their behalf.

¹⁸⁶ David Sheff, *Game Over: Press Start to Continue* (Wilton, CT: Cyberactive Media Group Inc., 1999), 12-4.

¹⁸⁷ *Ibid.*, 14.

¹⁸⁸ *Ibid.*, 19-20.

¹⁸⁹ *Ibid.*, 20-2, 25-6.

¹⁹⁰ *Ibid.*, 27, 34, 36.

¹⁹¹ *Ibid.*, 47-9.

¹⁹² *Ibid.*, 50.

In the states, while the names of Atari, Activision, and Coleco ran through the minds of players, Nintendo remained relatively unknown at this point. During these early days from their original Manhattan location, Minoru Arakawa, the son in law of Yamauchi, led the American division eventually settling in Redmond, Washington.¹⁹³ As they grew, they soon hired long distributors of Nintendo products Al Stone and Ron Judy, and obtained the services of Howard Lincoln one of the first lawyers that worked with the company and future Chairman of Nintendo of America.¹⁹⁴ With this team, Arakawa built the branch division from the ground while facing numerous obstacles such as the successful legal defense of Shigeru Miyamoto's *Donkey Kong* against Universal Studios by Jack Kirby and Lincoln, allowed Nintendo of America flourish.¹⁹⁵ Even as the US market collapsed around them in 1983 as covered in the chapter in the chapter, “Enter the Dragon,” through a vicious advertisement campaign, a better selection of games and distinguishing themselves for the old American companies, their console, the Nintendo Entertainment System, helped revitalize the industry made the company into an icon.¹⁹⁶ By 1992, the Japanese videogame company had accumulated over \$5.5 billion in sales in the US alone, which cemented them as one of the premier video game developers of the industry.¹⁹⁷

Furthermore, Sheff also looks into the rampant rise of Nintendo into the public psyche. This includes promoting numerous toys and television shows such as the 1988 *Super Mario Brothers Super Show* and the 1990 *Captain N: The Game Master* and contests like the Nintendo World Championships.¹⁹⁸ Yet, their greatest ploy revolved around the game *Super Mario 3*, which received a promotion campaign at McDonald's and a spot in the 1989 movie, *The Wizard*,

¹⁹³ Ibid., 89-98.

¹⁹⁴ Ibid., 97-98, 102-3.

¹⁹⁵ Ibid., 112, 117-127.

¹⁹⁶ Ibid., 158-186.

¹⁹⁷ Ibid., 261-2.

¹⁹⁸ Ibid., 192.

at the climax of the film.¹⁹⁹ The plug gave it tremendous hype as the game at the time of release outsold every previous title to date and made over five hundred million dollars in the process.²⁰⁰ These acts made Nintendo a household name much like Atari had done a few years prior and soon they reaped the benefits of their hard work.

Lastly, the book covers a few issues that helped the company further establish themselves. For example, in chapters From “Russia With Love” and “The ‘*Tetris*’ Song” show the company's battle to bring game *Tetris* to the west from the then Soviet Union.²⁰¹ The narrative also included the rivalry between them and Sega, which began the infamous bit wars between the two home consoles and game manufactures. Lastly, the book also cover the issues surrounding the violence and *Mortal Kombat*, further explained the new advancements in the battle between Sega and Nintendo, and the rise of a new competitor to the markets, the 3DO.²⁰² Furthermore, in the 1999 edition, Sheff added two more chapters with the first dealing with the failures of the Sega 32X, the 1995 Virtual Boy, and N64 DD for Nintendo.²⁰³ The final chapter finally deals with the legacy of Nintendo and its changing image as the end of the century approaches, which brings both new challenges as well as rewards for the company.²⁰⁴

While just a small sample of the overall literature about the general history of video games, let us shift gears and look at some of the non-historical books that deal with video games. These narratives are much more numerous than their historical counterparts that deal with a variety of topics that include childcare, sociology, psychology, books that focus on an individual developer, miscellaneous titles, and even a few studies on video games by scholars. With that

¹⁹⁹ Ibid., 190-1.

²⁰⁰ Ibid., 191.

²⁰¹ Ibid., 322.

²⁰² Ibid., 429-34.

²⁰³ Ibid., 448-53.

²⁰⁴ Ibid., 457-474.

said, let us begin by looking briefly at one of the one of the more important books that helped lead to the creation of the Electronic Software Ratings Board.

During the early 1990s, concerns over violence and sexism in gaming had started to become a major problem. Parents and adults unfamiliar with these games such as *Mortal Kombat* found them revolting, thus leading to several decades of research surrounding violence in gaming by experts in the field of psychology and sociology. One of the earliest studies in this field was Eugene Provenzo's 1991 book, *Video Kids: Making Sense of Nintendo*. In his work, the author in the introduction compares the 1980s movie *The Wizard* to understanding the importance of gaming and "the meaning of Nintendo and its importance in the lives of children."²⁰⁵

In the text, he looks at the social, cultural, and marketing aspects of video games, and while nothing special came from this study, two chapters stand out amongst his work. In chapter five, the author investigates what he sees as the stereotyping of women in Nintendo games.²⁰⁶ He does this by looking at the then popular titles such as *Double Dragon II*, *River City Ransom*, and *The Adventures of Bayou Billy* and suggests that the traditional female's roles remained as the females severed as the damsel in distress for the protagonist to save.²⁰⁷ He further proves his point by providing two tables summarizing the top forty-seven games based on *Nintendo Power Magazine* and their roles in gender themes and stereotyping.²⁰⁸ In Chapter 6, Provenzo evaluates the role of aggression linked to video games by looking at software thought to promote violence in children such as action and military games.²⁰⁹ Using the same games as in the tables mentioned above, he classifies these titles with such banter as "Guerrilla warriors fight an alien

²⁰⁵ Eugene F. Provenzo, Jr., *Video Kids: Making Sense of Nintendo* (Cambridge: Harvard University Press, 1991), 1-7.

²⁰⁶ *Ibid.*, 100-1.

²⁰⁷ *Ibid.*, 104-6.

²⁰⁸ *Ibid.*, 108-113.

²⁰⁹ *Ibid.*, 122-3, 126-7.

invasion" for *Contra* and "Dinosaurs and assorted monsters eat American cities" for *Rampage*.²¹⁰ In his conclusion, the author ends the book by boldly stating, "We need to eliminate the violence, destruction, xenophobia, racism, and sexism that are so much part of the world of Nintendo."²¹¹

Furthermore and quite interestingly, after the first hearing on violent videogames ended in 1993, a new wave of activism and alertness came about as a direct result of this meeting between leaders of the gaming industry and concerned parental groups. Out of this chaos, many books came out the following year to help make sense of the confusion. While some did bash gaming, others took a more positive stance and defended gaming in general. In Steven and Janet Schwartz book *Parent's Guide to Video Games*, the authors take an optimistic approach to the subject. The narrative covers many of the problems mentioned at the hearings such as sex and women in games, violent content, and evaluating the different types of games available. Yet, chapters that really stand out includes chapter one, which encourages parents to become gamers themselves and connect with children on this level to understand this phenomenon.²¹² Furthermore, the last chapter is also the shining point of this particular narrative. In this section, the authors rate and discuss various video games from across multiple platforms such as the Nintendo NES, Super NES, and Sega Genesis. Evaluating certain categories such as graphics, music, play control, challenge, violence, and entertainment, they look at a handful of titles and judge them on these criteria selections.²¹³ The games selected for this part include such popular software choices as *Kirby's Adventure*, *Mega Man X*, and *Sonic Spinball*, which each game got a basic description and difficulty analysis, based on the author's opinions.²¹⁴

²¹⁰ Ibid., 128-9.

²¹¹ Ibid., 140.

²¹² Steven A. Schwartz, Ph.D., and Janet Schwartz, *Parent's Guide to Video Games* (Rocklin, CA: Prima Lifestyles, 1994), 1-2.

²¹³ Ibid., 61-6.

²¹⁴ Ibid., 78-9, 137-8, 207-8.

In another book published at the same time, David Sheff's book, *Video Games: A Guide for Savvy Parents* looks at the same issues present in the Schwartz's narrative. Yet, the main differences in his work revolves around a much simpler and concise ranking system, which covers a wider selection of titles from multiple consoles, denotes the content using simplified icons, and provides a numerical scoring system with one-hundred being the best and zero as the worst.²¹⁵ In addition, in chapters six through seven, he gives his own opinions on the best and worst games for children and adolescences based on violence and other content appropriate for their age groups.²¹⁶ In the eighth chapter, the author evaluates what the kids thought about these types games, which the overall consensus favoring the more violent games because their fun factor over the more age appropriate, educational and creative titles, which many complained that they insulted their intelligence.²¹⁷ However, the consensus came to one unified thought, which the children claimed that the parents needing to calm down about the situation and force the ranking system down their throats.²¹⁸

In comparison to the other text may attempt to cherry pick a few games out of the thousands of available and try to explain if they are either good, bad, and why they are significant and useful to scholars, collectors, and general enthusiasts. One such example of this type of narrative comes from *1001 Video Games You Must Play before You Die*, edited Tony Mott. In his massive 949-page book, the author produces 1001 examples of video games that have meaningful and historical impact on the video game industry spanning from the 1970s consoles all the way to the 2010s.

²¹⁵ David Sheff, *Video Games: A Guide for Savvy Parents* (New York: Random House, 1994), 117-36.

²¹⁶ *Ibid.*, 67-98.

²¹⁷ *Ibid.*, 99-108.

²¹⁸ *Ibid.*, 101-2.

Organized by the year they were released, the Mott's book look sat various titles and through a brief description, the book's selected numerous options to represent the best of the best of their respected mediums. This includes such influential titles for the arcades such as *Defender*, *Gradius*, *Ridge Racer*, and *Mortal Kombat*.²¹⁹ It also includes such classic games from the various home consoles such as *Guitar Hero*, *The King of Fighters' 94*, *Sonic the Hedgehog*, and *Super Mario Brothers*.²²⁰ In addition, the narrative also explores the vast library of PC games that span from it early text based games to today's modern shooters through such choices as *The Oregon Trail*, *Doom*, *Serious Sam*, and *Team Fortress 2*.²²¹

While just a small sampling, the above seven books serves as some the better works on the market today. Granted, while the author could have chosen other books such as David Kushner's 2004 book *Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture*, Marc Pétronille and William Audureau 2012 *The History of Sonic the Hedgehog*, or the 2005 Jesper Juul narrative *Half-Real: Video Games between Real Rules and Fictional Worlds* as representatives of the historiography. The reason why these titles are not discusses is the authors' belief that the above seven books are excellent sources that represent the overarching story of video games. Finally, the literature is also a good starting place for those wish to beyond this thesis and learn more about gaming.

Finally, to conclude the chapter, where can the historian place video games and its literature? While many would consider that gaming as part of the vast pop phenomenon of the 1970s onward, in this author's opinion however, this stifles the field all together. In order for the subject to work in today's history, it needs a historical reclassification. As a world history,

²¹⁹ Tony Mott, ed., *1001 Video Games You Must Play Before You Die* (New York City, NY: Universe, 2010), 35, 98, 223, 240.

²²⁰ *Ibid.*, 103, 211, 273, 624.

²²¹ *Ibid.*, 22, 235, 461, 753.

gaming in the past forty years has influenced the way people entertain themselves as video games, through consoles or computers, has touched the five continents and its' influence continues to grow. Furthermore, the video game industry is one of the few globalized industries not exclusively controlled by the United States since after 1985; Asian companies such as Nintendo, Sega, and Sony became the dominating force, which in turn created a billion dollar software industry. In addition, video games have also affected the American regional history as well as what many of the newer generations do not remember is gaming actually began in the United States and remained dominant until 1983. Such companies such as Atari and Coleco were the big names of gaming back in the day and through their technology and software, they began the formation of a revolutionary form of entertainment that is filled with potential and controversy. Through these countless endeavors, unlike many fads, which only last from a few months to a few years, gaming has transcended this by integrating itself into the American society and as a result, the history of gaming has now become part of the greater United States history though events like the tragedy at Littleton, Colorado.²²²

Lastly, where can the scholarship and literature go from here? Unlike many histories, which have nearly exhausted their potential, video games as of 2016 still have nearly unlimited opportunity due its status as a young subject. From the many choices available, a person can investigate gaming's global impact, which sorely needs documentation from any decade after the 1960s onward to gaming's recent impact in television media in America during the 1980s and

²²² For further information, please consult Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tony Mott, ed., *1001 Video Games You Must Play Before You Die*, Universe, 2010; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

1990s. This in turn presents an excellent opportunity for historians to add another valuable page on the history of gaming.²²³

However, in the context of this thesis, we will need to leave the historiography and turn back the clock to when Atari was king, Commodore led the home computer market, and *Pac-Man Fever* swept the nation. Little did anyone that in just a few short months that a mighty crash would come down upon this industry and from it; two key events would forever shape the history of video games. First, a mighty market crash in 1983 destroyed the North American home console market and shook up PC and arcades sales so strongly that outside the states they the labeled the event as Atari shock. The second led to the revival of the US video game market, but instead of Atari at the helm, a nearly one hundred year old card game maker from Japan named Nintendo rose and set the stage for the third generation of video games alongside the recovering home computer and arcade markets to make an unexpected comeback.²²⁴

²²³ Ibid.

²²⁴ Ibid.

Chapter 2

Resurrection: The Unexpected Success of Nintendo and the Rebirth of Video Game Media

"Video Games are not a fad."²²⁵ - Tom Hirschfeld

Known today as the second generation of video games (1978-1983), the video game industry entered what many call its golden era. The arcade machine ruled the towns as its now iconic titles *Pac-Man*, *Donkey Kong*, and *Space Invaders* enticed both young and old to give them countless quarters while the consoles took dominion in the home with its king, the Atari 2600, and countless others trying to cash in on peoples fascination with this growing entertainment medium. Serving as the vanguard, over the course of five years, names such as Atari, Namco, Coleco, Activision, defined this era with their games created a billion dollar entertainment industry, but unforeseen problems were emerging on the horizon.

By late 1982, everyone ranging from Sears to Quaker Oats tried to capitalize on the booming craze.²²⁶ Believing in people's gullibility, many first and third party developers published successive poor quality titles. Cheap, easy to make, potentially profitable, and built upon the misleading marketing, embodied by the infamous titles *E.T.* and *Pac-Man* for the Atari 2600, these games were often rushed out to the market and lacked any quality control leading to numerous glitches making them unplayable or being generally not fun at all.²²⁷ The home consoles themselves, which had numerous different choices available, also flooded the market, but acted parasitic leaching off other company's titles in order to make a quick buck. Even other major video game companies began pirating off one another making sure their consoles ran their competitors games especially in the case of Coleco's Expansion Module #1 which could play

²²⁵ Tom Hirschfeld, *How to Master Video Games* (New York: Bantam Books, 1981), ix.

²²⁶ Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd ed., 71.

²²⁷ *Ibid.*, 70, 72.

Atari 2600 games on the Colecovision.²²⁸ Finally, the growing computer market of the 1980s role of computers also played a particular downfall of the second generation video game consoles as companies like Commodore began attacking the relevancy of the consoles as computers at the time claimed that they could be both practical and play games.²²⁹ Hoping for a profitable 1982 Christmas shopping season, many at the time did not expect the events that occurred the following year.

The year 1983 proved disastrous for the US video game industry. Spiraling out of control, popular interest in the entertainment medium unexpectedly collapsed, resulting in massive layoffs or bankruptcy all together. A once billion-dollar enterprise, headlines from 1983-5 chronicled the backlash. Such stories brought such bad news, claimed, "The first generation of the technology that spawned the video game revolution is dead."²³⁰ "Industry leader Atari Inc. already has cleared its inventory of 23 older game sold to merchants for less than \$6 each [...] it would offer consumers the chance to get once video game free if they purchase two."²³¹ "Once the hottest company on Wall Street, Atari has lost a reported \$536 Million this year alone, with [Raymond] Kassar resigning last July."²³² "I thought it would decline in some fashion, but I certainly didn't expect it to disappear as much as it has."²³³ "In one of the most dramatic reversals

²²⁸ Ibid., 64, 76.

²²⁹ Justin Page, "1980s Commodore VIC-20 Computer Ads Featuring William Shatner," Laughing Squid, October 8, 2012, accessed January 1, 2016, <http://laughingsquid.com/1980s-commodore-vic-20-computer-ads-featuring-william-shatner/>.

²³⁰ Michael Schrage, "The High-Tech Dinosaurs," *The Washington Post*, July 31, 1983.

²³¹ Kathryn Harris, "Video Game Makers Push Older Inventories, ear for New Models," *The Los Angeles Times*, January 10, 1983.

²³² Patrick Goldstein, "Video Explosion: Joysticks stuck in a sales slump," *The Los Angeles Times*, December 4, 1983.

²³³ Michael Schrage, "Video-Game Pros Zapped: Lean Times for Pac Man and His Friends," *The Washington Post*, December 23, 1985.

in American business, videogames prove to be neither an industry nor a new art form, but instead a fad with the economic durability of the hula hoop."²³⁴

The words fad, glut, and countless others associated with massive failure became associated with the American video game market. Many companies fell out of grace and consumer trust fell to an all-time low. When Atari tried to rebound in 1984, people only saw it as a facade and outright refused to fall into the same traps set just a few years earlier.²³⁵ The resulting depression and lull in sales caused many to proclaim that the video game industry had died, but was this case true.

The answer is obviously no, as pioneering and influential games still came out for the arcades during this short window. For example, the 1984 *Karate Champ* developed by Technos and published Data East according to IGN writer Damon Hatfield "Technos' martial arts cabinet established and popularized the one-on-one fighting game with a side perspective."²³⁶ He goes on to state, "While not the first game to utilize this scenario, it was the first to become popular and likely the first to be seen in the U.S."²³⁷ These game mechanics were later refined the following year under Konami's *Yie Ar Kung Fu* as it introduced different opponents to fight as the game progressed.²³⁸ Sports games would not have been the same if it were not for the two Tehken titles, *Gridiron Fight* and *Tehkan World Cup*, which established the above the field camera perspectives and some game mechanics used in modern sports titles.²³⁹ Even in 1984, Namco released the little known successor to *Pac-Man*, *Pac-Land*. Vastly different from its

²³⁴ Ibid.

²³⁵ Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd ed., 101-5.

²³⁶ Ryan Geddes and Damon Hatfield, "IGN's Top 10 Most Influential Games," *IGN*, October 7, 2007, accessed October 12, 2015, <http://www.ign.com/articles/2007/12/11/igns-top-10-most-influential-games>.

²³⁷ Ibid.

²³⁸ "Yie Ar Kung-Fu [Model GX407]" *Gaming History*, November 5, 2013, <http://www.arcade-history.com/?n=yie-ar-kung-fu-model-gx407&page=detail&id=3229> Accessed October 12, 2015.

²³⁹ "Gridiron Fight," *Wikipedia*, accessed October 12, 2015, https://en.wikipedia.org/wiki/Gridiron_Fight; Mott, ed., *1001 Video Games You Must Play Before You Die*, 102.

predecessor, the game sported a side scrolling aspect, which featured pre Mario Bros. style gaming and possibly served as the inspiration for Nintendo's most influential title, *Super Mario Bros.*²⁴⁰ Finally, little known developer Irem created *Kung-Fu Master*, which serves as the origin of the popular beat 'em up genre.²⁴¹

Conversely, the arcade machines allowed certain individual companies to shine more brightly. Veterans such as Namco to keep producing such Hit or Miss titles as *Pole Position II*, *Tower of Druaga*, *Super Xevious*, and the *Pac-Land*.²⁴² Another major contender, break out star Capcom used this period to expand its' library classic *Ghosts 'n Goblins* while Konami also emerged during this period with their hit games *Gradius* and *Track and Field*.²⁴³ Furthermore, future powerhouses of the late 1980s and 1990s, Nintendo and Sega established a foothold in the arcades with respectable titles like *Mario Bros.*, the arcade version of the *Punch-Out!!* series, the play choice 10 NES arcades, *Hang-On*, and *Space Harrier*.²⁴⁴ Lastly, after selling their business to other investors, fledging Atari Games despite its then vilified status managed to create several notable and memorable games such as *Paper Boy*, *Gauntlet*, and *Marble Madness*.²⁴⁵ Despite these good successes, many still considered the video game market as a dead, past fad.

By 1985, video game industry seemed to be a laughing stock. In one article, Michael Schrage simply mocks the industry, "Remember video games? A multi-billion dollar business, they were supposed to be the vanguard of a new generation of home entertainment."²⁴⁶ Through

²⁴⁰ Namco, "Pac-Land" (Arcade Game), Bally-Midway, 1984; Nintendo, "Super Mario Bros." (Nintendo Entertainment System Game), Nintendo, 1985; Mott, ed., *1001 Video Games You Must Play Before You Die*, 86.

²⁴¹ Mott, ed., *1001 Video Games You Must Play Before You Die*, 102.

²⁴² "Namco Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/namco>.

²⁴³ Mott, ed., *1001 Video Games You Must Play Before You Die*, 71, 93, 98.

²⁴⁴ "Nintendo Games," *IGN*, accessed May 1, 2016, <http://www.ign.com/companies/nintendo>; "Sega Games," *IGN*, accessed April 25, 2016, <http://www.ign.com/companies/sega>.

²⁴⁵ Mott, ed., *1001 Video Games You Must Play Before You Die*, 82, 87, 95.

²⁴⁶ Michael Schrage, "Video-Game Pros Zapped: Lean Times for Pac Man and His Friends," *The Washington Post*, December 23, 1985.

several interviews with several former designers, he shows the greed of the video game industry, how this led to the path of self-destruction, and forcing many people who used to work for them to get "real jobs."²⁴⁷ However, at the end of the year, a one-hit Japanese developer from the thriving Japanese video game market stepped up to the challenge and with drive and ambition, they managed to revive a dead American market. This third generation of home consoles from 1985-1991 set off a chain reaction, sparking interest for creating games across home consoles, personal computers, and for the arcades while at the same time correcting the mistakes of the past, returning gaming to favorable status, stabilizing the market, and making the video games industry a long-term success.

In chapter two, *Resurrection: The Unexpected Success of Nintendo and the Rebirth of Video Game Media* looks at the three facets that helped resurrect the US gaming market. Section one, focuses on the major role Nintendo played in popularization video games. These actions, which included the initial push to get the NES on the market, policies, and marketing from 1986-1990, and the subsequent ramifications of those actions that led to the industry's growth and stabilization stateside. Section two of this chapter deals with the rise of the PC gaming market. Exploring the growth of the computer market, through changing technology and advent of the Microsoft Windows operating system helped hype and expand the rising computer games market. Lastly, the final facet looks at the arcade gaming scene. Arguably, one of the most ignored areas during this period; the arcades brought two changes to the gaming field. First, it gave developers another medium and a testing ground to publish their games, which may not be feasible under home consoles and computers at this time. Secondly, the arcades unleashed two genres that will help define the 1990s gaming scene, the beat 'em up and one on one fighting

²⁴⁷ Ibid.

games. Finally, through the combined efforts of all these participants, they not only saved an industry, but the actions done during the third generation of video games helped define what gaming is today and with this we turn to the arguable savior of the US gaming market, a ninety-six year old Japanese company named Nintendo.

The rise and success of Nintendo arguably did not start in the United States, but in its native homeland of Japan. Founded in 1889 by Fusajiro Yamauchi, the Kyoto based business became the biggest distributor of Hanafuda and western-style playing cards in the country.²⁴⁸ Passing leadership to his daughter Tei and son in law Sekiryō Kaneda in 1929, they miraculously continued the ongoing success of Nintendo throughout the great depression, World War II, and early post war Japan.²⁴⁹ When 1949 rolled around, Hiroshi Yamauchi, a rebellious young man, found himself as third President of the then fifty-year-old enterprise took control.²⁵⁰

The son of Tei and Sekiryō's eldest daughter, Kimi; Hiroshi quickly became resented by his senior staff for not having and practical business experience.²⁵¹ Having a desire to expand, his tenure began by firing the old guard and those who opposed his authority.²⁵² After a profitable 1959 joint venture with Disney, its success convinced him to take the next step, as in 1962 Nintendo joined both the Kyoto and Osaka stock exchanges.²⁵³ The following year Yamauchi changed the corporate name to Nintendo Company, Ltd and installed himself as chairman.²⁵⁴

²⁴⁸ Sheff, *Game Over: Press Start to Continue*, 13-4.

²⁴⁹ *Ibid.*, 15-8.

²⁵⁰ *Ibid.*, 16, 18-9.

²⁵¹ *Ibid.*, 19.

²⁵² *Ibid.*

²⁵³ "Nintendo History| Corporate| Nintendo," Nintendo of Europe, <https://www.nintendo.co.uk/Corporate/Nintendo-History/Nintendo-History-625945.html>. Accessed October 20, 2015; Sheff, *Game Over: Press Start to Continue*, 19-20.

²⁵⁴ *Ibid.*

The next three years proved difficult for Yamauchi as his different ventures ranging from love hotels, instant rice, and even the Daiya taxicab service all folded quickly.²⁵⁵ Undeterred, he turned to his predecessor's already established Karuta distribution system as a means to push his latest venture into the entertainment sector as a toy and electronics company.²⁵⁶ From this rededicated focus, a new generation of key employees such as general manager Hiroshi Imanishi, chief Research and Development inventor Gunpei Yokoi, electronics specialist Masayuki Uemura, and engineer Genyo Takeda began growing Nintendo's games division.²⁵⁷ "Interested in original ideas" according to Uemura, these men began threw around several successful ventures such as the Beam Gun which sold more than one million units during the early 1970s to opening the first Laser Clay Range in Kyoto.²⁵⁸

Alongside Mitsubishi, further success came in 1977 with the *Color TV Game 6*, a home *Pong* console, which sold roughly one million units, and in 1980, they began the decade long creation of the *Game and Watch* series of liquid LCD handheld games.²⁵⁹ Three years later however, its greatest success, the Famicom, which came from years of R&D and creating new technology spectacularly paid off in the company's favor as they sold over one million home consoles in Japan.²⁶⁰ With the success of the Famicom and the major competition disappearing after the 1983 North American Video Game Crash, gave Yamauchi the confidence to tackle a much bigger and daunting target, the world; however, in order to do so, they had to conquer on the most volatile of markets, the US video game market.²⁶¹

²⁵⁵ Sheff, *Game Over: Press Start to Continue*, 20.

²⁵⁶ *Ibid.*

²⁵⁷ *Ibid.*, 20-26.

²⁵⁸ *Ibid.*, 24, 26.

²⁵⁹ *Ibid.*, 27, 32.

²⁶⁰ *Ibid.*, 28-36.

²⁶¹ *Ibid.*, 36.

The complex story of Nintendo in America blends both Japanese and American business histories creating an ironic historical parallel to its Japanese parent company. Unlike the situation in Japan, the already briefly mentioned American market possessed one giant titan, Atari, and countless other smaller competitors scratching at their heels. Needing a suitable leader for Nintendo's US branch, in 1980, Yamauchi choose his son in law Minoru Arakawa as president.²⁶² Originally set up in Manhattan, he and his wife Yoko moved the base of operations to Redmond, Washington after a brief stint in Seattle.²⁶³ During this time of building, the couple would meet several key employees that helped grow the division. Mirroring the success of their boss, the couple hired long time distributors of Nintendo products, Al Stone and Ron Judy as part of their sales team and Howard Lincoln, one of the first lawyers that worked with the company and future Chairman of Nintendo of America.²⁶⁴

When attempting to gain a foothold in the market, Nintendo hit a major obstacle. Their first videogame *Radar Scope*, a unique space shooter with a third person three-dimensional perspective failed to sell as some found the game's sound affects annoying alongside the already numerous space shooters available resulted in a warehouse full of thousands of unsold units.²⁶⁵ Quickly running out of money, Arakawa proposed the idea of repurposing roughly two thousand *Radar Scope's* through a conversion kit and a new game geared towards western audiences, but what would this new game look like.²⁶⁶ The answer surprisingly came from a twenty-nine year old staff artist named Shigeru Miyamoto.²⁶⁷

²⁶² Ibid., 92-5.

²⁶³ Ibid., 95, 113.

²⁶⁴ Ibid., 97.

²⁶⁵ Jeff Ryan, *Super Mario: How Nintendo Conquered America* (New York: Portfolio/Penguin, 2012), 15-16.

²⁶⁶ Ibid., 20-1.

²⁶⁷ Ibid., 21.

Working with a skeptical Gunpei Yokoi, the first time developer Miyamoto originally wanted the game to revolve around the characters of Popeye, Bluto, and Olive Oil, but Nintendo failed to acquire the rights from Paramount.²⁶⁸ Working around this, he instead took inspiration from *King Kong* and created a game featuring a giant gorilla he named name Donkey Kong.²⁶⁹ Opposing him was man called Jumpman who avoided various obstacles such fire, barrels, lifts, conveyor belts, and cream pies to save the woman in distress, Pauline, from the titular ape.²⁷⁰ When finished in 1981, the programing took an outstanding 20,000 lines of code, much more than the usual game for its time.²⁷¹

While development was underway, Al and Ron got to work selling the game. After converting two Radar Scope machines from their New Jersey warehouse, the duo choose the Spot Tavern in Seattle to test *Donkey Kong*, which unexpectedly amassed over \$65 in two days.²⁷² Using the conversion kit, the process took months of hard work erasing any trace the former game to make way for *Donkey Kong*; however, by the end of 1981, all two thousand repurposed machines were sold, and an additional sixty thousand *Donkey Kong* cabinets orders came the following year.²⁷³ The result ended with over \$100 million in overall sales and turning a nearly bankrupt into a successful venture overnight.²⁷⁴

Heading into 1983, the North American video game crash took hold leading to the bankruptcy of numerous video game developers and manufactures, Nintendo however, found mixed success in the chaos. During the course of three years, the company found itself in a cease

²⁶⁸ Ibid., 23.

²⁶⁹ Ibid., 24.

²⁷⁰ The character known as Jumpman was renamed by Nintendo as Mario; Ibid., 24-8.

²⁷¹ Ibid., 28.

²⁷² Sheff, *Game Over: Press Start to Continue*, 109-10.

²⁷³ Ryan, *Super Mario: How Nintendo Conquered America*, 29; Sheff, *Game Over: Press Start to Continue*, 111.

²⁷⁴ Sheff, *Game Over*, 111.

and desist lawsuit against Universal Studios over the royalty rights for the name Kong.²⁷⁵ In *Universal City Studios, Inc. v. Nintendo Co. Ltd.*, Universal MCA/Universal's lawyer claimed Nintendo ripped off the 1976 remake movie and attempted to prove this by comparing the game to their film.²⁷⁶ Nintendo's lawyers John Kirby and Howard Lincoln brilliantly disproved this by showing that RKO not Universal held the copyright and the name King Kong entered the public domain in 1975.²⁷⁷ Judge Robert W. Sweet decided in favor of Nintendo stating that *King Kong* and *Donkey Kong* were two different things, ordered the Plaintiff to pay \$56,689.41 in legal fees, and an additional \$1.8 million in a successful 1985 countersuit.²⁷⁸

While dealing with Universal, the North American branch found further success and failures. In many aspects, the crash affected their profits as by 1985 all their revenue came from coin operated machines.²⁷⁹ Furthermore, their handhelds market under the *Game and Watch* brand suffered as an unstable market raised uncertainty and a lackluster marketing campaign showed the company "how not to make commercials."²⁸⁰ Despite some setbacks, Nintendo released *Mario Bros.* in 1983, which firmly established the characters Mario and his brother Luigi.²⁸¹ Finally, seeing the success of the Famicom in Japan, Yamauchi felt it was the time to bring it to the states, but getting it across the Pacific took some time.²⁸²

Looking back it took the Famicom three years of hard work and negotiations to get it to the American market. Nintendo began this process by first going to the juggernaut of the day,

²⁷⁵ Kent, *The Ultimate History of Video Games*, 214.

²⁷⁶ *Ibid.*, 217.

²⁷⁷ Ironically, this came from the court case *Universal City Studios, Inc., v. RKO General, Inc.* where Universal successfully proved that *King Kong* was in fact part of the Public Domain leading the way for the 1976 adaptation of the 1933 film; *Ibid.*, 217.

²⁷⁸ *Ibid.*, 217-8.

²⁷⁹ Sheff, *Game Over: Press Start to Continue*, 129.

²⁸⁰ *Ibid.*, 128-9.

²⁸¹ Nintendo Research & Development 1, "Mario Bros." (Arcade Game), Nintendo, 1983.

²⁸² Sheff, *Game Over: Press Start to Continue*, 92-3.

Atari. When Yamauchi contacted Raymond Kassar, Atari's CEO quickly scheduled a meeting.²⁸³ According to Howard Lincoln, the event remained quite an affair meeting with high officials such as Kassar, Manny Gerard, and Warner Communications President Steve Ross.²⁸⁴ Taking three days according to Lincoln, "it was a done deal. [...] Skip Paul was over there....we had the whole thing put together," but the collaboration quickly fell through.²⁸⁵ Why did this happen? Two main factors led to this downfall. 1) According to Lincoln, a previous deal with Coleco over the Adam version of *Donkey Kong* caused Atari's executives to threaten ending the pending Famicom sales agreement if Coleco had the right to publish the game on their product.²⁸⁶ 2). While Yamauchi implored Coleco's president Arnold Greensburg to cease all sales and promotion of the Adam version of *Donkey Kong*, the deal with Atari evaporated a month later after the termination of Kassar.²⁸⁷

Despite selling over one million units in Japan, the progress in America ground to a screeching halt.²⁸⁸ This caused a clash between Yamauchi who blamed the NA branch for failing and Arakawa who defended his highly valued employees and friends from his father-in-law.²⁸⁹ In 1985, Arakawa himself believed that Nintendo of America itself should sell the Famicom and at the January Las Vegas Consumer Electronics Show, the now named Advanced Video System (AVS) took stage with the NOA president himself staffing the booth.²⁹⁰ Despite a hopeful outcome, the CES proved disastrous for moral and causing the branch to start doubting their product as Arakawa commented, "Everyone really thought we were crazy or dumb."²⁹¹

²⁸³ Kent, *The Ultimate History of Video Games*, 281.

²⁸⁴ Ibid., 282.

²⁸⁵ Quoted in Kent, *The Ultimate History of Video Games*, 283.

²⁸⁶ Kent, *The Ultimate History of Video Games*, 284.

²⁸⁷ Ibid., 284-5.

²⁸⁸ Ibid., 285.

²⁸⁹ Ibid.

²⁹⁰ Ibid., 285-7.

²⁹¹ Quoted in Kent, *The Ultimate History of Video Games*, 287.

Needing a fresh idea fast, they opted for a change of strategy by marketing the AVS as not a video game system. Turning to their popular light gun style games at the time, *Hogan's Alley* and *Duck Hunt*, they planned market it as an entertainment system.²⁹² Furthermore, they also planned pairing up system with the ROB, an interactive toy that worked with both *Gyromite* and *Stack-Up* with their new system.²⁹³ The final strategy point they came up with was renaming the AVS to the now iconic Nintendo Entertainment System or NES.²⁹⁴ Later showcased at June CES in Chicago, things did not turn out well for Arakawa as retailers avoided buying the system, but showed interest the games.²⁹⁵ The focus testing for the console also nearly destroyed his expectations as he watched one kid state claim, "This is shit!"²⁹⁶ As the dismal performance continued, more bad news arrived as two of his trusted employees, Ron Judy and Al Stone wanted to walk away while the biggest nail came from Yamauchi himself who told him to give it up, as no one in North America was willing to buy the NES.²⁹⁷ While devastated from the results, Arakawa wanted one more chance.²⁹⁸ He wanted a challenge and in his own words, "We decided to test the American marketed in New York. Everybody thought that we were going to die, that it was suicide."²⁹⁹

Given a budget of \$50 million dollars, a small team of thirty people called the SWAT team led by Arakawa and consisting of Ron Judy, Don James, and Gail Tilden headed for New York.³⁰⁰ Keeping in mind that *Super Mario Bros.* would not be released stateside until 1986, and not having star game to sell the system forced Arakawa to make an unusual business

²⁹² Kent, *The Ultimate History of Video Games*, 287-8.

²⁹³ *Ibid.*, 288.

²⁹⁴ *Ibid.*

²⁹⁵ *Ibid.*, 289.

²⁹⁶ *Ibid.*

²⁹⁷ *Ibid.*

²⁹⁸ *Ibid.*, 293.

²⁹⁹ Quoted in Kent, *The Ultimate History of Video Games*, 292.

³⁰⁰ Sheff, *Game Over: Press Start to Continue*, 296.

proposition.³⁰¹ To reassure potential investors, Nintendo offered the owners a risk free money back guarantee and offering to stock store themselves with their own promotions and merchandise and willing to buy back any remaining inventory after ninety days creating a no-lose situation.³⁰²

Working for three months, starting in October 1985, the team struggled to get any businesses to sign, as business were skeptical of their product and even racism played a small part. One encounter according to Howard Philips, one of Nintendo's chief spokesmen, came in the form of a guard working at a Toys R' Us who stated to him, "Your working for the Japs? I hope you fall flat on your ass."³⁰³ Even nature plotted against them as a small hurricane hit their Hackensack, New Jersey storehouse.³⁰⁴ Despite setbacks, they managed in acquiring a vital partner, the now defunct toy company Worlds of Wonder, who at the time showed interest in selling the NES alongside their two hit of 1985, Teddy Ruxpin, and Laser Tag.³⁰⁵ This gave both Nintendo and its console some much needed legitimacy and further talks with other stores chains in New York.³⁰⁶ After braving grueling conditions, a \$5 million dollar advertising budget, and working to the bone until the day before Christmas, the SWAT team managed to sell roughly 50,000 out of the 100,000 consoles in their possession.³⁰⁷ While meager by today's standards, in 1985, this served as a crucial turning point as it proved Arakawa was right all along and Americans were still interested in video games.

³⁰¹ This information seems to be a bit of a mystery as sources seem to indicate no one knows when Super Mario Bros came to the United States. On one hand, some say it came stateside sometime in October of 1985, while other claim it came with the Deluxe Box Set as a pack it game; Kirk Hamilton, "Nobody Knows When the Hell Super Mario Bros. Was Released," *Kotaku*, March 28, 2012, accessed April 8, 2016, <http://kotaku.com/5897284/nobody-knows-when-the-hell-super-mario-bros-was-released>.

³⁰² Sheff, *Game Over: Press Start to Continue*, 165-6.

³⁰³ Quoted in Sheff, *Game Over: Press Start to Continue*, 169.

³⁰⁴ Sheff, *Game Over: Press Start to Continue*, 169.

³⁰⁵ Kent, *The Ultimate History of Video Games*, 300-2.

³⁰⁶ *Ibid.*, 303.

³⁰⁷ Sheff, *Game Over: Press Start to Continue*, 169.

To support his theory, Nintendo conducted a second test in Los Angeles in February 1986, which the NES managed to sell steadily despite toy sales dropping after the Christmas shopping season ended.³⁰⁸ Similar experiments later occurred in other big cities like Chicago, San Francisco, and numerous Texas cities resulting in Nintendo selling an additional one million units.³⁰⁹ While wonderful news, many national retail stores still snubbed the NES calling it a "temporary aberration."³¹⁰ This mindset may have persisted if it not for the efforts of one Peter Main.

Canadian born, Main, an old friend of Arakawa possessed a wealth of corporate knowledge from working at such businesses as Colgate-Palmolive and serving as vice-president of General Foods.³¹¹ Taking over for Ron Judy who was leaving to market in Europe and having no prior experience with video games industry, Main dedicated himself to learning about his new profession as Nintendo of America's Vice President of Marketing.³¹² Using his newly acquired knowledge, he set out to bolster Nintendo's reputation on Wall Street.³¹³ He began his assault with the analysts, who he knew they were looking for key things such as a strong balance sheet and new hit idea.³¹⁴ Main used this to his advantage as he began pitching Nintendo itself to these men showing them the company's history, its debt free spreadsheet, and its thriving control of ninety percent of the Japanese market.³¹⁵ This valuable information caught their eye and gave Nintendo real, legitimate credibility as many American analysts contacted their Japanese counterparts and found out that Main's words were true, thus setting off something special.³¹⁶

³⁰⁸ Ibid.

³⁰⁹ Ibid.

³¹⁰ Ibid.

³¹¹ Ibid., 169-70.

³¹² Ibid., 170-1.

³¹³ Ibid., 171.

³¹⁴ Ibid.

³¹⁵ Ibid.

³¹⁶ Ibid.

Unlike the previous year, Nintendo became the star attraction. Stores who did sell the console quickly found out from their buyers that the NES was the must have item for the upcoming 1986 Christmas season, yet one company however served as the deciding factor of determining the success of the console.³¹⁷ Burned by Atari during the second generation of video games, Sears was cautious when it came to Nintendo.³¹⁸ Meeting with Main, they begrudgingly relented and agreed to sell the NES.³¹⁹ This set off a chain reaction of commitment from national stores like Circuit City, Babbages, K-Mart, Wal-Mart, and over 200 different minor retailers also agreeing to do business with Nintendo.³²⁰ Selling for around \$130 (\$149 if they bought a system with *Duck Hunt* included), the NES came with two controllers, the console, a Zapper (light gun), and library of over seventeen games that ranged from *Donkey Kong*, *Duck Hunt*, *Popeye*, and *Golf*.³²¹ Most importantly, the system came with the pack-in title *Super Mario Bros.* that by today critics' widely concenter as the game that saved the US video game industry.³²² By the end of the Christmas rush in 1986, over 3 million units sold nationally and continued to double its sells during the following 1987 fiscal year.³²³ Much like Atari however, Nintendo wanted to dominate its competition and during five years, the company flexed its muscles as the king of video games in the United States.

By 1990, one in four homes owned an NES and by contrast, the Shigeru Miyamoto's game *Super Mario Bros.* was on its way to selling over forty million copies worldwide.³²⁴ So why did this occur? Why did Nintendo become one of the most dominant gaming companies in

³¹⁷ Ibid., 171-2.

³¹⁸ Ibid., 172.

³¹⁹ Ibid.

³²⁰ Ibid.

³²¹ Kent, *The Ultimate History of Video Games*, 305-6.

³²² Ibid.

³²³ Ibid., 311.

³²⁴ "Nintendo Entertainment System: The Top-Selling Nintendo Entertainment System Games," *VGChartz*, accessed October 15, 2015, <http://www.vgchartz.com/platform/12/nintendo-entertainment-system/>.

North America? Looking at the information available, before the 1990s bit wars, a small window from 1986-1990 opened giving Nintendo a unique period where people equated video games with that brand. To find out how they did this we need to look at this five-year gap, what they did right, and the reproductions of those acts.

The first action came directly as a direct result of the 1983 crash. Coming out at the right place and the right time, the work of Peter Main, Greg Fischbach, Minoru Arakawa, Howard Lincoln, the entire North American Staff led to the unexpected success of Nintendo's North American branch, just as the people regained interest with the hobby. With no real direct competition, Nintendo became synonymous with electronic games and a common misconception grew from this dominance. When discussing video games, many claim that the NES was the only system in town, but this simply was not the case. In 1986, Sega, Nintendo major rival during the 1990s, released its first major console in the United States, the Master System, selling roughly 100,000 units by early 1987.³²⁵ Another competitor during the third generation of consoles came from Atari. Coming out at the same time as Sega's console, Atari rereleased the Atari 7800.³²⁶ They followed up by creating two follow-up consoles the Atari XE Games System in 1987 and their handheld system Atari Lynx two years later.³²⁷ Finally, a new generation of 16-bit home consoles started coming out on the market in 1989 with the TurboGrafx-16 and the counter to the Super Nintendo, the Sega Genesis.³²⁸ So why did Nintendo remain so unchallenged for so long during the late 1980s? The answer simply comes from the company willingness to learn from mistakes made by the companies of the past.

³²⁵ Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd ed., 113-4, 117.

³²⁶ *Ibid.*, 114, 117-9.

³²⁷ *Ibid.*, 118-9, 139.

³²⁸ *Ibid.*, 134-7.

In order for the NES to work in the United States, they had to make sure the mistakes of the past were not repeated. Steven Kent in his book makes mention to one pamphlet called *The Facts on Home Video Games*, author Howard Philips believed the second generation consoles failed because of four reasons, "1. Limited in graphics and depth of play, 2. Played at their best only in arcades, 3. Restricted to few colors, 4. Constricted by poor audio qualities, with limited variety of sound effects."³²⁹ Furthermore, the problem of poor quality games on the home consoles such as *E.T* and *Pac-Man* on the 2600 aided in the destruction of the video game market during the early 1980s. Finally, to differentiate themselves from past consoles, the following steps were taken.

First, when originally marketing the NES, at the time Nintendo refused to identify their products with gaming. Starting in 1985, Nintendo removed any mention of the word video game or any associated lingo from its merchandise, as these various terminologies had become taboo in the American psyche in the mid-1980s.³³⁰ The proof here rests in the first cartridges they produced that include *Super Mario Bros.* and *Excitebike* calling them action series and a programmable series rather than a video game.³³¹ Furthermore, when changing the Famicom's name they took special precautions not to invoke negative connotations associated with the former Atari brand.³³² As noted a few sentences ago, they did this by renaming the NES console as a control deck and game cartridges soon became known as software.³³³

Other ways they continued to differentiate themselves came from their own philosophy on quality. This came in the form of the Nintendo Seal of Quality featured on all their official

³²⁹ Kent, *The Ultimate History of Video Games*, 349.

³³⁰ Dillon, *The Golden Age of Video Games*, 95.

³³¹ Nintendo, "Excitebike" (Nintendo Entertainment System Game), Nintendo, 1984; Nintendo, "Super Mario Bros." (Nintendo Entertainment System Game), Nintendo, 1985.

³³² Dillon, *The Golden Age of Video Games*, 95.

³³³ David Sheff, *Game Over: How Nintendo Zapped an American Industry, Captured Your Dollars, and Enslaved Your Children* (New York: Random House, 1993), 167.

games and products. Aiming to avoid the rampant problem of consistently bad games, Arakawa knew that no matter how much money was put into marketing and advertising, if the game sucked people would lose all faith in the product.³³⁴ Wanting to avoid such failed hyped promotions as *E.T* the game and exceedingly bad games such as *Zombies from Pluto Kidnapped My Girlfriend* a way was needed to reassure audiences that a game was playable.³³⁵ Coined by Ron Judy, the Official Nintendo Seal of approval became Nintendo's early trump card, as any prospective game on the NES had to go through play testing before seeing a potential release date.³³⁶ While the qualifications for this process are not specified in any text or other media, if the game does not meet approval, Nintendo would declines to sell the game, but if the product does pass, the software is approved and the official seal is printed on the box and cartridge before shipping.³³⁷ Today many famous developers such as Sid Meier call it one of the greatest inventions in gaming as it "protected the customer from a nonstop onslaught of shovelware," while at the same time aided in setting a standard for video game quality.³³⁸

The seal of quality also had a secondary function, to prevent fraud. During the 1980s, Japanese video game makers dealt with problems of counterfeit video games.³³⁹ The same problem also occurred in America during the Atari Era, which led to numerous games for a certain console being playable on multiple home consoles such as the Coleco module #1 being able to play Atari 2600 games.³⁴⁰ One solution that came over to American shores to prevent this was the "lock-out chip."³⁴¹ Known as the 10NES Chip, the function of the "lock-out chip" acted

³³⁴ Sheff, *Game Over: Press Start to Continue*, 159.

³³⁵ Ibid.

³³⁶ Dillon, *The Golden Age of Video Games*, 95; Sheff, *Game Over: Press Start to Continue*, 175.

³³⁷ Ibid.

³³⁸ Susan Arendt, "Civilization Creator Lists Three Most Important Innovations in Gaming," *WIRED*, March 4, 2008, accessed September 12, 2015, <http://www.wired.com/2008/03/sid-meier-names/>.

³³⁹ Sheff, *Game Over: Press Start to Continue*, 160-1.

³⁴⁰ Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd ed., 64, 76.

³⁴¹ Sheff, *Game Over: Press Start to Continue*, 161.

much like a gatekeeper.³⁴² Given a special key code directly by Nintendo, if the NES detected NES10 it would run the game, but if an unlicensed game without the chip were placed into the console, it would not be playable.³⁴³ With the official symbol and the NES10, this made video game piracy much more difficult as buyers could easily identify an officially certified product and expect it will be playable, but even this also served another purpose that gave Nintendo an edge over its competition.³⁴⁴

Another advantage Nintendo had during this time came from its control and licenses on games. Following the above trends, the company desperately wanted to stabilize the market and avoid another crash. For Nintendo, to accomplish this goal, they had to invoke several draconic policies when it came to third party developers.³⁴⁵ As an example, licensees were not allowed to publish more than five games per year and two of them had to be NES exclusives.³⁴⁶ Furthermore, Nintendo demanded for the exclusive control of the manufacturing of all game cartridges, which according to Herman believed that, "By manufacturing all of the game cartridges, it had complete control of how much software reached the marketplace."³⁴⁷ Other licensing agreements that companies had to follow included allowing Nintendo to control advertising for their magazine *Nintendo Power*, controlling the minimum and maximum of cartridges ordered by the licensee, engaged in harsh censorship of games released on the NES platform, and not allowing the same game on any rival console for at least two-years.³⁴⁸

³⁴² Dominic Arsenault, "System Profile: Then Nintendo Entertainment System (NES)." In Mark J.P. Wolf, ed., *The Video Game Explosion: A History From Pong To PlayStation and Beyond* (Westport, Connecticut: Greenwood Press, 2008), 111.

³⁴³ *Ibid.*

³⁴⁴ *Ibid.*

³⁴⁵ *Ibid.*, 110.

³⁴⁶ *Ibid.*

³⁴⁷ Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd ed., 112.

³⁴⁸ Sheff, *Game Over: Press Start to Continue*, 214-5.

These three points, the quality control, the 10NES, and their draconic and near monopolistic control of the market enabled the company to keep control and influence the US video game market during the late 1980s. While an ambitious business model, there did exist a few problems. For example, many third parties got around the 10NES and created their own unauthorized games, which include various Atari games and the infamous three pornographic "adult titles" *Peek-A-Boo Poker*, *Hot Slots*, and *Bubble Bath Babes*.³⁴⁹ Many bigger developers such as Konami and Acclaim also got around the five game a year rule by creating subsidiaries Ultra Games and LJN, which were allowed to create another five games for the console.³⁵⁰ Finally, many smaller developers saw Nintendo's policies as monopolizing the market and disenfranchising them with "strong-arm tactics."³⁵¹ Despite these fallacies of the company's early days, Nintendo had one more ace in the hole, their first-party line-up of games.

According to modern estimates from Nintendo of America and its representative Joel Hocberg, they believe that at the end of its lifespan, The NES had over 650 official games and at minimum 250 unlicensed games in North America.³⁵² While a possible additional thousand plus titles may have come from third party developers, Nintendo also decided to create its own unique library of games featuring unique characters and adventures. However, unlike Namco who became sonorous with Pac-Man or Sega connection with their second mascot, Sonic, Nintendo did something equivalent to the likes of Disney and created an entire cast of beloved and sometimes hated characters. Though it took some time, people began associating the names like

³⁴⁹ Dominic Arsenault, "System Profile: Then Nintendo Entertainment System (NES)." In Mark J.P. Wolf, ed., *The Video Game Explosion*, 111-2.

³⁵⁰ *Ibid.*, 110.

³⁵¹ *Ibid.*

³⁵² *Ibid.*, 112.

of Mario, Zelda, Link, Samus, Donkey Kong, and Kirby with Nintendo. Quite arguably, this notoriety did not come from story alone, but with the success of their games sold.

Titles such as *Super Mario Bros.*, while released in 1985 sold over 29.08 million in the US and 40.24 million worldwide.³⁵³ Even its sequels *Super Mario Bros. 2 USA* and *Super Mario Bros. 3* released in 1988 and 1990 sold over 5.39 million and 9.54 million copies thus turning the Mario games into the NES' flagship series.³⁵⁴ Not to be outdone, the 1984 game *Duck Hunt* grossed in 28.31 million cartridges worldwide and sold a remarkable 26.93 million units in the US alone.³⁵⁵ Other Nintendo IPs released in the US includes *Legend of Zelda* selling over 3.74 million cartridges, *Mike Tyson Punch-Out!!/Punch Out!! Featuring Mr. Dream* sold a respectable 2.03 million, *Metroid* at 1.33 million and even at the end of the NES lifespan the 1993 *Kirby's Adventure*, which only sold a meager 0.79 thousand units, stuck out as some of the most iconic games for the NES.³⁵⁶ Impossible to mention them all, the above examples show the popular appeal of their first party line up, and while some games did not get a sequel such as *Duck Hunt* or *Mach Racer*, the legacy of these games still lives on as part of the Nintendo's overall legacy.³⁵⁷

Lastly, while not technically part of the original Nintendo IP's, several third party games linked their success to the NES. Selections as the *Castlevania* series, the *Mega Man* series, the *Dragon Quest* Series, *Double Dragon* series, and especially Tecmo's *Ninja Gaiden* series all

³⁵³ "Nintendo Entertainment System: The Top-Selling Nintendo Entertainment System Games," *VGChartz*, accessed October 15, 2015, <http://www.vgchartz.com/platform/12/nintendo-entertainment-system/>.

³⁵⁴ *Ibid.*

³⁵⁵ *Ibid.*

³⁵⁶ *Ibid.*

³⁵⁷ The Duck Hunt Dog and Duck while not playable in the original game but the duo eventually became a playable character in *Super Smash Bros. for Wii U and 3DS*. The reason for this came from the dog's famous laughing at the player for missing the mallard targets and the aggravation of the player who could not shoot him for taunting them. This quirk made the dog quite an iconic character in video game circles, which possibly led to his inclusion in *Smash Bros.* as a possible representative of the old light gun games; *Duck Hunt*" (Nintendo Entertainment System Game), Nintendo, 1985.

became identifiable to the Nintendo NES.³⁵⁸ Even individual titles such as *Duck Tales*, *Ghost 'n Goblins*, *Contra* and its sequel NES sequel *Super C* all stood out in the NES library.³⁵⁹ Lastly, during the high of its popularity, the first game in the *Teenage Mutant Ninja Turtles* cartoon video game series managed to sell roughly 3.38 million cartridges in the United States and is the only third party game to break into the top ten all time selling games NES games at number nine.³⁶⁰

Leading back to the original question, why did Nintendo have no competition despite having several rival consoles from Sega, Atari, and Turbogرافx? Looking at the above, Nintendo simply held the advantage of controlling the market. From the draconic licensing of the games to having the exclusive titles people wanted at the time, drew many fans to the Nintendo brand. According to Steven L. Kent by the end of 1987, Nintendo controlled roughly 86 to 93 percent of the US Market.³⁶¹ Furthermore, sales of the NES continued to multiply as Kent notes, "According to Nintendo's internal records, the company sold 1.8 million game consoles in the 1986 fiscal year, 5.4 million in 1987, and 9.3 million in 1988."³⁶² The trend continued into 1989 with an additional 5.3 million and 1990 with 7.6 million consoles sold. Doing the math, if the numbers are correct, from 1986 to 1990, Nintendo sold over 29.4 million consoles in the United States alone. On the other hand, financially, by 1987, Nintendo reached 1.7 billion in sales and by 1990, "Nintendo sales alone accounted for one-tenth of the Japanese-American trade deficit."³⁶³ Simply put, no competition at this time could match the power and influence of

³⁵⁸ Dominic Arsenault, "System Profile: Then Nintendo Entertainment System (NES)." In Mark J.P. Wolf, ed., *The Video Game Explosion*, 112.

³⁵⁹ Ibid.

³⁶⁰ "Nintendo Entertainment System: The Top-Selling Nintendo Entertainment System Games," *VGChartz*, accessed October 15, 2015, <http://www.vgchartz.com/platform/12/nintendo-entertainment-system/>.

³⁶¹ Kent, *The Ultimate History of Video Games*, 360.

³⁶² Ibid., 346-7.

³⁶³ Ibid., 347.

Nintendo. Even in the handheld market, Nintendo possessed a monopoly with its Game Boy line of games. Starting in 1989, and while its' only rival at the time, the Atari Lynx and later the Sega Game gear, attempted to compete, the names of Mario, *Zelda*, *Metroid*, and its ace in the hole, the second highest selling game for the platform *Tetris* made the competition look tame in comparison.³⁶⁴

A second, but less referenced reason why Nintendo became so popular in the 1980s came at the expense of pop culture. As one of the top products of the day, Nintendo often used their successful first party characters for merchandising. While this tactic of product sales with Nintendo IP's began with *Donkey Kong*, Nintendo came into its own from 1986 onwards eventually whoring out its characters. Often revolving around superstars such as Mario, one could find products like a *Super Mario Bros* book line, Princess Peach Shampoo, small toys, bedcovers, towels, lunch bags, and Halloween costumes.³⁶⁵ Another star series that received this treatment, the *Legend of Zelda* also had figurines, toys, stickers, books, lunchboxes, bedspreads, trash bins, replicas and so much more surrounding this particular franchise.³⁶⁶ Both series even got their own cereal in 1988. Known as the Nintendo Cereal Breakfast System, the rather obnoxious commercial repeated the word Nintendo as the three children both explained the product and marveled at the presence of both a Mario and Zelda (Link) cereal in one box.³⁶⁷

³⁶⁴ While *Tetris* sold roughly 30.26 million copies in world wide sales, it ran as the highest selling Game Boy game until 1996/1998 when *Pokémon's Red, Blue, and Green* just edged out the game with 31.37 million in worldwide sales; "Game Boy: The Top-Selling Game Boy Games," *VGChartz*, accessed October 15, 2015, <http://www.vgchartz.com/platform/14/game-boy/>.

³⁶⁵ "Mario Bros.," *Avane: Vintage toys, games, anime, & collectables*, accessed October 15, 2015, <http://www.avaneshop.com/products/super-mario-bros?pagesize=40>.

³⁶⁶ Juliet A. Singleton, Tawny, and Firehawk, "Zelda Collectables and Merchandise," *North Castle*, accessed October 12, 2015, <http://www.northcastle.co.uk/archive/collectibles/collectibles.html>.

³⁶⁷ "(1988) Nintendo Cereal System Commercial" (video), *YouTube*, 1988, accessed October 15, 2015, <https://www.youtube.com/watch?v=ebk-y2FdAEQ>.

Not only did Nintendo manage to sell their products, but also managed to break onto the small screen as well. One show that heavily used elements from Nintendo games was *Captain N: The Game Master* as it follows the series protagonists Kevin also known as Captain N and Princess Lana who defend Video Game Land from the *Metroid* antagonist Mother Brain.³⁶⁸ The series also used many first and third party locations found in Nintendo games at the time such as *Tetris*, *Castlevania*, *The Adventures of Bayou Billy*, *Donkey Kong*, and *Metroid*.³⁶⁹ Furthermore, while the show took many artistic liberties to avoid copyright infringement, other characters from first party and third party Nintendo games also appear on the program such as Simon Belmont, Mega Man, Dr. Wily, King Hippo, Donkey Kong, and even Link and Princess Zelda made several appearances.³⁷⁰ In addition, the Super Mario Bros received three different shows from 1989-1992 that included the *Super Mario Bros. Super Show* (which showed the *Legend of Zelda* TV series on Fridays), *The Adventures of Super Mario Bros. 3*, and *Super Mario World*.³⁷¹

Finally, Nintendo also made several appearances in film equating in often-small cameos, references show off the systems popularity during the 1980s. An example of this comes from *Ghostbusters II* where Egon uses an NES Advantage to pilot the Statue of Liberty through New York City during the films climax.³⁷² In *Back to the Future, part II*, a *Wild Gunman* arcade machine makes an appearance in the Cafe 80s where protagonist Marty McFly defeats one of the gunmen in front of two not so amused children.³⁷³ The 1989 movie the Wizard bankrolled by

³⁶⁸ *Captain N The Game Master - The Complete Series*, Directed by Michael Maliani, Chuck Patton, John Grusd, and Kit Hudson, (1989-91; Los Angeles, CA: Shout Factory, 2007), DVD; "List of Captain N: The Game Master Episodes," *Wikipedia*, last modified August 13, 2015, accessed October 20, 2015, https://en.wikipedia.org/wiki/List_of_Captain_N:_The_Game_Master_episodes.

³⁶⁹ "List of Captain N: The Game Master Episodes," *Wikipedia*, last modified August 13, 2015, accessed October 20, 2015, https://en.wikipedia.org/wiki/List_of_Captain_N:_The_Game_Master_episodes.

³⁷⁰ *Captain N The Game Master - The Complete Series*, Directed by Michael Maliani, Chuck Patton, John Grusd, and Kit Hudson, (1989-91; Los Angeles, CA: Shout Factory, 2007), DVD.

³⁷¹ Sheff, *Game Over: Press Start to Continue*, 192.

³⁷² *Ghostbusters II*, Directed by Ivan Reitman (1989; Culver City, CA: Columbia, 1999), DVD.

³⁷³ *Back to the Future part II*, Directed by Robert Zemeckis (1989; Universal City, CA: Universal, 2006) DVD.

Nintendo serves as a giant love letter to both its games and products as it starring Luke Edwards as Jimmy Woods a mentally handicapped child, alongside his brother Corey and friend Jenny Lewis, they trek across the United States to reach California.³⁷⁴ Along the way, the group discovers he has a knack for playing video games and head for a major contest called Video Armageddon, a video game championship held in Las Vegas.³⁷⁵

While encountering several Nintendo branded games on the journey there, at the movie finale however, the real surprise came with the reveal of an unreleased game, *Super Mario Bros. 3*, which provides both a showdown between Jimmy and the primary antagonist Lucas while promoting *Mario 3* at the same.³⁷⁶ While neither confirmed nor proven, *The Wizard* may have provided inspiration for the Nintendo World Championships in 1990 that followed a similar format to the movie's Video Armageddon.³⁷⁷ On the hand, thanks to its appearance in the finale, the anticipation for *Super Mario Bros. 3* surged as it went on to make lofty \$500 million dollars worldwide.³⁷⁸ With the above merits of being in the pop-culture scene, no wonder why people associated video games with Nintendo, conversely, however, with all good products, a negative side is also attached to them and the NES and its creator was no exception to the rule.

More often than not, most of the complaints came from the industry itself. As noted the draconic business sense of Yamauchi's Nintendo made other video game developers bend to their will. These actions did sit well with some video game companies and instead of joining them, others fought back such as in the case of Atari Games. During the 1980s, Atari often claimed the draconian regulations imposed by Nintendo only created a monopoly favoring the Kyoto based

³⁷⁴ *The Wizard*, Directed by Todd Holland (1989; Universal City, CA: Universal, 2006), DVD.

³⁷⁵ "Nintendo in Popular Culture," Nintendowikia, accessed October 20, 2015, http://nintendo.wikia.com/wiki/Nintendo_in_popular_culture; *The Wizard*. Directed by Todd Holland. (1989; Universal City, CA: Universal, 2006), DVD.

³⁷⁶ *The Wizard*, Directed by Todd Holland (1989; Universal City, CA: Universal, 2006), DVD.

³⁷⁷ Sheff, *Game Over: Press Start to Continue*, 191.

³⁷⁸ Ibid.

company.³⁷⁹ Masaya Nakajima, who in 1987 bought a majority of Atari Games from Commodore CEO Jack Tramiel, created subsidiary named Tengen.³⁸⁰ After meeting with Arakawa and agreeing to their terms in December 1987 to develop games for the NES, Nakajima began working on a way to get around the 10NES.³⁸¹ According Judge Fern M. Smith, Atari developers designed a rabbit program that the "lock out chip" thus allowing them free access to make their own games for the NES.³⁸² Furthermore, after releasing the games *Gauntlet*, *Pac-Man*, and *RBI Baseball* in 1988, their lawyers filed a false affidavit in order to get a reproduction of the 10NES.³⁸³ Then in a series of cases spanning from 1988 to 1990, Nakajima sued Nintendo for "improperly using its patent and greater market share to monopolize the video game market" and demanded \$100 million in reparations.³⁸⁴ Nintendo struck back by asking retailers to recall all Tengen games, which many complied.³⁸⁵ When the two met in court, Judge Fern Smith ruled in favor of Nintendo claiming that Atari's rabbit program "serve no function other than authenticating the console firmly establishes illicit copying."³⁸⁶

While the battle over the 10NES commenced, a second another dispute between Nintendo and Atari Games came in the fall of 1989 over the ownership of Alexy Pajitnov's rights to *Tetris*.³⁸⁷ In 1986, Pajitnov sold the rights to Spectrum Holobyte and Robert Stein's Andromeda.³⁸⁸ Stein who haphazardly sold the European rights to Mirrorsoft, never actually obtained the rights from the Soviet government, and from this, they unknowingly sold those

³⁷⁹ Anthony Ramirez, "Company News; Court Backs Nintendo on Video-Game Suits," *The New York Times*, March 15, 1990.

³⁸⁰ Kent, *The Ultimate History of Video Games*, 371-2.

³⁸¹ *Ibid.*, 372.

³⁸² *Ibid.*, 373.

³⁸³ *Ibid.*

³⁸⁴ *Ibid.*, 373-4.

³⁸⁵ *Ibid.*, 377.

³⁸⁶ *Ibid.*

³⁸⁷ *Ibid.*, 377-8.

³⁸⁸ *Ibid.*, 378.

same rights to Atari Games.³⁸⁹ On the other hand, Spectrum Holobyte sold its share to Hank Rodgers who ties with Nintendo of America convinced them to try to acquire the handheld rights to *Tetris*.³⁹⁰ While in Moscow, the Soviets wanted to sell Nintendo the worldwide selling rights thus on March 22, 1988 after formal negotiations ended, alongside Rodgers, Arakawa, and Lincoln, Nintendo secured the official copyright from Electronorgtechnica until 1996.³⁹¹ Atari who at the time was creating a Tengen version caught wind of the sale a promptly sued for the Tetris copyright.³⁹² Under Judge Smith, Nintendo proved that they owned the rights by bringing Soviet backed documentation thus forcing Atari Games to recall their arguably superior version.³⁹³ Smith dismissed the case on November 13, 1989, which he again cited and reaffirmed Nintendo's rights on *Tetris*.³⁹⁴

Outside of the Atari cases, Nintendo found itself losing against three opponents. This included the states of NY and MD v. Nintendo of America, with the United States sued the company for price fixing, costing them almost \$10 million in reparations and court fees.³⁹⁵ Another case, the 1990 Lewis Galoob Toys v. Nintendo of America ended on the successful defense Galoob's Game Genie as Nintendo could not prove that their product harmed the gaming market by using a game's hidden cheat codes costing Nintendo over \$15 million as reparations.³⁹⁶ Even Judge Kimba Wood in the 1993 Alpex Computer Corporation v. Nintendo of America awarded Alpex Computers \$252 million dollars for Nintendo infringing on Alpex's "555 patent" which "allowed consoles to play multiple games stored on ROM chips stored in

³⁸⁹ Ibid., 378-9.

³⁹⁰ Ibid.

³⁹¹ Ibid., 379, 381.

³⁹² Ibid., 379.

³⁹³ Ibid., 380.

³⁹⁴ Ibid.

³⁹⁵ Ibid., 388-9.

³⁹⁶ Ibid., 390-2.

game cartridges."³⁹⁷ However, in November 1996, Federal Circuit Judge Glen Archer overturned the settlement based on insubstantial evidence that Nintendo's technology and the "555 patent" "operated in the same way."³⁹⁸ Arguably, though, these cases spanning during the 1980s and 1990s came as a result from Nintendo's success and its defense of keeping the market stable.

In addition, another two problems emerged from the consumer market during the mid to late 1980s. The first mainly came from American parents' reaction to video games. Like its earlier counterparts, many newspapers and other activist groups tried to bring out negative aspects of video games. Kent in his book points out that "Educators and parent complained that Nintendo was distracting children from their studies, a 1989 survey stated that Nintendo was partially to blame for a 10 percent decrease in the cardio vascular fitness of American schoolchildren."³⁹⁹ Furthermore, the Jewish community protested that the outline of the third dungeon of the game *Legend of Zelda* was an inverted swastika."⁴⁰⁰ Richard Brudvik-Linder of Hill and Knowlton one of Nintendo's account team recalls a 1987 encounter with Families for Peace "Here was this crowd of families marching up and down in front of Nintendo...Families for Peace. There were moms pushing strollers with babies holding signs that said, "No Guns" and "Nintendo Breeds War."⁴⁰¹

To alleviate this, Nintendo turned employee and Representative Howard Phillips into the man who plays video games, and sent him on a PR campaign to promote gaming.⁴⁰² Other projects Nintendo tried included encouraging developers to make more educational games, donate money to the MIT Media lab, promote the benefits of video games in media outlets, and

³⁹⁷ Ibid., 392.

³⁹⁸ Ibid., 396.

³⁹⁹ Ibid., 347.

⁴⁰⁰ Ibid., 347-8.

⁴⁰¹ Ibid., 348.

⁴⁰² Ibid., 348-9.

even held a symposium calls "Video Games in Popular Culture" which discussed the impact of video games on both player and society.⁴⁰³ Despite these efforts and only causing a mixed reaction, many often ignored these PR stunts as Nintendo continuously made their way into children's lives and the news of violence in games and its hypnotizing effects made parents more suspicious.⁴⁰⁴

Finally, unlike many early video game makers, Nintendo had one sigma that they could not run from, their company's Japanese origins. Throughout the 1980 and early 1990s, the Japanese presence in the United States grew as native manufactures left the states for cheaper markets. Many feared of a wholesale Japanese takeover and many Americans felt their country was under attack. When Nintendo came out nationally in 1986, many lashed out due to its success as the Japanese video game market held nearly 100 percent of the American video game market after the 1983 crash.⁴⁰⁵ In one interview with Steven Kent, Richard Brudvik-Lindner stated,

That was a time when Japanese influence in American business was really picking up and there was a certain animosity towards Japanese companies. You'd call reporters in certain quarters and they'd basically say, "Three strikes an you' re out." Strike one was the video game industry was supposed to be dead; two was that they'd never heard of a company called Nintendo before; and tree came when they said, "oh so they're Japanese!"⁴⁰⁶

Again, at the time, many saw Nintendo as an outside threat. Many common workers saw the Japanese taking their both their money and jobs. Then Nintendo came into the America market, and essentially "stole" an American industry, which people thought was dead and turned it into a multi-billion dollar industry and causing resent as this "foreigner" had taken both their market

⁴⁰³ Sheff, *Game Over: Press Start to Continue*, 209-12.

⁴⁰⁴ *Ibid.*, 205.

⁴⁰⁵ *Ibid.*, 173.

⁴⁰⁶ Quoted in Kent, *The Ultimate History of Video Games*, 347.

and their money. In the end though, the Japanese video game and console creator success at the time were caught in a perfect storm of business xenophobia and current events happening during the 1980s.

Furthermore, these statements were reflected in the Congressional Record as the congressional representative from Maryland Helen Bentley submitted a rather xenophobic message to the record in regards to the US-Japanese trade balance.⁴⁰⁷ In Nintendo's Joy Stick, she claims that all the company wanted to do was to drain America of its money. Pointing out the recent price fixing case and monopoly they had on the market, she calls Nintendo "absolutely corrupt" for its success of exploiting the consumers.⁴⁰⁸ Even at the end of her rant, she goes on to state, "Nintendo has added a definition to Joystick. It is not just a gizmo to operate a cursor; it is also the joy Nintendo derives by sticking it to us--the American consumers--while Nintendo laughs all the way to the Bank of Japan--with its branch offices in DC and the RTC."⁴⁰⁹

In conclusion, to the above arguments, Nintendo in the United States was both a winner and victim of its own success. Beloved and loathed, it made an impact few thought could happen again. This Japanese business xenophobia ultimately may explain why many news articles during the 1980s and early 1990s praised and condemned Nintendo for doing what they did best. Despite this, the home console market was not the only outlet for video games at this time. In order to discover the full story, we need to leave Mario behind and head for the niche computer market.

⁴⁰⁷ US Congress, House of Representatives, "Shades of 1972," April 18, 1991, 102nd congress, 1st session, *Congressional Record* 137, pt.57: H2391.

⁴⁰⁸ US Congress, House of Representatives, "Shades of 1972," April 18, 1991, 102nd congress, 1st session, *Congressional Record* 137, pt.57: H2391.

⁴⁰⁹ Ibid.

Arguably, beginning as early as the 1940s and some sources even suggesting an even earlier emergence with proto-calculating machines in the early eighteenth century, the evolution of the popular home computer began quite humbly.⁴¹⁰ What we know as the modern PC originated in 1961 with Texas Instruments commercial integrated circuit.⁴¹¹ Mainly created for use by the US Air Force, Jack Kilby repurposed the circuit and from it created the first pocket calculators.⁴¹² Intel a.k.a. NM electronics also deserves a bulk of the credit as their pioneering work during the 1960s and 1970s in the creation of the revolutionary 4004, 8080, 8088 microprocessors.⁴¹³

While important to such early computers such as 8088 used in the first IBM computers, these early microprocessors often cost too much for the average consumer thus limiting their use to those who could afford these rather expensive machines.⁴¹⁴ This changed however during the mid-1970s with an invention by Chuck Peddle and developed by MOS Technology, the 6502 microprocessor.⁴¹⁵ More affordable, many pioneering founders such as Stephen Wozniak and Steve Jobs used the 6502 to create the first Apple 1 and its follow up, the Apple II.⁴¹⁶ From the success of both microprocessors, especially the latter, made possible the mass marketing of cheap computers seen during 1970s and 1980s.⁴¹⁷

During the next two decades, several notable early computers from across the world came into existence. The Japanese shipped the popular MSX and Sharp X1 starting from 1982 and

⁴¹⁰ Gordon Laing, *Digital Retro: The Evolution and Design of the Personal Computer* (Alameda, California: Sybex, 2004), 8-9.

⁴¹¹ *Ibid.*, 10.

⁴¹² *Ibid.*

⁴¹³ *Ibid.*, 11.

⁴¹⁴ *Ibid.*

⁴¹⁵ *Ibid.*

⁴¹⁶ *Ibid.*

⁴¹⁷ *Ibid.*

1984, which saw use in Asia, Europe, and South America.⁴¹⁸ England produced the Sinclair line of computers and lesser known Acorn BBC and Oric-1.⁴¹⁹ In the United States, a free for all emerged as the market grew. Notable names include the Atari's 800 and ST line of computers and the 1984 Apple Macintosh line bold Super Bowl XVIII ad led to its cultural popularity.⁴²⁰ Despite these few examples out of the sea of choices, two important brands truly had a significant impact during this time.

The first notable computer company that came from this period was Commodore. Bought out in 1966 by Irving Gould, founders Jack Tramiel and Manfred Kapp in 1958 started as a typewriter manufacture before pushing their company into creating calculators.⁴²¹ During the 1970s, Tramiel wanted to expand into the growing computer market, but in order to make Commodore a viable computer company he needed the 6502.⁴²² With his connections with MOS Technology, who acted as Commodore's supplier of microprocessors for their calculators, he used his business shrewdness to slowly acquire the company out from them for just a few hundred thousand dollars and giving him the notoriety of a "a very clever, very ruthless business man" according to Peddle.⁴²³ After much pressure, in September 1976, the financial backers of MOS Technology, Allen Bradley, sold the company to Jack Tramiel giving him full access to what he desired.⁴²⁴

⁴¹⁸ Winnie Forster, *Game Machines: 1972-2012: The Encyclopedia of Consoles, Handhelds, and Home Computers*, 2nd English edition, ed. Heinrich Lenhardt and Nadine Caplette trans., (GAMEplan: Vancouver, BC, 2011), 61, 70-1, 74-9.

⁴¹⁹ *Ibid.*, 72-3.

⁴²⁰ "Apple 1984 Super Bowl Commercial Introducing Macintosh Computer" (video), *YouTube*, 1984, accessed April 24, 2016, <https://www.youtube.com/watch?v=2zfqw8nhUwA>; Forster, *Game Machines: 1972-2012: The Encyclopedia of Consoles, Handhelds, and Home Computers*, 34-8, 100-5.

⁴²¹ Brian Bagnall, *On the Edge: The Spectacular Rise and Fall of Commodore* (Winnipeg, Manitoba: Variant Press, 2005), IX.

⁴²² *Ibid.*, 30-6.

⁴²³ *Ibid.*, 31-3.

⁴²⁴ *Ibid.*, 30-3.

Once acquired, Tramiel and Pettie used the technology to create the company's first computer in 1977, the PET. Selling for \$600, unlike the competition, which had the user assemble it from a kit, Commodore's product came ready strait out of the box and according to Bill Gates at the 1993 Smithsonian interview, remarked, "The Commodore Machine, the PET (2001), was the most aggressively priced machine, [...] It had some very innovative things."⁴²⁵ Always the enterprising man, Tramiel also began promoting Commodore itself as an educational tool as well as an all-purpose machine.⁴²⁶ This marketing angle continued with the VIC-20 in 1981, selling for an astonishingly low \$300 and its higher end 1982 counterpart the \$595 Commodore 64, which sold 25 million computers worldwide by 1984, beating out other popular computers brands such as the Apple II and Atari 800.⁴²⁷ Ultimately, Trammel's business philosophy of "sell to the masses not classes" served him well as Commodore managed to survive up until 1994 and even then it managed bring out a successor to the Commodore 64 in 1985, the Amiga, which sold a respectable five million computers worldwide.⁴²⁸

The second spark came from another popular computer, the IBM PC. Sold from 1981 until 1987, the original IBM managed to sell roughly fifty million worldwide at the starting cost of \$1,595 dollars.⁴²⁹ Furthermore, while instrumental in the establishment and success of the modern PC, a little known operating system called MS-DOS and later its successor Windows began Microsoft's meteoric rise as the Universal Operating System for modern computers

⁴²⁵ Ibid., 76.

⁴²⁶ Ibid., 79-80.

⁴²⁷ Bagnall, *On the Edge: The Spectacular Rise and Fall of Commodore*, 283; Forster, *Game Machines: 1972-2012: The Encyclopedia of consoles, handhelds, and home computers*, 2nd English edition, 46-7, 62-6.

⁴²⁸ Bagnall, *On the Edge: The Spectacular Rise and Fall of Commodore*, 271. Forster, *Game Machines: 1972-2012: The Encyclopedia of Consoles, Handhelds, and Home Computers*, 2nd English edition, 106-11.

⁴²⁹ Forster, *Game Machines: 1972-2012: The Encyclopedia of Consoles, Handhelds, and Home Computers*, 2nd English edition, 98; Laing, *Digital Retro*, 155; Matt Nicholson, *When Computing Got Personal: A History Of The Desktop Computer* (Bristol: England, Matt Publishing, 2014), 78.

today.⁴³⁰ With 60 million computers using one or both these platforms by 1990, it made company founder Bill Gates the youngest billionaire in American history at that time.⁴³¹ As for their relationship with the former, starting in 1980, Microsoft signed a contract with IBM allowing them to use MS-DOS, a program that they themselves just bought from Seattle Computer Products (SCC) for \$50,000.⁴³² This operating system aided in making the IBM an unprecedented success which culminated in January 1983 when the editors Time magazine called the PC and computers in general the "Machine of the Year."⁴³³

Surprisingly, while a royalty of \$10 to \$50 for every IBM computer sold made the company extremely profitable, Gates and his company found further success during the next six years.⁴³⁴ While settling with Seattle Computers owner Rod Brock over the MS-DOS licenses, a fortuitous event fell into their favor. With the success of the IBM, several cheaper clones of the PC came onto the market. Compaq, Tandy, and even Commodore, in order to emulate the success of the IBM PC, began making their products "IBM compatible" and thus adopted the MS-DOS Operating System.⁴³⁵ By 1983, Microsoft sold over 500,000 copies of MS-DOS netting 10 million in revenue and according to Campbell-Kelly and Aspray "became the link between hardware and software the every single user had to buy."⁴³⁶ The increased revenue led to the creation of Windows 1.0 in 1985, which heavily borrowed from the user interface of the Apple Macintosh.⁴³⁷

⁴³⁰ James Wallace and Jim Erickson, *Hard Drive: Bill Gates and the Making of the Microsoft Empire* (New York: John Wiley and Sons, Inc., 1992), 2-3.

⁴³¹ Ibid.

⁴³² Nicholson, *When Computing Got Personal*, 77-8.

⁴³³ Ibid., 257.

⁴³⁴ Martin Campbell-Kelly and William Aspray, *Computer: A History of the Information Machine* (New York: BasicBooks, 1996), 255.

⁴³⁵ Ibid., 257.

⁴³⁶ Ibid., 263.

⁴³⁷ Ibid., 278.

After marginal success, two years later, Microsoft began work on Windows 2.0, an updated successor to the original software.⁴³⁸ This gained the attention of Apple, who in 1988 filed a copyright protection lawsuit, but eventually it met an uneventful end as the courts essentially dismissed the case.⁴³⁹ In 1990, they displayed the next evolution of Windows, the Windows 3.0, which allowed Microsoft to sever ties with IBM and break out as their software computer manufacture.⁴⁴⁰ Yet, while the software company continued to grow, IBM's influence began to shrink as their final co-op with Microsoft, the 1987 OS/2 operating system lost against the titanic popularity of the MS-DOS and Windows brands.⁴⁴¹ Even the updated 1991 OS/2 version two, a ended in catastrophic failure as it cost the company over one billion dollars to create, but in the end, failed to defeat their rival forcing them to acquire Lotus Development Corporation for a hefty 3.5 billion in order to compensate, yet it was all in vain.⁴⁴² By 1995, with a few notable exceptions such as Apple and few smaller holdouts, Windows became the definitive operating systems for all computers, which forced many lucrative PC creators of the 1980s such as Atari and Commodore of the 1980s out of business by the mid-1990s leaving just Apple, Microsoft, and a few minor companies to fend for dominance.⁴⁴³ Furthermore, this consolidation also had one more profound impact as it unexpectedly aided the growth of the PC video game market.

⁴³⁸ Ibid., 279.

⁴³⁹ Ibid., 279-80.

⁴⁴⁰ Ibid., 280.

⁴⁴¹ Ibid., 279.

⁴⁴² Ibid., 281.

⁴⁴³ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Matt Nicholson, *When Computing Got Personal: A History of the Desktop Computer*, Matt Publishing, 2014; Winnie Forster, *Game Machines: 1972-2012: The Encyclopedia of Consoles, Handhelds & Home Computers*, GAMEplan, 2011.

Throughout the 1980s, the number of titles available for computers remains too numerous for this thesis to mention outright; however, there do exist some examples that made a lasting impact of the market. For instance, one of their big-ticket attractions for computers came from simulators and the ongoing *Microsoft Flight Simulator* series serves as its greatest source for popularizing the genre. Released in 1982 for the IBM PC, version 1.0 attempted to give players an authentic flight experience in their own homes.⁴⁴⁴ According to *PC Magazine's* Will Faste, he devotes a two and a half page spread on just the in game flight experiences alone calling it "visually exciting" and a "program everyone is going to want."⁴⁴⁵ Releasing an updated version every few years, by 1989 version 4.0 came out with continued success as Alfred Poor praises the both the updated visuals and random weather settings, but finds the controls "both easier and harder to fly."⁴⁴⁶

Other genres that started to take off for the home computers during the 80s and early 1900s were the racing simulators. While not as popular as their flight simulator counterparts, these games attempted to replicate the first person behind the wheel racing experience through such titles as 1989's *Hard Driving* as well as *Stunt Car Race*.⁴⁴⁷ For the early computers, the 1983 *Chequered Flag* only released for the ZX Spectrum in Europe serves as the earliest incarnations for racing games, but despite only having three racers and limited tracks it enjoyed popular praise with critics calling it as "realistic,.. exiting and highly enjoyable."⁴⁴⁸ In the US market however, the origins of this genre seem to stem from two early giants, Papyrus' 1989 *Indianapolis 500: The Simulation*, which only had one track, the titular race, and *MicroProse*

⁴⁴⁴ Will Faste, "Flight of the 5150: The PC Takes Off," *PC Magazine*, January 1983, 303.

⁴⁴⁵ *Ibid.*, 303-5, 307.

⁴⁴⁶ Alfred Poor, "Flight Simulator Offers More Realism," *PC Magazine*, January 1990, 364.

⁴⁴⁷ Atari Games Applied Research Group, "Hard Drivin" (Arcade Game), Atari, 1989; MicroStyle, "Stunt Car Racer" (Commodore Amiga Game), MicroPlay, 1989.

⁴⁴⁸ "Chequered Flag," *Wikipedia*, last modified September 13, 2013, accessed Oct 15, 2015, [https://en.wikipedia.org/wiki/Chequered_Flag_\(video_game\)#cite_note-CRASH-2](https://en.wikipedia.org/wiki/Chequered_Flag_(video_game)#cite_note-CRASH-2).

1992 World Circuit, a game that added hand-off multiplayer, circuits based of the 1991 F1 Grand Prix year, and more realistic race physics.⁴⁴⁹

Even a few individual games and or developers managed to use the small window of the late 80s and early 90s to make a name for themselves. One such creator, Sid Meier began his journey to greatness with the 1987 *Sid Meier's Pirates*, a 2D pirate simulator.⁴⁵⁰ His third game and arguably his most famous, the 1991 *Civilization* had the player take control of his or her own civilization which ranged from Romans, Mongols, and various other world civilizations across history in a race to develop and defend their own empire from their rivals.⁴⁵¹ Will Right, another famous video game creator at the time also contributed to the rich PC library of games with one of his arguably bestselling series from this period, *Sim-City*.⁴⁵² Allowing the player to play God, the simple goal of this title is to build and manage a city, but the fun comes from the satisfaction of destroying and then rebuilding your creation.⁴⁵³ Becoming one of the bestselling games on the PC of all time, the extreme success started generated a Super Nintendo port and inspiring other sequels to the Sim franchise such as *Sim-City 2020* and later the bestselling PC game of all time, *the Sims*.⁴⁵⁴

In addition, one developer in particular, LucasArts developed some of the more remarkable games of this era. Using SKUMM engine (Script Creation Utility for Maniac Mansion), according to the book of *1001 Games You Must Play Before You Die*, "The scripting language developed by LucasArts that enabled designers to create large parts of the game without having to write in the same language code as the game source code. This helped to create

⁴⁴⁹ "Evolution of the Racing Simulator," *listal*, accessed October 14, 2015, <http://www.listal.com/list/evolution-of-racing-simulators>.

⁴⁵⁰ Mott, ed., *1001 Video Games You Must Play Before You Die*, 153.

⁴⁵¹ *Ibid.*, 204.

⁴⁵² *Ibid.*

⁴⁵³ *Ibid.*

⁴⁵⁴ *Ibid.*, 168, 241, 441.

more visually attractive game."⁴⁵⁵ From this game engine, Lucas Arts created several memorable for home computers, which included *Manic Mansion* in 1987, the 1989 adventure game *Zak McKracken and the Alien Mindbenders*, the comical 1990s *Secret of Monkey Island* trilogy, and the 1992 *Indiana Jones and the Fate of Atlantis* an original expansion to the *Indiana Jones* franchise.⁴⁵⁶

Finally, one of two popular facets of the commercial market that emerged during the 1980s and 1990s was the concept of shareware. Originally, called itself freeware in the early 1980s, during the era of the Information Super Highway, shareware offered an effective cheap way to advertise a software program.⁴⁵⁷ Cheap to make, the creators often gave a try before buying approach, in which if a person liked that trial software they could copy it via floppy disk and continue circulating the original, or contact the original designer ask them to ship the full or next version of the program for a small fee.⁴⁵⁸ Made popular by good reviews in various magazines, shareware founding fathers such as Jim Button (Knopf) and Bob Wallace made millions over the course of the 1980s and 1990s.⁴⁵⁹

One of these fathers, Jim Knopf aka Jim Button began the "revolution" in 1982.⁴⁶⁰ Using the popularity of the PCs, he started converting programs from Applesoft basic to IBM basic, which became quite the rage in his hometown of Seattle.⁴⁶¹ Seeing its popularity in certain computer circles, he placed a message in one his programs asking users of his software to voluntarily to send him \$10 as a way to pay for the program's distributors cost, but according to

⁴⁵⁵ Ibid., 144.

⁴⁵⁶ Ibid., 144, 162, 180, 222.

⁴⁵⁷ "History of Shareware: How Did Shareware Become so Popular," *Avangate*, accessed October 15, 2015, <http://www.avangate.com/avangate-resources/article/History-of-shareware.htm>.

⁴⁵⁸ Ibid.

⁴⁵⁹ Ibid.

⁴⁶⁰ Jim Knopf, "The Origin of Shareware," *ASP: Association of Software Professionals*, 2000, www.asp-software.org/users/history-of-shareware.asp.

⁴⁶¹ Ibid.

Knopf, his first donation came for \$25.⁴⁶² From then on computer groups and others began latching on to the fad and by 1987, his company employed eighteen workers and made over 4.5 million annually.⁴⁶³

Furthermore, the history of freeware/shareware goes much deeper as what Knopf and other did was borderline piracy. In 1982, Andrew Fluegleman who created the program PC-Talk legally copyrighted the name Freeware and distributed his source code.⁴⁶⁴ From this, others such as Knopf creator of PC-File, Bob Wallice who created PC-Write, and Vernon Buerger's LIST program became popular and making their creators quite wealthy.⁴⁶⁵ Furthermore, as early as 1982, disc vendors began popping up and selling shareware through magazines.⁴⁶⁶ According to PsL news founder Nelson Ford, his subscription-based magazine lasted for over twelve years, and advertised many shareware programs.⁴⁶⁷ He had to compete with other groups such as Public Brand Software, Software Brands, and Reasonable Solutions who used high volume vendors and pushed millions of dollars into buying shareware.⁴⁶⁸ Nelson himself joined the race in 1987 and with Bob Wallace, Tom Smith, and Jim Knopf who created the Association of Software Professionals.⁴⁶⁹

Other problems the plagued shareware came from disgruntled creators who wanted and expected a payment outside of the distributors cost.⁴⁷⁰ According to Ford, "they put a hex" on their software, essentially crippling the product, as they believed the users never intended to pay

⁴⁶² Ibid.

⁴⁶³ Ibid.

⁴⁶⁴Nelson Ford, "History of Shareware and PSL," *ASP: Association of Software Professionals*, 2000, www.asp-software.org/users/history-of-shareware.asp.

⁴⁶⁵ Ibid.

⁴⁶⁶ Ibid.

⁴⁶⁷ Ibid.

⁴⁶⁸ Ibid.

⁴⁶⁹ Ibid.

⁴⁷⁰ Ibid.

them in the first place.⁴⁷¹ Conversely, some stopped developing updates for their software leaving many customers wary of actually paying the creator.⁴⁷² One remedy that fixed it came from credit card payments that offered a safe way to pay outside of check or cash and attempted to encourage those wary to try a program some assurance that a quality product, but all good things had to end.⁴⁷³ With the Internet and the rise of the CD-ROM made those who distributed shareware near obsolete, however, how did shareware influence video games?⁴⁷⁴

Different from some of their counterparts, many of the small game publishers and designers could not afford to compete with the larger names during this time.⁴⁷⁵ Shareware allowed some of these upstarts a chance to market their games to the masses.⁴⁷⁶ Early titles such as 1984 *Beast*, the text based roleplaying game *Rouge* and *Sopwith*, which serves as an influential pioneer in the "side-scrolling aviation subgenre."⁴⁷⁷ Another popular title the 1991-1995 shooting game *Scorched Earth* also scores points with captivating audiences with its various features like multiplayer, exotic ammo, random terrain and weather, and high replay value made it a beloved title despite it having stripped down graphics mirroring that of early PC games.⁴⁷⁸

Though somewhat successful, many shareware companies did not last long or could not make much money. On the other hand, Scott Miller founder of Apogee and 3D Realms claimed, "Shareware games did not make money before I formed Apogee. [...] The reason was because shareware games authors - and there weren't many - made the mistake of releasing their full

⁴⁷¹ Ibid.

⁴⁷² Ibid.

⁴⁷³ Ibid.

⁴⁷⁴ Ibid.

⁴⁷⁵ Kent, *The Ultimate History of Video Games*, 458.

⁴⁷⁶ Ibid.

⁴⁷⁷ Brett Camper, "Shareware Games: Between Hobbyist and Professional." In *The Video Game Explosion*, 152.

⁴⁷⁸ Ibid., 153, 155.

game as shareware, giving no incentive for players to send them money."⁴⁷⁹ So how did he fix this problem? Instead of giving out the full game, in 1987, he tested his theory with *Kingdom of Kroz*, which he broke up into three episodes.⁴⁸⁰ The first episode was the shareware version and the remaining two the player had to buy from Apogee which in the case of this particular title, Miller's experiment was a success raking in anywhere from \$100 to \$500 a day in sales.⁴⁸¹ This method became most noticeable with the company as they began creating their own IPs such as the *Duke Nukem* series as well as publish several of id's developed titles such as *Commander* and *Wolfenstein 3D*.⁴⁸² Another publisher who used the shareware method, Epic MegaGames also had much success with titles like *One Must Fall: 2097*, *Jazz Jackrabbit*, *Tyrian* and *Unreal*.⁴⁸³ These games from simulators, individual titles, and shareware selection all led to the popular appeal of PC gaming, but one conflicting genre stuck out amongst the selection of titles of the 1980s and 1990s.

The second and quite surprising facet that focused on computers came from both the United States Government and the push for educational games. According to the 1995 "Networking the Classroom" in 1989, the number of computers reached 2.4 million in America's classrooms.⁴⁸⁴ Unlike video game consoles and video games in general, which only appeared on and off the record and usually in a negative spotlight, the home computer on the other hand got the royal treatment. With abundant data found in the *Statistical Abstract of the United States*

⁴⁷⁹ Donovan, *Replay*, 255.

⁴⁸⁰ Ibid.

⁴⁸¹ Ibid.

⁴⁸² Brett Camper, "Shareware Games: Between Hobbyist and Professional," In *The Video Game Explosion*, 156.

⁴⁸³ Ibid., 156-7.

⁴⁸⁴ Christopher Conte, "Networking the Classroom," *CQ Researcher* 5, no. 39 (October 20, 1995): 921-44, accessed April 15, 2016, <http://library.cqpress.com/cqresearcher/cqresrre1995102000>.

going as far back as the 1985 and the *CQ Researcher* with similar parameters.⁴⁸⁵ This interest for this medium seems to revolve around one particular trait, to push both scholarly and technical education.

As for the technical aspect, this simply came from the explosive growth of the computer industry. In a 1987, CQR report called "Power Surge in Personal Computers" the unknown writer notes the growth from 1981 to 1984 in shipments jumped over 700 % before falling in 1985.⁴⁸⁶ Furthermore, many businesses began adopting computers to boost productivity as early as the 1970s.⁴⁸⁷ A reason for this according to David Bunnell, a magazine publisher who in 1978 states, "The reason for the fantastic growth of this industry in just three years is simple [...] The personal computer represents increased personal power [his emphasis]. It gives us the ability to fight back, to cope with the complications of our increasingly bureaucratic, paper-ridden society. It is an equalizer in the new world of technology."⁴⁸⁸ This emphasis on ease grew as new software applications made such as early versions of Microsoft Excel spreadsheet and Word popular for sharing, creating, and organizing documents more easily.⁴⁸⁹ These features and programs made computers especially higher end models outweigh their exorbitant price tags thus attracting both private and public consumers.

Lastly, the computer even has roots in the Cold War. Seen as an American invention, according to the unnamed author of "Power Surge in Personal Computers" states, "From its beginnings the personal computer was more than merely a utilitarian device. It served-and to

⁴⁸⁵ For further reference, please review the years between the U.S. Bureau of the Census, *Statistical Abstract of the United States: 1984* ed. 105 US Government Printing Office, 1983; U.S. Bureau of the Census, *Statistical Abstract of the United States: 1994* ed. 114 US Government Printing Office, 1994.

⁴⁸⁶ "Power Surge in Personal Computers," *Editorial Research Reports 1987 1* (1987): 1-16, accessed April 15, 2016, <http://library.cqpress.com/cqresearcher/document.php?id=cqresrre1987010900>.

⁴⁸⁷ Ibid.

⁴⁸⁸ Ibid.

⁴⁸⁹ Campbell-Kelly and Aspray, *Computer: A History of the Information Machine*, 279.

many still does - as a symbol of democracy, personal power, and self-realization."⁴⁹⁰ Ultimately, the author believed that the computer brought togetherness through a need for information and creating a unique social symbol by connecting humanity with both machine and their fellow man.⁴⁹¹ Just a few decades later in the 1990s and 2000s with the creation of the commercial Internet, it allowed people from across the world to connect with one another and spread information at a rapid pace, which just a few years prior seemed implausible. This invention quickly became instrumental in creating a somewhat informed community that today serves as a vital tool in creating awareness and spreading information at the touch of a keyboard.

Conversely, however, computers also had a strong case with educational purposes as just explained with the prior; many saw a future with computers and with this changing technology, a younger generation need to master these fascinating machines. The method they would choose was the public schools. In a 1989 report conducted by Dr. Brandon B. Sparkman, he believed the quality of the US public education system had been degrading since the 1960s leading to increased dropout rates and disadvantaging certain parts of the population on both ethnic and gender lines.⁴⁹² Stemming from societal factors, the individual states role in education, funding from "social coffers," and the perceptions on how to improve/fix the education system have led to a decline in quality education.⁴⁹³ One possible solution to the problem he suggested was to include "greater and more effective use of technology" such as use computer to aid in the teaching of students.⁴⁹⁴

⁴⁹⁰ "Power Surge in Personal Computers," *Editorial Research Reports 1987 1* (1987): 1-16, accessed April 15, 2016, <http://library.cqpress.com/cqresearcher/document.php?id=cqresre1987010900>.

⁴⁹¹ *Ibid.*

⁴⁹² US Congress. Senate. Brandon B. Sparkman. "Improving Education Into the Technological Age," July 11, 1989, 101st Congress. 1st session, *Congressional Record 135*, pt90: S7597.

⁴⁹³ *Ibid.*, S7597.

⁴⁹⁴ *Ibid.*, S7597.

While Dr. Sparkman's proposal attempted to show the importance of the computer in the classroom, it does make another, but less obvious point. Since the 1980s, American society seemingly wanted the computer in the classroom. Articles like the 1983 "'Positive' Video Games Score With Kids" tries to show how certain video games can help teach children vital problem solving skills while also showing off Commodore's connection between learning and the personal computer.⁴⁹⁵ Sparkman in his report foresaw computers especially those he endorsed aimed to combine and supplement the teacher experience with the computer engaging students further in such fields as science, history, and the arts.⁴⁹⁶ However, according to the 1994 *Statistical Abstract of the United States* in early 1989 only 2,355 computers at the time were used for instruction in elementary and secondary schools with ninety-six percent of schools owning a single computer and eighty percent having fifteen or more.⁴⁹⁷ While the number of Computers did slowly increase over time, an alternate a problem emerged that threatened to derail the idea of computers in the classroom. Since at that particular time, Sparkman's proposal was just that, and some educational programs costing excessively much for many school districts to afford a question soon arose, how does one-get children and teens interested in computers? Other than instructional classes, the other medium they discovered came from a potential compromise, educational video games.

Though possibly coined in ancient times, the word edutainment became a rather dirty word during the 1980s and 1990s. A cross between entertainment and education, this fusion served to teach children and adults through television through shows like *Magic School Bus* and

⁴⁹⁵ Clarke Taylor, "'Positive' Video Games Score With Kids," *The Los Angeles Times*, February 12, 1983.

⁴⁹⁶ US Congress, Senate. Brandon B. Sparkman. "Improving Education Into the Technological Age," July 11, 1989, 101st Congress. 1st session, *Congressional Record* 135, pt90: S7597, S7599.

⁴⁹⁷ U.S. Bureau of the Census. "No. 253. Instructional Use of Computers in Elementary and Secondary School: 1985 to 1992," *Statistical Abstract of the United States: 1994* ed. 114 (Washington DC: US Government Printing Office, 1994), 169.

Captain Planet or through video games. While many today can fondly reflect upon some of the shows for their tackiness, not everyone can say the same about the games. Ranging from exceptional to horrible, the goal of this genre "involves learning of a lesson."⁴⁹⁸ Geared mainly towards children in the four through twelve age group, these "lessons" are often given through a set of mini-games that require scoring points or giving a correct answer in order to advance.⁴⁹⁹ Some of the common types of educational games found on store shelves involved geography, science, math, history, or typing, with a majority of them developed by the same two developers Brøderbund and The Learning Company.

Despite good intentions, a fundamental error came about when making these edutainment games, the fun factor. While certainly not the case for all, a majority of these titles had no replay value, hardly no engaging story, and in general not fun at all. An example of how bad an educational game can get came from Nintendo attempt to get into the genre. Available across numerous platforms including MS-DOS, Macintosh, NES, and Super Nintendo and published by the Software Toolworks, the 1992-3 *Mario is Missing* featured Luigi trying to rescue his brother Mario from Bowser's Antarctic castle.⁵⁰⁰ In order to accomplish this feat, Luigi needed to travel various cities around world, defeating roughly three Koopa Troopas who possess the stolen loot, and returning landmarks to their respected locations ranging from anything from a Kola to the Empire State Building complete with King Kong.⁵⁰¹ This can. After finding everything, the process recycles itself until the player reaches bowser and rescues Mario.⁵⁰² Lauded by critics,

⁴⁹⁸ Mark J.P. Wolf, "Video Game Genres." In Mark J.P. Wolf ed., *The Video Game Explosion*, 266.

⁴⁹⁹ *Ibid.*, 266.

⁵⁰⁰ "List of Mario Educational Games," *Wikipedia*, accessed September 30, 2015, https://en.wikipedia.org/wiki/List_of_Mario_educational_games#cite_note-4; Radical Entertainment, "Mario is Missing" (Nintendo Entertainment System Game), Software Toolworks, 1993.

⁵⁰¹ Radical Entertainment, "Mario is Missing" (Nintendo Entertainment System Game), Software Toolworks, 1993.

⁵⁰² *Ibid.*

Electronic Gaming Monthly gave the SNES version of the game a 2.75 out of 5 commenting on the games extreme easiness and the games slow progression, but claimed it was good for young children.⁵⁰³

On the other hand, a few original edutainment games refreshingly broke the mold and met critical acclaim. The long running *Mavis Beacon Teaches Typing* has become the go to software to teach the QWERTY keyboard format.⁵⁰⁴ In 1989, Neil Randall of *Compute Magazine* commented when the first version of the game came out it aimed to please both children and adults with custom lessons meant to make anyone better at touch-typing after a few short sessions.⁵⁰⁵ Another popular series, *The Oregon Trail* since the late 1970s and 1980s has also maintained popularity appeal as players assumed the role of an 1848 pioneer trying to reach the Oregon Territory with their family and requiring players to manage supplies, hunt, and avoid dying from various diseases and accidents found on the journey.⁵⁰⁶ Since its release nearly forty years ago, it has since managed to sell over 65 million copies worldwide making it the one of the biggest selling educational video games of all time, yet, while successful to some degree, none of the above educational titles could match the popular appear to Brøderbund Software's Carmen Sandiego series.⁵⁰⁷

⁵⁰³ "List of Mario Educational Games," *Wikipedia*, accessed September 30, 2015, https://en.wikipedia.org/wiki/List_of_Mario_educational_games#cite_note-4.

⁵⁰⁴ Software Toolworks, "Mavis Beacon Teaches Typing" (MS-DOS Game), Software Toolworks, 1987.

⁵⁰⁴ *Ibid.*

⁵⁰⁵ Neil Randall, "Mavis Makes It Easy," *Compute!*, January 1989, 72.

⁵⁰⁶ Eli Rosenberg, "Sally Has Diphtheria: Is Oregon Trail the Greatest Video Game of All Time?" *the Wire*, January 21, 2011, accessed September 24, 2015, <http://www.thewire.com/entertainment/2011/01/sally-has-diphtheria-is-oregon-trail-the-greatest-video-game-of-all-time/21417/>; MECC, "The Oregon Trail" (Apple II Game), MECC, 1985.

⁵⁰⁷ Eli Rosenberg, "Sally Has Diphtheria: Is Oregon Trail the Greatest Video Game of All Time?" *the Wire*, January 21, 2011, accessed September 24, 2015, <http://www.thewire.com/entertainment/2011/01/sally-has-diphtheria-is-oregon-trail-the-greatest-video-game-of-all-time/21417/>.

First released in 1985, *Where in the World is Carmen Sandiego* met unexpected super popularity. Assuming the role of detective for the Acme Detective Agency, the game's goal involved the player traveling across the world trying to find clues in order recover various stolen treasures from Carmen henchmen.⁵⁰⁸ Smart, engaging, and teaching basic research, geography, and deductive skills, the player works the way through her ranks and eventually gets a chance to match wits with the villainess herself.⁵⁰⁹ According to Karen G. McCullough in her *Compute* review over *Where in the World is Carmen Sandiego*, she states that, "This is a educational game, but the emphasis is on the game; it's entertaining enough to disguise the fact that you might be learning something while you play."⁵¹⁰ After the success of its first two games, *Where in the U.S.A is Carmen Sandiego?* and *Where in the World is Carmen Sandiego?*, Brøderbund quickly expanded upon the franchise by releasing titles and remakes such as *Where in Time Is Carmen Sandiego?* in 1989, the remake of *Where in the U.S.A is Carmen Sandiego?* in 1996, and the 1996 and 2011 remakes of *Where in the World is Carmen Sandiego?*⁵¹¹

The popularity did not end with just their games as the series inspired a slew of product endorsements and a theme song sung by the band Rockapella.⁵¹² The franchise also inspired a book series, two popular PBS game shows, *Where in the World is Carmen Sandiego* (1991-1995) and *Where in Time is Carmen Sandiego* (1997-8), and a 1994 animated educational series, *Where*

⁵⁰⁸ Karen G. McCullough, "Where in the World Is Carmen Sandiego? for Apple," *Compute!*, February 1986, 47.

⁵⁰⁹ Ibid.

⁵¹⁰ Ibid.

⁵¹¹ Blue Fang Games, "Where in the World is Carmen Sandiego?" (Facebook Game), The Learning Company, 2011; Brøderbund Software, "Where in Time is Carmen Sandiego?" (MS-DOS Game), Brøderbund Software, 1992; Brøderbund Software, "Where in the U.S.A is Carmen Sandiego?" (MS-DOS Game), Brøderbund Software, 1986; Brøderbund Software, "Where in the U.S.A is Carmen Sandiego?" (Windows Game), Brøderbund Software, 1996; Brøderbund Software, "Where in the World is Carmen Sandiego?" (MS-DOS Game), Brøderbund Software, 1985; Brøderbund Software, "Where in the World is Carmen Sandiego?" (Windows Game), Brøderbund Software, 1996.

⁵¹² *Where in the World Is Carmen Sandiego? (Game Show)*, *Wikipedia*, accessed October 20, 2015, [https://en.wikipedia.org/wiki/Where_in_the_World_Is_Carmen_Sandiego%3F_\(game_show\)](https://en.wikipedia.org/wiki/Where_in_the_World_Is_Carmen_Sandiego%3F_(game_show))

on Earth is Carmen Sandiego.⁵¹³ Finally, as a character, *Carmen Sandiego* is considered as one of the most influential female video game villains of all time and despite having no major character appearances since the late 1990s; her character remains both beloved and nostalgic despite the games educational origins.

By 1990, Windows was quickly becoming the main the main operating system of choice. Computer video games, while not a popularized as their home console counterparts was taking off as both educational and more casual games became more common as their quality continuously improved over the two decades. However, while home computers and home consoles got most of the attention during the 1980 and early 1990, a third medium also returned alongside its' counterparts and it only needed was a few quarters for the player to experience a whole new world of pain.

One of the most unusual aspects of the video games industry came not from the PC or the home consoles, but the arcades. Largely forgotten, the era of the mid-1980s to 1991 virtually seems non-existent as few sources from historians seem to cover this period. Even already mentioned authors such as Steven L. Kent and Leonard Herman only briefly mention the topic before shifting focus. Contrary to popular belief, the brief seven-year window in the arcades, while infamous for it brutal difficulty, also allowed video game developers a medium to experiment and explore with new innovative titles.

Now why did some developers choose this path? One such reason may stem from Nintendo's rise to power. As noted, the company took staunch control of the US video game

⁵¹³ “Where in Time Is Carmen Sandiego? (Game Show),” *Wikipedia*, accessed October 20, 2015, [https://en.wikipedia.org/wiki/Where_in_Time_Is_Carmen_Sandiego%3F_\(game_show\)](https://en.wikipedia.org/wiki/Where_in_Time_Is_Carmen_Sandiego%3F_(game_show)); “Where in the World Is Carmen Sandiego? (Game Show),” *Wikipedia*, accessed October 20, 2015, [https://en.wikipedia.org/wiki/Where_in_the_World_Is_Carmen_Sandiego%3F_\(game_show\)](https://en.wikipedia.org/wiki/Where_in_the_World_Is_Carmen_Sandiego%3F_(game_show)); “Where On Earth Is Carmen Sandiego?,” *Wikipedia*, accessed October 20, 2015, https://en.wikipedia.org/wiki/Where_on_Earth_Is_Carmen_Sandiego%3F.

market from 1986 creating numerous safeguards to ensure that a second market crash would not occur on their watch. This included the exclusive control of the distribution of games, limiting developers to five games per year, and installing the NES10, which prevented playing unauthorized games on the NES.⁵¹⁴ Furthermore, Nintendo possessed a unique philosophy when it came to its product. According to the 1993-4 *Rating Videogames: A Parent's Guide to Games*, Nintendo's submitted to the Senate subcommittee a rundown of their content policy and how they deal with the content of their own games. On page 225, it states themes such as sexual content, explicit violence of any kind, obscenity, ethnic stereotyping, the use of drugs, and religions depiction was not tolerated for any game on the Nintendo home consoles.⁵¹⁵ These draconic measures coupled with Nintendo being the only real competitive home console at the time made the arcade machines an appealing alternative.

Conversely, the arcades also possessed another unique aspect, its superior technology in graphics and CPU processing. Unlike its console counterparts, who dealt with technological limitations when it came to sound, graphics, and their inferior CPUs bogging down when multiple sprites appeared, arcade machines on the other hand, often derived from the Motorola 68000 or Hitachi 6309, boasted superior sound, CPU processing, and graphics akin to the fourth generation of home consoles (1991-1996).⁵¹⁶ A good example how an arcade game differed from its home console counterparts is the 1987 Komani game *Contra*. Being on both the arcade and the NES, for example the first stage known as the Jungle, the arcade version boasted detailed foregrounds and backgrounds with palm trees, cracks in the rocks, and possesses a vivid color palate that shows off various little details in the metal and weapons placed throughout the

⁵¹⁴ Sheff, *Game Over: Press Start to Continue*, 161.

⁵¹⁵ US Senate, *Rating Video Games: A Parent's Guide to Games*, 225.

⁵¹⁶ Jason Eckert, "Arcade Game CPU Timeline," *Triosdevelopers*, September 2, 2012, accessed October 12, 2015, http://triosdevelopers.com/jason.eckert/blog/Entries/2012/9/2_Arcade_game_CPU_timeline.html.

level.⁵¹⁷ In comparison, the NES version while having exceptional graphics for its time, the detail the character sprites, backgrounds, and foregrounds and not as many colors used makes less visually appealing than its counterpart.⁵¹⁸ Unlike the NES or other early consoles, the arcades could also emulate a few lines of legible dialog such as the two lines found at the beginning of *Super Contra* and throughout *Teenage Mutant Ninja Turtles: The Arcade Game*.⁵¹⁹ While nothing exceptional by today's standards, these feats at the time served as a testament to the sound chips and CPUs in these machines.

Furthermore, some used their time in the arcades to market their games such as the case of Sega. Discussed more in detail in the next chapter, from 1986 to 1991, Sega struggled to compete with Nintendo with its first home console in the United States the Master System and later during the early tenure of its successor, the Genesis.⁵²⁰ Compensating for the lack of sales, they turned to the next best thing. Among the titles released in the arcades and home consoles included *Hang-On* and *Space Harrier* which both possessed both 16-bit graphics as well as a "super scaler technology" an effect which gave their games a graphical "Pseudo-3D effect."⁵²¹ Outside these two games, Sega used the next four years to build both their library that featured *Afterburner*, its sequel *Afterburner II*, *OutRun*, *Super Hang-On*, *Shinobi*, and *Power Drift*, which many of them received console ports to help boost the support of the Master System and Genesis.⁵²²

⁵¹⁷ Konami, "Contra" (Arcade Game), Konami, 1987.

⁵¹⁸ Konami, "Contra" (Nintendo Entertainment System Game), Konami, 1988.

⁵¹⁹ Konami, "Super Contra" (Arcade Game), Konami, 1988; Konami, "Teenage Mutant Ninja Turtles" (Arcade Game), Konami, 1989.

⁵²⁰ Kent, *The Ultimate History of Video Games*, 303, 404-5.

⁵²¹ Travis Fahs, "IGN Presents the History of Sega," *IGN*, April 21, 2009, accessed October 12, 2015, <http://www.ign.com/articles/2009/04/21/ign-presents-the-history-of-sega?page=3>.

⁵²² Mott, ed., *1001 Video Games You Must Play Before You Die*, 121, 133, 150, 160.

In addition, others used this time in the arcades to test the waters of the US gaming market. From this, we start to see the beginnings of some of today's most influential gaming companies. Developers like Capcom began working on a variety of different titles, which include *Commando*, *Ghosts 'n Goblins*, its follow up *Ghouls 'n Ghosts*, *Forgotten Worlds*, *Strider*, and *1943*.⁵²³ Konami also found success with *Gradius*, *Salamander*, and platformers such as *Haunted Castle* and *Vampire Killer*.⁵²⁴ Heavyweight Taito boasted *Operation Wolf* and *Bubble Bobble*, while newcomer Midway scored marks with their controversial game, *NARC*.⁵²⁵ Even the old guards from the golden age of gaming, Namco, and Atari Games also saw new life during the late 80s as they began updating their games to meet new tastes like *Splatter House*, *Galaga '88*, *A.P.B.*, and *Gauntlet II*.⁵²⁶ Finally, while many companies either returned or emerged during the 1980s, honorable mentions should go to Tecmo, SNK, Irem, and Epyx, as they too would lay the groundwork for the future video games of the 1990s.

Finally, the arcades provided the gateway for entirely new genre of games. Arguably, while sports, platforming, shooting, and racing games all came from the arcades, with a few notable exceptions none of them at the time seemed to match the popularity of the fighting genre. Technically consisting two different sub-genre's, the beat 'em up and the one on one fighter, both origins comes from the same handful of early games, Data East's 1984 *Karate Champ*, Irem's 1984-5 *Kung-Fu Master*, and Konami's 1985 *Yie Ar Kung-Fu*.⁵²⁷ Then in 1987, the beat em' up genre saw its first great hit, TechnosJapan's *Double Dragon* and its 1988 sequel *Double Dragon II*, which established the fundamentals such as friendly fire, double teaming, grappling, combo

⁵²³ Ibid., 92, 96, 146, 156-7, 170.

⁵²⁴ "Konami Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/konami>.

⁵²⁵ Mott, ed., *1001 Video Games You Must Play Before You Die*, 116, 148, 161.

⁵²⁶ Ibid., 113, 136, 142, 161.

⁵²⁷ Ibid., 78, 82, 94.

moves, and beating an enemy with a weapon alongside playing as the famous brothers Billy and Jimmy Lee.⁵²⁸ Two years later, the final evolution of the beat 'em up sub-genre came in the form of Capcom's 1989 *Final Fight*. Only using a simple two button layout (Movement, Jump, and Punch), the game dazzled audiences with much larger sprites compared its predecessors and non-gory but violent gameplay.⁵²⁹ After its release, the game quickly became the primary template for the beat 'em up that followed, with such key titles as the *Streets of Rage 2* and *Violent Storm* following its example, thus making it one of the most significant releases of the third generation of video games.⁵³⁰

As for the one-on-one fighting, these never really caught on during the late 1980s as their counterparts often eclipsed their success. While trying to break away, one such game that sticks out from the crowd, Capcom's 1987 *Street Fighter* serves as kind of a unique experiment for its time. Focusing on one of its two playable characters, the game follows the adventure of Ryu as he fights nine different opponents across five countries in order to reach Sagat, the final boss.⁵³¹ Bogged down by unresponsive controls and clunky gameplay, the game itself remains rather unremarkable; however, the results from this game led two interesting scenarios.⁵³² First, the original creator of *Street Fighter*, Takashi Nishiyama left Capcom and went to work for SNK.⁵³³ In an interview with 1Up.com, he envisioned his SNK game *Fatal Fury: The King of Fighters* as

⁵²⁸ Ibid., 240.

⁵²⁹ Capcom, "Final Fight" (Arcade Game), Capcom, 1989; Mott, ed., *1001 Video Games You Must Play Before You Die*, 170.

⁵³⁰ Konami, "Violent Storm" (Arcade Game), Konami, 1993; Mott, ed., *1001 Video Games You Must Play Before You Die*, 170; Sega AM7/Ancient, "Streets of Rage 2" (Sega Genesis Game), Sega, 1992.

⁵³¹ A second playable character Ken Masters could be played in a two player battle or if the player inserted the quarters on player two's side of the arcade cabinet; Capcom, "Street Fighter" (Arcade Game), Capcom, 1987.

⁵³² Capcom, "Street Fighter" (Arcade Game), Capcom, 1987.

⁵³³ Matt Leone, "The Man Who Created Street Fighter," *Iup*, December 14, 2011, accessed October 3, 2015, <http://www.1up.com/features/the-man-who-created-street-fighter>.

his spiritual sequel to the original game, which focuses on landing powerful special moves and creating a story strung together by the fights.⁵³⁴

The other result came after the failure to make *Final Fight*, originally conceptualized as *Street Fighter 89*, as *Street Fighter's* sequel as creator Yoshiki Okamoto set out a proper sequel.⁵³⁵ During development, the team discovered a unique program glitch during testing that allowed for the player to chain attacks together and form a combo.⁵³⁶ According to *Street Fighter II: The World Warrior's* programmer Motohide Eshiro, he states, while it was not intentional, the reason combo moves exist comes from a "side effect of giving people more time to enter the button (command) - players could perform combos."⁵³⁷ In nonprofessionals' terms, if the player was fast enough, they could attack the opponent multiple times before they could block again, thus making the game more fluid and faster. The team like the feature so the left it in the game. Unknowingly however, while the programmers liked this glitch and opted to keep in the game, this one decision changed the course of the entire one-on-one fighting genre as *Street Fighter II: The World Warrior* became the template for nearly all future fighting games to come.⁵³⁸

As historians we need to ask one question, why this is relevant, and the history of video games is no exception. The mid 1980s up until 1991 was a time of uncertainty, as many still believed that video games were only a passing fad, abets in this case, a returning fad.⁵³⁹ What Nintendo, the third party developers, PC software makers, and the arcades did was returning consumer confidence thus allowing the developers and publishers to revive a dead market.

⁵³⁴ Ibid.

⁵³⁵ Kent, *The Ultimate History of Video Games*, 445.

⁵³⁶ Props for Matt Leone for adding the popular Guile's theme to the webpage as the theme does go with everything; Matt Leone, "Street Fighter 2: An Oral History," *Polygon*, February 3, 2014, accessed October 3, 2015, <http://www.polygon.com/a/street-fighter-2-oral-history/chapter-2>.

⁵³⁷ Ibid.

⁵³⁸ Ibid.

⁵³⁹ Kent, *The Ultimate History of Video Games* 349.

Learning from the mistakes of the past, the third generation of video games took more bold chances and pushed the limit of their hardware. They also expanded, created, and perfected new genres of games such as the simulators, fighting games, and the platformers. These ideas laid the groundwork for future games, which kept experimenting with newer ideas to keep their base consumers happy. Overall, unlike its predecessor, the third generation of home consoles, PC, and arcades serve as the modern catalyst of today's video games, yet one-question remains, where could it go from there.

The roles and actions of PC, arcades, and home consoles makers played a decisive role in the resurrection of video games back into popular favor from 1985-1991. From this unexpected return to providence cemented two facts emerged from the chaos. First, the American domination of the video game market, which they controlled from 1972 to 1983 had ended and showed no signs of returning to its once former glory. Secondly, from the void of the 1983 North American Video Game crash created led to the rise of the Japanese dominated US video game market. While Japanese developers such as Namco did garner much of their attention in the arcades during the early 1980s, Nintendo's foray into the console market in 1985 and 1986 forever changed this dynamic. By taking control and influencing the North American market, they inadvertently gave some smaller Japanese third party developers a new market to tap, that at one time was inaccessible with the giants Atari and Activision running the show. These names include Konami, which brought *Contra*, *Metal Gear*, and *Castlevania* series' stateside, Capcom, which revolutionized a genre with *Final Fight* and *Street Fighter* as well as Square, which introduced western audiences to Role Playing Games such as the now popular *Final Fantasy* series.

Finally, either love them or hate them, Nintendo is the primary reason why video games returned to their former glory in the United States. Granted, while the arcades and home computers did have interesting and innovate titles, people gravitated more towards the Japanese console and games resulting in roughly 7.4 million consoles or one in four homes in America having a NES by 1990.⁵⁴⁰ Now, while it is up for debate that if it was the draconic measures Nintendo undertook to ensure control of the US video game market or if it was games alone that secured their dominance is open to debate, but what cannot be ignored is their efforts of Nintendo's North American branch's employees. Unknown to the masses, the names Howard Lincoln, Peter Main, Ron Judy, and Howard Philips, while unappreciated, became the unsung heroes of an industry. Though in retrospect, much of the credit especially goes to Minoru Arakawa who often clashed his own boss stated in David Sheff's book *Game Over*, "I learned to set a goal and to do what is necessary to reach it."⁵⁴¹ This mindset alongside his close circle of friends/employees led to the success of Nintendo in North America. So, where could video games even go from here?

In 1990, Nintendo sat as King of the preverbal video game mountain. Its' chief mascot Mario became famous worldwide much like his arcade predecessor Pac-Man. Finally, a new console in Japan was coming out, the Super Famicom, which promised 16-bit graphics and expected to come to the states the following year. With these high expectations, who could even bring down this juggernaut? The answer to this dilemma came in the form of a blue blur, blast processing, and an opponent that came out at the same time as Nintendo in 1986. With an edgy scream and bold marketing plan, in 1991, with their second console, they etched themselves

⁵⁴⁰ Quoted in Sheff, *Game Over: Press Start to Continue*, 347.

⁵⁴¹ Sheff, *Game Over: Press Start to Continue*, 172.

itself in the annals of gaming history as the eternal rival to Nintendo. Move over Mario, a company named Sega wants to play for keeps.

Chapter 3

For A Few Bits More: The Bit Wars and Video Gaming in the Early 1990s

"Now You're Playing with Power, Super Power."⁵⁴²

"Genesis Does What Nintendon't."⁵⁴³

After the unexpected and unprecedented resurrection of the US video game market during the mid to late 1980s, gaming was entering a second golden age. With the torch passed from Pac-Man, the undisputed king of the arcades and icon of the arcade boom, to Mario, the king of the console characters at the time, many saw Nintendo's dominance extending throughout the 1990s. Then in 1991, something both unique and strange happened that caught many off guard. During the transition period between fans switching from the Nintendo Entertainment System to the more powerful Super Nintendo, a rare alternate option presented itself. Serving as Nintendo's antithesis, for over five years Sega competed against them with little to no success. Even their 16-bit console released in 1989 failed to dethrone the king of console game's 8-bit console. Then over the course of two years, two men, Michael Katz and Tom Kalinske, serving as successive presidents of Sega of America, laid the groundwork for the Sega Genesis outselling the Super Nintendo during the 1991 Christmas shopping season.⁵⁴⁴ This marked three significant shifts as it finally allowed the Sega to break free from Nintendo's monopolistic shadow and became the unexpected alternate whose company controlled roughly 55% of the market share.⁵⁴⁵ Third and most important, it opened up a small but vital period in the history of video games, the

⁵⁴² "Super Mario World Commercial (America)" (video), *YouTube*, 1991, accessed April 27, 2014, <http://www.youtube.com/watch?v=azpSVs0e6qM>.

⁵⁴³ "Sega Genesis Commercial 'Genesis Does'" (video), *YouTube*, [n.d.], accessed April 27, 2014, <http://www.youtube.com/watch?v=35jGnZ-e3jc>.

⁵⁴⁴ Kent, *The Ultimate History of Video Games*, 434.

⁵⁴⁵ *Ibid.*, 434.

bit wars, as between 1991 and 1994, no fewer than seven home console manufacturers battled for control of the North American market.⁵⁴⁶

Using popular slogans, million dollar ad campaigns, exclusive titles, and general mudslinging each vied for a piece of the billion-dollar industry. While many failed to garner mass attention, such as the Atari Jaguar and Real 3DO, the two console developers in particular Nintendo and Sega became the heart and soul of the conflict. Representing the two biggest video game supporters in the US market at the time, they possessed the vast resources to wage an all-out campaign. With tag lines following the likes of "Genesis Does what Nintendon't," "Blast Processing," and "Now You're Playing with Power, Super Power" diehard fans defended their 16-bit console of choice.⁵⁴⁷ This bitter rivalry while lasting just a few short years would define the fourth generation of home consoles serving as an influential turning point in the growth of gaming in the US market, but it was not the only powerful gaming medium.⁵⁴⁸

As the console developer's war entered commenced, the home computer gaming circle saw a quieter, but still influential growth during the 1990s. Through a mix of shareware titles alongside games bought from retailers, the PC gaming market built the medium's popularity with variety of different game genres. Ranging from early online gaming, point and click adventures, real time strategy, flying and racing simulators, educational and other miscellaneous genres for

⁵⁴⁶ For further reference, please review Sam Pettus, *Service Games: The Rise and Fall of Sega: Enhanced Edition*, CreateSpace Independent Publishing Platform, 2013; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

⁵⁴⁷ "Blast Processing! (Sega Genesis Commercial)," *YouTube*, [n.d.], accessed January 2, 2016, <https://www.youtube.com/watch?v=zlulSyBI2aY>; "Sega Genesis Does What Nintendon't. Ad/commercial," *YouTube*, [n.d.], accessed January 2, 2016, <https://www.youtube.com/watch?v=4YV5jV3oIWI>; *Super Mario World Commercial (America)* (video), *YouTube* [1991], accessed April 27, 2014, <http://www.youtube.com/watch?v=azpSVs0e6qM>.

⁵⁴⁸ For further reference, please review Blake Harris, *Console Wars: Sega, Nintendo, and The Battle That Defined a Generation*, It Books, 2014; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Sam Pettus, *Service Games: The Rise and Fall of Sega: Enhanced Edition*, CreateSpace Independent Publishing Platform, 2013; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

kids and adults all found a home on this medium. Granted, while the PC gaming audience had an established video game following with such titles such as *Sim City*, *Ultima*, and *Civilization* alongside countless other computer games, this controversial titles such as *Wolfenstein 3D* and *Doom* helped spur mass appeal among still growing market.⁵⁴⁹

Finally, a third medium, the arcade machine resurged as the popularity of the fighting game craze made its mark on the early to mid-1990s. Pro arcade machine developers like Capcom, Konami, Midway, Namco, SNK, and countless other smaller developers created a variety of games ranging from action oriented to beat 'em up to virtual reality; however, the real success came with games such as *Street Fighter II*, *Samurai Shodown*, *King of Fighters '94*, and *Tekken* being serving as the more influential titles. Furthermore, if an arcade game were successful enough, developers ported them onto the home consoles, portable gaming consoles, and sometimes home computers. Though it may not seem major crux point, these ports would play a huge role during the bit wars, and even help determine the success of one console home video game library over its competition; yet, as a whole, the years of 1991-1995 fundamentally changed the video game industry in both commercial and historical terms.⁵⁵⁰

In chapter three, "For a Few Bits More: The Bit Wars and Video Gaming in the Early 1990s" explores the three popular mediums of arcade, home computer and console games between 1991-1994 and asks why this small window in video game history proved to be one of the most important in changing and influencing of the US video game market. Through the

⁵⁴⁹ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Matt Fox, *The Video Games Guide: 1,000+ Arcade, Console and Computer Games, 1962-2012*, 2nd edition, McFarland, 2013; Tony Mott, ed., *1001 Video Games You Must Play Before You Die*, Universe, 2010.

⁵⁵⁰ For further reference, please review Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tony Mott, ed., *1001 Video Games You Must Play Before You Die*, Universe, 2010; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

investigation of the arcades, it shows the influence of the fighting game craze leading to many developers porting their games onto the major home consoles. In addition, the chapter also shows how the home computer gaming market grew parallel to the consoles and arcades during the bit wars era. Unimpeded by petty rivalries, the various games made for this medium popular with titles like *Civilization*, *Sim City*, *Ultima* helping attract the masses; however, the bulk of the exploration falls on one particular company, id software, as how their games *Wolfenstein 3D* and *Doom* both revolutionized and transformed home computer gaming from niche to wide spread popularity.⁵⁵¹ Furthermore, the thesis further explores chapter namesake by looking at the conflict from Nintendo and Sega perspective as it attempts to show how Sega dethroned Nintendo, the approaches to selling their product, and the measures both sides used to attract the masses to in order to retake the market lead in in the states.. Finally, the chapter briefly looks at a few failed consoles that challenged both Nintendo and Sega during the bit wars and asked why they never succeeded to capturing the attention of gamers like the big two.⁵⁵²

As mentioned in the previous chapter, the late 1980s saw arcades popularity return and then skyrocketing through the success of the fighting game genre. Among the slew of games that came out during the early 1990s, four kings emerged who dominated the arcade market. From

⁵⁵¹ For further reference, please review David Kushner. *Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture*, Random House, 2004; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tony Mott, ed., *1001 Video Games You Must Play Before You Die*, Universe, 2010.

⁵⁵² For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Blake Harris, *Console Wars: Sega, Nintendo, and The Battle That Defined a Generation*, It Books, 2014; Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Sam Pettus, *Service Games: The Rise and Fall of Sega: Enhanced Edition*, CreateSpace Independent Publishing Platform, 2013; Matt Fox, *The Video Games Guide: 1,000+ Arcade, Console and Computer Games, 1962-2012, 2nd edition*, McFarland, 2013; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tony Mott, ed., *1001 Video Games You Must Play Before You Die*, Universe, 2010; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

this success, they began etching their names as premier video game developers while at the same time made millions profiting off a craze that they created.

Serving as the most influential of the four, Capcom built its success in the arcades with both the 1989 *Final Fight* and the *Street Fighter II* series that for the next four years that followed became its' most profitable franchise. Garnering off the success off *Street Fighter II: World Warrior* in 1991, and inquiring about the unlicensed *Street Fighter II: Championship Edition* knock off known as Rainbow edition they began tweaking the game. Starting in 1992, the *Street Fighter II* series was created with the release *Street Fighter II: Championship Edition* and *Street Fighter II Turbo: Hyper Fighting*.⁵⁵³ Inspired by Rainbow edition, new features such as increased the game's play speed, alternate colors for characters, fine-tuning and adding new special moves, perfecting the gameplay, and the inclusion of the four non-playable bosses from the *World Warrior* onto the roster all made these highly regarded fan favorites even more popular.⁵⁵⁴ Its' 1993 follow-up *Super Street Fighter II* continued this trend by further fine-tuning the game fighting mechanics and adding four new characters, Dee Jay, Cammy, T. Hawk, and Fei Long.⁵⁵⁵

While Capcom fine-tuned their premier fighting franchise, they also worked on other projects in order to find the next great fighting game franchise. Titles such as the *Darkstalkers* series, *Warriors of Fate*, *Cadillacs and Dinosaurs*, *Alien vs. Predator*, *Captain Commando*, and *Saturday Night Slam Masters*, all made a profound mark on the company's success during this time.⁵⁵⁶ Conversely, Capcom also did a few other mentionable non-fighting games for the arcades. These rare gems ranged from side scrolling shooting games like *U.N. Squadron* and

⁵⁵³ Mott, ed., *1001 Video Games You Must Play Before You Die* (New York City, NY: Universe, 2010), 230.

⁵⁵⁴ *Ibid.*, 230.

⁵⁵⁵ Capcom, "Super Street Fighter II: The New Challengers" (Arcade Game), Capcom, 1993.

⁵⁵⁶ "Capcom Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/capcom>.

Varth: Operation Thunderstorm to action games like *Dungeons & Dragons: Tower of Doom* and *Magic Sword*.⁵⁵⁷

Another arcade giant that dominated the 1990s arcade scene was Konami. While mainly both a home console brand in the states like Capcom, they also had quite a few memorable arcade titles. Became synonymous for its beat 'em up games, its' main claim to fame from its' handling of the *Teenage Mutant Ninja Turtles* video game series and its second arcade title, the 1991 *Teenage Mutant Ninja Turtles: Turtles in Time* being its pinnacle and arguably best game in the series.⁵⁵⁸ They also handled many other popular cartoon series franchise games such as the 1991 *Simpsons Arcade game*, which many claim serves and one of the better beat 'em up titles of its day and *G.I. Joe*, with its fast rail shooter style gameplay and iconic characters that came from the Hasbro cartoon.⁵⁵⁹ They even had their own line up of games outside of TV inspired games. Such titles such as the space side scrolling shooter *Gradius* series becoming a long running staple of the company, while unique and quirky titles such as *Smash TV* thrived on fast-paced run and gun action to appeal to their audiences.⁵⁶⁰

A third challenger that thrived in the arcades surprisingly came from the old guard early 1980s company, Namco. Unlike their early 1980s rivals, Namco managed to evolve with the times and keep their games fresh and innovative while having some games rooted in the past. Spreading across all genres their titles encompassed everything from racing to fighting. Hard to pin down their selection included the 1993 *Ridge Racer* a popular racing series and *Air Combat*, a fun flying/Action simulator that would go on to inspire the *Ace Combat* series.⁵⁶¹ Finally,

⁵⁵⁷ Ibid.

⁵⁵⁸ "Konami Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/konami>.

⁵⁵⁹ Ibid.

⁵⁶⁰ Ibid.

⁵⁶¹ "Namco Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/namco>.

Namco's golden children, *Tekken*, a 3-D fighting game, introduced a set of rather unforgettable characters and "a realistic fighting style praised by the martial arts community," and the *Soul Edge/Soul Caliber* series that focuses on sword fighting rather than martial arts became their flagship franchises for over two decades.⁵⁶²

The fourth notable company that made an impact during the 1990s came from the Shin Nihon Kikaku Corporation or SNK for short. Another old guard maker from the early 1980s, SNK did not hit its stride until the 1990s. Much like Namco, they had a jack-of-all-trades mentality creating games ranging anywhere from sports and action style genre titles. Their video game library for instance included such choices as the 1996 *Metal Slug* a fun, fast paced run and gun/action title, the 1994 puzzle game *Bust-A-Move*, and the strange 1988 *Psycho Soldier* which featured a psychic girl named Athena as its protagonist.⁵⁶³ While much of the SNK library consists of rather well made games, what made this brand truly a success during the 1990s came from its' fighting games.⁵⁶⁴

At its' core, the fighting games served as the company's forte. Mainly capitalizing off *Street Fighter II*'s success, the brand distinguished themselves as rivals to Capcom's success in the genre. Possessing several successful franchises, SNK used them to their fullest potential. Their main claim to fame came from the 1991 game *Fatal Fury: The King of Fighters*, which introduced players to main protagonist Terry Bogard, his brother Andy, friend Joe Hiashi and their nemesis, Geese Howard.⁵⁶⁵ As the series progressed, it took cues from *Street Fighter II* and became akin to a tournament style gameplay, while introducing and reintroducing main staples

⁵⁶² Mott, ed., *1001 Video Games You Must Play Before You Die*, 254; "Namco Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/namco>.

⁵⁶³ "SNK Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/snk>.

⁵⁶⁴ *Ibid.*

⁵⁶⁵ SNK, "Fatal Fury: The King of Fighters" (Arcade Game), SNK, 1991.

characters such as Mai Shirinui, Duck King, Rock Howard, and Blue Mary Ryan just to name a few.⁵⁶⁶

On the other hand, *Fatal Fury's* sister counterpart, *Art of Fighting* also had a profound impact. Notorious for its brutal difficulty, the series introduced to main stay characters Ryo, his sister Yuri, friend Robert, and female martial arts expert King while at the same time serving as a prequel to the *Fatal Fury*.⁵⁶⁷

Conversely, SNK also possessed a third series that took off during the 1990s. Samurai *Shodown* also known as *Samurai Spirits* became one of the more popular games during its initial run. Set in feudal Japan, eighteen-century Europe, and exaggerated United States, the game unlike its fight game counterparts opted for simplified gameplay with its decrease importance of special moves and emphasizing sword combat.⁵⁶⁸ Its' tactical style gameplay, blood, roster, poor English translation and good controls made it popular with gaming crowds inspiring SNK to create *Samurai Shodown II*, which improved upon on all the weaknesses of the first game making it even more popular.⁵⁶⁹

Finally, their fourth and most famous of their successful franchises, *The King of Fighters*, serves as SNK's lovechild. In its' first game, *The King of Fighters '94*, the crossover combined several series from the company's library encompassing *Fatal Fury*, *Art of Fighting*, *Psycho Soldier*, *Ikari Warriors*, and several original fighters into one game.⁵⁷⁰ Taking the concept of team based fighting; the game pitted a group of three fighters against a CPU or human controlled

⁵⁶⁶ The tournament style gameplay first took place in *Fatal Fury 2*; SNK, "Fatal Fury 2" (Arcade Game), SNK, 1992; SNK, "Fatal Fury 3: Road to the Final Victory" (Arcade Game), SNK, 1995; SNK, "Garou: Mark of the Wolves" (Sega Dreamcast Game), SNK, 2001.

⁵⁶⁷ This was confirmed in *Art of Fighting 2* with the games hidden final boss, a young Geese Howard; SNK, "Art of Fighting" (Neo Geo Game), SNK, 1992; "Art of Fighting 2" (Neo Geo Game), SNK, 1994.

⁵⁶⁸ Mott, ed., *1001 Video Games You Must Play Before You Die*, 265.

⁵⁶⁹ *Ibid.*, 265.

⁵⁷⁰ *Ibid.*, 273.

opponent.⁵⁷¹ Known for its highly challenging A.I. and borderline "broken" final boss Rugal Bernstein, *King of Fighters '94* did two things right. First, it served as the main rival franchise against *Street Fighter's* popularity and arguably became the flagship franchise of the company with its poster boy Kyo.⁵⁷² Secondly, alongside *Fatal Fury's* antagonist Geese Howard, Rugal Bernstein helped coined a rather popular but unofficial word, SNK boss syndrome, which means "any opponent whose power level is outright broken."⁵⁷³ This may include such facets such as having unstoppable moves, possessing abilities a beyond human reaction time, having an unfair attack damage, or being able to read player controller inputs and countering them.⁵⁷⁴ Overall, these features gave a unique quality to their games that few seem to duplicate.

Outside of the arcades, each of the above contenders all played a role in the ongoing console wars happening in the early to mid-1990s. In the battle of the brands, Nintendo and Sega both needed premier arcade games for their home consoles and Capcom, Konami, Namco, SNK, and another rising star Midway quickly obliged them by porting several of their top titles for the 16 bit machines available at the time. Unlike earlier arcade ports done for the NES, the fourth generation of home consoles possessed better graphics, sound cards, and CPU's that could replicate arcade experience more faithfully or in some cases even surpass the arcade original. One such example comes from the early Super Nintendo line up, *Teenage Mutant Ninja Turtles IV: Turtles in Time*.⁵⁷⁵ Despite it not having all the voice clips from the arcade, not having four player support, and slightly less detailed graphics, the Super Nintendo port managed to outshine

⁵⁷¹ Ibid.

⁵⁷² Ibid.

⁵⁷³ Lucas Sullivan, "12 unfair fighting game bosses that (almost) made us rage quit," *GamesRadar*, accessed September 15, 2015, <http://www.gamesradar.com/12-unfair-fighting-game-bosses-almost-made-us-rage-quit/>.

⁵⁷⁴ "SNK Boss," *TV Tropes*, accessed September 15, 2015, <http://tvtropes.org/pmwiki/pmwiki.php/Main/SNKBoss>; "SNK Boss Syndrome," *SNK Wiki*, accessed September 15, 2015, http://snk.wikia.com/wiki/SNK_Boss_Syndrome.

⁵⁷⁵ Konami, "Teenage Mutant Ninja Turtles: Turtles in Time" (Arcade Game), Konami, 1991.

its counterpart.⁵⁷⁶ This was done by making several small, but arguably positive changes such as changing certain bosses around and adding a new fourth level called Technodrome: Let's Kick Shell.⁵⁷⁷

Finally, depending on what system the port was made for would drastically affect the quality, music, graphics, or gameplay of a certain title from the original arcade version. While hard to explain and depending on personal preference, certain games may look or play better on a certain console. For example, people preferred the Genesis version of *Mortal Kombat* because the unlike the SNES bowdlerization, they kept faithful to the original arcade release complete with blood and gory fatalities. On the other hand, when comparing the SNES versus Genesis experience of *Street Fighter II*, some people preferred the ergonomic design of the SNES controller six-button layout opposed to the stock genesis three-button layout. Overall, it again depends on what the player's personal preference that determined what game he or she enjoyed. However, personal preference also pushed several gamers away from the home consoles and arcades. Instead, these men and women focused their attention towards on a rising star in video game media, the Home Computer.⁵⁷⁸

⁵⁷⁶ Konami, "Teenage Mutant Ninja Turtles: Turtles in Time" (Arcade Game), Konami, 1991; Konami, "Teenage Mutant Ninja Turtles IV: Turtles in Time" (Super Nintendo Game), Konami, 1992.

⁵⁷⁷ For the most part the first two stages of the arcade and SNES port remain faithful, but the next couple of stages change. In the arcade after Stage 3 Sewer Surfin' the player is sent into time by Shredder to level 4 Prehistoric Turtlesauras, Level 5 Skull and Crossbones, Level 6 Bury My Shell at Wounded Knee, Level 7 Neon Night Riders, Level 8 Starbase: Where No Turtle Has Gone Before, and the final stage Technodrome: The Final Shell Shock. In the SNES port, Level 3, which had no boss in the arcade, saw the Rat King as the new end boss; level four/five Cement Man was replaced by Slash, and their popular 1987 cartoon series counterparts Bebop and Rocksteady replaced level five/six arcade bosses Tokka and Rahzar in Skull and Crossbones. Finally, the SNES included a new level four, Technodrome: Let's Kick Shell, which saw the arcades level five bosses become the sub bosses and the Shredder serving as the levels primary boss. After Skull and Crossbones and the minor exception of Neon Night Riders slight camera placement on the SNES, the two games match up once again with the fight against Super Krang; Konami, "Teenage Mutant Ninja Turtles: Turtles in Time" (Arcade Game), Konami, 1991; Konami, "Teenage Mutant Ninja Turtles IV: Turtles in Time" (Super Nintendo Game), Konami, 1992.

⁵⁷⁸ The sources used for the paragraph include Midway, "Mortal Kombat" (Sega Genesis Game), Acclaim, 1993; Midway, "Mortal Kombat" (Super Nintendo Game), Acclaim, 1993; Capcom, "Super Street Fighter II: The New Challengers" (Sega Genesis Game), Capcom, 1994; Capcom, "Super Street Fighter II: The New Challengers" (Super Nintendo Game), Capcom, 1994.

As noted in the previous chapter, the home computer gaming and software scene of the 1980s and early 1990s metaphorically equated to the Wild West. Several programs written by both professionals, nonprofessionals, and pirated flooded both store shelves and specialty magazines of the time. Armed with the newest word processor or next great software program, this emerging field offered great potential for numerous moneymaking opportunities. Furthermore, it relatively unregulated landscape during this particular time allowed a unique situation to rise, one that allowed free exploration of ideas both clean, and perverse, come into fruition. Surprisingly, up until the advent of the commercial Internet of the late 1990s, the benefactor of this lawless landscape did not come in the form of some pornographic literature or new revolutionary spreadsheet program created by a man in Seattle, but the individual third party developers who created video games for the personal computers.⁵⁷⁹

Unlike their console counterparts and some major development studios, the niche PC market allowed these men and women to create the video game of their dreams without forcibly edit their work. The reason for this comes surprisingly comes from differentiating perceptions as at this particular time home consoles such as Nintendo and Sega were seen as more oriented towards children and teenagers while the home computer was billed as the more adult option. Granted, as mentioned in chapter two, numerous educational games for children did come for the PC market, but at the same time other titles that targeted both adult and general audiences did exist for this medium. This drive to meet a rapidly expanding demographic eventually led to the

⁵⁷⁹ For further reference, please review Matt Nicholson, *When Computing Got Personal: A History of the Desktop Computer*, Matt Publishing, 2014; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

growth of several influential PC video game publishers and developers hoping to profit from the rather young market.⁵⁸⁰

While too many to mention off-hand, several popular studios emerged to popular receptions during the 1980s and 1990s such as MicroProse who made a name for itself by focusing on creating both strategy and simulation type games such as the *Sid Meier's Civilization* series, *Railroad Tycoon* and *World Circuit: The Grand Prix Race Simulation*.⁵⁸¹ Sierra Entertainment focused on creating games encompassing all genres with such notable titles as the *Leisure Suit Larry* series and the *Dr. Brain* educational series.⁵⁸² Papyrus Design group mainly worked on racing simulators such as the influential *Indianapolis 500: The Simulation* and the *NASCAR Racing* series.⁵⁸³ Apogee/3D Realms mainly acted as a publisher and developer of numerous video games, but they became rather noticeable after the success of their arguably largest intellectual property *Duke Nukem* in 1991 and the subsequent sequels *Duke Nukem II* and *Duke Nukem 3D*.⁵⁸⁴ Finally, while each of the above assisted in the growth of the PC video game market, quite possibly id Software's served as its champion during the 1990s as both a revolutionary and creator of controversy.⁵⁸⁵

⁵⁸⁰ For further reference, please review Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001, Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tristan Donovan, *Replay: The History of Video Games*, Yellow Ant, 2010.

⁵⁸¹ MicroProse, "World Circuit: The Grand Prix Race Simulation" (MS-DOS Game), MicroProse, 1992; MPS Labs, "Sid Meier's Civilization" (MS-DOS Game), MicroProse, 1991; MPS Labs, "Sid Meier's Railroad Tycoon" (MS-DOS Game), MicroProse, 1990.

⁵⁸² For general reference, please refer to Sierra On-Line, "Castle of Dr. Brain" (MS-DOS Game), Sierra On-Line, 1991; Sierra On-Line, "Leisure Suit Larry in the Land of the Lounge Lizards" (MS-DOS Game), Sierra On-Line, 1987.

⁵⁸³ Papyrus, "Indianapolis 500: The Simulation" (MS-DOS Game), Electronic Arts, 1989; Papyrus Design Group, "NASCAR Racing" (MS-DOS Game), Papyrus Design Group, 1994.

⁵⁸⁴ 3D Realms, "Duke Nukem 3D" (MS-DOS Game), GT Interactive Software, 1996; Apogee Software, "Duke Nukem" (MS-DOS Game), Apogee Software, 1991; Apogee Software, "Duke Nukem II" (MS-DOS Game), Apogee Software, 1993.

⁵⁸⁵ For Further information, please consult David Kushner. *Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture*, Random House, 2004; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

Principally founded by four unlikely computer programmers, in 1989, John Carmack, John Romero, Tom Hall, and Adrian Carmack all met as employees of another company, Softdisk.⁵⁸⁶ Starting out as pet project between Romero, J. Carmack, and Lane Roathe, formed a three-man team calling themselves the Gamer's Edge crew.⁵⁸⁷ Chiefly pushed by the two Johns, they began forming the future id Software as they managed to convince other Carmack and much later Tom Hall to join their endeavor. With Adrian doing the art, Romero creating the software tools and engine, Lane focusing on management and miscellaneous programing, Tom Hall as creative director, and J. Carmack developing the games core engine, these men set out to accomplish some impressive feats.⁵⁸⁸ Such accomplishments included J. Carmack figuring out how to simulate a side scrolling effect for PC games, which was unheard of at the time outside the home consoles and arcades.⁵⁸⁹ He also developed came up with the idea he called "adaptive tile refresh," which tricked the computer programing into creating a smooth transitions by only focusing on things that need to change in the background such as clouds.⁵⁹⁰ Furthermore, according to David Kushner, he added an extra set of blue tiles outside the right edge of the screen and stored it into the games memory, which could be placed on screen without being redrawn every time.⁵⁹¹ This surprising leap meant that, "They could do *Super Mario Brothers 3* on a PC! Nobody, no one, nowhere had made the PC do this."⁵⁹² It was this idea that pushed these men to create their own company, and with their ironically named prototype called *Dangerous Dave In "Copyright Infringement,"* they attempted to get in touch with Nintendo.⁵⁹³

⁵⁸⁶ David Kushner, *Masters of Doom: How Two Guys Created an Empire and Transformed Pop Culture* (New York: Random House, 2004), 36-7, 41-5.

⁵⁸⁷ *Ibid.*, 37-8.

⁵⁸⁸ *Ibid.*, 45.

⁵⁸⁹ *Ibid.*, 47.

⁵⁹⁰ *Ibid.*, 49-50.

⁵⁹¹ *Ibid.*, 50.

⁵⁹² *Ibid.*

⁵⁹³ *Ibid.*, 50-1.

In an attempt to woo the Redmond, Washington higher ups, the now renamed Gamer's Edge crew now calling themselves the IFD or Ideas From The Deep Team consisting of Romero, both Carmacks, Hall, and Lane worked a non-stop in seventy-two hour marathon programing a PC demo of *Super Mario Bros. 3*, which included Mario and a few levels.⁵⁹⁴ After sending it to Nintendo, they response they got back disappointed them as the company, while praising their hard work, showed no interest in joining the PC market.⁵⁹⁵ Following the fallout, Romero received an unexpected call from Scott Miller, one of the founders of 3D Realms/Apogee, who wished to publish the groups' games as shareware.⁵⁹⁶ Agreeing with Miller, the team minus Lane began work on their first episode of their first original franchise *Commander Keen: Marooned on Mars*.⁵⁹⁷ Given only two months to meet the upcoming the Christmas deadline, the team from October to December 1990 worked a "death schedule," to get the game to Miller on time, but in the end, their efforts paid off in dramatic fashion.⁵⁹⁸ In just a few days, sales for Commander Keen from December 14 to Christmas made around \$30,000 in sales thus netting the team royalty check for \$10,500.⁵⁹⁹ This success spurred Romero, Hall, and both Carmack's to break away from any association with Softdisk. On February 1, 1991, the renamed IFD team officially became id Software and now outside of a contractual dispute with their former employer, these men were now free to make the games they desired.⁶⁰⁰

From its inception to roughly the time of the first senate hearing on December 9, 1993, id Software began building its library of titles. During the first year, Mesquite, Texas based company met some success with the continuation of the *Commander Keen* series with its sequel

⁵⁹⁴ Ibid., 57, 64.

⁵⁹⁵ Ibid.

⁵⁹⁶ Ibid., 57-8.

⁵⁹⁷ Ibid., 63-6, 68-70.

⁵⁹⁸ Ibid., 64, 68.

⁵⁹⁹ Ibid., 70-2.

⁶⁰⁰ As a side note, in the name id Software the id is always un-capitalized; Ibid., 74.

*Commander Keen in Goodbye, Galaxy!*⁶⁰¹ Furthermore, to avoid a lawsuit and fulfill their remaining obligations to Softdisk, id Software developed a flurry of successive that included *Rescue Rover 1 & 2*, *Dangerous Dave in the Haunted Mansion*, *Shadow Knights*, *Hovertank 3-D*, *Commander Keen: Keen Dreams*, and *Catacomb 3-D* in order fully break away from the Louisiana based developer.⁶⁰² Nevertheless, John Carmack's began experimenting with the core game engine featured in *Hovertank 3-D* and *Catacomb 3-D* and during the next two years from 1992-1993, two new games would not only popularize a genre, but also spark deep-rooted controversy from their gameplay⁶⁰³

The first game in question, *Wolfenstein 3-D* was not an original IP as in 1981 and 1984 Muse Software developed both *Castle Wolfenstein* and *Beyond Castle Wolfenstein* for the Apple II and Commodore computers.⁶⁰⁴ The reason why id even got the rights in the first place came from Muse software's bankruptcy during the mid-1980s and the lapse on the *Wolfenstein* trademark allowed the development team to the intellectual property.⁶⁰⁵ Furthermore, John Carmack began tweaking the now known *Wolfenstein 3D* engine from his old *Catacombs 3-D* engine, by cleaning up the codes for bugs and streaming it for speed making it both look good graphically, but maintain a fast arcade style of gameplay.⁶⁰⁶ In addition, Carmack also took advantage of the new Video Graphics Adapter or VGA, which in comparison to its earlier counterpart, the EGA, VGA graphics boosted the color palate from 16-colors to 256 color palate.⁶⁰⁷ This allowed for not only more graphically appealing games, but allow for the creation

⁶⁰¹ Ibid., 84-5, 95.

⁶⁰² Ibid., 72, 78, 83, 88-9.

⁶⁰³ Ibid., 95.

⁶⁰⁴ Ibid., 94.

⁶⁰⁵ Ibid.

⁶⁰⁶ Ibid., 95.

⁶⁰⁷ Ibid., 97.

of more detailed death animations and blood, which *Wolfenstein* had in spades.⁶⁰⁸ It also boasted numerous sound effects such as enemy voice clips, the protagonist's voice clips, and gunfire, which creator Bobby Prince utilized digitalized sound to full effect.⁶⁰⁹ Finally, taking cues from both *Catacombs 3-D* and *Hovertank 3-D*, *Wolfenstein 3D* became a pioneering the first person shooter as the unique perspective of actually seeing the game through the characters perspective allowed the players to interact with a strange and somewhat similar world.⁶¹⁰

As for the story, the player assumes the role of William B.J. Blazkowitz, a captured American soldier of Jewish decent facing hordes of Nazi soldiers that want him dead.⁶¹¹ Split into three episodes with ten floors (levels) apiece; episode one takes place in the titular castle with the player attempting escape from their diabolical jailor, Hans Grosse.⁶¹² The second episode Operation: Eisenfaust, Blazkowitz take on the villainous Dr. Schabbs, a lunatic physical who is turning corpses into mutant soldiers for the Third Reich.⁶¹³ Finally, in the third episode, Die, Führer, Die, the story reaches its climax with the player reaching the Führer bunker and the games notorious final boss, Adolf Hitler.⁶¹⁴

Featuring thirty labyrinthine levels, each of them comes packed with guards, dogs, Schutzstaffel, and episode exclusive enemies such as the mutants in episode two and the officers in episode three.⁶¹⁵ In addition, the player is given only three lives, a knife, a pistol, and full health at the beginning of each episode.⁶¹⁶ Remediating this, each level contains numerous health and weapon pick-ups like the machine gun, chain gun, heath packs, dinners, dog food, and

⁶⁰⁸ Ibid.

⁶⁰⁹ Ibid.

⁶¹⁰ Ibid., 89, 95.

⁶¹¹ *Wolfenstein 3D Manual* (Mesquite, TX: id Software, 1992), 2.

⁶¹² Ibid., 10.

⁶¹³ Ibid.

⁶¹⁴ Ibid., 11.

⁶¹⁵ Ibid., 10-11.

⁶¹⁶ Ibid., 8.

ammunition.⁶¹⁷ The castle while sporting numerous Nazi paraphilia such as the Swastika and portraits of Hitler, also boasts hidden treasure.⁶¹⁸ These secret rooms contain numerous hidden treasures, extra lives, ammunition, early access to more weapons, and one undisclosed exit per episode that leads to floor ten.⁶¹⁹ Also unique to the game, set dead center between the score, lives, health, and ammo count sits BJ's face. While a nice artistic touch, its' appearance deteriorated as the player took damage going from a fresh faced at full health to a mangled state as the player neared death.⁶²⁰ It also served another function as it humanizes the character known as Blazkowicz and gives a chance for the player to connect in a minor way.⁶²¹

Today, many consider *Wolfenstein 3D* to be the grandfather of modern first person shooters. When released in May 1992, the game received a mixed reception. On one hand, Chris Lombardi from *Computer Gaming World* praises the game comparing it to another popular PC title *Ultima Underworld*.⁶²² Noting the fluidly, speed, and beautiful graphical detail of the various environments that range from the Nazi paraphernalia to the blood stains and from detail of the enemies to the P.O.W's skeletons locked in the cages all looked gorgeous and serves as a reminder of the "brutality of the Wehrmacht."⁶²³ Even when talking about the sound, Lombardi states, "Overall, the sound track is used to good effect in building suspense and pulling the player further into the experience," while at the same time reflecting upon the graphics, "The pneumatic pump of the machine gun, communicated in both sound and visual action, is frighteningly realistic."⁶²⁴ The author also mentions the games self "PC-13" rating for profound carnage as

⁶¹⁷ Ibid., 9.

⁶¹⁸ Ibid., 12.

⁶¹⁹ id Software, "Wolfenstein 3D" (MS-DOS Game), Apogee, 1992.

⁶²⁰ Ibid.

⁶²¹ Ibid.

⁶²² Chris Lombardi, "The Third Reich in the Third Dimension: id Software Puts New Perspective on a Classic," *Computer Gaming World*, September 1992, 50, 52.

⁶²³ Ibid., 50.

⁶²⁴ Ibid., 50, 52.

"extremely violent" for leaving a trail of dead corpses in his wake and he outright warns readers of the sensitive nature to "stay clear of this one."⁶²⁵ Ultimately, he concludes his review by again praising the game ability to create a sufficient element of disbelief that can draw in players into this "thrilling environment," and recommends players to look into the game as an example of the "interactive entertainment's potential for a sensory immersed visual' future."⁶²⁶

On the other hand, in the United States, the game while it sold popularly did get hardly any recognition on the violence factor until 1994 and even then, it was sparse. In an article written by Mike Snider for the *USA Today* states in only a paragraph, "Three years ago, when Id Software introduced *Wolfenstein* - a Nazi hunt - Wilson wrote an editorial about the game's first-person perspective 'Was more gut-wrenching and if we weren't careful, the end result could be callousness.'"⁶²⁷ However, across the Atlantic and Pacific reactions were varied. In Australia, writer Phil Campbell for the *Sydney Morning Herald*, while noting the graphic violence is not suitable for children under thirteen, he outright praises the game stating "*Wolfenstein 3D* is fast, its action packed, and its fun to play. I'm impressed."⁶²⁸ Meanwhile in Europe, Germany unlike the UK or France outright banned the game from store shelves for violating section 86a of the *Strafgesetzbuch*, which bans the public use of anything regarding the National Socialist party.⁶²⁹

Now going back to the aforementioned quotes, why did both Lombardi and Snyder react so weirdly to *Wolfenstein's* gameplay? As mentioned earlier, the game takes place in a first person perspective. The player literally views the world of the game through BJ's eyes and

⁶²⁵ Ibid., 50.

⁶²⁶ Ibid., 52.

⁶²⁷ Mike Snider, "Video game ratings present a new difficulty level," *USA Today*, March 3, 1994.

⁶²⁸ Phil Campbell, "Low-Budget Pack Is High On Adventure," *Sydney Morning Herald* (Australia), October 12, 1992.

⁶²⁹ Gerhard Dannemann, "Section 86a Use of Symbols of Unconstitutional Organizations," *German Law Archive*, 2015, accessed December 15, 2015, <http://germanlawarchive.iuscomp.org/?s+=Strafgesetzbuch&submit=>; David Kushner, *Masters of Doom*, 115.

interacts with his world via killing Nazis. Why is the aspect important? During the 1980s and 1990s, a strange paranoia surrounding violent video games emerged that led many to believe that this type of media would encourage violent behavior and also desensitize them making it easier to perpetrate heinous acts. Furthermore, at this same time, the military began using computer combat simulations that helped train and prepare soldiers. Yet, in a strange development, many people seemingly connected that violent video games only served as training tools for death and destruction.⁶³⁰

Going back to what Lombardi and Snyder stated, the pseudo realistic nature of *Wolfenstein 3D's* first person view did act as a simulation in a way, as the situation featured the player killing many people during while escaping. The fire from the guns and the voice clips also were top notch for 1992 as a person could literally hear the enemy scream in pain before they died or shout, "Mein Leben."⁶³¹ Finally, at the time many thought that the First person point of view was going to be the next great gaming trend that allowed player and game to interact with one the digital world. While this did not transpire, *Wolfenstein 3D* was viewed as the first game that successfully simulated this experience thus making it a controversial game in the eyes of many. However, what effect did the success of the game have for Romero, Hall, and the two Carmack's?

In June 1992, id Software received a royalty check from Apogee for \$100,000 just for the first episode and the sales for their other game *Commander Keen*.⁶³² The success of their unexpected treasure brought in much needed revenue and in turn enabled the men at id Software

⁶³⁰ For further reference, please consult, Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., Harmony, 2014; Michael Macedonia, "Games Soldiers Play," *IEEE Spectrum* vol. 39 no. 4 (2002).

⁶³¹ id Software, "Wolfenstein 3D" (MS-DOS Game), Apogee, 1992.

⁶³² Kushner, *Masters of Doom*, 113.

to create a sequel, *Wolfenstein Spear of Destiny*.⁶³³ Again, being a young company, both Johns wanted something different, bolder, and for the next project, they planned to send their loyal players and fans straight to Hell.

Beginning development in 1992-3, *Doom* was a technical and visual upgrade in comparison to its predecessor, *Wolfenstein 3D*.⁶³⁴ Created by John Carmack, the id Tech 1 engine also known as the Doom engine allowed for a 3D spatial effect while the game was created with a two dimensional floor plan thus giving the illusion of a 3D environment, despite only moving on a flat plane.⁶³⁵ Carmack also used a programming technique called Binary Space Partitioning, which only drew the environments and enemies in the direction the player faced instead of drawing the entire level.⁶³⁶ This considerably sped up the pace of the game making *Doom* much faster in comparison to its predecessor.⁶³⁷ Finally, both Carmack and Romero expressed interest in granting players access to modify and create their own maps through WADs (Where's All the Data) and the possibility online multiplayer resulted in an ambitious project unlike anyone seen before seen before.⁶³⁸

As for the game's main premise, *Doom* follows the adventure of an unnamed space marine, who according to the PC manual's backstory states, "You're a space marine, one of the toughest, hardened in combat and trained for action."⁶³⁹ Three years ago, you assaulted a superior officer ordering his soldiers to fire upon civilians.⁶⁴⁰ He and his body cast were sent to Pearl

⁶³³ id Software, "Wolfenstein: Spear of Destiny" (MS-DOS Game), FormGen, 1992; *Wolfenstein 3D Manual* (Mesquite, TX: id Software, 1992), 11.

⁶³⁴ Kent, *The Ultimate History of Video Games*, 459.

⁶³⁵ "Doom Engine," *Wikipedia*, accessed December 15, 2015, https://en.wikipedia.org/wiki/Doom_engine.

⁶³⁶ Kushner, *Masters of Doom*, 142.

⁶³⁷ *Ibid.*, 141-2.

⁶³⁸ *Ibid.*, 130.

⁶³⁹ *Doom Manual* (Mesquite, TX: id Software, 1993), 1

⁶⁴⁰ *Ibid.*

Harbor, while you were transferred to Mars home of the Union Aerospace Corporation."⁶⁴¹ The UAE began conducting inter-dimensional experiments on Phobos and Deimos, but these portals quickly became unstable, leading to the mysterious disappearance of Deimos and a demonic invasion its sister moon.⁶⁴² Now with your platoon slaughtered, the player traverses the complex alone, fighting off the demonic hordes and killing everything that gets in their way.⁶⁴³

Much like *Wolfenstein 3D*, *Doom's* core gameplay uses a first person perspective, contains many hidden in-game secrets, and consists of three episodes (four if you are playing the 1995 Ultimate Doom).⁶⁴⁴ Unlike its predecessor however, the successor game was improved in almost every aspect, as levels for example are now more open than the closed off corridors of its forerunner making fighting enemies more chaotic.⁶⁴⁵ The new Heads up Display or HUD no longer kept count of score or lives, but instead added new features such as armor and individual bullet counts as well as a weapon select indicator.⁶⁴⁶ Even the face at the center had a new purpose as it both indicated the player's health via image, but also gives a hint on what direction an enemy attack came from allowing the player to retaliate accordingly.⁶⁴⁷ Furthermore, being a first person shooter, the game gives seven new weapons for the player to play around with which

⁶⁴¹ Ibid.

⁶⁴² Ibid.

⁶⁴³ Most interestingly, this story was not going to be the original story. Written by Tom Hall, The Doom Bible described a much more detailed story driven plot, different characters with unique personalities, and a new alien world called Tei Tenga. While ultimately scrapped, many ideas from the Doom Bible made it into the game and its sequel such a certain weapons, enemies, and certain plot elements from Hall's original script. Ironically, one of the characters from Episode 1 of the *Doom Bible*, "Buddy Dacote: the guy that dies" originally was slated to die in the first episode, however since his appearance and personality seem to parallel that of the unnamed space marine, it is widely believed that Dacote was at least the inspiration for the protagonist character in *Doom*; *Doom Manual* (Mesquite, TX: id Software, 1993), 1; Tom Hall, "Doom Bible: Revision Number.02," *5 Years of Doom*, accessed December 15, 2015, <http://5years.doomworld.com/doombible/doombible.pdf>, 7-14.

⁶⁴⁴ id Software, "Doom" (MS-DOS Game), GT Interactive, 1993; id software, "Ultimate Doom" (MS-DOS Game), GT Interactive, 1993.

⁶⁴⁵ id Software, "Doom" (MS-DOS Game), GT Interactive, 1993; id Software, "Wolfenstein 3D" (MS-DOS Game), Apogee, 1992.

⁶⁴⁶ *Doom Manual* (Mesquite, TX: id Software, 1993), 5.

⁶⁴⁷ Ibid.

includes the characters bare fists, a pistol, shot gun, chain gun, rocket launcher, plasma rifle, a chain saw, and the signature BFG-9000.⁶⁴⁸ The game also has other new items at the player's disposal such as artifacts that raise the health, armor, and defense beyond 100%, backpacks that increase the amount of ammunition the player can carry, and Berserker Packs that increase the protagonists' strength for a limited time.⁶⁴⁹

In addition, *Doom* also features several different environments as the player travels through each area. For example, episode one: Knee Deep In The Dead takes place in a futuristic military and toxic waste facility while episode two: Shores of Hell mixes both the militaristic aspects of the previous levels, but slowly adds increasing satanic visuals and imagery become visible as the player progresses.⁶⁵⁰ The final episode, episode three: Inferno takes the fight to Hell itself and in turn features backgrounds and foregrounds with gothic architecture (stones and torches), demonic images, blood pits, lava, and an overall hellish atmosphere.⁶⁵¹ To complement the overall theme of the game, the designers provided a slew of demonic enemies to fight that include former humans, Imps, Demons, Specters, Lost Souls, Cacodemons, Barons of Hell, the Cyberdemon, and The Spider Mastermind/Arachnotrons.⁶⁵² These touches make the game both unique as no game developer at the time put willingly placed demonic themes within a game, but at the same time generate controversy for both the aforementioned ideas and for its the high level of graphic violence.

Overall, *Doom* received the same reaction as *Wolfenstein*, one of both praise and revulsion. *Dragon Magazine* overall gave the game numerous positive remarks for its "fast

⁶⁴⁸ Ibid., 5, 8.

⁶⁴⁹ Ibid., 11-2.

⁶⁵⁰ Such images include inverted crosses, pentagrams, black candles, and carvings of the devil in the walls; id Software, "Doom" (MS-DOS Game), GT Interactive Software, 1993.

⁶⁵¹ Ibid.

⁶⁵² *Doom Manual* (Mesquite, TX: id Software, 1993), 13.

moving, first person sprite manipulation,” its multiplayer network gameplay feature, the lighting effects, and improved gameplay over *Wolfenstein 3D*.⁶⁵³ Conversely, *Edge Magazine* took another route and while giving some praise to the game, they took the time to point out its many flaws such as the repetitive game play, and limited enemies made it into just like any other 2D shoot 'em up available.⁶⁵⁴

With the earlier success of *Wolfenstein 3D* and *Doom*, id Software began its ascent from a group of four men to a multimillion-dollar game developer. Continuing its fame throughout the rest of the 1990s, the created such classics as *Doom II: Hell on Earth* in 1994, *Ultimate Doom* in 1995, and *Final Doom* in 1996 making millions in revenue.⁶⁵⁵ This sparked the development of the next game for the company, *Quake*, which finally offered the true 3D experience the players have wanted since the 1980s.⁶⁵⁶ Despite its rather lackluster mentioning in 1993, the ghosts of *Doom* would eventually come back to haunt the company as the game was featured as one of the possible causes behind Eric Harris and Dylan Kiebold's rampage at Columbine School Shooting in 1999.⁶⁵⁷ Yet, while the home computer games quietly grew during early to mid-1990s, a war of between two iconic brands was heating up quickly. At the head of one side was represented by a portly Italian plumber and his brother stood as mascot of the successful Nintendo video game company, on the other hand, a brash, smooth, and overall cool anthropomorphic blue hedgehog named Sonic represented their chief rival Sega. Soon like many choices, a split occurred that many compare to various popular competitors such as Pepsi vs. Coke, Boston Red Socks vs.

⁶⁵³ Sandy Petersen, "Are you ready to face your DOOM?" *Dragon Magazine* (March 1994): 59-60.

⁶⁵⁴ Edge Staff, "Doom Review," *Edge*, March 3, 1994, accessed September 16, 2015, <https://web.archive.org/web/20121023154751/www.edge-online.com/review/doom-review/>.

⁶⁵⁵ id Software, "Doom 2: Hell on Earth" (MS-DOS Game), GT Interactive, 1994; id Software, "Final Doom" (Windows 95 Game), GT Interactive, 1996; "Ultimate Doom" (MS-DOS Game), GT Interactive, 1995.

⁶⁵⁶ "Quake (Video Game)," *Wikipedia*, last modified April 21, 2016, accessed April 30, 2016, [https://en.wikipedia.org/wiki/Quake_\(video_game\)](https://en.wikipedia.org/wiki/Quake_(video_game)).

⁶⁵⁷ "Video Game Controversies," *Wikipedia*, last modified April 22, 2016, accessed April 26, 2016, https://en.wikipedia.org/wiki/Video_game_controversies#Public_debate_in_US.

New York Yankees, Ford vs. General Motors, DC Comics vs. Marvel comics and McDonalds vs. Burger King. Arguably, outside the select few successful arcade and home computer titles, none at the time could touch the home console market and standing at its center from 1991 to 1994, the bit wars forever shaped the image of video games.

Until late 1991, Nintendo served as the dominant force in video game entertainment. Sporting such hit franchises at the time such as the first party titles *Super Mario Bros.*, *Legend of Zelda*, and *Metroid*.⁶⁵⁸ Their third party licensees were no slouch either producing several top quality games like Capcom's *Mega Man* series, Konami's *Castlevania* NES trilogy, *Metal Gear*, and *Contra*, Tecmo with its' famous sporting games like *Tecmo Bowl*, and the *Double Dragon* trilogy made by TechnoJapan.⁶⁵⁹ Nintendo also at this time had a near exclusive access in publishing popular cartoon video games such as *Duck Tales* and *Teenage Mutant Ninja Turtles* found a home on the NES.⁶⁶⁰ On the other hand, the company also had a monopoly on the handheld video games sector with its' Game Boy line, with such games as *Super Mario Land* and *Tetris* made it somewhat of an appealing choice for people on the go.⁶⁶¹ Many business leaders, news leaders, and people in general believed the 1990s were going to be an extension of the company's 1980s dominance, but in 1992 despite having a new console in the American and worldwide market, the a two-year-old Sega Genesis outsold the debuting Super Nintendo during

⁶⁵⁸ Nintendo Research & Development 1, "Legend of Zelda" (Nintendo Entertainment System Game), Intelligent Systems/Nintendo, 1986; Nintendo Research & Development 4, "Legend of Zelda" (Nintendo Entertainment System Game), Nintendo, 1986; Nintendo, "Super Mario Bros." (Nintendo Entertainment System), Nintendo, 1985.

⁶⁵⁹ For further reference, please review Capcom, "Mega Man" (Nintendo Entertainment System Game), Capcom, 1987; Konami, "Castlevania" (Nintendo Entertainment System Game), Konami, 1986; Konami, "Contra" (Nintendo Entertainment System Game), Konami, 1988; Konami, "Metal Gear" (Nintendo Entertainment System Game), Ultra Games, 1988; Technōs Japan, "Double Dragon" (Nintendo Entertainment System Game), Tradewest, 1988; Tecmo, "Tecmo Bowl" (Nintendo Entertainment System Game), Tecmo, 1989.

⁶⁶⁰ Capcom, "DuckTales" (Nintendo Entertainment System Game), Capcom, 1990; Konami, "Teenage Mutant Ninja Turtles" (Nintendo Entertainment System Game), Ultra Games, 1989.

⁶⁶¹ Bullet-Proof Software/Nintendo, "Tetris" (Game Boy Game), Nintendo, 1989; Nintendo R&D1, "Super Mario Land" (Game Boy Game), Nintendo, 1989.

the 1991 Christmas rush.⁶⁶² Now with control of 55% of the market, the 1990s finally greeted Sega as the new king of the mountain and it ushered in the now bitter rivalry between Nintendo and Sega.⁶⁶³ Yet, the origins of this bitter battle did not start in the 1990s, but with the growth of Sega during the 1970s and 1980s.

Sega, unlike its counterpart, did not have the extensive history or software influence, so it faced an uphill struggle. A company born from the Cold War, Matt Bromley, an American executive, teamed up with the Nihon Goraku Bussan Company in 1957 to provide numerous coin-operated machines to American military bases in Japan.⁶⁶⁴ Conversely, David Rosen, an American stationed in the country, seized an opportunity to make money in the recovering Japanese market. In 1960, he formed Rosen Enterprises, which provided the civilian population several coin-operated arcades that received an enthusiastic response from his new customers.⁶⁶⁵ In 1964, the two companies merged into one business, Sega, which Rosen acting as chair decided to keep them firmly rooted in Japan.⁶⁶⁶ In the late 1970s, the company capitalized on the American video game craze happening at the time. Through the acquisition of Gremlin, it provided them a base of operations in San Francisco and allowed them to create several notable titles as *Frogger*, *Congo Bongo*, *Spy Hunter*, *Turbo*, and countless others that became part of the golden age of arcade gaming.⁶⁶⁷ In 1983, Sega began production on the exclusive Japanese only gaming console, the Sega SG-1000; yet, thanks to the superior Nintendo Famicom and the Commodore computer, the console never took off, falling behind the others in sales.⁶⁶⁸

⁶⁶² Kent, *The Ultimate History of Video Games*, 434.

⁶⁶³ *Ibid.*

⁶⁶⁴ Sam Pettus, *Service Games: The Rise and Fall of Sega: Enhanced Edition* (San Bernardino, CA: CreateSpace Independent Publishing Platform, 2013), 2-3.

⁶⁶⁵ *Ibid.*, 3-5.

⁶⁶⁶ *Ibid.*, 5.

⁶⁶⁷ *Ibid.*, 7-9.

⁶⁶⁸ *Ibid.*, 12.

In 1986, Sega, alongside Nintendo, attempted to breach the North American market with their American console, the Sega Master System.⁶⁶⁹ While on par with the NES graphically and having notable games *Phantasy Star* and the *Alex Kidd* series, they faced several setbacks. First, due to Nintendo's monopoly, control over the third party developers, and earlier release, the powerhouse enjoyed a clear dominance in the United States, leaving other smaller upstarts like Sega fighting for the remains.⁶⁷⁰ Another reason why they did not achieve a more dominant position revolved around their partnership with Tonka toys. Tonka, who had the rights to sell the Master System, failed to both appropriately market the console to the masses and garner third party support from other game developers.⁶⁷¹ This in turn, doomed Sega's early chances as the Kyoto based company, who used their multiple developers and controlled their own marketing campaign thus earning more attention from the American gamers. Finally, unlike their counterparts, Nintendo gained brand recognition by the late 1980s and used it to promote the company. Ranging from boxers, mugs, breakfast cereal, and cartoons, they heavily pushed their stars, which translated into profits and turned fictional characters such as Mario and Link into household names.⁶⁷² Sega, on the other hand, did not have this type of popularity and sales suffered. The only character they had to match Mario rising star was Alex Kidd, but unlike the *Mario Bros.* series, which skyrocketed with every game released, the *Alex Kidd* titles received a lukewarm reception by gamers at best. In order to gain recognition, they went back to the drawing board and soon they found their answer, the Genesis.

By 1989, Nintendo possessed a stranglehold on the North American console market; however, Sega had a unique trump card, the arcades. After the crash, the arcades across America

⁶⁶⁹ Ibid., 24.

⁶⁷⁰ Ibid., 30-4.

⁶⁷¹ Ibid., 25-27.

⁶⁷² Ibid., 31-2.

either folded or went into hibernation. While never achieving the success of the pre-1983 era, numerous games still found their way into those places. Such popular Sega games included *OutRun*, *Shinobi*, *Altered Beast*, *Super Hang-On*, and *Afterburner* drew which drew in gamers to these machines.⁶⁷³ Needing a clean break from the failure of the Master System in America, the company executives realized that they required a more powerful console, but what could best the NES' 8-bit graphics stranglehold on the market.⁶⁷⁴ Knowing this fact and having the technology available, they set about creating the Sega Genesis, a revolutionary 16-bit system that, according to CEO Hayao Nakayam, could "bring the arcade experience home."⁶⁷⁵ Using the above hardware, they thought that their console could edge out Nintendo's product and place them on the gaming map. Yet, to accomplish this massive endeavor, they needed to take a radical new stance on their marketing strategy.

Wanting to prevent another dismal failure, the company dropped Tonka due to its poor performance and looked elsewhere.⁶⁷⁶ Initially, Sega's chair, Dave Rosen, and President Hayao Nakayama turned to Atari, but according to Michael Katz, the former president of Atari's game division, "We came close to making a hefty licensing deal so that Atari could jump into the 16-bit fray before Nintendo. The negotiations went pretty far down the stream, and as I recall they fell apart when Jack [Tramiel] and Dave Rosen couldn't agree to the terms."⁶⁷⁷ Out of options, Sega took a page directly from Nintendo's playbook, and according to Katz, "Sega decided to do it themselves."⁶⁷⁸ With a North American release date of August 15, 1989, and a \$200 price tag, the Genesis boasted a "Motorola 68000 CPU" with a "16-bit VDP," "64 KB of Ram," a "TI-

⁶⁷³ Ibid., 38-9.

⁶⁷⁴ Ibid.

⁶⁷⁵ Ibid., 39.

⁶⁷⁶ Kent, *The Ultimate History of Video Games*, 400-1.

⁶⁷⁷ Quoted in Kent, *The Ultimate History of Video Games*, 401.

⁶⁷⁸ Quoted in Kent, *The Ultimate History of Video Games*, 401.

76489 sound generator," and "backwards compatibility with all Sega Master System games."⁶⁷⁹

They also had the pack-in game, *Altered Beast*, included with the console to prove that their console could reproduce arcade quality titles.⁶⁸⁰

Next, the company began to reorganize their American division to give themselves a fighting chance. They contacted Katz, who had left Atari, to see if he wanted to become the CEO of Sega of America, which he accepted in October 1989.⁶⁸¹ When he arrived, his first order of business included implementing a strategy to overtake the competition by creating a unique identity that encompassed both the console and the company.⁶⁸² The business did this through their marketing campaign, which attacked Nintendo head-on with its slogan "Genesis does what Nintendon't."⁶⁸³ The slandering worked as Nintendo employee, Don James, vice president of design, points out, "Sega came out slamming us in their commercials. They were naming us by name, and that was a big deal."⁶⁸⁴ Part two of the plan involved creating a software library of name recognizable games, which reflected upon their selection of sports titles that included "*Pat Riley' Baseball, Arnold Palmer Golf, Buster Douglas Boxing and Joe Montana Football*."⁶⁸⁵ They also received the support of the then rising third party developer, Electronic Arts (EA), who supplied them with numerous sports related games like *John Madden Football*.⁶⁸⁶ Outside this sphere, they also included other recognizable names like *Michael Jackson's Moonwalker* alongside their own selection of first party arcade games.⁶⁸⁷

⁶⁷⁹ Herman, *Phoenix: The Fall and Rise of Videogames*, 136; Pettus, *Service Games: The Rise and Fall of Sega*, 44.

⁶⁸⁰ Pettus, *Service Games*, 50.

⁶⁸¹ Kent, *The Ultimate History of Video Games*, 404-5.

⁶⁸² *Ibid.*, 405.

⁶⁸³ *Ibid.*

⁶⁸⁴ Quoted in Kent, *The Ultimate History of Video Game*, 406.

⁶⁸⁵ Kent, *The Ultimate History of Video Games*, 406.

⁶⁸⁶ *Ibid.*, 409-10.

⁶⁸⁷ *Ibid.*, 408.

While Katz's plan improved Sega's situation in the North America and managed to sell over one million systems, this did not please his superiors in Japan.⁶⁸⁸ In response to the slow sales of the console, in 1991, Nakayama replaced him with Tom Kalinske, a shrewd executive who had no prior experience with gaming industry before accepting the position.⁶⁸⁹ Under his leadership however, he managed to increase Sega's profits tenfold from a meager \$100 million in 1991 to a mighty one billion dollars by the end of 1993.⁶⁹⁰ He did this by slightly modifying Katz's plan while implementing his own changes. They began in early 1991 by slashing prices of the Genesis from \$189 to \$100 in order to sell as many consoles as possible before the release of the Super Nintendo.⁶⁹¹ He also continued the slander campaign and began targeting an older generation of gamers by associating the company as the epitome of “cool” with a preferred market suited for teens and adults, while at the same time depicting their rival as a kiddie system.⁶⁹² As a final measure, Kalinske realized that, like Nintendo, they also needed a mascot to associate with Sega, a Mario killer, and from this idea came the basis for one of gaming’s greatest icons, Sonic the Hedgehog.⁶⁹³

Built around the concept of speed, series creator Yuji Naka, inspired by attempting to speed run *Super Mario Bros.*, wanted to create a game that tested how fast a player could get through a level.⁶⁹⁴ Teaming up with graphic designer Naoto Ôshima and level designer Hirokazu Yasuhara, the three set out to find their character.⁶⁹⁵ Looking at various designs, ranging from a rabbit, dog, human, etc., the developers, wanted to base the game on a simple two-button format,

⁶⁸⁸ Pettus, *Service Games: The Rise and Fall of Sega*, 55.

⁶⁸⁹ Kent, *The Ultimate History of Video Games*, 423-4, 426; Pettus, *Service Games*, 55.

⁶⁹⁰ Kent, *The Ultimate History of Video Games*, 426.

⁶⁹¹ *Ibid.*, 427.

⁶⁹² Pettus, *Service Games*, 68-9.

⁶⁹³ Kent, *The Ultimate History of Video Games*, 427-8.

⁶⁹⁴ Marc Pétronille and William Audureau, *The History of Sonic the Hedgehog* (Richmond Hill, ON: Udon Entertainment, 2013), 22.

⁶⁹⁵ *Ibid.*

and needed a character that could roll into a ball.⁶⁹⁶ Two concepts came to mind, an armadillo, or a blue hedgehog, and through much deliberation, the team opted for the blue blur.⁶⁹⁷ As development for the game continued, they decided to base their levels much like a pinball table.⁶⁹⁸ For example, act one of the first world, better known as the Green Hill Zone, while seeming linear contained multiple paths for the player to take, which allowed for both speed running and exploration.⁶⁹⁹ This concept permitted each of the game's stages to have a unique flair about them while providing multiple ways to play for both veterans and newcomers. Alongside the level design, the game also focused on memorable music, which, provided by Masato Nakamura, became a main staple and trademark of the series.⁷⁰⁰ Finally, the creation of the story surrounding the Chaos Emeralds and the now famous antagonist Dr. Ivo Robotnik acted as the unifiers of the series and provided the players with an additional in game challenge.⁷⁰¹

The game was now ready, and Kalinske opted to both put the game on retail and offered it as a pack in title for the Genesis replacing *Altered Beast*.⁷⁰² Alongside this, Sega unleashed a pro-Sonic ad campaign that introduced gamers to the character as well as promoted the game.⁷⁰³ After months of hard work, gambles, and sacrifices, everything in the end paid off as *Sonic the Hedgehog* met universal acclaim receiving four 9 out of 10 reviews from Electronic Gaming Monthly in July 1991 and received high remarks from other gaming magazines.⁷⁰⁴ Furthermore, due to the success of this one title, the Genesis sold over 15 million additional systems and

⁶⁹⁶ Ibid., 22-3.

⁶⁹⁷ Ibid., 23.

⁶⁹⁸ Ibid., 28-30.

⁶⁹⁹ Pétronille and Audureau, *The History of Sonic the Hedgehog*, 28; Sonic Team, "Sonic the Hedgehog (1991 video game)" (Sega Genesis Game), Sega, 1991.

⁷⁰⁰ Pétronille and Audureau, *The History of Sonic the Hedgehog*, 31-33.

⁷⁰¹ Ibid., 31.

⁷⁰² Kent, *The Ultimate History of Video Games*, 431.

⁷⁰³ Pétronille and Audureau, *The History of Sonic the Hedgehog*, 34-9.

⁷⁰⁴ "Sonic the Hedgehog Review," *Electronic Gaming Monthly*, July 1991, 24.

pushed them ahead of their competition with a 55% to 65% control of the market after the fourth quarter in 1991.⁷⁰⁵ This enthralled Sega as they finally overcame the biggest hurdle in the American market, yet, there was one question remaining, where was Nintendo at this time?

By the late 1980s, the NES had hit its zenith; however, the company suffered from a fatal overconfidence in their product. Granted, this brashness came from the string of successful titles during this period like the 1988 game *Super Mario Bros. 3*, which made over \$500 million in worldwide sales.⁷⁰⁶ In addition, and as mentioned before, they also controlled a majority of the market, but when the Sega Genesis came out in 1989, Nintendo ignored them as they still outsold their competitor. Even in the case of Sonic, Richard Brudvik-Lindner a "former group supervisor and head of Nintendo of America's Account team" stated:

It was pretty much a typical Nintendo reaction at first. [People said] "Look, they're trying to copy us with *Super Mario Bros.* and it the same kind of a game. They can't really do anything as good as we do it." Over time, there was this kind of dawning realization that this was... not such a bad product. It was the same thing with the Genesis, in general.⁷⁰⁷

In addition, the company had on their hands multiple lawsuits to deal with. In 1990, Atari claimed the draconian regulations on Nintendo games only created a monopoly favoring the Kyoto based company, but they lost the suit and the courts forced them to stop illegally producing unlicensed games for the NES.⁷⁰⁸ On the other hand, in a different case, Nintendo lost against Lewis Galoob Toys whose claim on the Game Genie fell through, as it did not infringe on any copyright laws and lawfully able to sell in store.⁷⁰⁹ The main reason for the litigation cases came down to the Japanese developer's staunch control and hold on the pulse of the

⁷⁰⁵ Kent, *The Ultimate History of Video Games*, 434; Pétronille and Audureau, *The History of Sonic the Hedgehog*, 39-40;

⁷⁰⁶ Sheff, *Game Over: Press Start to Continue*, 190-1.

⁷⁰⁷ Quoted in Kent, *The Ultimate History of Video Games*, 430.

⁷⁰⁸ Anthony Ramirez, "Company News; Court Backs Nintendo On Video-Game Suits," *The New York Times*, March 15, 1990.

⁷⁰⁹ Lawrence M. Fisher, "Nintendo Loses Court Case On Video-Game Enhancer," *The New York Times*, July 6, 1991.

market. While many such as Atari, unlicensed companies, and other third party developers beat the anti-trust drum, Nintendo believed that they had to keep control on the pulse of the still fragile industry to make sure that another crash did not happen on their watch.⁷¹⁰

By the time Nintendo of America released its new system in 1991, it had been on the market in Japan for over a half-a-year as the Super Famicom.⁷¹¹ Unlike the Genesis, the 16-bit Super Nintendo or SNES contained a faster Motorola 65816 CPU, could produce over 32,000 different colors, and a mode known as "Mode 7 Graphics," that could aid in the development of backgrounds and game sprite scaling.⁷¹² Despite the advantages in a June 1991 *Time* magazine article, author Philip Elmer-DeWitt suggested that while the next Super Mario game (*Super Mario World*) will drum up hype, the \$200 price tag, parent's aversion to the new system, and the cooling of the Nintendo's name all harmed the company's chances in the end.⁷¹³ In October, Nintendo claimed that they sold over 500,000 units and expected to sell over 2.2 million by January 1, 1992.⁷¹⁴ By December, Nintendo sold over 3.4 million consoles and did quite well for only being out for three months, yet, instead of being on top, the two-year-old Genesis had outsold the superior system 5:1.⁷¹⁵ For the first time in their six years in the American market, another company dominated. Now with two lead companies competing for the hearts and minds of gamers, they squared off in what gamers would call "the bit wars."

Between the years of 1992-1995, the second console war, also known as the bit wars, sparked great competition between Nintendo and Sega. This surprisingly created a strong divided

⁷¹⁰ "Company News; Game Maker Sues Nintendo," *The New York Times*, January 9, 1991.

⁷¹¹ Kent, *The Ultimate History of Video Games*, 431.

⁷¹² *Ibid.*, 432.

⁷¹³ Philip Elmer-DeWitt, "Hold On to Your Joysticks.," *Time*, June 10, 1991, 1-2, accessed March 3, 2014, <http://web.a.ebscohost.com.vortex3.uco.edu:2050/ehost/detail?vid=3&sid=92b1f121-5fed-41e6-a639-6527cee7f2eb%40sessionmgr4001&hid=4107&bdata=JnNpdGU9ZWhvc3QtG12ZQ%3d%3d#db=mth&AN=9106102048>.

⁷¹⁴ "Company News; Nintendo Says Game Sells Well," *New York Times*, October 31, 1991.

⁷¹⁵ Kent, *The Ultimate History of Video Games*, 447.

market, as many people could not afford both systems due to a moderate recession harming the economy during the early 1990s. Soon, people formed two camps, the pro Genesis and pro Super Nintendo fan bases, which rallied behind their respective mascots. Conversely, the simple rivalry between the two companies quickly evolved into an all-out war as both the fans and the companies attacked their competition's software library. Furthermore, acting as propaganda fuel, both companies entered into a slandering contest to gain the necessary edge on each other based on the concept of bits.

This raises a question of what is a bit, as both sides claimed their consoles possessed more bits than its competitors had and from this, they incorporated it as part of their marketing strategies. According to Merriam-Webster dictionary online, a bit means "a unit of information equivalent to the result of a choice between only two possible alternatives, such as 1 and 0 in the binary code generally used in digital computers."⁷¹⁶ While a general definition, this surprisingly has little to do with gaming as the word endured heavy corruption from 1989-1995. In the world of video gaming, a bit deals more closely with the graphical capabilities and power of a system. In the simplest terms, the more bits a game has the better the game looks and the more sprites it can use at one time without slowing down the main central processing unit. Companies such as the big two used this throughout the early 1990s in order to claim that their system was better. Because of this, they mainly applied this idea as a major pushing point in their advertisements. On the other hand, in order to gain an advantage, both companies used different tactics and philosophies to get the point across to the consumer.

During the early 90s, Sega continued to follow Kalinske and Katz's original strategy to browbeat Nintendo in an attempt for domination. Throughout this early period, they mainly

⁷¹⁶ *Merriam-Webster*, s.v. "Bit," accessed April 30, 2014, <http://www.merriam-webster.com/dictionary/bit>.

appealed to the teen and young adult demographic in their advertisements. For example, one such advertisement came from the game *Boogerman: A Pick and Flick Adventure*, which featured various toilet humor comments from certain magazine reviews as part of the promotion.⁷¹⁷ In another ad for *Streets of Rage*, it advertised using special violent moves to clear out an endless supply of “punks, muggers, and riff-raff” and encouraged the player to “Go at 'em with everything you've got. Pipes. Bottles. Knives. Dish out justice however you see fit.”⁷¹⁸

Even in the television commercials, it attempted to capture this same spirit. This most notably comes from the “young Bobby Angles” advertisements, which promoted numerous games on the same premise.⁷¹⁹ In this television spot, two teenage bullies constantly pester him as he looks like a stereotypical nerd.⁷²⁰ In order to “gain the respect of this peers ” he goes out and gets a Sega Genesis with a game *Mortal Kombat* to supposedly help his popularity and the next day ends up receiving enamoring looks from two teenage girls as well as served cookies by his former tormenters.⁷²¹

The company also pandered to the bit craze going on during this time. In a way, the advertisements made it clear that that particular game had so many bits and, ergo, which made it better than their rivals system. An example of this comes from one of their earlier commercials the now famous “Genesis Does what Nintendon’t” series that ran roughly up until 1992 when the company slogan changed.⁷²² The premise featured a chorus of female singers along with an

⁷¹⁷ “*Boogerman: A Pick and Flick Adventure Ad*,” *vgmuseum.com*, accessed April 27, 2014, <http://www.vgmuseum.com/ads/genesis/a/interplay0002.jpg>.

⁷¹⁸ “*Streets of Rage*,” *vgmuseum*, accessed April 27, 2014, <http://www.vgmuseum.com/ads/genesis/a/sega0011.jpg>.

⁷¹⁹ Pettus, *Service Games: The Rise and Fall of Sega*, 66; “Sega Genesis Bully Commercial 1993” (video), *YouTube*, 1993, accessed April 27, 2014, <http://www.youtube.com/watch?v=w-Cih2rEjB8>.

⁷²⁰ “Sega Genesis Bully Commercial 1993” (video), *YouTube*, 1993, accessed April 27, 2014, <http://www.youtube.com/watch?v=w-Cih2rEjB8>.

⁷²¹ *Ibid.*

⁷²² “Sega Genesis Commercial ‘Genesis Does’” (video), [n.d.], accessed April 27, 2014, <http://www.youtube.com/watch?v=35jGnZ-e3jc>.

announcer that proclaimed, "Genesis Does. Sixteen-bit arcade graphics, you can't do this on Nintendo. Genesis Does. Sixteen-bit sport action, you can't do this on Nintendo. Genesis Does. Genesis Does. Genesis Does. Genesis Does."⁷²³ Finally, in the strange commercial for the Sega CD, the company portrays a typical Nintendo fan as a dimwitted teenager while the man on the television states, "Hey, you still don't have a Sega CD? What are you waiting for? Nintendo to make one? You have seen the games...right? Wrong Answer man, show him."⁷²⁴ The kid suddenly becomes overwhelmed with the numerous titles available for the system, thus blowing him into the wall and the commercial ending with the man saying, "You want to see more?"⁷²⁵

The company further demoralized their rival by claiming that the competition had nothing but kiddie games, while Sega had the software suitable for older teens and adults.⁷²⁶ Tom Kalinske stated why they did this, "I saw that our primary audience was over eighteen years of age. Nintendo tended to focus on younger kids. We attempted to focus on an older crowd. Forty percent of our business is over eighteen years old."⁷²⁷ They also implemented the iconic "Sega scream" that came at the end of some the commercial while also putting it before the title in many of their games.⁷²⁸ This also helped further distinguishing themselves from their enemy as the fad quickly caught on and people started to associate the company with the scream.⁷²⁹ Finally, in the last attempt to create distance between the two competitors, in the now famous "blast processing" commercial, the company boasted about the "Super Fast Action" of the

⁷²³ Ibid.

⁷²⁴ "Sega Cd Ad from 1993 - Angry Black Guy" (video), *YouTube*, 1993, accessed April 27, 2014, <http://www.youtube.com/watch?v=HCQRcinZYH8>.

⁷²⁵ Ibid.

⁷²⁶ Kent, *The Ultimate History of Video Games*, 449.

⁷²⁷ Quoted in Kent, *The Ultimate History of Video Games*, 449.

⁷²⁸ Ibid., 449.

⁷²⁹ Pettus, *Service Games: The Rise and Fall of Sega*, 66.

Genesis by comparing *Sonic 2* tied to a dragster, while conversely showing the slowness of the SNES by showing off *Super Mario Kart* represented by an old jalopy.⁷³⁰ The goal of the commercial acted to distract gamers to the technologically superior opponent. From this, the term “blast processing” became controversial, as Sega could not technically prove its own concept, and, even today, people still discuss its meaning across various internet boards.

On the other hand, Nintendo took a completely different tactic. Instead of constantly criticizing Sega, they focused more on promoting games geared towards a wide audience from youth to adult. For example, in a rather tongue-in-cheek manner, the advertisement for *Super Castlevania IV* they state, "Our Critics Talked About Us So Much We Started Rippin' Them."⁷³¹ This the shows several ripped cutouts from the game, which show certain levels as well as numerous praises from magazine reviews about the software.⁷³² Furthermore, the ad for the game *Final Fight 2*, a similar beat 'em up like *Streets of Rage*, takes a much friendlier tone as it promotes Mike Haggar, the fictional mayor of Metro City, alongside Maki and Carlos as heroes attempting to save the world from the villainous Mad Gear gang.⁷³³ This is also notable, as it does not discuss any graphic maiming of people like the *Streets of Rage* ad, but instead addresses the issue eliminating the gang and using that as the crux for the last sentence, "the world depends on it" as justification to stop the antagonists.⁷³⁴

⁷³⁰ “Sega Genesis - Blast Processing TV Commercial” (video), *Youtube*, [n.d.], accessed March 4, 2014, <http://www.youtube.com/watch?v=rDpTLY6dpXQ>.

⁷³¹ “*Super Castlevania IV* Ad,” *vgmuseum*, accessed April 27, 2014, <http://www.vgmuseum.com/ads/snes/a/konami0003.jpg>.

⁷³² *Ibid.*

⁷³³ “*Final Fight 2* Ad,” *vgmuseum*, accessed April 27, 2014, <http://www.vgmuseum.com/ads/snes/a/capcom0006.jpg>.

⁷³⁴ *Ibid.*

In addition, their television commercials followed the same philosophy during this early period. Like Sega, in the *Super Mario World* commercial it emphasizes the bit (graphics) issue going around as it described the game as,

Introducing the next generation from Nintendo, new *Super Mario World* created especially for the Super Nintendo Entertainment System. It's a bit more exiting, a bit more challenging, a bit more graphic, a bit more colorful, a bit more realistic, a bit more levels, a bit more secrets, a bit more enemies, a bit more friends, a bit more sound, a bit hotter, a bit cooler, a bit weirder, a bit more revolutionary, a bit more Mario, a bit more of what you want, It's 16 bit and its yours only if you get new *Super Mario World* for Super Nintendo. Now you're playing with power, super power.⁷³⁵

Furthermore, like the competition Nintendo did call out its rival, but in more of a tongue-in-cheek way. An example comes from the 1993-4 *Star Fox* commercial, which, near the end enticingly declares, "Why go to the next level, when you can go light years beyond."⁷³⁶ This paid homage to both Sega's previous slandering through "Genesis Does what Nintendon't," and there at the time current ("Welcome to the Next Level") slogan by offering a new game that surpassed every one of their competition's videogames.⁷³⁷

Finally, from a first party developer's perspective, the rivalry between the two giants also created an anything you can do, I can do better mentality. Appearing throughout the main series games created by the companies, these now famous franchises battled to gain an edge over each other. For example, the biggest rivalry focused on *Mario* for Nintendo and *Sonic the Hedgehog* for Sega. In the main game franchise, the *Sonic* series, which fed off the popularity of the first title attempted to push for a sequel every other year. This included *Sonic the Hedgehog 2* in

⁷³⁵ "Super Mario World Commercial (America)" (video), *YouTube*, 1991, accessed April 27, 2014, <http://www.youtube.com/watch?v=azpSVs0e6qM>.

⁷³⁶ "Starfox - SNES Video Game TV Spot - Super Nintendo" (video), *YouTube*, 1993-1994, Accessed April 27, 2014. <http://www.youtube.com/watch?v=JxvXD30Jta8>.

⁷³⁷ Pettus, *Service Games: The Rise and Fall of Sega*, 66; "Sega Genesis - Blast Processing TV Commercial" (video), *YouTube*, [n.d.], accessed March 4, 2014, <http://www.youtube.com/watch?v=rDpTLY6dpXQ>; "Sega Genesis Commercial 'Genesis Does'" (video), [n.d.], accessed April 27, 2014, <http://www.youtube.com/watch?v=35jGnZ-e3jc>.

1992, *Sonic the Hedgehog 3* in 1994, and *Sonic and Knuckles* that same year.⁷³⁸ In addition, these four games, thanks to a special lock-on of feature found on *Sonic and Knuckles*, allows for the interconnectivity between all four games. The lock-on allowed for *Sonic and Knuckles* and *Sonic 3* to become one complete game, while connecting with *Sonic 2* enabled the player to play as Knuckles in *Sonic 2* and with the original *Sonic the Hedgehog*, it provided an endless challenge of 3D bonus rounds found in *Sonic and Knuckles* and *Sonic 3*.⁷³⁹ In contrast, the only main game found in the *Mario* series came from the extremely popular 1991 *Super Mario World*, which they sold throughout the lifespan of the Super Nintendo.⁷⁴⁰

Conversely, Mario, unlike his counterpart, featured him in more spinoffs meant to reinforce the character's popularity. Staring in numerous and often A-AAA titles, the series spanned from educational to racing genres. These games included such entries as the cult classic *Super Mario RPG: Legend of the Seven Stars* in 1995, the educational *Mario is Missing* in 1993, the 1993 comical shooter *Yoshi's Safari*, and the popular 1992 cart racing game *Super Mario Kart*.⁷⁴¹ Not to be outdone, Sega put their blue blur in several spinoffs as well with such notable titles as the 1993 pinball simulator *Sonic Spinball*, the odd, but challenging 1993 puzzle game *Dr. Robotnik's Mean Bean Machine*, the strange 1995 entry *Sonic 3D Blast*, and the 1994 Sega Game Gear cart racer *Sonic Drift*.⁷⁴² This type of rivalry also managed to spill throughout their

⁷³⁸ Sonic Team, "Sonic and Knuckles" (Sega Genesis Game), Sega, 1994; Sonic Team, "Sonic the Hedgehog 2" (Sega Genesis Game), Sega, 1992; Sonic Team, "Sonic the Hedgehog 3" (Sega Genesis Game), Sega, 1994.

⁷³⁹ Sonic Team, "Sonic and Knuckles" (Sega Genesis Game), Sega, 1994; Sonic Team, "Sonic the Hedgehog (1991 Video Game)" (Sega Genesis Game), Sega, 1991; Sonic Team, "Sonic the Hedgehog 2" (Sega Genesis Game), Sega, 1992; Sonic Team, "Sonic the Hedgehog 3" (Sega Genesis Game), Sega, 1994.

⁷⁴⁰ Nintendo EAD, "Super Mario World" (Super Nintendo Game), Nintendo, 1991.

⁷⁴¹ Nintendo EAD, "Super Mario Kart" (Super Nintendo Game), Nintendo, 1992; Radical Entertainment; Nintendo R&D1, "Yoshi's Safari" (Super Nintendo Game), Nintendo, 1993; Radical Entertainment, "Mario is Missing" (Nintendo Entertainment System Game), Software Toolworks, 1993; Square, "Super Mario RPG: Legend of the Seven Stars" (Super Nintendo Game), Nintendo, 1996.

⁷⁴² Compile, "Dr. Robotnik's Mean Bean Machine" (Sega Genesis Game), Sega, 1993; Sega, "Sonic Drift" (Sega Game Gear Game), Sega, 1994; Sega Technical Institute, "Sonic Spinball" (Sega Genesis Game), Sega, 1993; Traveller's Tales/Sonic Team, "Sonic 3D Blast" (Sega Genesis Game), Sega, 1996.

software libraries as well. This provided a unique battleground for the rivals as certain characters like the company's mascots and certain games that often got compared to one another by both people and magazines and acted as ammunition to pummel each other for control of the market, but this trend tended to favor Sega in the short term and Nintendo in the long term.

Why did this happen? On both sides, two different strategies emerged during the 1990s. After the release of Super Nintendo, Sega opted to put out more first party titles more frequently over the course of a year. While opting for a quantity over quality approach, the company used this to maintain a lead and spread out their software selection to maximize profits.⁷⁴³ This ensured unlike their rival who often waited around Christmas to promote their high profile titles, Sega decided to distribute evenly their titles across the year to ensure that they provided a highly anticipated game every few months. On the other hand, Nintendo took a much more conservative stance. While not producing as many titles as Sega, they opted to focus more on quality over quantity, creating one to two first per year and used second and third party developers to fill in the void.⁷⁴⁴ By producing first party games more slowly and letting others develop some of their games for them, they ensured a better product, which could leave a lasting impression on the gamer. From their library, titles such as *Legend of Zelda: A Link to the Past*, *Super Mario World*, and *Super Metroid* topped many online lists of the 100 greatest games of all time and are extremely popular to both collectors and fans alike.

In another strange turn of events, developers from second and third party companies also found themselves picking sides. Their choice came down to following either Nintendo's more unfavorable strict guidelines policies but having a superior system, or going with Sega's much more lax standards, but facing the challenges of working with a much older console. Many

⁷⁴³ Ibid., 448.

⁷⁴⁴ Kent, *The Ultimate History of Video Games*, 448.

eventually picked a side and stuck with it, but a select few managed to work under both names from 1991-1995.

When deciding whom to pledge support, many continued working with Nintendo, such as Square and to a major extent Capcom, which drew Sega's ire. In response, the rival itself developed many first party games to act as a countermeasure against this cooperation. An example of this comes from two beat 'em ups, the *Final Fight* series on SNES and *Streets of Rage*, which appeared exclusively on Genesis.⁷⁴⁵ While near identical in concept, looks, and gameplay, the rights for the sequels seemed to go towards Nintendo, but did not quite live up to its arcade counterpart. On the other hand, the *Streets of Rage* series remained quite popular during the early 90s, but it hit its zenith by 1995 and, other than some homebrewed hacks, the development of future installments ceased after the third game.⁷⁴⁶ Furthermore, in the case of Sega, EA, the now popular electronic sports company, supplied the Genesis with countless games such as the Madden Football series, who had the exclusive rights to reproduce the names NFL teams and its players thus bringing in name recognition.⁷⁴⁷

Conversely, not all companies remained loyal to just one side and used the console wars to make money off the conflict. Konami, made famous for its *Castlevania* and *Contra* franchises, managed to sell well on both consoles. While they could have sold the same game on each system, they opted for the unique strategy of creating two different titles for both the SNES and Genesis. Using both systems, they managed to produce such classics as *Castlevania Bloodlines* and *Contra Hard Corps* for Sega and *Castlevania Dracula X*, *Super Castlevania IV*, and *Contra*

⁷⁴⁵ "Capcom Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/capcom>; "Sega Games," *IGN*, accessed April 25, 2016, <http://www.ign.com/companies/sega>.

⁷⁴⁶ "Sega Games," *IGN*, accessed April 25, 2016, <http://www.ign.com/companies/sega>.

⁷⁴⁷ "Electronic Arts Games," *IGN*, accessed April 25, 2016, <http://www.ign.com/companies/electronic-arts>; "Sega Games," *IGN*, accessed April 25, 2016, <http://www.ign.com/companies/sega>.

III: The Alien Wars for Nintendo. In addition, in some cases, they also supplied both consoles with the same title with the notable example of *Lethal Enforcers*.⁷⁴⁸ Similarly, Capcom, a pro loyal Nintendo supporter at this time also did business with Sega. Through this endeavor, they provided them with such games as *Street Fighter II: Championship Edition* and quite arguably the best rendition of the first *Final Fight* for the Sega CD.⁷⁴⁹

Despite having two different philosophies and approaches, neither side managed to gain an upper hand. For Nintendo, this meant they had to deal with the humiliation of being browbeaten as a second rate kiddie developer while their rival rode the post 1980s videogame boom that they helped create. On the other hand, Sega remained a top contender thanks to excellent leadership and distinguishing their brand from the competition, yet like Nintendo in 1991, they too became overconfident and this led to the company's two mistakes that would mark the end for of their domination and help turn the next chapter in the console wars.

During 1992-1995, Sega wanted to take the next leap and advance their technology as quickly as possible. To support the Genesis, the design team came up with two modifications to expand its life span, the Sega CD, and the 32x. Thought by many as the next evolution in console gaming, The Sega CD utilized compact disk technology as a means to store more data than the cartridges. When the add-on came out in 1992, the \$300 accessory managed to increase the graphic capability of the Genesis and provided much faster processing speeds.⁷⁵⁰ This allowed the console to provide both full motion video as well as providing movie like cut scenes as seen in its two launch titles, *Sewer Shark* and *Night Trap*.⁷⁵¹ While creating multiple titles to the system, one game in particular, *Sonic the Hedgehog CD* received critical acclaim from multiple

⁷⁴⁸ "Konami Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/konami>.

⁷⁴⁹ "Capcom Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/capcom>.

⁷⁵⁰ Herman, *Phoenix: The Fall & Rise of Videogames*, 162-3.

⁷⁵¹ *Ibid.*

review sources that quite often praised the game. *Electronic Gaming Monthly's* review crew, gave it two 9 out of 10 and two 8 out of 10 stars, noting the fun time travel based gameplay, awesome music, and cartoon style intro and ending all making this game a worthy reason to get a Sega CD.⁷⁵² Yet, an unexpected result shook company confidence. Expecting big numbers, the system never caught on and thanks to poor support from other third party developers who found working with early CD technology confusing, this forced them to abandon the system and move on to their next project, the 32x.⁷⁵³

In 1994, in a bid to capitalize on the bit-trend, the company opted to create a 32-bit adapter to ease gamers from the Genesis to the upcoming Sega Saturn slated to come out in 1995. This add-on according to Jesse Taylor, the head designer on the 32x claimed, “The machine will be able to display 32,000 simultaneous colors and maintain video rates of 60 frames a second.”⁷⁵⁴ Denise Caruso the “editorial director of Technologies and Media” stated, “If Nintendo doesn’t mimic this, they’ll be in trouble.”⁷⁵⁵ In retrospect, Nintendo was fortunate not to copy their mistake. Released in November 1994, the 32x only lasted around six months on the market, had a pitiful selection of games available and with its expensive \$160 price tag it only resulted in the system selling relatively few consoles despite shipping over 600,000 units that year, thus making it a poor choice for gamers willing to buy the product.⁷⁵⁶

⁷⁵² "Sonic CD Review," *Electronic Gaming Monthly* November 1993, 48.

⁷⁵³ Blake Snow, “The 10 Worst-Selling Consoles of All Time,” *GamePro*, May 4, 2007, accessed March 4, 2014, <http://web.archive.org/web/20070508014611/http://www.gamepro.com/gamepro/domestic/games/features/111822.shtml>.

⁷⁵⁴ John Markoff, “Sega to Introduce Cartridge for Improved Video Games,” *The New York Times*, March 14, 1994.

⁷⁵⁵ *Ibid.*

⁷⁵⁶ Blake Snow, “The 10 Worst-Selling Consoles of All Time,” *GamePro*, May 4, 2007, accessed March 4, 2014, <http://web.archive.org/web/20070508014611/http://www.gamepro.com/gamepro/domestic/games/features/111822.shtml>; Herman, *Phoenix: The Fall & Rise of Videogames*, 194-5.

While Sega tried to lick their wounds heading into 1995, Nintendo, during the Sega CD and 32x fiascos, slowly retook the market they lost in 1991. Instead of building expensive add-ons, they instead focused on expanding the capabilities of the Super Nintendo through its cartridges. To match the more graphically advanced Sega add-ons, Nintendo, on select games, created a special chip that created 3D environments. The Super FX chip boosted the processing power of the console's CPU while providing "texture mapping, better shading, and a real 3D effect."⁷⁵⁷ In two notable cases, the power of this advancement pushed the boundaries of what the SNES could accomplish. In *Star Fox*, the futuristic space shooter used a chip called the FX chip to render 3D polygons to bring environments, enemies, player's ship, (known as the Arwing) and his teammates to life.⁷⁵⁸ Being the first of four titles that utilized the FX technology, the game received wide spread attention from news outlets as they introduced the public to one of Nintendo's famous characters, Fox McCloud. In one report, the nameless writer states, "'*Star Fox*' is the most technologically advanced video game ever introduced for a 16-bit video game system."⁷⁵⁹ Shipping over one million titles at \$60, the highly anticipated title received favorable appeal from gamers, who quickly bought up the game.⁷⁶⁰ The other game, *Stunt Race FX*, also brought something new to the table. While obscure compared to its counterpart, the racing game used the same 3D Polygons to construct over twelve racetracks and a variety of terrains.⁷⁶¹ This in some way met and challenged Sega's own 3D racing game *Virtua Racing* and proved the power of the SNES.

⁷⁵⁷ Herman, *Phoenix: The Fall and Rise of Videogames*, 163.

⁷⁵⁸ Nintendo, "Star Fox" (Super Nintendo Game), Nintendo, 1993.

⁷⁵⁹ "Nintendo's 'Star Fox' Has Landed; Flight Adventure Game Arrives at Stores in the Largest Ever One-Time Shipment of a Video Game," *PR Newswire*, March 22, 1993.

⁷⁶⁰ *Ibid.*

⁷⁶¹ Nintendo EAD, "Stunt Race FX" (Super Nintendo Game), Nintendo, 1994.

In addition to this, Nintendo also lowered the price of the Super Nintendo in 1992 from \$172 to \$149 resulting in the selling of over 5.6 million additional consoles.⁷⁶² Not only did this give them a shot at the much lower priced Genesis but it allowed them to technically catch up to Sega as the console ratio to owner sales gap between the two started to close. Finally, as mentioned before, through their connections to their third party affiliates, the console provided several notable titles, which included such Capcom games as the *Mega Man X*, *Breath of Fire*, and *Final Fight* franchises, as well as having early exclusive access to the popular fighting game *Street Fighter II: The World Warrior* for roughly one year.⁷⁶³ Other companies that showed some interest in the SNES included Square with *Chrono Trigger* as well as receiving major but not exclusive support from Konami with popular software choices like *Super Castlevania IV* and *Contra III: The Alien Wars*.⁷⁶⁴

While they remained behind their rival, thanks to some well-timed releases, Nintendo in 1994 caught a lucky break as numerous titles continuously found their way onto the console. Popular titles like *Final Fantasy III*, while not selling as well as developers liked, became the top selling game for Square for that year.⁷⁶⁵ This also saw the return of Samus and the planet Zebes in *Super Metroid*. Featuring bigger caves, harder bosses, new power-ups, challenging game play, and a creepy atmosphere combined into what many fans of video games call one of the greatest games and stories of all time.⁷⁶⁶ Finally, after much controversy with the first game, *Mortal Kombat II* on the SNES retained all the blood, gore, and violence the arcade counterpart

⁷⁶² Kent, *The Ultimate History of Video Games*, 448; "Nintendo Reduces Price On Super NES System; Industry's Best-Selling 16-Bit System at Less Than \$150," *PR Newswire*, May 1, 1992.

⁷⁶³ Kent, *The Ultimate History of Video Games*, 446.

⁷⁶⁴ The SNES *Final Fantasy II* and *Final Fantasy III* were also known as *Final Fantasy IV* and *Final Fantasy VI* as *Final Fantasy's II, III, and V* never came out in the United States until after 1997; Kent, *The Ultimate History of Video Games*, 541; "Konami Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/konami>.

⁷⁶⁵ Kent, *The Ultimate History of Video Games*, 541-2.

⁷⁶⁶ Nintendo R&D1, "Super Metroid" (Super Nintendo Game), Nintendo, 1994.

contained, pleasing many fans, which resulted in this version outselling the Genesis version.⁷⁶⁷

While generally satisfied with the results, by midyear, they still could not overtake Sega; however, Nintendo realized they needed a fresh new game to outpace the competition. The company soon turned to an unlikely character rooted in their past, a rival to Mario, and ironically in this case, an 11th hour hero named Donkey Kong.

The path to retaking the market lead started not from Nintendo but a third party called Rare. Chris and Tim Stamper, the cofounders of the small video game developer who became famous for their hit NES game *Battletoads*, came up with the technology to create high quality 24-bit character sprites on a 16-bit system without any lag or distortions.⁷⁶⁸ After showing a tech-demo that displayed their work, an impressed Nintendo allowed them, with Miyamoto's blessing, to create a game with Donkey Kong as the central character.⁷⁶⁹ In response to this massive challenge, Rare put everything they had into this one video game. Assigning over twelve-man team, the crew set out under a tight deadline and headed into the unknown.⁷⁷⁰ Using state of the art Silicon Graphics computers, it allowed for the creation of crisp 3D animation and for the creation of realistic Environments and textures as compressed 2D images, but the entire process took months of labor-intensive work to complete.⁷⁷¹ During the development, Rare also contributed to the Nintendo universe by creating the now popular Diddy Kong, a replacement for Donkey Kong Jr., acting as the second character of the game as well as the Kremlings who acted

⁷⁶⁷ Donovan, *Replay: The History of Video Games*, 235; Kent, *The Ultimate History of Video Games*, 480.

⁷⁶⁸ Kent, *The Ultimate History of Video Games*, 492.

⁷⁶⁹ "The Making of Donkey Kong Country," *NowGamer*, June 21, 2010, accessed March 4, 2014, http://www.nowgamer.com/features/895227/the_making_of_donkey_kong_country.html.

⁷⁷⁰ *Ibid.*

⁷⁷¹ Herman, *Phoenix: The Fall and Rise of Videogames*, 205; "The Making of Donkey Kong Country," *NowGamer*, June 21, 2010, accessed March 4, 2014, http://www.nowgamer.com/features/895227/the_making_of_donkey_kong_country.html.

as the games and later series antagonists.⁷⁷² Yet, from this ambitious project, no one had an idea of just how influential the game would become a few months later.

While in development, Rare and Nintendo prepared a massive campaign to promote the new game, *Donkey Kong Country*. In one of their first commercials, they reintroduce gamers to the character with almost peaceful music and scenes depicting wildlife.⁷⁷³ Then the music picks ups and a statement is shown, "Where are you going to find it? Not on Sega, Not of 32x Adapters, Not of CD-ROM, It's Only for Super NES."⁷⁷⁴ In addition to this campaign, Nintendo also provided a separate 13-minute promo, which showed off the inner workings of game, the computer animation, and some of the levels Rare designed for the final product.⁷⁷⁵ Both these ads worked together to build up hype for the games November 21 deadline, however, no one, even the industry experts could have expected what happened on that now fateful day.⁷⁷⁶

After months of hard work and released in late November 1994, *Donkey Kong Country* had done the impossible. In just forty-five days, the game set an all-time record, managing to sell 6.1 million copies worldwide.⁷⁷⁷ During the life span of the Super Nintendo, it managed to sell an additional 3 million, making it one of the bestselling games for the Super Nintendo.⁷⁷⁸ For their efforts, a closer partnership formed between Rare and Nintendo, which would lead to even greater titles for their new Nintendo 64. Lastly, thanks to the success of *Donkey Kong Country*,

⁷⁷² "The Making of Donkey Kong Country," *NowGamer*, June 21, 2010, accessed March 4, 2014, http://www.nowgamer.com/features/895227/the_making_of_donkey_kong_country.html.

⁷⁷³ "Donkey Kong Country - SNES Commercial Us (3)" (video), *YouTube*, 1994, accessed March 4, 2014, http://www.youtube.com/watch?v=z8Aun_xTuAg.

⁷⁷⁴ *Ibid.*

⁷⁷⁵ "Donkey Kong Country Exposed: The Making of Donkey Kong Country (VHS)" (video), *YouTube*, 1994, accessed March 4, 2014, <http://www.youtube.com/watch?v=uNpZnAdZGro>.

⁷⁷⁶ "Donkey Kong Country - SNES Commercial Us (3)" (video), *YouTube*, 1994, accessed March 4, 2014, http://www.youtube.com/watch?v=z8Aun_xTuAg.

⁷⁷⁷ Kent, *The Ultimate History of Video Games*, 497.

⁷⁷⁸ *Ibid.*, 49.

after three long years, Nintendo sales squeaked past Sega's, and the once dominate company of the 1980s for a brief time found itself king of the mountain once more.

When peering back through the curtain the bit wars created, many younger generations would assume that Nintendo and Sega were the only two brands on the market. While partially true, the fourth generation of consoles had five other major contenders via for a piece of the billion dollar the North American market. Each with promise and provided significant contributions to the bit wars of the 1990s, all of them were destroyed by the success of the Super Nintendo and Sega Genesis. The following briefly shows three of those consoles brief stents during the 1990s.

The first major console to challenge the success of the big two came from the NEC TurboGrafx 16. Released in the US market in 1989 alongside the Genesis and aging NES, the system boasted the PC Engine, a unique hybrid of 8-bit and 16-bit technology according to Stephen Boogar, NEC's former vice president of sales.⁷⁷⁹ Ken Wirt commented that, "The quality was great. At the time, we were comparing it to the Nintendo Famicom and the Sega Master System, and it did an awful lot better than either of those did."⁷⁸⁰ Marketed as the first true 16-bit game console at the selling price of \$500 dollars, the TurboGrafx's unique quirk came from the game themselves, which instead of a cartridge, it came on a card that the player inserted into the console.⁷⁸¹ Furthermore, in August 1989 NEC also launched a CD port add called the TurboGrafx-CD for about \$199 that once hooked up to the console allowed it to play CD games made for the system.⁷⁸²

⁷⁷⁹ Ibid., 411-2.

⁷⁸⁰ Ibid., 412.

⁷⁸¹ Ibid., 412-3.

⁷⁸² Ibid., 413.

Despite heavy and popular opinions from newspapers expecting it to be the next big electronic, the system floundered against the more established Sega and Nintendo. Things only got worse two years later with the release of the Super Nintendo in 1991, forcing NEC to reduce the price down to an unprofitable \$99.⁷⁸³ Lasting three more years, the console, and its portable, the TurboExpress, eventually faded from the US Market in 1994.⁷⁸⁴ While many reasons exist on why the console failed, the most prevalent come from NEC's incapability to compete with the Genesis and Super Nintendo, as their game library was much stronger than the TurboGrafx.⁷⁸⁵ Furthermore, the games featured in their library did not appeal to the masses as their odd first and third party titles such as *Bonk's Adventure*, the NEC port of *Bomberman*, and *Fighting Street*, the oddly renamed *Street Fighter*, all failed to win support.⁷⁸⁶ However, one game that never made to the US market did manage to transcend the console's lack of popularity, *Akumajou Dracula: Chi no Rondo* or *Castlevania Rondo of Blood*, the fifth game in the *Castlevania* console series and the prequel to the PlayStation smash hit *Castlevania: Symphony of the Night*.⁷⁸⁷

The major second console company that tried to break into the US market from 1991-1995 was Atari. After the failure of the 7800 and the stigma of causing the North American Video Game Crash of 1983, Atari attempted twice more to rejoin the American video game market and regain its lost popularity. The first try came in October 1989 in the Atari Lynx, a handheld similar to the Nintendo Gameboy.⁷⁸⁸ After another video game developer, Eypx

⁷⁸³ Ibid., 433.

⁷⁸⁴ Ibid., 433, 449-50.

⁷⁸⁵ Ibid., 412.

⁷⁸⁶ "List of Turbograft-16 Games," *Wikipedia*, accessed January 20, 2016, https://en.wikipedia.org/wiki/List_of_TurboGrafx-16_games.

⁷⁸⁷ "List of PC Engine Games," *Wikipedia*, accessed January 20, 2016, https://en.wikipedia.org/wiki/List_of_PC_Engine_games; For further information please refer to the remake, Konami, "Castlevania Dracula X Chronicles" (Sony PSP Game), Konami, 2007.

⁷⁸⁸ Kent, *The Ultimate History of Video Games*, 419.

collapsed due to financial reasons, many of their products and ideas were up for sale.⁷⁸⁹ Created by the leaving Eypx duo RJ Mical and Dave Needles, one of these ideas, the Handy Game, was acquired by Atari and aptly renamed the Lynx.⁷⁹⁰ Despite rave reviews for the Lynx's ambidextrous design and quality LCD screen featuring color graphics, Atari could not keep up with Nintendo's Game Boy.⁷⁹¹ Furthermore, many stores did not carry the Lynx thanks to Atari's tattered reputation, lack of advertising, and alongside the \$199 price tag forced many to stay away from the product.⁷⁹² Within a year, retailers cleared the product from store shelves and the only way a person at the time could get one was through mail order.⁷⁹³

Following the failure of the Lynx, Atari went back to the drawing board and in November 1993, they released its new original console, the Atari Jaguar. Marketed as the first 64-bit console, but this was for flash and dash as under the hood rested a Motorola CPU and the two 64 bit RISC graphics processing chips, which equated the system to nothing more than a newer 16-bit console.⁷⁹⁴ On the topic Trip Hawkins founder of 3DO states, "Their CPU is 16 bit. Ours is 32 bit, and our coprocessors are lot more powerful doing the graphics and sound. Atari has trouble getting good sound during gameplay because of how they set up their bus structure. It's only because of an ambiguity in the law that they can even say 64 bit without having to explain what they mean."⁷⁹⁵

Furthermore, to push the 64 bit idea, they began a series of campaigns called "Do the Math" when comparing themselves to the 3DO and Sega Genesis claimed superiority over their 32 and 16 bit consoles, but ironically, those attacked called them out on their claim, but got no

⁷⁸⁹ Ibid., 416-7, 419.

⁷⁹⁰ Ibid.

⁷⁹¹ Ibid.

⁷⁹² Ibid.

⁷⁹³ Ibid., 419.

⁷⁹⁴ Ibid., 488.

⁷⁹⁵ Quoted in Kent, *The Ultimate History of Video Games*, 488.

response.⁷⁹⁶ With a starting price of \$249 in 1993, they were priced in-between the Genesis and Super Nintendo at roughly the \$100 price range, and the 3DO at a whopping \$699 dollars.⁷⁹⁷ Despite receiving a warm reception and numerous awards like "Best New Game System" (VideoGames Magazine), "Best New Hardware System" (Game Informer) and "1993 Technical Achievement of the Year" (DieHard GameFan), the system failed to capture the hearts of gamers.⁷⁹⁸ Again, several forces were at play here ranging from already established Nintendo, Sega, and the highly anticipated arrival Sony PlayStation in 1995 taking up much of the market interest to the Atari Jaguar's extremely weak video game library with the exception of *Tempest 2000* and *Alien vs. Predator*, forced potential customers away from the console.⁷⁹⁹ This lack of interest caused Atari executives scramble to save face as sales dropped dramatically between 1994 and 1995. Attempts to revive the console included a \$150 CD peripheral that sold roughly 50,000 units, but had few games to its name to a thirty-minute infomercial that ran during 1994.⁸⁰⁰ After two years and selling less than estimated 250,000 consoles worldwide, Atari finally gave up on the Jaguar in 1996 thus ending the company's final attempt to get back into the American home console market.⁸⁰¹

Another ill-fated system that deserves mentioning is the Interactive Multiplayer or 3DO for short. Founded by Trip Hawkins, according to Kent "The 3DO Multiplayer was the result of an interesting experiment in marketing economics, a partnership in which one company provided all the technology while another provided the manufacturing--both without paying each

⁷⁹⁶ "Atari Jaguar - 'Do the Math' Commercial" (video), 1993-1994, accessed March 3, 2014, http://www.youtube.com/watch?v=wCo_JrDNlXg; Kent, *The Ultimate History of Video Games*, 489.

⁷⁹⁷ Kent, *The Ultimate History of Video Games*, 489-90.

⁷⁹⁸ "Atari Jaguar Snares Top Awards a CES," *PR Newswire*, January 13, 1994.

⁷⁹⁹ Kent, *The Ultimate History of Video Games*, 489.

⁸⁰⁰ Herman, *Phoenix: The Fall & Rise of Videogames*, 223-4; Kent, *The Ultimate History of Video Games*, 490.

⁸⁰¹ Kent, *The Ultimate History of Video Games*, 490.

other."⁸⁰² Created by former Eypx employees RJ Mical and Dave Needle alongside Electronic Arts and company founder Trip Hawkins, the 3DO became one of the first fifth generation consoles for the American Market.⁸⁰³ With a 32-bit ARM 60 RISC CPU processor, three megabytes of memory, capable of producing nine to sixteen million pixels per second, a 16-bit stereo sound card, and all capped off with a CD-ROM drive capable of holding more data than a cartridge made the 3DO quite the machine for its time.⁸⁰⁴

Attracting interest and support from several uncanny console manufacture partners such as AT&T, Panasonic, Saiyo, and Gold Star to build the 3DO as well as and convincing game developers Activision, MicroProse, and LucasArts to create games for the new system Hawkins was ready to launch.⁸⁰⁵ With EA's backing in the fall of 1993, the 3DO got nationwide attention from many newspapers, which gave the newly established company enthusiastic praise, and Wall Street backing EA's founder by calling him, "the world's best salesman."⁸⁰⁶ Yet, some people still had their doubts. Seen as a dark horse against the two big powerhouses, the company published many statements to the *New York Times* in an attempt to boost sales by promoting the power of the console and its endless potential.⁸⁰⁷ By the near end of 1993, while the sold roughly 30,000 to 125,000 systems as \$700 and it gained a small cult following in electronic circles for

⁸⁰² Ibid., 484.

⁸⁰³ Ibid., 484-5.

⁸⁰⁴ "3DO Interactive Multiplayer," *Wikipedia*, accessed January 20, 2016, https://en.wikipedia.org/wiki/3DO_Interactive_Multiplayer; Kent, *The Ultimate History of Video Games*, 485

⁸⁰⁵ Kent, *The Ultimate History of Video Games*, 486.

⁸⁰⁶ Ibid.

⁸⁰⁷ John Markoff, "In Video Games, a Couple of U.S. Dark Horses Have Risky Appeal," *The New York Times*, November 30, 1993, accessed April 27, 2014, [http://www.lexisnexis.com.vortex3.uco.edu:2050/hottopics/Inacademic/?verb=sr&csi=6742&sr=BYLINE\(John\)%2Bw%2F3%2BMarkoff\)%2BAND%2BHEADLINE\(In+video+games%2C+a+couple+of+U.S.+dark+horses+have+ri+sky+appeal\)%2BAND%2BDATE%2BIS%2B1993-11-30](http://www.lexisnexis.com.vortex3.uco.edu:2050/hottopics/Inacademic/?verb=sr&csi=6742&sr=BYLINE(John)%2Bw%2F3%2BMarkoff)%2BAND%2BHEADLINE(In+video+games%2C+a+couple+of+U.S.+dark+horses+have+ri+sky+appeal)%2BAND%2BDATE%2BIS%2B1993-11-30); Trip Gabriel, "At Work With: Trip Hawkins; A Visionary On the Border of Movies and Microchips," *The New York Times*, October 27, 1993, accessed April 27, 2014, [http://www.lexisnexis.com.vortex3.uco.edu:2050/hottopics/Inacademic/?verb=sr&csi=6742&sr=BYLINE\(Trip\)%2Bw%2F3%2BGabriel\)%2BAND%2BHEADLINE\(On+the+border+of+movies+and+microchips\)%2BAND%2BDATE%2BIS%2B1993-10-27](http://www.lexisnexis.com.vortex3.uco.edu:2050/hottopics/Inacademic/?verb=sr&csi=6742&sr=BYLINE(Trip)%2Bw%2F3%2BGabriel)%2BAND%2BHEADLINE(On+the+border+of+movies+and+microchips)%2BAND%2BDATE%2BIS%2B1993-10-27).

its realistic graphics and ability to process music far better than the competition, yet this did not bring in the profits Trip Hawkins expected.⁸⁰⁸ By 1994, due to lack of wide spread appeal, stocks rapidly falling, and being too expensive, the company dropped the expensive \$700 price tag down to \$400 and twice again in 1995 to \$250 and then \$199 to match the newer systems coming out later that year.⁸⁰⁹

Furthermore, under Trip Hawkins business model, he did not want to create any of his own games for his home console and instead wanted third parties to make games for the 3DO.⁸¹⁰ This proved to be a fatal mistake. While having plenty of developers that signed on in 1993, as the popularity of the 3DO waned, developer interest in the console plummeted and potential costumers followed suit and stayed away.⁸¹¹ At the time then chairman of Nintendo of America Howard Lincoln stated, "They violated, in my opinion, the cardinal rule. And that is that you cannot rely on other people to make good games for your system. It's nice to think that they can, but these hardware systems need first-class software, and you have to do it yourself. The model just didn't work."⁸¹² Michal Katz former CEO of Sega of America also chimed in on the 3DO stating, "Why would more than one company want to compete against someone else with exactly the same product? Why would a retailer want to buy the same product from more than one company? Everyone in the industry thought that was ludicrous."⁸¹³ As a result, with such a weak video game library made up of third party software found on other platforms and no game

⁸⁰⁸ "3DO Sales Called Pleasing," *The New York Times*, November 20, 1993; Steven Kent, *The Ultimate History of Video Games*, 487.

⁸⁰⁹ "Company News; Shares of 3DO Fall by Another 18%," *The New York Times*, May 21, 1994; Herman, *Phoenix: The Fall and Rise of Videogames*, 220, 245; Kent, *The Ultimate History of Video Games*, 487.

⁸¹⁰ Kent, *The Ultimate History of Video Games*, 485.

⁸¹¹ Herman, *Phoenix: The Fall & Rise of Videogames*, 245.

⁸¹² Quoted in Kent, *The Ultimate History of Video Games*, 486.

⁸¹³ Quoted in Kent, *The Ultimate History of Video Games*, 486.

developer interest, the 3DO struggled to make a name for itself despite having the backing of EA.

Finally, advancing technology that especially in the CD-ROM field caught up with the then outdated 3DO. With newer consoles such as the Sony PlayStation and Sega Saturn coming out in 1995 that featured better graphics and processing power in comparison to the 3DO, Sony and Sega essentially ended any chance for Hawkins 32 bit console to shine.⁸¹⁴ In one final gasp to regain a foothold in the US market, work commenced on a 64-bit console more formally known as the M2 project.⁸¹⁵ Nevertheless, this never came to fruition as Matsushita bought out 3DO in 1996 for \$100 million and then promptly closed the hardware division in 1997 thus writing the final page in the consoles short life span.⁸¹⁶

In retrospect, the era of the bit wars during the fourth generation of video games accomplished many things. First, for the consoles, it established Sega as one of the great video game makers and publishers of the 1990s. Through their games, they managed to create publish or port influential titles onto the Genesis like *Sonic the Hedgehog*, the early *Lunar* saga games, *Streets of Rage II*, *Daytona USA*, *Altered Beast*, *Golden Axe*, *Virtua fighter*, and *Castlevania Bloodlines*.⁸¹⁷ They also manage to not only break Nintendo monopoly on the industry, but also hold onto the market lead up until late 1994, and even then, some sources claim that they still did not lose the majority of the market until the unsuccessful launch of the Sega Saturn the following year.⁸¹⁸ Finally, though unsuccessful, Sega hardware experimentation led the console and game

⁸¹⁴ Kent, *The Ultimate History of Video Games*, 520-1.

⁸¹⁵ *Ibid.*, 521.

⁸¹⁶ Herman, *Phoenix: The Fall & Rise of Videogames*, 267-8, Kent, *The Ultimate History of Video Games*, 521.

⁸¹⁷ "Konami Games," *IGN*, accessed September 15, 2015, <http://www.ign.com/companies/konami>; "Sega Games," *IGN*, accessed April 25, 2016, <http://www.ign.com/companies/sega>.

⁸¹⁸ For further reference, please review Blake Harris, *Console Wars: Sega, Nintendo, and The Battle That Defined a Generation*, It Books, 2014; Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Sam Pettus, *Service Games: The Rise and Fall of Sega: Enhanced Edition*, CreateSpace Independent Publishing Platform, 2013.

developer to become arguably one of the first major adopters of CD-ROM technology for home consoles in 1992, forayed into the 32 bit territory with the 32X, and even dabbled in bring Sega games over the phone line via the Sega channel.⁸¹⁹

Nintendo on the other hand, used this time to humble itself. After losing its top spot in the United States market and the fight to retake the crown, Nintendo never lost sight in what originally made them successful, making and publishing great games. Today titles such as the critically acclaimed *Super Metroid* and *Legend of Zelda: A Link to the Past* are seen as arguably some of the greatest games ever made according to both critics and fans alike. Experimental titles made during this time such as *F-Zero*, *Star Fox*, and *Super Mario Kart* became their own established series because of their success during the bit wars.⁸²⁰ Even the cult classic *Earthbound* deserves praise as its unique quirks and gameplay went on to inspire countless creators of more recent games indie developers. Yet, for all their success and shortcomings, the bit wars taught Nintendo to diversify their game library as much as possible while being creative with their new and old IPs and marketing to a wide demographic. Through this wisdom drew much ire from hardcore gamers, by placing quality over quantity on the top video games they ensured their survival even today as many today parallel Nintendo to Disney.

Computer video games, on the other hand, remained largely behind their console counterparts during the 1990s. Despite having notable games like *Civilization*, *Sim City*, and *Secret of Monkey Island*, computer games did possess the popular appeal or iconic characters featured on home consoles. In ironic hindsight however, controversial games such as id Software's *Doom* and *Wolfenstein 3D* managed brought mass attention to computer games with

⁸¹⁹ For further reference, please review Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

⁸²⁰ Nintendo EAD, "F-Zero" (Super Nintendo Game), Nintendo, 1991; Nintendo EAD, "Super Mario Kart" (Super Nintendo Game), Nintendo, 1992.

their fast, challenging gameplay and at the time over the top violence making it slightly controversial. Through the above iconic titles alongside rapidly evolving technology pushed interest for improving games on the PC thanks to innovations such as Windows 95 and the rise of the commercial Internet.⁸²¹ This finally came to fruition during the late 1990s and early 2000s with *Half-Life*, *System Shock 2*, *Fallout*, *Quake*, and epically *the Sims* taking top billing and firmly establishing PC gaming as a legit medium of the new millennium.⁸²²

Conversely, the coin operated arcade machines, which found success in the fighting craze fad slowly started to fade away during the late 1990s as the medium declined in popularity. Granted, there were several great arcade-fighting games like *Marvel vs Capcom*, *Street Fighter III: Third Strike*, *King of Fighters '99*, *Street Fighter Alpha 3*, and *Capcom vs SNK: Millennium Fight 2000* that came out to popular appeal with fans from 1996-2001, yet general interest in the arcades themselves dissipated.⁸²³ The reason for this was at the time, the late fifth and early sixth generation consoles could easily replicate the arcade experience. Furthermore, it was much more cost effective to produce a game on CD and sell it directly to the consumer at roughly \$50 to \$70 than pay thousands of dollars for an arcade cabinet that had no guarantee that the cost of making the machine will break even. Although not entirely dead, arcade machines both new and old still can be found in theaters, some specialty restaurants, retro arcades and in private collections. Notwithstanding though, while their glory days have long since passed, their legacy however, still lives on today.⁸²⁴

⁸²¹ Herman, *Phoenix: The Fall and Rise of Videogames*, 267-8, Kent, *The Ultimate History of Video Games*, 519.

⁸²² Mott, ed., *1001 Video Games You Must Play Before You Die*, 331, 365, 411.

⁸²³ *Ibid.*, 368, 386, 432.

⁸²⁴ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Matt Fox, *The Video Games Guide: 1,000+ Arcade*,

The bit wars period from 1991 to 1995 brought many innovations ranging from new games, consoles, ideas, and even new IPs to the video game industry. Yet, in the chaos that came from the battle between Sega, Nintendo, and countless others, a wave of concern came not from leaders of the industry, but the parents of targeted consumers. Worry became fear as many adults not familiar with video games reacted harshly when seeing some of these games first hand. Fear became panic as parents saw a man rip another person's head off in bloody fashion and seeing a realistic woman being abducted by a masked group of men. Panic begat a cry and this cry caught the attention of the worst people imaginable for the video game industry. It was not newspapers, local media outlets, national programs such as *60 Minutes*, or parental groups geared at protecting children, it was Washington DC, and from this unique encounter, people would never see video games in the same light again.

Chapter 4

Games on Trial: The Hearing on Violent Video Games and the Creation of the Video Game Rating System

"I was surprised when Howard Lincoln and Bill White went after each other like that. I thought that it looked awful. And I was surprised at the intensity of it. I guess it gave me this message that this was obviously big business."⁸²⁵- Senator Joe Lieberman

The year 1993 in the United States serves as memorable year for the country. On February 26, Islamic terrorists killing six and injuring thousands bombed the north World Trade Center tower marking one of the first modern terrorist attacks.⁸²⁶ Mexico, Canada, and the US signed the North American Free Trade Agreement (NAFTA) into law, which authorized free trade between the three nations.⁸²⁷ The standoff at Waco with US agents and the Branch Davidians at Waco became a media sensation that ended in tragedy as the compound caught fire killing David Koresh and his followers.⁸²⁸ Conversely, the Timothy McVeigh and Terry Nichols used the attack as a primary motivator for their bombing of the Alfred P. Murrah Federal Building two years later.⁸²⁹

American popular culture, on the other hand, also grew during the year. In movies, Oscar winner *Schindler's List*, *Jurassic Park*, *Mrs. Doubtfire*, and *Groundhog Day* grabbed top box office mentions for 1993.⁸³⁰ In television, Fox debuted two extremely popular series, the *X Files*

⁸²⁵ Quoted in Kent, *The Ultimate History of Video Games*, 477.

⁸²⁶ "1993," *Wikipedia*, last modified April 13, 2016, accessed April 13, 2016, <https://en.wikipedia.org/wiki/1993>; "1993 Trivia and Fun Facts," *Pop Culture Madness*, accessed April 13, 2016, <http://www.pop-culture.us/Annual/1993.html>; Gary West, "1993 Review," *Mr. Pop Culture/Mr. Timeline*, accessed April 13, 2016, <http://www.mrpopculture.com/1993#ts>.

⁸²⁷ *Ibid.*

⁸²⁸ *Ibid.*

⁸²⁹ *Ibid.*

⁸³⁰ *Ibid.*

and *Mighty Morphin Power Rangers* which both shows became culturally significant, capturing the attention of both children and adults nationwide thus leading to multiple season renewals and generating millions in revenue from toys, memorabilia, and a future movies.⁸³¹ American sports fans saw the Chicago Bulls win the NBA Championship and the first retirement of superstar Michael Jordan.⁸³² Furthermore, the Dallas Cowboys defeated the Buffalo Bills in Super Bowl XXVII while the Toronto Blue Jay's repeated as World Series Champions.⁸³³

While these momentous experiences unfolded, other subtle events lurked in the shadows of both pop culture and American history at this time, as some of these affairs do not appear in typical history books. Conversely, unlike pop culture history, the events questioned in this chapter did not have the cultural impact like many more popular stories during 1993-4 and fell to the wayside. However, in hindsight, these tribulations not only shaped the future of the video game industry, but serve as the influential genesis point for many arguments found in gaming today from censorship, is gaming an art form, and video game industry's claim to First Amendment rights.

During the early 1990s, video games had reached a popular plateau of success. The bit wars divided a fan base as rival companies commercials boasted how many bits their consoles possessed and why the competition games, characters, and consoles were inferior. The home computer video game market distinguished their then niche market by producing a wide array of software choices for both children and adults that included a diverse library of games ranging from educational to pornographic. Finally, the arcades machines drew people with unique gimmicks and concepts during the 1990s. The VR reality fad for example, which put the player

⁸³¹ Ibid.

⁸³² Ibid.

⁸³³ Ibid.

into a pseudo immersive world where they could "intimately interact" with the digital world, became quite popular. Furthermore, while these entertainment machines also boasted a variety of other games genres, the white-hot fighting game craze featuring the likes of *Street Fighter*, *Mortal Kombat*, and *King of Fighters* aided enticing gamers to return to the arcades for a unique experience that the competition could not replicate at this point. Nevertheless, home computer, console, and arcade game developers had one thing in common; they regularly experiment with the video game content.⁸³⁴

Through this great experimentation of the 1990s, development teams refreshed old concepts or created new ones in the search of the next great game or franchise. Inspired by games like *Dungeons and Dragons* and text-based adventures, the Multi-User Dungeons or MUDs of the late 1980s and early 1990s paved the way for the modern Massively Online multiplayer games.⁸³⁵ The advent of the early survival horror genre grew as *Alone in the Dark* and later *Clock Tower* made a small step in popularized them before going mainstream with *Resident Evil* and *Silent Hill*.⁸³⁶ Furthermore, Role Playing Games (RPG) began catching on in the United States. Though not as popular until the late 1990s with *Final Fantasy VII* and *Pokémon Red* firmly establishing the genre stateside, early RGS like *System Shock*, *Earthbound*, *Chrono Trigger*, *Dragon Warrior*, *Phantasy Star II* onward, and the SNES version of *Final*

⁸³⁴ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Sam Pettus, *Service Games: The Rise and Fall of Sega: Enhanced Edition*, CreateSpace Independent Publishing Platform, 2013; Tony Mott, ed., *1001 Video Games You Must Play Before You Die*, Universe, 2010.

⁸³⁵ For further reference, please review Brad King and John Borland, *Dungeon's and Dreamers: The Rise of Computer Game Culture from Geek to Chic*, McGraw-Hill, 2003.

⁸³⁶ Capcom, "Resident Evil" (Sony PlayStation Game), Capcom, 1996; Human Entertainment, "Clock Tower" (Super Famicom Game), Human Entertainment, 1995; Infogrames, "Alone in the Dark" (MS-DOS Game), Infogrames, 1992 Konami, "Silent Hill" (Sony PlayStation Game), Konami, 1999.

Fantasy III serve as notable examples of the genres early console and home computer roots.⁸³⁷

Even and *Virtua Racing* all made strides in expanding the genre during the fourth generation of games. As the examples could go on with racing games such as *Super Mario Kart*, *Daytona USA*, *Ridge Racer*, *Need for Speed*, and even flight games with Namco's *Ace Combat* series the 1990s brought much experimentation to the video game industry, but they also did something unintentionally as well.⁸³⁸

As the competition grew, games started taking more bold chances to appeal to a growing audience, but maintain a child friendly image. The children who first played the NES were now either teenagers or adults now sought more mature titles than their younger counterparts. This niche filled quickly as increasingly more violent action games for the home computer, consoles, and arcades while still small produced some of the more memorable titles of the decade. Despite expanding the demographic, in a culture where children want to play the "older cool kids" games as a rebellious act, being cool or simple curiosity quickly became a problem as they too sought out these software titles. Ironically, this begs the question of why violence and children became associated in the first place.⁸³⁹

The 1990s spotlighted violence in American culture as the issue fell into a unique taboo category. While nothing new, movies, television, and comics made during the 1950s onwards

⁸³⁷ APE/Hal Laboratory, "Earthbound" (Super Nintendo Game), Nintendo, 1995; Chunsoft, "Dragon Warrior" (Nintendo Entertainment System Game), Nintendo, 1986; Game Freak, "Pokémon Red" (Game Boy Game), Nintendo, 1998; Looking Glass Technologies, "System Shock" (MS-DOS Game), Origin Systems, 1994; Sega, "Phantasy Star II" (Sega Genesis Game), Sega, 1990; Square, "Chrono Trigger" (Super Nintendo Game), Square, 1995; Square, "Final Fantasy II" (Super Nintendo Game), Square, 1991; Square, "Final Fantasy III" (Super Nintendo Game), Square, 1994; Square, "Final Fantasy VII" (Sony PlayStation Game), Square, 1997.

⁸³⁸ Namco, "Ace Combat 04: Shattered Skies" (PlayStation 2 Game), Namco, 2001; Namco/Arsys Software, "Air Combat" (Sony PlayStation Game), Namco, 1995; Namco, "Ridge Racer" (Arcade Game), Namco, 1993; Nintendo EAD, "Super Mario Kart" (Super Nintendo Game), Nintendo, 1992; Pioneer Productions/EA Canada, "The Need For Speed" (3DO Game), Electronic Arts, 1994; Sega AM2, "Daytona USA" (Arcade Game), Sega, 1994; Sega AM R&D #2, "Virtua Racing" (Sega Genesis Game), Sega, 1994.

⁸³⁹ For further reference, please review David Sheff, *Video Games: A Guide for Saavy Parents*, Random House, 1994; Steven A. Schwartz, Ph.D., and Janet Schwartz, *Parent's Guide to Video Games* Prima Lifestyles, 1994.

featured rather violent content such as graphic killing via shooting, stabbing, or wonton destruction.⁸⁴⁰ These concepts and tropes have meet intense scrutiny as awareness groups and congress stepped up efforts to curb violence in popular media.⁸⁴¹ Why did they do this? Cliché as it may seem, answer after years of study and research remains the same, to protect the children.⁸⁴² Strangely, American culture seemingly dictates that children are the most vulnerable and most susceptible to suggestion from pop culture sources via music, movies or television that in turn would pervert the young.⁸⁴³ This paranoia fueled by current events such as the Persian Gulf War in 1991 the LA Riots a year later and the 1999 columbine school shootings led many to scrutinize America's violence culture.⁸⁴⁴

As the video games industry grew from fad to legitimate entertainment media, many began looking at them with increasing scrutiny. Done throughout the history of gaming, the early 1990s in particular brought out the worst, as many parents and uninformed non-gamers believed that the video game corporations knowingly created promoted and sold violent games to children. Conversely, these same groups ignored the fact that many adults also played video games because popular consensus established that playing games as an exclusive children's hobby. Finally, three violent games in particular, *Lethal Enforcers*, *Night Trap*, and *Mortal Kombat* coupled with a nonstop media coverage fueled rally cries through constant bombardment of negative press exposure brought attention to the video game industry. Hearing these said cries, the US Congressmen Joe Lieberman and Herb Kohl eventually demanded these companies address the violence issue or face possible government regulation. Through these trials from

⁸⁴⁰ Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: Call to Action Against TV, Movie, and Video Game Violence*. Rev ed., 2nd ed., (New York, NY: Harmony, 2014), 55-6, 66.

⁸⁴¹ *Ibid.*, 62-5, 179-85.

⁸⁴² *Ibid.*, 2-5.

⁸⁴³ *Ibid.*

⁸⁴⁴ *Ibid.*, 7.

December 9, 1993, and July 29, 1994, a new era of video games forged themselves from the fires controversy, which would shape all of modern gaming to come.⁸⁴⁵

In chapter 4, *Game on Trial: The Hearing on Violent Video Games and the Creation of the Video Game Rating System* covers the question of how violence in video games influenced its perception during the early 1990s and its lasting impact that followed. The following asks why congress decided to address the issue of video game violence in the first place. Answering this query, several key factors, and events aided this push. This included America's ongoing war against violent pop culture, evaluating the role of the video game industry played in pushing questionable games such as *Lethal Enforcers*, *Night Trap*, and *Mortal Kombat* and what roles video game industry itself played in regulating their content for the consoles, home computer, and arcade game markets. Finally, the chapter evaluates the significance of the December 9 1993, March 4, 1994, and June 29, 1994 joint hearings and what it took for the video game industry to come together to create a universal ratings system. Yet, before we address any of the above, we must address the unique love hate relationship between violence and the United States citizen.⁸⁴⁶

Violence, serves as a way for an organism defense mechanism. These actions by either tooth and claw, toxins, natural agility, barbs, or other adaptations allow protection for many of earth's diverse ecosystems. Accepted and slightly feared, the terms nature, beauty, evolutionary, life, mysterious, and multiple other words seemingly describe this aspect of nature in both popular culture and scientific findings, giving it a unique niche in people's psyche. Glorified on both the silver and movie screens, the horror genre utilizes animals or plants as the central

⁸⁴⁵ For further reference, please review, Kent, *The Ultimate History of Video Games*, Prima, 2001; *The New York Times* March-December 1993 and January-December 1994; US Senate, *Rating Video Games: A Parent's Guide to Games*, Government Printing Office, 1995.

⁸⁴⁶ Ibid.

antagonists pitting them against the hapless human protagonists or victims. In nature shows staring such beloved conservationists like the late Steve Irwin, viewers may ponder when or what animal is finally going to get the host as they often get in harm's way of many dangerous creatures. Finally, many people and scientists just accept natural violence in both animals and plants as a way for them to eat and protect themselves and humans find this aspect strangely exotic, yet, this cannot be said with one particular species.⁸⁴⁷

Conversely, however, human violence is not seen with the same reverie as its natural kingdom counterpart. As a species in general, humanity sees itself as one of the more violent species on Earth. With countless wars fought for conquest, religion, or ideology, millions if not billions have perished in the roughly five thousand years of known recorded history. This would indicate that humans are savages with access to advanced technology and knowledge, but at the same time, humans or more likely modern societies claim they advocate peace. Many stable countries often associated with republic and democratic ideals abhor the use of violent measures such as war, saving it as a last resort especially after the carnage and reactions seen in the past two world wars and the Vietnam War.⁸⁴⁸

Certain religious texts also seem to point towards peace and cooperation with your fellow man. Despite their tendency to fight for their religious beliefs, the Abrahamic faiths of Judaism, Christianity, and Islam for example all have references to helping the needy, trying to live in

⁸⁴⁷ For further reference, please review *Deep Blue Sea*, Directed by Renny Harlin, (1999; Burbank: CA: Warner Bros. Studios), 2010. DVD; *Jaws*, Directed by Steven Spielberg (1975; Universal City, CA: Universal, 2000), DVD; *Little Shop of Horrors*, Directed by Frank Oz (1986; Burbank: CA: Warner Bros. Studios, 2000), DVD; *The Birds*, Directed by Alfred Hitchcock (1963; Universal City, CA: Universal, 2002), DVD; *The Crocodile Hunter (Steve's Story/Most Dangerous Adventures/ Greatest Crocodile Captures*, Directed by John Stainton (2001; Newbury Park, CA: Family Home Entertainment, 2001), DVD.

⁸⁴⁸ Alexander Moseley, "Just War Theory," *Internet Encyclopedia of Philosophy*, accessed April 13, 2016, <http://www.iep.utm.edu/justwar/>.

harmony with one another, and a concept of heaven and hell.⁸⁴⁹ The eastern religions of Hinduism and Buddhism believe in Karma, Dharma, reincarnation and that if you do good deeds throughout your life you ascend to a high existence, yet on the contrary, if one sins they will descend into a lower existence.⁸⁵⁰

Finally, human ideas on violence seemingly exist in a grey area. On one hand, many see violence as simply barbaric. While reasons for this mentality are endless, one popular belief claims humans often elevate themselves as a higher species to distinguish the species from the other animals. Classifying violence as animalistic and barbaric, people highlight intelligence with peace, yet acts of violence are seen with repugnance and savagery. On the other hand, violence seems to have popular appeal especially in forms of entertainment throughout history. In ancient Rome, the Roman citizens enjoyed the gladiator fights and from the Middle Ages up until the Victorian England era, people saw public execution as a form of entertainment.⁸⁵¹ Even today, throughout the twentieth century the rise of violent sports such as football, rugby, hockey, and boxing have taken the place of violent mass entertainment, but how does tie into the subject at hand.⁸⁵² To understand the above we need briefly look at two other areas, American society relationship with violence and readdress the success of video games.

⁸⁴⁹ “Comparison Table between Christianity, Islam and Judaism,” *Christianity in View*, last modified March 7, 2016, accessed April 13, 2016, <http://christianityinview.com/xncomparison.html>; David Arnow, Mary C. Boys, and Muhammad Shafiq, “What is your tradition’s approach to charity (for Christians), Zakat (for Muslims), or Tzedakah (for Jews)?” EXODUS CONVERSATIONS, accessed April 13, 2016, <http://exodusconversations.org/questions/what-is-your-traditions-approach-to-charity-for-christians-zakat-for-muslims-or-tzedakah-for-jews/>.

⁸⁵⁰ “Describe the Hindu & Buddhist Belief of Reincarnation,” *OPPOSINGVIEWS*, accessed April 13, 2016, <http://people.opposingviews.com/describe-hindu-buddhist-belief-reincarnation-5574.html>.

⁸⁵¹ For further reference, please review Harold Schechter, *Savage Pastimes: A Cultural History of Violent Entertainment* St. Martin's Press, 2005; “Violence for Entertainment through History,” *Changes in Human Nature Through History*, September 23, 2010, accessed April 13, 2016, <http://naturechange-lynn.blogspot.com/2010/09/violence-for-entertainment-through.html>.

⁸⁵² “Football injuries Data from the 2004/05-2008/09 Seasons,” *NCAA*, accessed April 13, 2016, https://www.ncaa.org/sites/default/files/NCAA_Football_Injury_WEB.pdf; James Johnson, “11 Horrific Boxing Injuries and Deaths From The Last 100 Years,” *Inquisitr*, November 22, 2013, accessed April 13, 2016, <http://www.inquisitr.com/959533/11-horrific-boxing-injuries-and-deaths-from-the-last-100-years/>; Matthew Whitty,

The United States has a love-hate relationship with the issue of violence. Its love aspect comes from the entertainment sector as these types of spectacles gets the crowds going, but can severely harm a combatant. A football match for example can lead to permanent damage from concussions via repeated blows to the head, the potential breaking the numerous bones in the arms or legs and in rare cases cardiac arrest.⁸⁵³ Hockey possesses a high chance that a player can receive injuries anywhere from few cuts, fracturing bones, or a possible broken neck, while boxing could easily disfigure someone's face or even result in death⁸⁵⁴

In both the home and in the movie theaters, violence came in spades especially after the Second World War when the country acquired a taste for more dramatic tales. The four decades (1945-75) that followed came with its own fair share of comedies, horror, war, action, sci-fi, and westerners, and each of them had its share of questionably violent moments. Cartoons, such as *Tom and Jerry* uses slapstick cartoonish fights between two main characters that feature them attack each other via blunt objects and other weapons.⁸⁵⁵ The 1990s alphabet crime dramas made famous by the *Law and Order* franchise shifted targets from the more police oriented shows of the 1970s *Dragnet*, *Chips*, and *Adam-12* that focus on the day-to-day patrols of the protagonists in favor of increasing the drama by having the cast try to solve homicides as its primary focus.⁸⁵⁶ Even shows focused on drama and mystery used the act of major violence as a way to increase

"Top 15 Worst Injuries In NHL History," *TheSportster*, April 09, 2015, accessed April 13, 2016, <http://www.thesportster.com/hockey/top-15-worst-injuries-in-nhl-history/>.

⁸⁵³ "Football injuries Data from the 2004/05-2008/09 Seasons," *NCAA*, accessed April 13, 2016, https://www.ncaa.org/sites/default/files/NCAA_Football_Injury_WEB.pdf.

⁸⁵⁴ James Johnson, "11 Horrific Boxing Injuries and Deaths From The Last 100 Years," *Inquisitr*, November 22, 2013, accessed April 13, 2016, <http://www.inquisitr.com/959533/11-horrific-boxing-injuries-and-deaths-from-the-last-100-years/>; Matthew Whitty, "Top 15 Worst Injuries In NHL History," *TheSportster*, April 09, 2015, accessed April 13, 2016, <http://www.thesportster.com/hockey/top-15-worst-injuries-in-nhl-history/>.

⁸⁵⁵ *Tom and Jerry: Spotlight Collection Vols. 1-3*, Directed by William Hanna and Joseph Barbera (1940-58; Burbank, CA: Warner Home Video, 2007), DVD.

⁸⁵⁶ "List of Police Television Dramas," *Wikipedia*, March 10, 2016, accessed April 14, 2016, https://en.wikipedia.org/wiki/List_of_police_television_dramas#C.

ratings as in the case of *Dallas* in the now famous “Who Shot J.R.” angle and its payoff episode “Who Done It” watched by 83 million stateside and an estimated 380 million worldwide.⁸⁵⁷

In the 1970s through the 1990s, Americans threshold for violence increased and Hollywood quickly obliged especially for the popular action films of the 1970s and 1980s. *Conan the Barbarian*, *Blade Runner*, *Braveheart*, *Schindler's List*, *Death Wish* series, and *Full Metal Jacket* all began pushing the comfortable limits surrounding violent moments and exploring bloodier, realistic, and gory themes.⁸⁵⁸ Most notably the 1980s it saw the rise of the modern action movies through the *Terminator*, *Die Hard*, *Rambo First Blood*, *Raiders of the Lost Ark* and the first two movies in the *Alien* franchise become box office sensations.⁸⁵⁹ Lastly, the horror genre also shifted gears. While the Rod Sterling’s and Alfred Hitchcock’s remained timeless, the controversial slashers *Friday the 13th* series, *A Nightmare on Elm Street* series, and more bloodier horror movies in general took off in popularity much to the critics chagrin.⁸⁶⁰ Nevertheless, despite the violence seen in popular media, a growing contingency was also established, leading to the counterarguments and the hate aspect surrounding violence.

While having many different branching origins and goals, one argument continues to remain strong to this day, to protect the children. Seen as the most vulnerable part of American

⁸⁵⁷ Harry Hurt III, “Larry Hagman’s Curtain Call,” *Texas Monthly*, June 2012, accessed April 14, 2016, <http://www.texasmonthly.com/articles/larry-hagmans-curtain-call/>.

⁸⁵⁸ Information found in part 5 in Tim Dirks, “The History of Film The 1970s The Last Golden Age of American Cinema (the American 'New Wave') and the Advent of the Blockbuster Film,” *AMC Filmsite*, accessed April 13, 2016, <http://www.filmsite.org/70sintro5.html>; Information found in part 4 & 5 in Tim Dirks, “The History of Film The 1980s Teen-Oriented Angst Films and the Dawn of the Sequel, with More Blockbusters,” *AMC Filmsite*, accessed April 13, 2016, <http://www.filmsite.org/80sintro.html>; Information found in parts 2 & 4 Tim Dirks, “The History of Film The 1990s The Era of Mainstream Films and 'Indie' Cinema, the Rise of Computer-Generated Imagery, the Decade of Re-makes, Re-releases, and More Sequels,” *AMC Filmsite*, accessed April 13, 2016, <http://www.filmsite.org/90sintro.html>.

⁸⁵⁹ Information found in parts 1, 3, 4, & 5 in Tim Dirks, “The History of Film The 1980s Teen-Oriented Angst Films and the Dawn of the Sequel, with More Blockbusters,” *AMC Filmsite*, accessed April 13, 2016, <http://www.filmsite.org/80sintro.html>.

⁸⁶⁰ Tim Dirks, “Three Great Horror Film Franchises,” *AMC Filmsite*, accessed April 13, 2016, <http://www.filmsite.org/horrorfilmfranchises.html>.

society, American kids since the 1950 have been placed in a special protective category. Wanting to build a better life for their children, parents and several notable groups began an ongoing crusade have made it their mission to monitor and or aid in the elimination of obscene materials found in popular media. Extremely vocal, but not well known, groups like the Parent Teacher Association during the 1980s often get around holding protests, present reports, and express their views through various news sources willing to cover their stories.⁸⁶¹ This constant voice's argument however receives constant validation, as "scholarly" study after study pointing to the negative impacts of this type of media only validated their stance.⁸⁶²

Finally, the changing cultural history of the United States itself acts as a decisive factor towards the love-hate relationship with violence. With radical change spurred on by the Civil Rights Movement, Second Wave Feminism, and the partial growing awareness for other cultures living in the US borders all led to the country asking questions about itself. While much of the argument seems to fall under the growing debate of political correctness, as the nation faces its own past ghosts and attempting rectifying past mistakes, many seem to want and completely forget these transgressions and outright censor inappropriate racial content. This caused many direct changes such as books featuring biased racial depictions to be taken from library shelves, reprints of literature featuring slurs and abhorring of teaching controversial historical racial depictions.⁸⁶³ Conversely however, adding fuel to the controversy, other ethnic races such as the African American communities became more vocal and adopted racial slurs such as the N-word

⁸⁶¹ "Video Game Controversies," *Wikipedia*, last modified April 22, 2016, accessed April 26, 2016, https://en.wikipedia.org/wiki/Video_game_controversies#Public_debate_in_US.

⁸⁶² For further reference, please review Lawrence Kutner, Ph.D., and Cheryl Olson, Sc.D., *Grand Theft Childhood: The Surprising Truth About Violent Video Games*, Simon & Schuster, 2008; Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., Harmony, 2014

⁸⁶³ Autumn Gould, "Book Censorship," Lehigh University, 2010, accessed April 14, 2016, <http://www.lehigh.edu/~infirst/bookcensorship.html>.

in their music and culture, yet these are often ignored giving it a sort of blind acceptance in American culture.⁸⁶⁴

On the other hand, pop culture since the 1950 have also influenced the direction of American society. The music for example after the Second World War got much more risqué with such popular bands as Kiss, Nirvana, Black Sabbath, Motley Crue, The Police, Led Zeppelin, and the NWA whose lyrics reflected the times with themes ranging from drug use to sex to disrespecting the police.⁸⁶⁵ Individuals like Jimi Hendrix defined an era musical rebellion, Weird Al who made his fame by comically parodying famous songs and Michael Jackson who broke away from the Jackson 5 becoming the controversial but extremely successful king of pop music. Furthermore, the music video during the 1980s served as the primary focus of MTV, which in itself acted as its own mini phenomenon with its own slogan "I Want My MTV," and sung about in Dire Straits 1987 hit Money for Nothing.⁸⁶⁶

Now was the social movements all good, no, was all social movements bad, no. Every single social change possessed both positives and negatives. The sexual movement while promoting sexual freedom, breaking conventional one-lifetime partners, and promoting the growth of casual sex coincidentally aided the spread of certain STDs, which in turn led to fears about certain viruses such as HPV and the much-feared AIDS/HIV. The Civil Rights movements while trying to create a bridge between races and end civil racism did not go away overnight and

⁸⁶⁴ Sean Price, "Straight Talk about the N-Word," *Teaching Tolerance* no. 40 (Fall 2011): 46-8, accessed April 14, 2016, <http://www.tolerance.org/magazine/number-40-fall-2011/feature/straight-talk-about-n-word>.

⁸⁶⁵ While numerous in scope, for further information please consult such songs as "BLACK SABBATH LYRICS 'Snowblind'," *azlyrics*, accessed April 14, 2016, <http://www.azlyrics.com/lyrics/blacksabbath/snowblind.html>; "N.W.A. LYRICS 'Fuck Tha Police'," *azlyrics*, accessed April 14, 2016, <http://www.azlyrics.com/lyrics/nwa/fuckthepolice.html>.

⁸⁶⁶ For further reference, please review Mark Knopfler, "Money for Nothing" (music video), directed by Steve Barron, posted on MTV 1985, accessed April 14, 2016, <https://www.youtube.com/watch?v=IAD6Obi7Cag>; Rob Tannenbaum and Craig Marks, *I Want My MTV: The Uncensored Story of the Music Video Revolution*, Revised ed. Plume, 2012.

even in 2014 with the Ferguson Riots show that even today that racial discrimination still exists in America. Yet, the main question we need to ask is how and why does the above have to do with video games in North America during the early 1990s?

Much like the above examples, video games possess a certain pull in society especially in the United States. One of the possible greatest technological influences, alongside TV, Radio, and later the Internet, electronic gaming since the advent of *Pong* in 1972 influenced how people spend their recreation time. By entrancing them in a fictional world, rocking to one of several memorable original sound tracks, or simply admiring its artistic value, these simple games did not act as just a one-note attraction; they make people remember them via the experience. From kids to the elderly, video games can literally be pick up by anyone willing to give it a chance, but this was not the mentality of the late 1980s and throughout the 1990s.⁸⁶⁷

When people and some scholars think about video games, they give a rather present outlook. Much like the above paragraph, nostalgic and some contemporary opinions seem to utilize rosy words when describing the topic historically, but in hindsight, the truth could not be further apart. During the 80s and 90s, the consensus seems to waver. On one hand, the more youthful generations from kids to college age roughly anywhere from the 1970s onwards seemed to have no problems with this form of media. Conversely, those growing up during the earlier to mid twentieth century do not possess the opinions of their successors. In their eyes, many viewed video games as a dangerous distraction that desensitized those who played. Though many problems did exist in the all-encompassing theme of electronic gaming such as sexualization and

⁸⁶⁷ For further reference, please review David Sheff, *Video Games: A Guide for Saavy Parents*, Random House, 1994; Steven A. Schwartz, Ph.D., and Janet Schwartz, *Parent's Guide to Video Games* Prima Lifestyles, 1994; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

gender roles, the main problem growing during the early 1990s came from the issue of violence.⁸⁶⁸

As already mentioned, the theme of violence served a common trope in literature and in history, but in the case of video games, many could not grasp the enigma the presented. At the time, the common consensus viewed gaming an exclusive activity of children. Many titles such as Super Mario and Pac-Man seemed to point towards a younger demographic, while advertisements published from 1985-1991 also made this point.⁸⁶⁹ Furthermore, newspapers and TV news affiliates kept pounding the connection between video games and children thus creating a myth of the video game market exclusive attitude towards the young.⁸⁷⁰ Despite this misconception, several titles were not suitable for kids and more geared for teens and adults such as *NARC*, *Splatter House*, and numerous "adult" oriented PC titles like *Leisure Suit Larry in the Land of the Lounge Lizards*.⁸⁷¹

Finally, another noteworthy facet of this argument comes from a surprising source, Virtual Reality. During the 1970s onward, the US military began utilizing virtual technology to train pilots, vehicle operators, and even soldiers. The fruits of this labor came in 1991 during the First Persian Gulf War. Published in 1992, the book *It Doesn't Take a Hero* when comparing the eerily similar computer simulation to the real thing General H. Norman Schwarzkopf stated,

⁸⁶⁸ For further reference, please review David Sheff, *Video Games: A Guide for Saavy Parents*, Random House, 1994; Eugene F. Provenzo Jr., *Video Kids: Making Sense of Nintendo*. Harvard University Press, 1991; Jason R. Rich, *A Parent's Guide to Video Games*. Post Falls, ID: DMS, 1991; Steven A. Schwartz, Ph.D., and Janet Schwartz, *Parent's Guide to Video Games* Prima Lifestyles, Prima Lifestyles, 1994.

⁸⁶⁹ For further reference, please review Steven Kent, *The Ultimate History of Video Games*, Prima, 2001; *The New York Times* March-December 1993 and January-December 1994; US Senate, Rating *Video Games: A Parent's Guide to Games*, Government Printing Office, 1995.

⁸⁷⁰ For Further Reference Please review *The New York Times* from January 1990 - December 1994 specifically September 1993-July 1994.

⁸⁷¹ Namco Splatter Team, "Splatter House" (Arcade Game), Namco, 1989; Sierra On-Line, "Leisure Suit Larry in the Land of the Lounge Lizards" (MS-DOS Game), Sierra On-Line, 1987; Williams Electronics, "NARC" (Arcade Game), Williams Electronics, 1988.

We played Internal Look in late July 1990, setting up a mock headquarters complete with computers and communication ear at Eglin Air Force Base in the Florida panhandle. As the exercise got under way, the movements of Iraq's real-world ground and air forces eerily paralleled the imaginary scenario of the game....As the war game began, the message center also passed along routine intelligence bulletins about the *real* Middle East. Those concerning Iraq were so similar to the game dis-patches that the message center ended up having to stamp the fictional reports with a prominent disclaimer: 'Exercise Only.'⁸⁷² .

Furthermore, according the Macedonia, students who played video games possessed an advantage as "Employing these computer simulations has proved to be a smooth transition for younger generations of soldiers, who, after all, were spoon fed on Nintendo and computer games."⁸⁷³ Now why are both these quotes relevant?

At the time, the military was using simulations to train soldiers for all types of combat situations. As noted by General Schwarzkopf, many soldiers could not tell the difference between the fictional fighting and the real life war happening in the Persian Gulf. Essentially, what those men were doing was playing a video game in order to train.

This paralleled Macedonia's remarks as he stated that soldiers who played video games before going into the armed force could easily transition from the controller and keyboard to military simulator with little trouble. In non-technical language, they already had combat training experience via the game they played at home. Titles such as 1981 Atari game *Battlezone* and the popular PC flying simulator, *Microsoft Flight simulator* were used to train unmanned vehicles while the US Marine corps used the 1993 id Software game *Doom* to train soldiers in "properly sequencing an attack, protecting the rifleman, conserving ammunition, and observing the chain of command."⁸⁷⁴ As a weird result, the Persian Gulf War received the popular but informal name, the Nintendo War not for just strapping video cameras on bombs, but also its use of VR

⁸⁷² Michael Macedonia, "Games Soldiers Play," *IEEE Spectrum* 39, no. 4 (March 2002): 33-4.

⁸⁷³ *Ibid.*, 35.

⁸⁷⁴ *Ibid.*

training to prepare the next generation of soldiers.⁸⁷⁵ In contrast, a small question arose for this fascinating parallel; did the home console and PC games do the same thing with their children.

These military benefits while remarkable also led to an innate paranoia. Questions quickly soon arose about certain video games. Did these games teach kids to kill, are video game makers ruining children's lives by desensitizing them to violence, is the gaming industry putting profits over responsibility? By 1993, signs seemingly pointed to yes, as the ongoing bit wars stalemate between Sega and Nintendo resulted in both console and games creators leaning towards questionably increasingly violent titles to grab the customer's attention. Home computer software games fared no better as they too had their share of at the time controversial software that struck moral grounds, the arcades also contained new but violent titles thanks to the ongoing fighting game craze spurred on by the success of *Street Fighter II: The World Warrior*.⁸⁷⁶

Compounding this problem further, books and scholarly articles created around this time began linking and to some degree using video games as a scapegoat claiming their link towards aggression after playing, while constant media coverage with topics surrounding video games increased as local news affiliates and nation programming began their own investigations into the world of video gaming and its industry.⁸⁷⁷ In addition, concerned parents wrote to both their congressional representative and their local newspapers discussing their fears of a virtual world that they do not understand.⁸⁷⁸ Backlash aside, the constant bombardment of concerns led both the nation and gaming to meet at one place and on December 9, 1993, a series of three hearings

⁸⁷⁵ Steven Keeva, "Lawyers in the War Room," *ABA Journal* 77, no. 12 (December 1991): 52.

⁸⁷⁶ For further reference, please review Leonard Herman, *Phoenix: The Fall & Rise of Videogames*. 3rd ed., Rolenta Press, June 2013; Steven Kent, *The Ultimate History of Video Games*, Prima, 2001.

⁸⁷⁷ For further reference, please review Lawrence Kutner, Ph.D., and Cheryl Olson, Sc.D., *Grand Theft Childhood*, 5-16, 61-70, 73-9, 85.

⁸⁷⁸ While not abundant in the *Congressional Records* between 1990 and 1994 for further information please refer to national newspapers such as *The Los Angeles Times* and *The New York Times* preferably the years January 1990 to December of 1994 and various local newspapers with in the same period.

would commence in Washington, DC, that ultimately would determine the future and direction of the US gaming industry.⁸⁷⁹

Why these hearings took place; to further understand we need to dive deeper into the violence controversy and look into its sources by evaluating a couple of specific examples. Outside the excluded home computer gaming market, the home consoles and arcades boasted the three most mentioned violent titles at the first hearing. From the group, two out of the three games did not get much media attention, while the third practically stole the spotlight. Nevertheless, all these following titles raised concerns causing people to pause and think about what goes into these electronic games their children and teens played.⁸⁸⁰

First seen in the arcades in 1992, Konami's *Lethal Enforcers* serves as a typical shooting gallery type game. Taking place in Chicago, Illinois, the player takes the roles of an elite cop whose job involved taking back the city from various thugs and terrorists.⁸⁸¹ The game itself only consisted of five levels ranging from a bank robbery, a Chinatown gang war, an airline hijacking, a drug deal, and a terrorist showdown at a chemical plant.⁸⁸² When he or she completes a level, the game ranks the player based hit percentage.⁸⁸³ If they hit only just the enemy with a precise shot, their rank goes up, but if they hit any innocent victims, their rank drops.⁸⁸⁴ Therefore, what makes this game controversial?

⁸⁷⁹ For further reference, please review Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; US Senate, Subcommittee on Juvenile Justice of the Committee on the Judiciary, *Rating Video Games: A Parent's Guide to Games*, Government Printing Office, 1995.

⁸⁸⁰ Ibid,

⁸⁸¹ Konami, "Lethal Enforcers" (Arcade Game), Konami, 1992.

⁸⁸² Ibid.

⁸⁸³ Ibid.

⁸⁸⁴ Ibid.

The two core problems this game comes from its gimmicks and gameplay. On the arcade promotional poster, it states one curious feature "Digitalized Graphics."⁸⁸⁵ What are digitalized graphics? Digitalized graphics or the more appropriate terminology digitized sprites is a concept made popular during the 1990s that incorporated "pictures or video of actual human beings into video games as sprites."⁸⁸⁶ First used in the 1983 game, *Journey*, the art style met a mediocre response until roughly 1992 with two games thrusting it back into temporary favor, *Lethal Enforcers* and *Mortal Kombat*.⁸⁸⁷ To achieve this result, Konami hired actors to play the roles of the villains and hostages. Furthermore, the non-playable characters used certain lines of dialog to enhance the game, which included "You missed me pig," "Eat lead copper," "Don't shoot," and "Help me."⁸⁸⁸ While nothing impressive on the surface, the next concept goes hand in hand with the above and makes the digitized sprites extremely relevant.

The parallel concept that ties the earlier paragraph comes from the game core gameplay. Unlike many arcade machines that used a joystick and buttons for the player to interact with the game, *Lethal Enforcers* did not possess this particular control scheme. Instead, like many arcade shooters in the 80s, 90s, and onwards they implemented a light gun style controller. With these, the player would point the gun at the screen and depending on the in-game circumstances, if they hit an enemy, it would fade off screen and gameplay would continue unless the said target took numerous shots to defeat or fulfilling a special requirement to take down the enemy.⁸⁸⁹ For *Lethal Enforcers*, the gun also called the Konami Justifier resembled a police issue .44 Magnum

⁸⁸⁵ "Lethal Enforcers," *The Arcade Flyer Archive*, accessed December 27, 2015, <http://flyers.arcade-museum.com/?page=thumbs&db=videodb&id=601>.

⁸⁸⁶ "Digitized Sprites," *Giant Bomb*, last modified August 31, 2015, accessed November 2, 2015, <http://www.giantbomb.com/digitized-sprites/3015-2288/>.

⁸⁸⁷ "Digitized Sprites," *Giant Bomb*, last modified August 31, 2015, accessed November 2, 2015, <http://www.giantbomb.com/digitized-sprites/3015-2288/>; Kent, *The Ultimate History of Video Games*, 174-5.

⁸⁸⁸ Konami, "Lethal Enforcers" (Arcade Game), Konami, 1992.

⁸⁸⁹ For further reference please refer to such games as Konami, "Lethal Enforcers" (Arcade Game), Konami, 1992; Nintendo Research & Development 1, "Duck Hunt" (Nintendo Entertainment System Game), Nintendo, 1985.

revolver, but painted sky blue for player 1 and hot pink for player 2.⁸⁹⁰ Invoking memories of Dirty Harry Callaghan, the player is encouraged via in game and manual to shoot anyone who gets in their way and here lies the primary concern.⁸⁹¹

If it were any other game with cartoonish sprites such as the NES *Hogan's Alley*, no one would care, however *Lethal Enforcers* with its digitalized sprites made for a damning case. Going back earlier in the chapter, it argues that the military used simulators to train soldiers for wartime situations. Furthermore, both academic and television sources blamed video games for increased violence in children after watching or playing a game. In addition, both of these combined created a small moral panic as people began connecting the simulated violence in the game to real world violence. Finally, one other event key though only indirectly involved pushed the notoriety of this game. Granted, while no evidence primary or secondary directly correlates the two together its seems more than likely that the event in question did have some role in why *Lethal Enforcers* was discussed at the December 9, 1993 Congressional hearing. Keep in mind though this is just a scholarly speculation and could be merely coincidental.

The event that may have sparked why *Lethal Enforcers* became a controversial game was the 1992 LA Riots. Following the event began in 1991 with the beating of Rodney King and the arrest and trial of four Los Angeles police officers the following year.⁸⁹² The subsequent not-guilty verdict sent an entire city into lockdown causing over fifty-three deaths, billions in property damage, and serves as one of the few times in modern American history that the military had to step in to quell a pseudo-rebellion.⁸⁹³ Coincidentally, the LA riots now serves as the

⁸⁹⁰ Konami, "Lethal Enforcers" (Arcade Game), Konami, 1992.

⁸⁹¹ Konami, "Lethal Enforcers" (Arcade Game), Konami, 1992; *Lethal Enforcer's SNES Instruction Booklet* (Buffalo Grove, IL: Konami of America, 1994) 5.

⁸⁹² Jessica Dickerson, "Remembering the 1992 LA Riots Over 2 Decades Later," *Huffington Post*, April 29, 2015, accessed November 2, 2015, http://www.huffingtonpost.com/2015/04/29/1992-la-riot-photos_n_7173540.html. Ibid.

⁸⁹³ Ibid.

poster child for the term police brutality despite seeing and noting multiple similar events happening in history from the early twentieth century back.

Now with this knowledge under our belts, let us look at *Lethal Enforcers* once more. The premise and plot of the game focuses on the player shooting various thugs, criminals, and terrorist in what could be Chicago. During a normal gameplay session, several weapons including a machine gun, magnum bullets, shotgun, assault rifle, grenade gun, and automatic handgun become available for the player to use against the villains.⁸⁹⁴ Supporting the previous paragraph, on both the SNES and Sega CD instruction Manuals several phrase in the section "Justice will be served!" states that "most criminals are just looking for a free ride," and "If you come in here waving guns and sellin' dope you're going to pay the price for crossing the line."⁸⁹⁵ Furthermore, on the last paragraph, the unknown narrator states, "Go it alone or take backup, but either way I want you to send a message to those scumbags: there are laws in my city, and my enforcers are packing loaded 'Justice.' Now Hit the Streets!"⁸⁹⁶ Contrastingly and ironically, the manual states to protect the innocents in multiple places, but the whole section of "Justice will be served," sounds more like a speech fueled by police aggression taken to the nth degree. Perhaps, while the game did not have a single person of color, the action of playing a brutal cop caught the eyes of congress and they essentially called the video game industry out on the issue.⁸⁹⁷

The second game mentioned at the congressional hearing, *Night Trap* is quite an odd choice as the basis of the argument against it rests on one scene and one issue, violence against

⁸⁹⁴ Konami, "Lethal Enforcers" (Arcade Game), Konami, 1992; *Lethal Enforcer's SNES Instruction Booklet* (Buffalo Grove, IL: Konami of America, 1994), 5.

⁸⁹⁵ *Lethal Enforcer's Sega CD Instruction Booklet* (Buffalo Grove, IL: Konami of America, 1993), 5; *Lethal Enforcer's SNES Instruction Booklet* (Buffalo Grove, IL: Konami of America, 1994), 5.

⁸⁹⁶ *Ibid.*, 5.

⁸⁹⁷ For information surrounding police brutality, please refer to the newspaper coverage of the Rodney King beating and subsequent trial of the officers behind the attack; *The Los Angeles Times* March 1991-May 1992 and *The New York Times* March 1991-May 1992.

women. In best summing up the software, *Night Trap* is akin to a cheesy sci-fi film made during the 1950s. As a member of SCAT, Special Control Attack Team, the player serves as a lead operator in the investigation of the Lakeshore winery house owned by Martin family.⁸⁹⁸ The goal as mentioned by Commander Sims in the introduction is to protect five girls from whatever attacked five other girls who disappeared while staying at the Martin home.⁸⁹⁹ Requiring operating eight cameras, the main object is to monitor the premises and use the various booby traps to defeat both the Martin's, a family of vampires, and a force of humanoid bloodsuckers known as Augs.⁹⁰⁰

Only lasting roughly twenty-six minutes, a perfect run can net a total ninety-five Augs total.⁹⁰¹ What makes this game unique comes from the Sega CD gimmick Full Motion Video, which utilizes pre-recorded video alongside gameplay making them akin to an interactive movie.⁹⁰² As a technique, the most famous example comes from the 1983 Don Bluth game *Dragon's Lair*, which used laser disks to store data and allowed the game to resemble more as a high-quality interactive cartoon compared to the 4-bit titles at the time such as *Pac-Man* and *Donkey Kong*.⁹⁰³ Yet, while *Dragon's Layer* used hand drawn animation that many still highly regard, *Night Trap's* Full Motion Video aged quite poorly, making more ironic that such a game caused such a controversy.⁹⁰⁴

Finally, outside of it being nothing more than a less than remarkable title, what saved it from the annals of obscurity came from it now one infamous scene. At roughly 12:30 mark in the

⁸⁹⁸ Digital Pictures, "Night Trap" (Sega CD Game), Sega, 1992.

⁸⁹⁹ Ibid.

⁹⁰⁰ Ibid.

⁹⁰¹ Ibid.

⁹⁰² Ken Horowitz, "Rise and Fall of Full-Motion Video," *Sega-16*, July 19, 2005, accessed December 19, 2015, <http://www.sega-16.com/2005/07/rise-and-fall-of-full-motion-video/>.

⁹⁰³ Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd ed., 95.

⁹⁰⁴ Ken Horowitz, "Rise and Fall of Full-Motion Video," *Sega-16*, July 19, 2005, accessed December 19, 2015, <http://www.sega-16.com/2005/07/rise-and-fall-of-full-motion-video/>.

in-game time, one of the female characters named Lisa, who in a nightgown encounters a group of Augs in a bathroom.⁹⁰⁵ If the player does not help her, the monsters will gang up on her, rap a metal collar around her neck, drag the victim off camera, and proceed to drain her blood.⁹⁰⁶ Ironically, the player does not even see the act, blood, or anything perverse and the only consequence from this action is Commander Sims firing the player thus resulting in a game over.⁹⁰⁷ Despite these rather questionable sets of circumstances, this scene became the rallying cry for people wanting to regulate and censor the content of video games.

Furthermore, the argument of violence against women can slightly receive some justification. Much like the infamous 12:30 scene, the player can simply ignore the pleas of the women and watch the antagonists capture the characters, or they can actually "kill" the girls by activating a trap next to them.⁹⁰⁸ The greatest case for this comes at the very end of the game in the secret ending. After trapping Sarah Martin, Kelly, the co-protagonist and undercover SCAT agent whom the player saved confesses that she feels safe around the player.⁹⁰⁹ As she walks off screen she walks towards spot/trap used to defeat Sarah just a few movements earlier, turns to the camera and states, "Nah, you wouldn't." Then the player has two options, first the player lets her proceed as normal, and she says, "Ha, Ha I didn't think so, see you next time" before the game fades to credits.⁹¹⁰ Conversely, if the player decides to "trap" Kelly she turns around in horror stating "I cannot believe you do this to me after everything we been through," before presumably falling to her death.⁹¹¹ Despite being controversial, these scenes were never discussed in the hearing, as the scene featuring Lisa became the topic of interest; conversely,

⁹⁰⁵ Digital Pictures, "Night Trap" (Sega CD Game), Sega, 1992.

⁹⁰⁶ Ibid.

⁹⁰⁷ Ibid.

⁹⁰⁸ Ibid.

⁹⁰⁹ Ibid.

⁹¹⁰ Ibid.

⁹¹¹ Ibid.

however, the final video game mentioned at the 1993 hearing makes *Night Trap* look tame in comparison as all the title in question, *Mortal Kombat*.

Taking only ten months to develop, the 1992 *Mortal Kombat's* brutal legacy began with series founders Ed Boon and John Tobias.⁹¹² At first, the initial premise centered on actual martial artist and Hollywood action superstar Jean Claude Van Damme, but Midway failed to secure his consent for the use of his image.⁹¹³ Going back to the drawing board, Boon and Tobias wanted to make their prospect different from *Street fighter II: The World Warrior* and its inspired fighting game clones. In order to do this they needed two things, 1.) According to Kent, during the early 1990s martial arts movies resurged though actors like Steven Segal and Van Damme.⁹¹⁴ Wanting the game to emulate popular martial arts movies, they opted to use digitized graphics to make it more realistic and Midway already used the technique in many of their titles including *Terminator 2, Narc*, and the game pre-rendered game *Pit Fighter*.⁹¹⁵

Furthermore, while unusual for an arcade title, Boon and Tobias build a rich mythos and plenty of secrets hidden throughout for players to discover. These secrets included special move combinations, which without hours of trial and error, the use of a game magazine, or having a friend reveal them, these attacks did not appear in game via tutorial or on the game cabinet.⁹¹⁶ Furthermore according Ed Boon, at the last minute, they added in Reptile, a green pallet swapped ninja, into the game.⁹¹⁷ According to an interview with Kent, he states, "Let's make him come out vary rarely so few people will see it."⁹¹⁸ The intended effect Boon and the development team wanted was people to talk about this elusive and mysterious ninja, but at the same time make the

⁹¹² Kent, *The Ultimate History of Video Games*, 463.

⁹¹³ *Ibid.*, 462.

⁹¹⁴ *Ibid.*

⁹¹⁵ *Ibid.*

⁹¹⁶ *Ibid.*, 463.

⁹¹⁷ *Ibid.*

⁹¹⁸ Quoted in Kent, *The Ultimate History of Video Games*, 463.

character seem nothing more than a rumor.⁹¹⁹ This rumor however, helped *Mortal Kombat's* popularity as countless people pumped untold amounts of quarters into the machines in hopes of finding and facing him in combat.

On the other hand, thanks to Reptile, led to two additional rumored characters hidden within the game, one being a black kick boxer named Nimbus Terrafaux exclusive to the Genesis version, but this was nothing more than an April Fool's Day joke perpetrated by *EGM* magazine.⁹²⁰ The other rumor circulated around a mysterious Red Ninja named Ermac. Due to a glitch on the character select screen, one of the characters named Scorpion would have a turned his usual yellow outfit turned red in color.⁹²¹ The name itself originated from part of the arcade ROM's Error Marco, which is merely nothing more than just a program designed to capture coding errors in the game.⁹²² However, unlike Nimbus, thanks to fan mythology and popularity, Boon and Tobias made him a legitimate character in the 1995 *Ultimate Mortal Kombat 3*.⁹²³

Now despite its appeal, what was the main plot of *Mortal Kombat* and how was it controversial? The main story revolving around the titular named tournament and its seven "Earthrealm" combatants sent to face a challenge from their Outworld invaders wanting to conquer their dimension.⁹²⁴ These fighters included a thunder god named Rayden (Raiden in later installments), shaolin monk Liu Kang, Hollywood actor Johnny Cage, Sonya Blade, a U.S Special Forces member, her terrorist nemesis Kano, ninja cryomancer Sub-Zero, and the demon ninja Scorpion.⁹²⁵ The main goal of the involved the player taking one of the playable characters

⁹¹⁹ Kent, *The Ultimate History of Video Game*, 463.

⁹²⁰ "Scan of the Nimbus Terrafaux EGM Article Legend of Nimbus Terrafaux," *Angelfire*, accessed November 17, 2015, <http://www.angelfire.com/pa5/mkoutworld/mk1/secrets/mk1nimbus.html>.

⁹²¹ "Ermac," *The Mortal Kombat Wiki*, accessed November 17, 2015, <http://mortalkombat.wikia.com/wiki/Ermac>.

⁹²² *Ibid.*

⁹²³ *Ibid.*

⁹²⁴ Midway Games, "Mortal Kombat (1992 video game)" (Arcade Game), Midway Games, 1992.

⁹²⁵ *Ibid.*

up the tournament ladder and if he or she defeated all six other characters, a mirror match, and three endurance challenges, they earned the right to face Goro, a gigantic half-human dragon and undefeated champion of the tournament for over 500 years.⁹²⁶ Finally, if they best the beast, the games main antagonist Shang Tsung appears to challenge the player for their soul.⁹²⁷ Upon succeeding, the player becomes the champion and sees an ending narration exclusive to that character.⁹²⁸

Contrastingly, at the time three concerns made the 1992 original controversial but iconic. The first came from the realistic sprites used during gameplay. Suffering from the same problem *Lethal Enforcers*, the digitized sprites coupled with the perceived over the top violence, many concerned individuals began over exaggerate the gore factor which ironically made for some free publicity and notoriety. As a result, both local and national news affiliates across the US began reporting on the game reveling several dichotomous opinions about the game, as the older generations saw it as horrific violence, but the younger generations saw it as just a game.⁹²⁹

This leads to the other problem, the fatalities. What is a fatality? Never discussed in the manuals, the fatality mechanic is an endgame stun state where the losing character begins a small dizzy animation.⁹³⁰ During this short window, the player is given the chance to kill the opponent. According to Ed Boon after somebody viewing the stunned state by random chance suggested that "Let's make it gruesome," as the entire idea became a major aspect of the game iconic.⁹³¹ However, these fatalities were not common knowledge. To execute, two things were needed,

⁹²⁶ Mortal Kombat Instruction Manual for Sega Genesis (Chicago, IL: Midway), 3.

⁹²⁷ Midway Games, "Mortal Kombat (1992 video game)" (Arcade Game), Midway Games, 1992.

⁹²⁸ Canonically speaking though, the one who "officially" defeated Shang Tsung was Liu Kang therefore making his ending canon. This result was later referenced in the games that followed all the way to the 2011 reboot of the series; Ibid.

⁹²⁹ For further reference, please review such newspapers as *The Los Angeles Times* and *The New York Times* from August 1993 - December 1993 for more information

⁹³⁰ Kent, *The Ultimate History of Video Games*, 464.

⁹³¹ Ibid.

knowing the correct distance between the two characters and the correct button combination.⁹³² Furthermore, as noted beforehand, these special moves were purposely made obscure so that no one could easily figure them out, but gamers are clever.⁹³³ On the subject co-founder John Tobias stated, "At the time, we thought these button and joystick combinations were going to be so hard to do that no one would ever figure them out. I think the first time we put *Mortal Kombat* out at a test location, in that first week somebody found it."⁹³⁴ Despite the efforts to hide the mechanic, once these moves became common knowledge, almost anyone could access them on the fly and with this knowledge came widespread notoriety as countless others sought the game's secrets for themselves alongside concerned others who feared that such violent exposure would turn their kids into killers.

The last issue that many had with the game came from the blood and gore. Acclaim who got the console rights from Midway began a ten million dollar ad campaign known as "Mortal Monday" to promote the game across the two major home consoles and the two popular handhelds.⁹³⁵ While possessing all the features of the arcade port, the Super Nintendo version infamously sanitized the game forcing Acclaim to take out the blood and edit the fatalities.⁹³⁶ As a result two outcomes occurred. First, the Genesis version outsold the SNES version three to one as it stayed faithful to its source by keeping the blood in via "the blood code" and gore intact.⁹³⁷ The second and somewhat unexpected result came from the fans themselves who heavily criticized Nintendo for censoring the game and quite arguably becoming the origin point of the now common stigma of Nintendo consoles labeled as "kiddie systems" for its censorship of

⁹³² Ibid.

⁹³³ Ibid.

⁹³⁴ Quoted in Kent, *The Ultimate History of Video Games*, 464.

⁹³⁵ "Mortal Kombat 1 Mortal Monday Commercial" (video), 1993, accessed April 24, 2016, <https://www.youtube.com/watch?v=R8V7TwlYCt0>; Kent, *The Ultimate History of Video Games*, 465.

⁹³⁶ Kent, *The Ultimate History of Video Games*, 465.

⁹³⁷ Kent, *The Ultimate History of Video Games*, 465-6.

violent and graphic games.⁹³⁸ This one act made the Genesis version the go to choice for those wishing to get the arcade experience at home.⁹³⁹ Ironically, though, in the case of the overall blood found in the game, unlike what the media portrayed, the actual amounts were quite low especially in the arcade version. Depending on the move, blood only appeared for roughly no more than three to five seconds and only then, only a handful of special moves, five out of seven fatalities, and the uppercut all drew blood while the rest of the moves did not.⁹⁴⁰

Finally, one fatality in particular caught the eye of the media. While the seven in game fatalities were present, each ranged in brutality. Sonya and Scorpion incinerated their opponents, Johnny Cage beheaded with an uppercut, Liu Kang did a similar, but less graphic cartwheel uppercut, and Rayden electrocuted his target resulting in their head exploding.⁹⁴¹ Kano on the other hand deserves special mention as while not as graphic as the last fatality; his fishing move plunged his fist into the victim and ripped out a still beating heart.⁹⁴² Then there was the seventh and final character Sub-Zero and out of every move in the game, his fatality besides Scorpions signature "get over here/ come here" harpoon special move became the most iconic.⁹⁴³ After forcing the opponent into a stun state, he rips the unfortunate victim's head and spinal cord clean from the rest of the body.⁹⁴⁴ As a final coup de grâce, he faces the player and hoists his trophy showing off the gruesome handiwork with the head wincing in pain.⁹⁴⁵ This fatality known as the Spine Rip caught the eye of the media, soon news reports across the nation often showed his finishing move in both national and local news segments.⁹⁴⁶ Thanks to this attention, Sub-Zero

⁹³⁸ Ibid., 465.

⁹³⁹ Ibid.

⁹⁴⁰ Midway Games, "Mortal Kombat (1992 video game)" (Arcade Game), Midway Games, 1992.

⁹⁴¹ Ibid.

⁹⁴² Ibid.

⁹⁴³ Ibid.

⁹⁴⁴ Ibid.

⁹⁴⁵ Ibid.

⁹⁴⁶ Ibid.

despite being a ninja assassin was arguably the tipping point in why congress finally called out the video game industry, which leads to one final question, why did congress even concenter looking into the video game violence controversy in the first place?

Since the 1950s, issue of violence has always piqued the interest of the US congress. Starting with its ongoing crusade against perceived obscene materials, a series of investigations commenced that looked into Television violence under the House of Representatives in 1952 and two years later, the Senate looks at its connections to Juvenile crime.⁹⁴⁷ During the 1960s, FCC commissioner Newton N. Minow proclaimed the "vast wasteland" American TV had become while in 1969 The National Commission on the Causes and Prevention of Violence claimed that TV violence acts as a catalyst for societal violence.⁹⁴⁸ This trend continued into the 1970s and 1980s with the surgeon general in 1972 issuing a report linking aggressive behavior to films and TV; while in 1982 and 1985 both the National Institute of Mental Health and the American Psychological Association Commission on Youth and Violence also claimed a connection between violence and media.⁹⁴⁹ The 1990s became a hotbed for regulation TV violence through the 1990 Television Violence Act, the beginnings of placing and viewer warnings before every program with suggestive content, and the implementation of the V-chip put into televisions.⁹⁵⁰

On top of this, America for the lack of better words became obsessed with over protecting their children from the bad things in life. Advocacy groups such as the Parent-Teacher Association, the Parents Music Resource Center, and other smaller organizations argued the impact media violence had on children and their schoolwork.⁹⁵¹ The 1984 congressional hearing

⁹⁴⁷ Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., (New York, NY: Harmony, 2014), 179.

⁹⁴⁸ *Ibid.*, 179.

⁹⁴⁹ *Ibid.*, 180-1.

⁹⁵⁰ *Ibid.*, 181-2.

⁹⁵¹ For further reference, please review Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., Harmony, 2014.

on Record Labeling led by Mary "Tipper" Gore inquired on explicit lyrics sung by various artists, which led to marking certain albums featuring suggestive materials with a Parental Advisory label starting in 1985.⁹⁵² Quite interestingly, the case of video games received little to no attention by government watchdogs. Now why did this occur?

Up until 1992-1993, video games seem more like a nuisance rather than a problem. As we already established in chapter two, congress already targeted the video game industry but for a different reason. Divided on Japanese investments in the US, some senators like Oregon Senator Mr. Mark Hatfield defended foreign investment and Japanese-Americans by stating, "Bigotry cannot be allowed to cloak itself in the name of saving jobs, no matter how complicated our relationship with Japan becomes."⁹⁵³ Others, such as congressional representative Mr. James Traficant of Ohio believed that Japan unfairly allowed illegal trade practices, which gave them the edge while America merely votes for unemployment benefits.⁹⁵⁴

Strangely, even after digging through the congressional record, only rarely did an individual game get mention and more often than not, it was an obscure title such as noted by Raymond J. Magrath in an extension to the congressional record about a Nazi Death Camp simulator known as *KZ Manager*.⁹⁵⁵ Outside these parameters, congress only seemed to lump the major home console and home computers developers together alongside the issue of trade practices with Japan. In addition, with the exception of the 1983 edition, much of the *Statistical Abstract of the United States* up until the mid-1990s did not have any relevant information

⁹⁵² US Senate, *Record Labeling Hearing before the Committee on Commerce, Science, and Transportation*. United States Senate, Ninety-ninth Congress, First Session on Contents of Music and the Lyrics of Records (Washington, DC: U.S. Government Printing Office, 1985), overview of proceedings.

⁹⁵³ US Congress, Senate, "Japan-Bashing," March 17, 1992, 102nd Congress, 2nd session, *Congressional Record* 138, pt.38: S3752.

⁹⁵⁴ US Congress, House of Representatives, "Japan Says America Guilty of Illegal Trade" June 9, 1992, 102nd congress, 2nd session, *Congressional Record* 138, pt.81: H4342.

⁹⁵⁵ US Congress, House of Representatives, "Vidor Games Contain Vicious Overtones" May 16, 1991, 102nd congress, 1st session, *Congressional Record* 137, pt.74: E1790.

regarding computer or home console games.⁹⁵⁶ This signifies one of two real possibilities; either Washington DC was ignorant to the growing video game trend, or video game industry had not crossed an established line in the sand such as the issue of violence.

The question now rests in did they know or did they even care? On one hand, controversy in video games did not just appear in the 1990s alone. During the 1970s and into the 1980s, some video games received heavy criticism for their unsavory gameplay. Most notably in 1976, the arcade game *Death Race* by Exidy became one of the first violent arcade games.⁹⁵⁷ Featuring a top down perspective, the objective featured the player running down stick figure skeleton's aka "gremlins" in a cemetery for points.⁹⁵⁸ Popular reaction however led several establishments outright banning the controversial machine resulting in the developer only selling one thousand units and getting a spot on CBS *60 Minutes* in which founder of Exidy Pete Kaufmann defended his game.⁹⁵⁹

Another controversial game that came out in the early 1980s came from Caballero, a Swedish erotica game developer that crated X-rated software for the Atari 2600 under the Mystique name.⁹⁶⁰ It's legacy however, the 1982 *Custer's Revenge* saw the historical figure General Armstrong Custer attempting to rape a Native American woman.⁹⁶¹ The ultimate reaction towards the game resulted in nothing less than revulsion. According of Arnie Katz the former editor in chief of *Electronic Games Magazine* stated, "As You might imagine, Native American groups loved this game. There were protest all over the country. Women against

⁹⁵⁶ For further reference, please review the U.S. Bureau of the Census, *Statistical Abstract of the United States: 1995* ed. 115, US Government Printing Office, 1995.

⁹⁵⁷ Kent, *The Ultimate History of Video Games*, 90.

⁹⁵⁸ *Ibid.*, 91.

⁹⁵⁹ *Ibid.*

⁹⁶⁰ *Ibid.*, 226-7.

⁹⁶¹ *Ibid.*, 226.

Pornography did a lot of picketing against it."⁹⁶² While normally bringing attention to a plight can work in favor of a particular agenda, for video games however, it is another story. In the case of *Custer's Revenge*, all the attention resulted in Mystique doubling its overall sells to around 80,000 cartridges making it one of the bestselling adult games for its time.⁹⁶³

While just two examples and early one at that, these show the pull of video games had during the 1980s. Seen as a fad, the response and criticisms came not from the "higher ups" but the people. Groups such as the PTA, Women against Pornography, Families for Peace, etc., and all brought attention, but outside a few obscure newspaper articles and possibly a segment on a popular news program, no one paid any attention to gaming. However, when the 1990s came around, the state of video games dramatically changed. Why did this happen?⁹⁶⁴

While a hodgepodge of different causes and effects do culminate into the final answer, the main reason why people began caring about gaming comes from its transition from fad to legitimacy. As noted in chapter two, many believed the early gaming industry only acted in self-interest in order to get as much money as possible from hapless consumers. This unfortunately came in the form of shoddy games and a video game bubble that eventually burst in 1983. Over the course of roughly eight years from 1985-1993, Nintendo, Sega, countless third party developers, and the home compute turned this notion around by making a strong claim that video games were not a just fad, but a legitimate form of entertainment. Through several successful titles, a billion dollar industry formed, which built its empire on the success of their AAA titles.

⁹⁶² Quoted in Kent, *The Ultimate History of Video Games*, 226-7.

⁹⁶³ Kent, *The Ultimate History of Video Games*, 227.

⁹⁶⁴ For further reference, please review Lt. Col. Dave Grossman and Gloria DeGaetano, *Stop Teaching Our Kids to Kill: A Call To Action Against TV, Movie & Video Game Violence*, Rev ed., 2nd ed., Harmony, 2014; "Video Game Controversies," *Wikipedia*, last modified April 22, 2016, accessed April 26, 2016, https://en.wikipedia.org/wiki/Video_game_controversies#Public_debate_in_US.

Ironically, however, from this battle for notoriety, Washington finally started noticing the influential power that these companies and fictional characters held.

On the other hand, as noted by Steven Kent, one problem even today seems to elude scholars comes from fining the exact origins of the 1993-4 hearings on violent video games.⁹⁶⁵ Speculative fingers point in many different directions. Tom Zito, the founder of Digital Pictures, blames Nintendo as Sega's success from 1991-3 led the company in his opinion to send representatives to Washington, DC in a "go for broke and attack Sega," by showing tapes of violent games and drumming up support against violent games.⁹⁶⁶ Furthermore, Kent in his work notes that a Nintendo's director of communications Perrin Kaplan in 1993 gave a speech discussing video game violence to the National Organization of Women gives some credence to the theory.⁹⁶⁷

Another legitimate claim comes from the various newspaper and media coverage covering video games during the early 1990s. Almost on a rather frequent rotation, the media always seemed to mention something about the gaming industry from Japanese business practice, the next great console, or even the musings of the average person in the opinion section. This dramatically changed in 1992-1993 as the tone switched to the issues surrounding violence as games such as *Mortal Kombat* and *Wolfenstein 3D* came on to the market thus raising awareness on the issue and helping frame the question, did video games need a ranking system for their in game content? While much of this argument has already been touch upon, the main cause for this demand came at the wake of such increasingly violent software choices such as *Mortal Kombat*. Yet, were there any measures taken to prevent this in the first place? To further

⁹⁶⁵ Kent, *The Ultimate History of Video Games*, 466.

⁹⁶⁶ *Ibid.*, 466-7.

⁹⁶⁷ *Ibid.*, 466.

understand why called the video game industry, let us briefly look at how the arcades, PC, and home consoles dealt with regulating content.⁹⁶⁸

For the arcades, it was quite an uncensored experience. Already noted and discussed these machines often appeared in public places such as convenience stores and malls. Quite often, if a game had a notable reputation for violence or inappropriate content, it was up to an older adult such as a worker or teenager to keep younger children from playing these types of games. Furthermore, if a game got too much heat, the location owner could call the distributor of the arcade machine and ask for its removal. Despite these attempts, many adults remained ignorant towards certain games and accidentally let their children play these more violent titles.⁹⁶⁹

On the other hand, the home computers also fell prey to the same faults of the arcades. At first glance, a many early computer games did not provide any warning on the games content. Granted, while such explicit games such as Sierra's 1987 *Leisure Suit Larry in The Land of the Lounge Lizards* did provide a small content warning on the front, but it quite easily gets lost.⁹⁷⁰ This is especially true for the Amiga version's box, which features a pink background with cards, a taxi driving through the box, a picture of a woman bathing, and Larry himself.⁹⁷¹ Furthermore, quite a few popular games of the 1980s and 1990s did not come from stores, but came as shareware, which may or may not provide any content warnings outside a possible brief mention such as what id Software did for *Wolfenstein 3D* by rating their own game "PC-13" for "Profound Carnage."⁹⁷² .

⁹⁶⁸ For further reference, please review *The New York Times* 1990-1994.

⁹⁶⁹ For further reference, please review Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; US Senate, *Rating Video Games: A Parent's Guide to Games*, Government Printing Office, 1995.

⁹⁷⁰ Sierra On-Line, "Leisure Suit Larry in the Land of the Lounge Lizards" (Amiga Game), Sierra On-Line, 1987.

⁹⁷¹ Ibid.

⁹⁷² id Software, "Wolfenstein 3D" (MS-DOS Game), Apogee, 1992.

Finally, some software required the use of some sort of verification to access the game. Chiefly used to prevent piracy, programmers did this by having the user typing in a random phrase found on a code sheet or from the manual. A good example of this comes from a racing game *MicroProse's World Circuit*, which players needed to locate a word using the page - paragraph - line - word, found in the manual and type it in to authorize gameplay.⁹⁷³ Other more explicit games may also require the player to verify their age. *Leisure Suit Larry* and its subsequent sequels did this by using a series of five random questions revolving around 1960-1980s Americana pop culture trivia to verify the age.⁹⁷⁴ If the player got all five questions right they could play the game, but if they got two wrong the game thinks that the player is a "child" and boots them off to the DOS menu.⁹⁷⁵ In later installments such as *Leisure Suit Larry 3: Passionate Patti in the Pursuit of Pulsating Pectorals*, by getting the questions wrong the raunchiness level decreases and keeping things such as nudity and adult content to a minimum.⁹⁷⁶ However, in contrast by getting all five questions right the game becomes uncensored with full topless female nudity, implied sex scenes, and risqué adult humor.⁹⁷⁷ These measures while at minimum did not guarantee that a child could not access the game or let parents know about the content thus making them rather ineffective.

Finally, the home consoles record for regulating content surprisingly makes for tricky to discuss in full, as by December 1993 five major consoles existed on the American Market, the Super Nintendo, Sega Genesis/CD, Atari Jaguar, Neo Geo AVS, and the recently released

⁹⁷³ MicroProse, *MicroProse Formula One Grand Prix Technical Supplement for Commodore Amiga* (Tetbury, Gloucestershire: MicroProse, 1991), 3.

⁹⁷⁴ Sierra On-Line, "Leisure Suit Larry in the Land of the Lounge Lizards" (MS-DOS Game), Sierra On-Line, 1987.

⁹⁷⁵ Ibid.

⁹⁷⁶ Sierra On-Line, "Leisure Suit Larry 3: Passionate Patti in the Pursuit of Pulsating Pectorals" (MS-DOS Game), Sierra On-Line, 1989.

⁹⁷⁷ Ibid.

Panasonic 3DO. Yet, while the latter three, despite having some good games, did not possess the influence of the big two's success. Instead, the two upcoming examples evaluate how Sega and Nintendo handled the issue of content.

Noted earlier in chapter two, Nintendo took its North American content guides seriously. Sanitized of any racial, religious, sexist, or excessively violent content, these guidelines served as the basis for what developers both in-house or third party could put into a Nintendo licensed game. Numerous examples exist that showcase this philosophy used during the 1980s and 1990s. Examples like *Mortal Kombat*, which took out the blood and neutered the fatalities, the 1987 *Bionic Commando* for references to Adolf Hitler, renaming certain characters such as Sodom and Damned in SNES port of *Final Fight* to Katana and Thrasher, and completely removing the transgender females Roxy and Poison with generic goons Billy and Sid.⁹⁷⁸ Granted however, across the Pacific, Nintendo of Japan software took a more lax tone with more nudity, violence, religious references, and even blood than the American branch. The reason for this simply came down to Japan's more liberal openness to certain themes deemed taboo in the west and America's much more ridged views on violence, sexism, and religious views that evolved since the colonial days onward. Despite these limitations, video game developers worked around these rules and today many games created for the SNES during the fourth generation of home consoles that still rank as some the greatest video games of all time by critics and fans alike.

On the other hand, Sega took more of lax and liberal stance. The games featured on the Sega Genesis, Sega CD, Sega Game Gear, and Sega 32x ranged from the family friendly titles such as *Sonic the Hedgehog* and *Ecco the Dolphin* to the much more mature software choices like *Splatter House 2* and Sega CD version of *Snatcher*. As the 1990s came and the issue of

⁹⁷⁸"List of regionally censored video games," *Wikipedia*, accessed November 30, 2015, https://en.wikipedia.org/wiki/List_of_regionally_censored_video_games.

violence in video games surfaced, Sega needed a way to let buyers know about the content of their titles, which led to a clever solution. In 1993, Sega established the Videogame Ratings Council or VRC to rate all Sega platform games.⁹⁷⁹ Originally, the plan was to have the Motion Picture Association of America rate the games for them, but after the president of the MPAA Jack Valenti declined; Sega took an ambitious step in wanting to their VRC system into the universal standard for rating all console and home computer titles.⁹⁸⁰

For their new project, Arthur Pober, a member of the Children's Advertising Review Unit, stepped in as Sega's first chair of the VRC.⁹⁸¹ In order to create both a new organization and a concept of a ratings system, Pober worked alongside psychologists and child development experts in questioning such terms issues as "what was the difference between violence, cartoon violence, and graphic violence."⁹⁸² After weeks of hard work, the newly formed VRC established a general set of guidelines. Mirroring the MPAA ratings, the ratings system consisted of three general ratings, GA for general audiences, MA-13 for Mature/Teenage audiences, and MA-17, which reflected games, designated only for adults.⁹⁸³ These guidelines remained lax enough to keep Sega's liberal stance on blood and violence, but it gave buyers a heads up on what content was in that particular game. Starting that year, they began labeling all game boxes and hoped this would stave off concerned parents, but this particular ratings system had its share of noticeable flaws.⁹⁸⁴

One such example comes from the VRC's actual rating process. Never mentioned in any known textual based document, no one exactly knows the process Sega used to rate the

⁹⁷⁹ Blake Harris, *Console Wars: Sega, Nintendo, and The Battle That Defined a Generation* (New York: It Books, 2014), 427-9.

⁹⁸⁰ *Ibid.*, 423, 428.

⁹⁸¹ *Ibid.*, 423, 428.

⁹⁸² *Ibid.*, 428-9.

⁹⁸³ *Ibid.*, 429.

⁹⁸⁴ *Ibid.*, 427-9.

company's titles. Granted, for each tier of the rating system does briefly explain the requirements such as GA having no blood, graphic violence, sexual themes, or drug references this tells little on the actual criteria used to rate the content.⁹⁸⁵ On the other hand, one possible reason why the lack of any brochures or text talking about the VRC never came forth was the ratings system's rather short life span, as the ESRB replaced it in mid-1994 thus giving no time to establish itself in the first place.⁹⁸⁶

Compounding the above issues, another problem came from inconsistent ratings among their software library. An example comes from the Sega Genesis and Sega CD versions of *Mortal Kombat*, which the Genesis version received a MA-13 rating but its counterpart received a MA-17 rating.⁹⁸⁷ The reason for this comes down to the Genesis' hidden blood code, which turned on and off the blood, but the Sega CD version forged this option in favor of keeping the gore in at all times, thus making violent option, yet having the same amounts of violence as the Genesis version.⁹⁸⁸ Furthermore, this inconsistency did not stop here as other games received rather peculiar ratings. For example, in the American release of *Castlevania Bloodlines*, it depicts scenes of "mild gore" on certain monsters and depicts blood throughout the game, but

⁹⁸⁵ Harris, *Console Wars*, 429; World Heritage Encyclopedia, "Videogame Rating Council," *World Public Library*, accessed November 27, 2015, http://www.worldlibrary.org/articles/videogame_rating_council.

⁹⁸⁶ World Heritage Encyclopedia, "Videogame Rating Council," *World Public Library*, accessed November 27, 2015, http://www.worldlibrary.org/articles/videogame_rating_council.

⁹⁸⁷ *Ibid.*

⁹⁸⁸ *Ibid.*

received a GA rating.⁹⁸⁹ Conversely, *Mega Man: The Wily Wars*, which had no graphic violence, gore, or blood, received a rating of MA-13 by the VRC.⁹⁹⁰

Finally, with the issue of censorship, even before and after the VRC, Sega did censor some questionable content. Liberal in the issues of violence and blood, the company however did not approve of such themes as profanity, nudity, or sexuality in their American market titles.⁹⁹¹ *Snatcher*, the cult game that originally came out for the Japanese PC 8801 in 1988 saw many changes before ported onto the Sega CD. The 1994 release Sega censored many features such as increasing Katrina's age from fourteen to eighteen, editing certain gory deaths, several scenes that featured full and partial nudity, and the as removal of certain inappropriate commands the player could do and change certain background areas to avoid possible copyright infringement.⁹⁹²

Another notable game that saw an odd removal stateside came from *Streets of Rage 3*. In the Japanese release called *Bare Knuckle 3*, the player would face a flamboyantly homosexual man named Ash whose sprite animations gave him an effeminate style of fighting.⁹⁹³ When playing the version released stateside and in Europe, the games localization team removed him from the game entirely due to fears that the character offend homosexuals.⁹⁹⁴ While just the tip

⁹⁸⁹ As for the gore certain enemies such as the Harpy enemies are decapitated after defeated, Zombies when killed spill their guts onto the floor as they fall, and the miniboss in stage one gets cut in half showing off its guts. As for the blood, certain enemies do in fact bleed such as the zombie, but many stages such as the first stage which blood oozes from the ground and stage five at the Palace of Versailles depicts water turning into blood as bloody skeletons rise from the fountain to attack the player; Konami, "Castlevania Bloodlines" (Sega Genesis Game), Konami, 1994; World Heritage Encyclopedia, "Videogame Rating Council," *World Public Library*, accessed November 27, 2015, http://www.worldlibrary.org/articles/videogame_rating_council.

⁹⁹⁰ World Heritage Encyclopedia, "Videogame Rating Council," *World Public Library*, accessed November 27, 2015, http://www.worldlibrary.org/articles/videogame_rating_council.

⁹⁹¹ Ibid.

⁹⁹² Konami, "Snatcher" (Sega CD Game), Konami, 1994; "Snatcher (Video Game)," Wikipedia, accessed November 27, 2015, [https://en.wikipedia.org/wiki/Snatcher_\(video_game\)](https://en.wikipedia.org/wiki/Snatcher_(video_game)); World Heritage Encyclopedia, "Videogame Rating Council," *World Public Library*, accessed November 27, 2015, http://www.worldlibrary.org/articles/videogame_rating_council.

⁹⁹³ Sega, "Bare Knuckle 3" (Sega Mega Drive Game), Sega, 1994.

⁹⁹⁴ Sega, "Streets of Rage 3" (Sega Genesis Game), Sega, 1994.

of the iceberg, both games show that while Sega reputation revolved around being more lax censorship policies, even they viewed some material too offensive for western audiences. These inconsistencies with the VRC however, would eventually come back to haunt them during the hearing on video games. This leads back to the earlier question, was congress inept or did they even care about the issue of video games.

When asking this question, this remains quite problematic as the chair, Democratic Senator Joe Lieberman and Senator Herb Kohl's papers are still unavailable, so determining why exactly these hearings happened in the first place remains unclear. Despite this, a clue does come in the form of Steven Kent's book, *Ultimate History of Video Games*. According to Kent, Lieberman learned of the whole video game controversy after hearing from his chief of staff Bill Andresen told him about the violence in *Mortal Kombat* and his nine year old wanting to get the game.⁹⁹⁵ After sitting down and playing the game, Lieberman stated, "I was startled. It was very violent and, as you know, rewarded violence. And at the end, if you really did well, you'd get to decide whether to decapitate...how to kill the other guy, how to pull his head off. And there was all sorts of blood flying around"⁹⁹⁶ Upon further investigation, he quickly discovered *Night Trap* and reflected upon the infamous bathroom scene, "It ends with this attack scene on this woman in lingerie, in her bathroom. I know that the creator of the game said it was all meant to be a satire of Dracula; but nonetheless, I thought it sent out the wrong message."⁹⁹⁷

As his inquiry continued, the Senator quickly became concerned with the state of video game affairs. He discovered that while only ten percent of games on the home market were violent, these often consisted of big money makers such as *Street Fighter II: The World Warrior*

⁹⁹⁵ Kent, *The Ultimate History of Video Games*, 467.

⁹⁹⁶ Quoted in Kent, *The Ultimate History of Video Games*, 467.

⁹⁹⁷ Quoted in Kent, *The Ultimate History of Video Games*, 467.

and *Mortal Kombat*.⁹⁹⁸ Furthermore, in the case of the Genesis, he discovered that several of the games in its library consisted of teenage as adult software choices while the main demographic targeted by the company seemly revolved around male children ages seven to twelve year olds according to various surveys he found.⁹⁹⁹ In addition, Lieberman discovered something else more concerning during his talks with concerned parents of his Connecticut constituency as states in Kent's book,

I started talking to people in Connecticut about it. Part of what I was hearing back from parents was that they didn't know what was in the game. Either there was a generational gap, which meant that they really didn't know how to use the machines, ore they didn't take the time. In a lot of these game, as you probably know, you have to spend a little time playing until you get to the so-called good parts.¹⁰⁰⁰

These rallying cries of his people coupled with the lack of knowledge on video games disturbed the senator. This would help build his case violent video games, but up until then he only had relied on the consumer's accounts, yet if he wanted to get the whole story, he needed to go to the primary cause of this trouble, the video game industry.

Finally, Lieberman in Kent's book also addresses the allegations that Nintendo set up the hearings against violent video games in order to get back at Sega. While many contemporary authors such as Sam Pettus's in his book *Service Games: The Rise and Fall of Sega* and Blake J. Harris' *Console Wars: Sega, Nintendo, and the Battle That Defined a Generation* believe Howard Lincoln as the instigator for the senate hearing, the senator from Connecticut debunks this rumor.¹⁰⁰¹ In his words, Lieberman states, "He (Howard Lincoln) certainly didn't initiate the

⁹⁹⁸ Kent, *The Ultimate History of Video Games*, 468.

⁹⁹⁹ Ibid.

¹⁰⁰⁰ Quoted in Kent, *The Ultimate History of Video Games*, 468.

¹⁰⁰¹ Kent, *The Ultimate History of Video Games*, 468.

process; in other words, we went to him. We went to the industry. I had not heard about Howard Lincoln before we planned the whole thing."¹⁰⁰²

While not covered by any contemporary author, supposedly after investigating the video game industry, Lieberman believed the video game industry peddled and sold the equivalent of R-Rated materials to children.¹⁰⁰³ Furthermore, the parents had no clue in what exactly went into a game. Something had to fix this situation quickly. On one hand, he could let the video game industry create their own rating system, as just a few hours before the first hearing, in hopes of defusing the situation, many major video game companies agreed to join forces for the creation of a universal ratings system.¹⁰⁰⁴ On the other hand, he push a bill that endorsed a government ran organization that endorsed harsh and mandatory censorship which video game industry feared. To end the debate, on December 9, 1993, Senator Joe Lieberman serving as the chair of the Subcommittee on Regulation and Government Information the charge alongside Wisconsin Senator Herb Kohl, the chairman of the Subcommittee on Juvenile Justice decided to bring together experts in the fields of child psychology and education to serve as one panel in the upcoming hearing.¹⁰⁰⁵ On the other side, Nintendo and Sega represented the home video game console developers while the Software Publishers Association, who looked down upon video game developers as "not a legitimate members of the computer industry," represented the interests of PC software.¹⁰⁰⁶

Finally, on a worthy side note, many senators, and congressional representatives believed that the issue of violence in America had reached epidemic proportions. This especially becomes

¹⁰⁰² Quoted in Kent, *The Ultimate History of Video Games*, 468.

¹⁰⁰³ Kent, *The Ultimate History of Video Games*, 468.

¹⁰⁰⁴ *Ibid.*, 469.

¹⁰⁰⁵ *Ibid.*

¹⁰⁰⁶ *Ibid.*

noteworthy between the years of 1993-4 as numerous entries found in the Congressional Record on both sides deliberate this topic quite heavily with issues such as gun, television, and youth violence as popular discussion points. While these core problems serve merely as moot points, with the rise of popular mentioning of video games like *Mortal Kombat* gave them an easy scapegoat, but the topic was rarely even mentioned in general. One such opposition point came from Illinois Democrat Senator Paul Simon when submitting a Washington Post article called "Violence for Fun and Profit" (an article about *Mortal Kombat*) to the record notes "We have a problem in our society."¹⁰⁰⁷ The answer in his opinion is not to in any way infringe on the first amendment, but we cannot ignore what the American Psychological Association just published in a report on youth and violence, stating that violence in media is adding to violence in our society."¹⁰⁰⁸

Despite the concern of Lieberman and Simon, the issue of video games during 1993-4 did attract the immediate but informal attention of Washington leading to sort of vendetta. Contra to the above apathy, since the escalating concern of media violence, the popular misconception these electronic toys equated to solely children's entertainment and the increasing negative exposure via news outlets seemingly turned all games into violence indulging pieces of filth that polluted the minds of kids.¹⁰⁰⁹ These pressing dilemmas, followed by demand for some sort of accountability from concerned Americans led Lieberman to begin researching the video game industry. With this in mind, all the pieces fell into place, the experts readied, and during the

¹⁰⁰⁷ US Congress, Senate, "Something Is Wrong" September 28, 1993, 103rd congress, 1st session, *Congressional Record* 139, pt.16: S12536.

¹⁰⁰⁸ Ibid.

¹⁰⁰⁹ Kent, *The Ultimate History of Video Games*, 468.

course of the next seven months three quiet hearings commenced that would determine the future of all video games inbound for the United States market.¹⁰¹⁰

On December 9, 1993, the first and most publicized of the three joint hearings commenced. The proceeding began with a mentioning of the concerns with the situation at large. Being a businessperson, Herb Kohl spoke first mention the upcoming 1993 Christmas shopping season as a time for people to "take a close, hard look at just what is that we are actually buying for our kids."¹⁰¹¹ Lieberman, on the other hand, stressed four major points as the industry transitions into a rating system. First, how will this system work, who will do the rating, will everyone participate, will the industry inform parents about the new ratings system, etc.¹⁰¹² Second, he stated that the whole point of the rating system should not devolve into a marketing ploy as an incentive to play more violent games.¹⁰¹³ Third, it needed some sort of teeth to enforce and regulate the new ratings system by providing both incentives and penalties for those who deceive the board in order to get a lower rating.¹⁰¹⁴ Finally, the senator points out that if the video game industry fails to come up with a comprehensive ratings system, both he and senator Kohl had a form of blackmail legislation ready for congressional approval that would force the developers to submit games to Washington for rating.¹⁰¹⁵

The reasons for such drastic questions came from earlier in his previous comments stating in regards to violence stating, "it is time to draw the line."¹⁰¹⁶ Games such as *Mortal Kombat*, *Night Trap*, and *Lethal Enforcers* encourage children to simulate in horrific violent acts

¹⁰¹⁰ Ibid., 469.

¹⁰¹¹ The store in question that his family founded was KOHL'S department store chain; US Senate, *Rating Video Games: A Parent's Guide to Games*, 1.

¹⁰¹² Ibid., 3.

¹⁰¹³ Ibid.

¹⁰¹⁴ Ibid., 3-4.

¹⁰¹⁵ Ibid., 4.

¹⁰¹⁶ Ibid.

often deemed inappropriate by most parents.¹⁰¹⁷ Furthermore, the advertising campaigns for many violent and adult games were aimed to grab the attention of children and teens, while popular toy stores like Wal-Mart, Kay-Bee, and Toys 'R Us often sold these types of games to children without much consideration.¹⁰¹⁸

In addition, Senator Kohl also stresses some key points. Mirroring the concerns of his fellow senator, Lieberman, believed that this hearing gave a window of opportunity for the video game industry to solidify their commitment towards a unified ratings system; but warns them that by throwing smallest bone will only result in disaster while creating something more substantial will make them "heroes or grinchies."¹⁰¹⁹ Second, the already games like *Lethal Enforcers*, *Mortal Kombat* and *Night Trap* serve no purpose for a responsible parent to give their child as a Christmas present as the messages found within them only promoted violence as an acceptable solution to life's problems.¹⁰²⁰ His third and final point stresses that with the ongoing problem of violence in the United States and the increasing role of video games played in children's lives, reducing the "culture of carnage" was needed drastically as technology improved and even more persuasive by the day.¹⁰²¹ In the end, Kohl believed that "Our nations children should not be told that to be a winner, you need to be a killer, or that make-believe violence yields real-life success."¹⁰²²

Joining the hearing was Senator Byron L. Dorgan. While not part of the primary investigation, Senator Dorgan joined both Kohl and Lieberman in questioning of both experts

¹⁰¹⁷ Ibid., 2-3.

¹⁰¹⁸ Ibid., 4.

¹⁰¹⁹ Ibid., 7.

¹⁰²⁰ Ibid., 7-8.

¹⁰²¹ Ibid., 8.

¹⁰²² Ibid.

and the video game industry. With his brief introduction out of the way, Lieberman opened the floor for the first panel's testimonies and Q&A.

For the first panel, Dr. Parker Page, Dr. Eugene Provenzo, Robert Chase, and Marilyn Droz represented a hodgepodge of fields ranging from academia to concerned parents giving the proceedings pro unique perspective on the state of video games from "educators" perspective during the 1990s.¹⁰²³ Yet, while few studies about video games existed at that point, especially surrounding the violence issue, the points made on December 9 only serve as a list of grievances and arguably served little to no point during the rest of the hearings or final judgment carried out in 1994.¹⁰²⁴ Granted, their concerns did help influence the direction of the ESRB, yet, their presence is still rather perplexing. Frankly, if it were not for the casual throwing around of the word "children" in the press and their "association" to video games, these people would not even be relevant.

The testimony came from Dr. Parker Page President of the Children's Television Resource and Education Center as well as a leader of studying the connection of media violence on children.¹⁰²⁵ In his argument, he claims that TV violence remains a significant problem in with the youth culture whose steady diet makes them "more aggressive towards children, less cooperative and altruistic, more tolerant of real-life violence, and more afraid of the world outside their homes."¹⁰²⁶ By extension, he states that video games pose the same threat especially since children often spend more time interacting with them and with the increasing violence in games such as *Mortal Kombat*, this could become a significant future problem.¹⁰²⁷ Furthermore,

¹⁰²³ Ibid., 10.

¹⁰²⁴ Ibid.

¹⁰²⁵ Ibid.

¹⁰²⁶ Ibid.

¹⁰²⁷ Ibid., 11-2.

Page summarized that while studies in video games did not have the scholarly attention that their TV brethren had over the past forty years, with the technology constantly advancing, keeping up with the change will prove even more difficult.¹⁰²⁸ He goes on to state that from recent research,

One, at least in the short term, children who play violent video games are significantly more aggressive afterwards than those children who play less violent video games. Two, violent TV programs and video games have similar effects in raising children's subsequent levels of aggression. And three, violent video games can suppress children's inclination toward engaging in prosocial behaviors.¹⁰²⁹

In addition, Page offers four suggestions from the Children's Television Resource and Education Center on dealing with the violent video game problem. First, the federal government needs to fund projects aimed at interactive media.¹⁰³⁰ Two, the video game industry needs to provide parents with accurate product information via ratings system.¹⁰³¹ Three, the video game industry needs an industry wide commitment in order to enforce the widespread usage of the ratings system.¹⁰³² Fourth, as technology progresses and features more realistic characters, the video game industry must agree to a voluntary cap on all in-game violence portrayed in order to protect children from participating in "heinous act of cruelty, misogyny and inhumanity should not be portrayed, regardless of profits."¹⁰³³

The second witness to speak at the witness stand was Dr. Eugene F. Provenzo, a professor at the University of Miami and writer of *Video Kids: Making Sense of Nintendo*.¹⁰³⁴ In his book, he believed that video games are "overwhelmingly violent, sexist, and racist."¹⁰³⁵ Moreover, while researching, he discovered that when looking at the top forty-seven most

¹⁰²⁸ Ibid., 11-12.

¹⁰²⁹ Ibid., 12.

¹⁰³⁰ Ibid.

¹⁰³¹ Ibid.

¹⁰³² Ibid.

¹⁰³³ Ibid.

¹⁰³⁴ Ibid., 11, 14.

¹⁰³⁵ Ibid., 14.

popular video games in America circa 1990, based on the power polls found in *Nintendo Power Magazine* forty of them had violent themes incorporated, and of those listed, several of them featured a woman getting kidnapped and needed rescue from a male protagonist.¹⁰³⁶ Concurring with Page, Provenzo also notes that the relationship between video game violence and real life aggression are more than likely connected, but since the newness of this "powerful and cultural force" in America, as he puts it, no major studies have been undertaken yet by scholars.¹⁰³⁷ Ultimately, once again agreeing previous speaker's testimony, the blame of this violence and sexual content found in those current games should be on the hands of the video game industry and in turn, it is their job to take responsibility for their actions and make games a safe place for children.¹⁰³⁸

The third speaker Robert Chase represented the National Education Association (NEA) and its 2.1 million employees consisting of "elementary, secondary, vocational, and post-secondary schools."¹⁰³⁹ Quite interestingly, Chase does not have anything going for the NEA yet, his testimony concurs Chase's and Provenzo's previous statements as it mainly touches upon the disappointment of people demand for more sexually and violently graphic video games, and the responsibility of protecting the children mainly on the hands of both the parents and the video game industry.¹⁰⁴⁰ Going further, in his written statement, he gives a much more damning explanation stating, "These video games are not just child's play. They shape our children's values, their sense of justice and compassion, and their overall world view."¹⁰⁴¹ Furthermore, he proclaims,

¹⁰³⁶ Ibid., 15.

¹⁰³⁷ Ibid.

¹⁰³⁸ Ibid., 16.

¹⁰³⁹ Ibid., 19.

¹⁰⁴⁰ Ibid., 20-21.

¹⁰⁴¹ Ibid., 21.

Many studies have established a link between passive television viewing and aggressive social behavior. Video games are anything but passive in the way they involve young people in brutal acts. In the world of today's video games, children are encouraged and even rewarded for committing electronic acts that are nothing short of heinous, sadistic, and barbaric. Yet these games are the recreation of millions of our children-children who are not only impressionable, but unable to cope with the perverse emotional states the games demand.¹⁰⁴²

Rounding out his argument, in both the written and spoken testimonies he claims that while the constitution's First Amendment protects video games, the founding fathers never intended to protect such content found in video games let alone fathom such complex technology such as the Computer and CD-ROMs.¹⁰⁴³ Furthermore, Chase believed that a rating system that worked with the video game industry and parents served as the bet in "promoting awareness of the relationship between the depictions of violence and the reality of violence in America today."¹⁰⁴⁴

A parent, teacher, and Vice President of the National Coalition on Television Violence the final witness, Marilyn Droz, was both the most candid and unusual member of the group.¹⁰⁴⁵ Quickly getting to the point, she calls out the video game industry's manufactures and shareholders by "shaming" their product for producing such filth.¹⁰⁴⁶ While speaking, she makes a comparison defining the word "toy" in Swedish as "little tools."¹⁰⁴⁷ The tools she suggests help prepare children for the future and with technology advancing at a rapid rate and they will push them in directions that people cannot fathom.¹⁰⁴⁸ However, these tools in her opinion are perverting children through their violence and sexist themes. This is seen in her testimony as she states,

The video industry has done the same thing that the movie industry has done. They have confused children's desire or action with violence. My 23 years of

¹⁰⁴² Ibid.

¹⁰⁴³ Ibid., 20-21.

¹⁰⁴⁴ Ibid.

¹⁰⁴⁵ Ibid., 11.

¹⁰⁴⁶ Ibid., 22.

¹⁰⁴⁷ Ibid.

¹⁰⁴⁸ Ibid.

working with children directly has proven to me that children want action, they want excitement. They do not need to see the insides of people splattered against the wall to understand. You know, they need action, but they do not need to find murder as a form of entertainment.¹⁰⁴⁹

In addition, she also points out a technical gender discrepancy in regards to access. In the testimony, Droz speaks upon how computers, games, and technology are designated as a boy's toy while girls however get pushed aside due to a lack of games not geared for them.¹⁰⁵⁰ This inequality pushes away, in her opinion, fifty percent of the American population from learning about the computer thus creating a technological gender gap.¹⁰⁵¹

On that note, Droz also brings attention to the lack of female characters with considerable power in video games. Often objectifying them, these women are often the victims or sex object meant for the appeal of men or the reward for the hero.¹⁰⁵² Furthermore, those who do have in her opinion, "are built with iron body parts or they have the kiss of death; they can blow the kiss of death. Once again, we got sex and violence mixed into the message. This has to stop." Untimely, while not in her spoken testimony, she writes in the written statement that the responsibility for these unsettling act lies with the video game industry and while a ratings system is a step in the right direction, she would like to see harsher measures such as warning labels similar to cigarettes warning the "effects of violence on children."¹⁰⁵³

After opening statements concluded, the witness' began their Q&A with Lieberman and Kohl. During the session, a few hot button issues came up that warrant attention. One such area already mentioned came from the lack of scholarly studies about video game aggression. Dr. Provenzo stated that when he wrote *Video Kids*, all the information about the psychological point

¹⁰⁴⁹ Ibid.

¹⁰⁵⁰ Ibid.

¹⁰⁵¹ Ibid.

¹⁰⁵² Ibid., 23.

¹⁰⁵³ Ibid., 24.

of view of video games came from the early 1980s when such as *Space Invaders* was new on the market.¹⁰⁵⁴ Furthermore, with the advancement of technology such as the VR craze happening, video games were quickly evolving from from playing the game into interacting with the game's world.¹⁰⁵⁵ Page concurs with Provenzo's statements, but these limited studies were conducted in the early 1980s and while they did show the children getting aggressive these were out of date with today technology and needed hundreds more testing to prove the connection.¹⁰⁵⁶ On the contrary, he also states while it makes for a great theory, research at the time also pointed to the opposite direction by stating video games actually decreased aggressive behavior, but these were inconclusive and needed more testing to prove.¹⁰⁵⁷

Another issue that received attention was gender and the game *Night Trap*. Most notably, Droz in her testimony believed that by simply watching violent entertainment, a child or adult is more likely to become more insensitive to victims of sexual crimes.¹⁰⁵⁸ Dr. Provenzo stated that with new computer software such as cybersex and dildonics, if a teen got their hands on this software they might engage in acts of sexual violence against women and this he found was "very scary."¹⁰⁵⁹ Even less sexual titles such as *Night Trap* he states do show sexual overtones like the featured image found on the games box art.¹⁰⁶⁰

These were highly concerning to the doctor, but Senator Dorgan retorts with a statement made by one of the game's producers Tom Zito, who claimed the game was a "spoof of vampire films" and the controversial bathroom scene only occurred when the player lost.¹⁰⁶¹ Droz

¹⁰⁵⁴ Ibid., 27.

¹⁰⁵⁵ Ibid.

¹⁰⁵⁶ Ibid.

¹⁰⁵⁷ Ibid., 29.

¹⁰⁵⁸ Ibid., 28.

¹⁰⁵⁹ Ibid.

¹⁰⁶⁰ Ibid., 29.

¹⁰⁶¹ Ibid., 30.

counters this remark by saying, "Oh, it makes me feel a lot better that if you are loser, you are dead? No it doesn't. We are dealing with self-esteem here."¹⁰⁶² When regarding to game magazines that teach kids how to beat the game, she goes on the record by further stating, "In no time at all, children become winners and kill and their kill ratio goes up. It tells them the secret codes and exactly what to do to become successful at murder."¹⁰⁶³ Senator Dorgan concurs with the overall message set by the witnesses and calls *Night Trap* shameful to drag a woman by a metal hook and drill into her neck as entertainment.¹⁰⁶⁴

Finally, though addressed at the beginning of the Q&A, senator Kohl asks the witnesses what they would like to say to the video game industry. Page wanted two things; first, he did not want to see games marketed for teenagers appeal to young children who ask their parents to buy the game for them.¹⁰⁶⁵ Second, he wanted the video game giants to start creating games that dropped the violence in favor of creative ones that replicate the action and glitz of action titles children to enjoy.¹⁰⁶⁶ Provenzo, while once again mirroring Page sentiments pushed for more quality games as well as wanting the gaming industry to provide parents with content guidelines on both the boxes and stores to help them decide what game to buy for their children.¹⁰⁶⁷ Chase unlike the above two simply wanted the video game industry to take responsibility for their violent games and instead push for software that helps build society rather than destroying countless lives.¹⁰⁶⁸ Droz on the other hand, wanted the prospective ratings system to have an independent board free of influence in order to prevent false ratings.¹⁰⁶⁹ She also encouraged

¹⁰⁶² Ibid.

¹⁰⁶³ Ibid.

¹⁰⁶⁴ Ibid., 31.

¹⁰⁶⁵ Ibid., 24.

¹⁰⁶⁶ Ibid., 24-5.

¹⁰⁶⁷ Ibid., 25.

¹⁰⁶⁸ Ibid.

¹⁰⁶⁹ Ibid.

video game makers to work with the educational community, as video games proved effective as excellent tools for problem solving, creativity, and logic.¹⁰⁷⁰

With the above marks out of the way, Lieberman dismissed the first panel and taking their place was the representatives of the video game industry took the stand. With their remarks ready to go, these men and women held the future of the North American video game market in their hands. The panel included such names as Senior Vice President of Nintendo of America Howard Lincoln, William White Jr., Vice President of Sega of America, The Council of the Software Publishers Association Irene Rosenthal, Dawn Wiener, President of the Video Software Dealers Association, and Craig Johnson, former President of the Amusement and Music Operators Association.¹⁰⁷¹ Yet, before discussing the testimonies of Lincoln and White, the paper needs to address one interesting quirk of this hearing, the lack of testimony from Rosenthal, Wiener, and Johnson.

Working backwards, we start with Craig Johnson, the immediate past President of the Amusement and Music Operators Association. Representing a 1,700-member association of owner-operators of coin-operated machines and 140 manufactures, the AMOA represented the largest sector of the arcade business in the United States.¹⁰⁷² Committed against games that utilize excessive graphic violence, the group supported the video game industry to enact self-policing measures in order to curb the increasing violence in video games, as it would be bad for their business much like the backlash seen in the early 1980s after the 1983 North American Crash.¹⁰⁷³ On the other hand, Johnson proclaimed that they played no role peddling violent video

¹⁰⁷⁰ Ibid., 26.

¹⁰⁷¹ Ibid., 35.

¹⁰⁷² Ibid., 57.

¹⁰⁷³ Ibid., 58.

games as the "AMOA does not manufacture video games and cannot control what designers put into their games."¹⁰⁷⁴

Furthermore, throughout the Q&A, Johnson continuously denied any involvement despite two of the games featured in the trial, *Mortal Kombat* and *Lethal Enforcers* were originally arcades exclusive titles before ported onto the consoles. When regarding Kohl on how to keep kids from accessing these arcade machines, the former president simply stated that there was no way keep kids from playing those games at such public places as arcade chains, bowling alleys, restaurants, and movie theaters.¹⁰⁷⁵ The only way for kids to stop playing is for the location owners to call the AMOA and ask for its removal.¹⁰⁷⁶ When Lieberman asked once if the arcade manufactures could support a rating system, he once again denied that they could do anything about it besides removing the arcade machine all together.¹⁰⁷⁷ Though despite acting as one of the bigger instigators of three games showcased at the hearing, all three senators let him side with little effort.

Another one that slipped by in the trial was Dawn Weiner. Representing the Video Software Dealers Association, her organization included over 4,000 member companies and supplied over 20,000 retailers.¹⁰⁷⁸ Since 1991, through its Pledge to Parents program managed to prevent the rental and sale of R and NC-17 movies to children.¹⁰⁷⁹ A strong supporter of self-policing, they supported a voluntary ratings system to ease the concerns of Americans in order to prevent any governmental or quasi-governmental organization from stepping in on their own

¹⁰⁷⁴ Ibid.

¹⁰⁷⁵ Ibid., 65.

¹⁰⁷⁶ Ibid., 65.

¹⁰⁷⁷ Ibid., 72.

¹⁰⁷⁸ Ibid.

¹⁰⁷⁹ Ibid., 56.

terms.¹⁰⁸⁰ By supporting the video game manufactures, they agreed to do everything in their power to make a voluntary rating system possible.¹⁰⁸¹

Despite being one of the bigger distributors of video game rentals in the country, they played little role in the trial. Only twice did Wiener make a comment. First, it was to address working with and supporting Sega and the VSDA role in aiding the establishment of a universal ratings system back in September 1993.¹⁰⁸² She also noted that Nintendo declined the invitation, but Lincoln retorted in his defense that while Sega was part of the VSDA, Nintendo does not distribute games to her organization, and "Nintendo is not the VSDA's favorite customer."¹⁰⁸³ The second time she spoke came near the end of the hearing where she responds to Lieberman's inquiry about the VSDA willingness to implement the prospective ratings systems. Wiener responded to this by stating that they planned to include Video Games in the Pledge to Parents program and try to the best of their ability to keep violent titles out of the hands of children.¹⁰⁸⁴ Once again, despite the VSDA playing a large role stocking many major stores and retailers, the three senators let them slide without any trouble.¹⁰⁸⁵

The last of the mentioned trio, Ilene Rosenthal, council of the SPA, served little to no purpose in the hearing despite representing the interests over one thousand major companies including Sega, Apple, Konami, and Brøderbund as well as controlling over ninety percent of home computer software sold globally!¹⁰⁸⁶ In the spoken testimony, Rosenthal addresses that despite the rare few games that feature violence the SPA mainly sells titles that have little to no

¹⁰⁸⁰ Ibid.

¹⁰⁸¹ Ibid.

¹⁰⁸² Ibid., 65.

¹⁰⁸³ Ibid., 65.

¹⁰⁸⁴ Ibid., 71-2.

¹⁰⁸⁵ Ibid., 65.

¹⁰⁸⁶ Ibid., 48-9.

violence in them such as *Microsoft Flying Simulator*, *X-Wing* and *Front Page Sports*.¹⁰⁸⁷ She also notes that computer games are mainly targeted towards older consumers ages eighteen to forty-five and the games featured use keyboard and computer rather than cartridges and controllers.¹⁰⁸⁸ Finally, she pledged the SPA support to help create a uniform ratings system that provided parents with the information they needed to make an informed choice as well as beginning work on their own universal ratings system that utilizes the input of industry leaders, child psychologists, education, and parent-teacher groups.¹⁰⁸⁹

Outside of a prepared written testimony that expanded upon much of the points seen above, Rosenthal contributed nothing to the overall trial. The only time she spoke came near the end of the hearing when Lieberman asked if Konami was part of the SPA and would she support a ratings system.¹⁰⁹⁰ Her response to the first question simply came down to her not knowing if Konami was part of the SPA, as she did not have any knowledge about the company.¹⁰⁹¹ When answering about the ratings system she completely complied in supporting the enforcement of a ratings system.¹⁰⁹² In the end, despite Konami being part of the SPA as noted in her own written statement, some of the most violent games featured on the computer such as the controversial *Wolfenstein 3D* went completely unnoticed by the Senate committee even though id Software was part of the SPA.¹⁰⁹³ Ergo, the wild west of video games remained untamed as it served as a place where violence and sexual content went unchecked for a while longer.

At the heart of the first hearing, two companies that were embroiled in the bit wars stood at its epicenter, Nintendo and Sega. In comparing the two, Howard Lincoln used much of the

¹⁰⁸⁷ Ibid., 49.

¹⁰⁸⁸ Ibid., 50.

¹⁰⁸⁹ Ibid.

¹⁰⁹⁰ Ibid., 71.

¹⁰⁹¹ Ibid.

¹⁰⁹² Ibid.

¹⁰⁹³ Ibid., 54.

company's history with regulating game content to their advantage in both his spoken and written testimonies. Establishing guidelines when they released their first console, the NES in 1985, they managed to work with their 70 third-party licenses to keep such themes as graphic violence, sexual stereotypes, profanity, and the use of illegal drugs from almost all of their licensed 1,200 games in the United States.¹⁰⁹⁴ Turning the controversial games at hand, when Konami asked Nintendo to publish *Lethal Enforcers* on the SNES, Nintendo refused to do so until the developer made substantial changes to the in-game content as well as take the name "Justifier" from its light gun.¹⁰⁹⁵ On *Night Trap*, Lincoln outright stated that the game would never appear on a Nintendo console as "violence against women, simply has no place in our society."¹⁰⁹⁶ On *Mortal Kombat*, when Acclaim, the game's console port developer, came to Nintendo to license the SNES version, Nintendo of America willingly asked them to omit the blood and death animations while full knowing that they will make lose money by porting less violent version than the Sega port.¹⁰⁹⁷ The result led to the sanitized SNES version *Mortal Kombat* that came under heavy scrutiny as angry gamers wrote and called the company telling them that they were censoring the game by removing what made the game unique.¹⁰⁹⁸

Finally, Lincoln agreed to aid in the development of a rating system, but he further explains that, "it was not a substitute for corporate responsibility, and rating games will not make them less violent."¹⁰⁹⁹ In his opinion, only through controlling game content and exercising some self-control only then will developers keep games such as *Night Trap* off the market.¹¹⁰⁰

Furthermore, he states for a rating system to work it needs several factors to come together such

¹⁰⁹⁴ Ibid., 35.

¹⁰⁹⁵ Ibid., 70.

¹⁰⁹⁶ Ibid., 36.

¹⁰⁹⁷ Ibid.

¹⁰⁹⁸ Ibid.

¹⁰⁹⁹ Ibid.

¹¹⁰⁰ Ibid.

as maintaining credibility, mass participation from the video game industry, making it clear, concise, and understandable to the masses and making the public aware for it to have a chance at succeeding.¹¹⁰¹ Lastly, according to Lincoln, the rating system must have an independent board to rate the games, as in his belief, a self-administered rating system is unenforceable by any means.¹¹⁰²

Contra to the above, Sega's William White went on the defensive during his opening testimony making four key points. First, unlike the popular media opinion at the time, the vice president states video games are not just for children as plenty of teens and adults partake in gaming.¹¹⁰³ For example, he states the average age of a Sega CD user is twenty-two years of age and the average age for the Sega Genesis user is nineteen.¹¹⁰⁴ Out of these statistics, only five percent of thirteen year olds play a Sega CD and fewer than 30 percent of Sega Genesis users are non-teenagers.¹¹⁰⁵ Secondly, he notes that Sega possesses a vast video game library with forty percent of their games sold in 1993 came from action/adventure titles, thirty-five percent from sports games, thirteen percent from fighting games, five percent each of total revenue came from both role playing games and educational games and two percent came from puzzle oriented games.¹¹⁰⁶

Third, by building on the MPAA ratings, Sega developed the VRC to help parents make informed choices. Consisting of three ratings, GA, MA-13, and MA-17, alongside a toll-free phone hotline staffed by professionals, the "Everyone Wins" brochure that explains their ratings in detail, an independent council consisting of experts from "child psychology, sociology

¹¹⁰¹ Ibid., 36, 40-1.

¹¹⁰² Ibid., 40.

¹¹⁰³ Ibid., 41.

¹¹⁰⁴ Ibid., 42.

¹¹⁰⁵ Ibid.

¹¹⁰⁶ Ibid.

cinema, education" that rates each game all contribute to making their ratings system possible.¹¹⁰⁷ As for the fourth point, they agreed to support the establishment of a universal ratings system by working with retailers, the SPA, and other video game developers and publishers in order to make it possible.¹¹⁰⁸

As soon as Lieberman began the Q&A with the five witnesses, the senator immediately targeted White calling him out on the game *Night Trap* asking him why Sega does not pull it off the market.¹¹⁰⁹ White retorts that the point of his opening testimony was to show video games are not just for children, but also for an adult audience as in the case for *Night Trap*.¹¹¹⁰ Lieberman after hearing this criticizes him calling for an "exercise of responsibility" for showing a woman attacked by a darkly clothed man but Sega's Vice President countered by saying, "Let me make two points. First, if you showed only the violent and gory scenes out of context consecutively, one after the other, from "Roots" or "Gone With The Wind," you might conclude that they are horrible films, but in reality they aren't."¹¹¹¹ He further hits home by stating the senators were jumping to conclusions as the point of *Night Trap* was to save the victims from the villains, but you will see a person attacked if the player lost.¹¹¹² Lieberman snuffed this remark and commented that he had a long way to go if his point was to show that his video games did not show aggression towards women or raised cultural values of the players.¹¹¹³

Another topic that they touch upon was Sega's advertising policies. In an example, Lieberman brought out a brochure from Circuit City's featuring Sega's top products from their 1993 lineup and among the appropriate family titles such as *Joe Montana Football* and

¹¹⁰⁷ Ibid., 42-3.

¹¹⁰⁸ Ibid., 43.

¹¹⁰⁹ Ibid., 58.

¹¹¹⁰ Ibid.

¹¹¹¹ Ibid., 59.

¹¹¹² Ibid.

¹¹¹³ Ibid.

Spiderman v. Kingpin, one of them happened to be *Night Trap*.¹¹¹⁴ The senator follows up his previous remark by then showing the "young Bobby Angles Mortal Kombat commercial" and stated for a game that was meant for teenagers, why did the kid in the commercial look younger than twelve?¹¹¹⁵ William White comments that while the commercial chief target was the teenage demographic, he possessed no knowledge on what the general age of its cast members.¹¹¹⁶ Furthermore, he stated that children's television time would not permit that kind of commercial and while they do by time to advertise to children and teens, the Sega ratings system was there to serve as guidelines for buyers and thus preventing censorship.¹¹¹⁷ After stating this, Lieberman hits him again with another example this time featuring a third party advertisement for the game *Splatter House 3* stating, "He's back. *Splatter House 3*, for Sega Genesis, is the kind of game ratings system were invented for."¹¹¹⁸ White struck back stating that Sega has no control over third party licensees' advertisements or their opinions, so he cannot make a statement for that company.¹¹¹⁹

Turning back to Lincoln, the vice president of the North American branch quickly attacks White's earlier comments noting White's former employment with Nintendo and claiming he should know the demographics of their market as it mainly pertained chiefly to a younger audience.¹¹²⁰ Pushing further, he advocates that a ratings system does not go far enough as if the video game industry just put a rating on the game; they will go nowhere to curb the problem.¹¹²¹ In addition, despite Whites advocacy for the Sega VRC, Lincoln notes that *Night Trap* did not

¹¹¹⁴ Ibid., 59-60.

¹¹¹⁵ US Senate, *Video Games: A Parent's Guide to Games*, 60; "Video Game Violence" (video), *C-SPAN*, December 9, 1993, accessed December 21, 2015, <http://www.c-span.org/video/?52848-1/video-game-violence>.

¹¹¹⁶ US Senate, *Rating Video Games: A Parent's Guide to Games*, 60.

¹¹¹⁷ Ibid., 60-1.

¹¹¹⁸ Ibid., 61.

¹¹¹⁹ Ibid.

¹¹²⁰ Ibid.

¹¹²¹ Ibid.

possess any type of rating or warning featured on the box and a young child theoretically can pick up the game in any K-Mart, Wal-Mart, or Toy 'R Us with very little trouble especially if an adult buys the game for them.¹¹²² Finally, he notes that as he walked in he saw an ad for the Super Nintendo game *Untouchables* as part of the evidence.¹¹²³ After calling Nintendo and discovering that the third party licensee for that game went behind their back and released an ad without Nintendo's permission, they were in breach of contract if the ad is not withdrawn.¹¹²⁴ He also goes on record by stating Sega does have the power to control advertising, but they refuse to do so unlike Nintendo.¹¹²⁵ Finishing the remark, he apologizes to the committee for their slip up and tells them "when I get back to Seattle, I will call that licensee."¹¹²⁶

Lincoln's statement received praise from Lieberman as he told the witness, "Thanks for your forthrightness, thanks for assuming responsibility. I believe you have shown some leadership here. You are not perfect, as you have said, but you have been a damn sight better than the competition."¹¹²⁷ Enraged, White attempts to attack Lincoln's statement by showing a video of the SNES version of game *Street Fighter II* claiming the Nintendo does not rate their own violent games like Sega who gives all fighting games an M-13 rating.¹¹²⁸ Lieberman however directly retorted to White,

Mr. Lincoln, on behalf of Nintendo has accepted the idea of a ratings system. They have previously been self-regulating more than you have. They chose not to produce "Night Trap" and they have a clearly less violent version of "Mortal Kombat" out. You have a rating system, but I have still not today heard you accept responsibility for regulating the content of your games more than you already are, and I regret that. That I think, notwithstanding the tape you have

¹¹²² Ibid.

¹¹²³ Ibid.

¹¹²⁴ Ibid.

¹¹²⁵ Ibid., 61-2.

¹¹²⁶ Ibid., 62.

¹¹²⁷ Ibid., 63.

¹¹²⁸ "Video Game Violence" (video), C-SPAN, December 9, 1993, accessed December 21, 2015, <http://www.c-span.org/video/?52848-1/video-game-violence>; US Senate, Rating *Video Games: A Parent's Guide to Games*, 63.

shown us, which doesn't compare, in my opinion, to "Mortal Kombat" and "Night Trap" is what is at issue here.¹¹²⁹

Sega fell under further scrutiny as Senator Dorgan and Lieberman decided to go after the company's pride and joy, the VRC ratings system. When asking about the difference between the MA-13 and MA-17 rating, which White stated that the VRC considers thirteen as an adult advisory and seventeen as adults according to their guidelines causing a surprised Dorgan to state, "are you kidding me?"¹¹³⁰ After hearing White attempting to clarify, the senator scolds him by saying, "Mr. White, I read your statement and honestly think you don't understand what we are talking about here, and let me tell you why."¹¹³¹ He goes on to state,

My sense is that you really don't get what this hearing is about, and I don't mean to single you, it is likely there are others that ought to be sitting in your place. But, you know, it seems to me we have to begin to exercise some common sense to protect our children, and when you and when others say-and my guess is the person that marketed this particular game says this is not for kids, this is adult entertainment. The fact is you know and I know that kids in this country will have wide access to it, and we need to exercise responsibility to see that we protect those children.¹¹³²

Ultimately, he claims by following the money trail and marketing these games to kids is far more profitable at the expense of stripping the morals of children. He hopes that this trial will push video games in a more constructive direction.¹¹³³

Lieberman also chimed in on the Sega VRC with another controversial game, Lethal Enforcers, and the problem with gun violence in the United States. As he discusses the problem, he takes a moment to read a passage from Sega's own updated December 2, 1993 guidelines that goes as follows, "As always, Sega will not approve products which contain, one material that

¹¹²⁹ US Senate, *Rating Video Games: A Parent's Guide to Games*, 63.

¹¹³⁰ *Ibid.*, 68.

¹¹³¹ *Ibid.*

¹¹³² *Ibid.*, 69.

¹¹³³ *Ibid.*

encourages criminality of any kind."¹¹³⁴ The senator then tells the Sega VP the problem with *Lethal Enforcers* here comes from giving a gun to a child and encouraging them to shoot at both enemies and innocent bystanders who when hit fall back and bleed after being shot.¹¹³⁵ Looking into the matter further, one of Lieberman's aids on the morning of the hearing went into a Toys 'R Us and found in plain view both *Mortal Kombat* and *Lethal Enforcers* next to other popular children games.¹¹³⁶ Moreover, these game's ratings were obscured from view, and while the senator states that Sega does not own the store, he states that without some form of standardization, could they even afford to trust the retailer in promote their rating.¹¹³⁷ Furthermore, he shows White a promotion from the same store featuring *Lethal Enforcers* and once again, they obscured rating from view.¹¹³⁸ Granted, while the store did play a role in hiding the rating, Lieberman states Sega was also at fault as they could have moved the rating to another more visible part of the box or simply state that this game should not be played by anyone under the age of 17.¹¹³⁹

In really a last gasp to save face, White once again defended and in some ways blamed the Sega rating system by stating "Senator, we rely on the independent ratings council to help us make those decisions because we at corporate are not psychologists, we are not sociologists. We do not understand the detail of that research that was discussed at the first panel. We rely on experts to help make those decisions, and they have rated that product MA-17, only appropriate for adults."¹¹⁴⁰ In addition, he tries to divert attention by introducing Nintendo's "rapid fire

¹¹³⁴ Ibid.

¹¹³⁵ Ibid.

¹¹³⁶ Ibid., 70.

¹¹³⁷ Ibid.

¹¹³⁸ Ibid.

¹¹³⁹ Ibid.

¹¹⁴⁰ Ibid., 69.

machine gun" that has no rating on any of the games that uses the "bazooka."¹¹⁴¹ Responding, Lincoln clarified the object in question was the Super Scope, a product that could be bought for the SNES and in comparison to *Lethal Enforcers* Justifier packaged with the game, their "gun" is used for target shooting.¹¹⁴² Lieberman agreed with the Nintendo VP and replied the weapon packed in with the genesis game is a handgun, pure and simple and giving an assault weapon to children is a bad idea.¹¹⁴³

As noted earlier Sega, Nintendo, the SPA, the VSDA, and to some extent the AMOA all concurred that a ratings system was in order and each promised to do everything in their power to make it happen. At the time, Senator Lieberman wanted to hear more from the video game industry in February to check in their progress on the creation of a prospective ratings system.¹¹⁴⁴ In Kohl's final remarks, his sentiments mirror his fellow senators remarks and calls the video game industry as exercise in the limits freedom in regards to profit and further states "I think this is an example of how we can push it too fare and really do great damage to our country."¹¹⁴⁵ With all the business taken care of for the day, the first hearing officially ended.

During the intersession, video game industry leaders began work on creating a universal ratings system, but they had more problems in back in Washington. In order to keep them on their toes and to make sure they agree to get something out quickly, Senators Lieberman, Kohl, and Dorgan enacted some blackmail legislation. Introduced on February 3, 1994, the "Video Game Rating Act of 1994" proposed the creation of a voluntary ratings system that would provide information about the graphic violence or sexually explicit content found in certain

¹¹⁴¹ Ibid.

¹¹⁴² Ibid., 70.

¹¹⁴³ Ibid.

¹¹⁴⁴ Ibid., 73.

¹¹⁴⁵ Ibid.

games.¹¹⁴⁶ The act also called for "providing parents with information about the nature of video games which are used in homes or public areas, including arcades or family entertainment centers."¹¹⁴⁷ They also define video games and video devices as "any interactive computer game, including all software, framework, and hardware necessary to operate a game, placed in interstate commerce."¹¹⁴⁸ Finally, the definition the writers used for video game industry proclaimed that "all manufacturers of video games and related products" fell under this umbrella term.¹¹⁴⁹ Conversely, in the House, Congressman Tom Lantos took the bill word for word and prosed it as H.R 3785 in an act of cooperation with the Senate.¹¹⁵⁰

While Washington prepared its contingency plan, the video game industry also worked on the creation of proposed universal ratings system, yet no information exists that shows how they accomplished this feat. Newspapers sources do not cover any viable information on the subject, there is no available minutes to these meetings, and interviews with key industry leaders that discuss the creation of the now ESRB virtually do not exist. Even great secondary sources such as *Ultimate History of Video Games, Replay: The History of Video Games* and *Phoenix: The Fall & Rise of Video games* do not even cover in depth what happened in-between the first and second hearings. What we do know is that leaders from Nintendo, Sega, Atari, Acclaim, 3DO, and countless other developers and publishers met a few times in public most likely at the Winter CES in 1994 and in private to create the new ratings board.¹¹⁵¹ Sometime during the intersession, both Jack Heistand and Douglas Lowenstein were brought in to serve as the chair

¹¹⁴⁶ US Congress, Senate, "THE VIDEO GAME RATING ACT OF 1994 -- S 1823," February 03, 1994, 103rd congress, 2nd session, *Congressional Record* 140, pt.8: S1146-7.

¹¹⁴⁷ *Ibid.*, 1147.

¹¹⁴⁸ *Ibid.*

¹¹⁴⁹ *Ibid.*

¹¹⁵⁰ US Congress, House of Representatives, "INTRODUCTION OF H.R. 3785, THE VIDEO GAME RATING ACT OF 1994 -- H.R. 3785" February 03, 1994, 103rd congress, 2nd session, *Congressional Record* 140, pt.8: E105-6.

¹¹⁵¹ Kent, *The Ultimate History of Video Games*, 479.

and President of the Interactive Entertainment Industry Committee who made strides in creating a Washington based lobbyist group supporting video game interests.¹¹⁵² Finally, the PC software industry under the SPA who at the time did not agree with the direction the possible ratings system decided to break off and create a PC oriented alternative.¹¹⁵³

Most notably, what we can scrape up about the meetings reveals the animosity between the major video game players at the time. According to Richard Brudvik-Lindner,

In a lot of ways, the hearings really changed the industry. It was a coming of age for the industry. It really marked the arrival of Sega as the industry leader. It created alliances and engendered animosities that exist to this day. It also created the opportunity for the PC entertainment industry and the video game industry to check each other out and see if they could be married. It forced these companies to develop a political savvy that they never really had.¹¹⁵⁴

While once again, we do not know what proposed ratings were thrown around during this time, but one confirmed ratings system as discussed was the Sega VRC. After proposing, many companies such as Nintendo objected thus forcing Sega to back down and compromise with the others.¹¹⁵⁵ As they did, Douglas Lowenstein says in Kent's book states, "Well, I think the real reason they didn't go with Sega's ratings system was that it was Sega's Rating system and...at the time the notion of Nintendo and Sony as fierce competitors, with Sega adopting a system identified with Sega's product, was...that was very unpalatable."¹¹⁵⁶ While tough to work together, in the three months that followed the December 1993 hearing, a joint consensus emerged from these groups and from it, the formation of a unified rating board emerged from the chaos.

¹¹⁵² Ibid., 478-9.

¹¹⁵³ Ibid., 479.

¹¹⁵⁴ Quoted in Kent, *The Ultimate History of Video Games*, 477-8.

¹¹⁵⁵ Kent, *The Ultimate History of Video Games*, 479.

¹¹⁵⁶ Quoted in Kent, *The Ultimate History of Video Games*, 479.

Finally, the biggest double edge reaction from the first hearing came with the removal of the game *Night Trap* as the negative publicity shown seen by millions of views in news outlets, newspapers, and eventually the senatorial hearing, convinced retailers to pull the game from the shelves.¹¹⁵⁷ While this should have ended the game, much like Atari game *Custards Revenge* in 1982, the negative publicity transformed it into a cult classic and sparked re-interest in the title. When speaking with Kent, Tom Zito commented, "Sega wound up selling way more copies of MK1, probably as a result of the hearings, *Night Trap* came back to life, You Know, I sold 50,000 units of *Night Trap* after those hearings."¹¹⁵⁸ Furthermore, in 1994 and 1995, the game was rereleased for the Sega 32X, 3DO, and PC, but the only difference this time around was they removed the "offensive" original box art of that of Dana Plato, the actor who played Kelly and the central hero of the game.¹¹⁵⁹ Since then, *Night Trap* alongside *Lethal Enforcers*, and the first *Mortal Kombat* forever solidified themselves as the games that helped pushed for the creation of a ratings system gaining further popular appeal, something ironically the senators wanted to prevent in the first place.

On March 4, 1994, the hearing on rating violent video games reconvened once again under the leadership of Lieberman and Kohl. Serving as a progress report, both senators wanted to see the progress made on video game industry's creation of a universal ratings system as well as question the major retailers and arcade dealers in possibly stopping the sell and access of violent video games to children. However, this did not come without a warning as Kohl, Dorgan, and Lieberman had prepared the "Video Game Rating Act of 1994" in case the leading video

¹¹⁵⁷ Mike Langberg, "Sega Will Yank 'Night Trap' from Stores, *San Jose Mercury News* (California), January 11, 1994; Tom Redburn, "Toys 'R Us Stops Selling a Violent Video Game," *The New York Times*, December 17, 1993.

¹¹⁵⁸ Quoted in Kent, *The Ultimate History of Video Games*, 478.

¹¹⁵⁹ Kent, *The Ultimate History of Video Game*, 478.

game leaders failed to develop an appropriate rating system of their own.¹¹⁶⁰ Kohl in his opening speech states, "Violent video games are harmful to our children, and at a time when we need to cultivate morality in our society, these games, like too much of what we see on television and movies, teach our children all the wrong values."¹¹⁶¹ Lieberman in his opening speech emphasized heavily the need of the ratings system to have teeth to punish offenders, educate the public about the system by providing plenty of information, and create a credible, but reliable ratings guide with high standards, which does not falter on its own principles by the falsification of ratings.¹¹⁶² Ultimately, he states the video game industry whose influence in this new technology proved so great now held the responsibility to either cultivate the growth of society's children or indoctrinate them with senseless death and carnage.¹¹⁶³ The proceedings then turned to Tom Lanthos, one of the congressional representatives from Texas.

While not adding much to the overall argument, Lanthos' testimony did serve one purpose as it showed bipartisan support for a video game ratings system. After the proposal of the "Video Game Rating Act of 1994", the House followed up with "H.R. 3785", which acts as the House of Representative's counterpart to the Senate proposition.¹¹⁶⁴ Furthermore, he notes that while humans have a long human history with violence, torture, and sadism before the creation of a video game, the congressional representative believes games should serve a more constructive purpose, which in turn, lead society in a more civilized direction.¹¹⁶⁵ Finally, Lanthos states that while demonizing the video game industry was unnecessary, they needed to practice corporate responsibility and become a positive force to society instead of an enemy of

¹¹⁶⁰ US Senate, *Rating Video Games: A Parent's Guide to Games*, 76.

¹¹⁶¹ *Ibid.*, 75.

¹¹⁶² *Ibid.*, 80.

¹¹⁶³ *Ibid.*, 81.

¹¹⁶⁴ *Ibid.*, 82.

¹¹⁶⁵ *Ibid.*

the state.¹¹⁶⁶ After leaving the table, Lieberman called forth the first panel consisting of the representatives of video game manufactures Howard Lincoln and Edward Volkwein as well as the senior vice president for Electronic Arts and Chairman of the Interactive Entertainment Industry Committee Jack Heistand.¹¹⁶⁷

First, to address this panel, both a Howard Lincoln and Edward Volkwein who replaced White played no major part in these proceedings. Unlike the previous December hearing, the now Chairman of Nintendo of America and Senior Vice President of Sega of America played a supporting role as they continued to address and defend their companies policies, but at the same time supporting Jack Heistand's new ratings system.

In Edward Volkwein opening testimony, he began with damage control after White's poor performance in December harmed Sega's reputation. First, he commented that Sega's three hardware platforms, the Genesis, CD, and 32x were geared more for a late teen and adult audience with the average age of their products being around twenty-two years of age.¹¹⁶⁸ Second, he further touched upon the VRC and its' continuing stance on providing parents with information about their games.¹¹⁶⁹ Third, Sega began changing its own marketing, advertising, and promotion in favor of a much more strict campaign, which heavily pushed their the VRC ratings system on all television and print advertisements by requiring ad companies to feature the rating prominently or risk losing ad money as well as pushing informational materials describing their system to all retailers.¹¹⁷⁰ Finally, he restates Sega's commitment to an industry wide standard and committed to make it work.¹¹⁷¹

¹¹⁶⁶ Ibid., 82-3.

¹¹⁶⁷ Ibid. 85.

¹¹⁶⁸ Ibid., 96.

¹¹⁶⁹ Ibid.

¹¹⁷⁰ Ibid.

¹¹⁷¹ Ibid., 96-7.

On the other hand, Howard Lincoln kept his testimony rather short. He simply notes that Nintendo, Sega, and the various third party developers were committed in creating the ratings system under Jack Heistand's leadership and while great progress had been made in three months, there still was plenty of work left.¹¹⁷² Outside of this rather brief statement, much like Volkwein and Heistand, submitted to the record a list of questions and answers given by the committee to Lincoln after the proceeding ended. While nothing major or earth shattering came from any of Lincoln's responses, he mainly addressed Lieberman's various concerns such as Nintendo's release of *Lethal Enforcers*, the use of "backdoors" by third parties to change content in the game, the push for more educational games in Nintendo's library, and their role in discussing content guidelines for the ratings system.¹¹⁷³

The final member of the three, Jack Heistand played the biggest role during this first part. As chair, the responses he gave played a key role in ensuring the success of the three months of progress and ideas the Interactive Entertainment Industry Committee and its various supporters such Nintendo, Sega, 3DO, and the various Personal Computers game developers drew up during this short window of time.¹¹⁷⁴ In both his testimony and submission to the record, he stresses both the immense challenges they will face in order to implement such as system and thirteen points the game industry thought and agreed upon during the hiatus.¹¹⁷⁵

To summarize these points, they all revolve around getting the ratings system out as quickly as possible. The first point stresses the rating system will be out by the 1994 Christmas season circa November 1.¹¹⁷⁶ Point two recommends that the ratings board consists of an

¹¹⁷² Ibid., 92.

¹¹⁷³ Ibid., 93-5.

¹¹⁷⁴ Ibid., 85-6.

¹¹⁷⁵ Ibid., 86-7, 90-2.

¹¹⁷⁶ Ibid., 86.

independent panel of experts coming from a range of fields such as "educators, parents, child development experts" and have the final say when rating a game.¹¹⁷⁷ Points three, four, and five all deal with the creation of the rating categories, creating content descriptors allowing anyone to know what is in the game, and all packaging, advertisements and consumer materials must display the rating.¹¹⁷⁸ Points six and seven deal with submitting the game for review, which the developer must show the most extreme content in its game and if they withhold information or create a fragment content to get a better rating the committee will levy sanctions through an expensive re-stickering process or face a trademark enforcement suit.¹¹⁷⁹ Point eight revolves around marketing as video game industry agreed to develop a voluntary advertising code with guidelines enforcing age appropriate advertising.¹¹⁸⁰ The ninth point asks and agrees to work with stores that agree to only carry games with a ratings decal and ask them to place the rating in all their advertisements featuring video games.¹¹⁸¹ Points ten, eleven, and twelve ask for the cooperation of all software game manufactures and arcade operators and manufactures in displaying any rating handed down by the ratings board regardless of the developer's desire for a higher or lower rating.¹¹⁸² The thirteenth and final point stressed by Heistand's simply states they will engage in an "intensive consumer and retailer education program" so that everyone knows the ins and outs of the pending ratings system after implementation.¹¹⁸³

Furthermore, in his written submission he goes even further detail about what the video game industry is trying to accomplish with the prospective ratings board. This includes his summarization of the numerous problems in developing a ratings system and guidelines from

¹¹⁷⁷ Ibid., 87.

¹¹⁷⁸ Ibid.

¹¹⁷⁹ Ibid.

¹¹⁸⁰ Ibid.

¹¹⁸¹ Ibid.

¹¹⁸² Ibid.

¹¹⁸³ Ibid.

scratch so that that both consumers and competitive game market could understand with little trouble.¹¹⁸⁴ He also discusses on the early agreements on how the ratings board, the ratings process, and how to make the system work such as the use of an independent, but self-sustaining board consisting of people of various backgrounds and races.¹¹⁸⁵ While not finalized at this particular time, this panel would judge a game by reviewing videotapes sent by the game's creator featuring its most extreme content and submitting an affidavit answering several questions about the software.¹¹⁸⁶ Finally, to conclude his written testimony he elaborates on what still needs to be done and affirming to Lieberman that the Interactive Entertainment Industry Committee's work will not be in vain.¹¹⁸⁷

In the Q&A section that followed, Heistand made another relative point that possibly could harm the pending ratings system. As the goal was to set up a ratings system as fast as possible, he saw looking into older games which Kohl and Lieberman wanted as a major step backwards.¹¹⁸⁸ He further breaks down the situation stating that as of March 1994, their probably existed over 4,000 to 5,000 titles on the marketplace with seventy percent of the volume and sells conducted in the first three months and these games rather short lifespans thus rating those games nearly pointless.¹¹⁸⁹ Lincoln also concurred on this point by stating that the primary goal is getting the rating system up and running as fast as possible, once established, then the future ratings committee could go back and look into a few select titles for consideration.¹¹⁹⁰ Volkwein further added that by looking into the older games lose time and instead needed to keep the process going in order to meet the Christmas season, when the bulk of video game sales take

¹¹⁸⁴ Ibid., 89.

¹¹⁸⁵ Ibid., 90-1.

¹¹⁸⁶ Ibid.

¹¹⁸⁷ Ibid., 92.

¹¹⁸⁸ Ibid., 100.

¹¹⁸⁹ Ibid., 107-8.

¹¹⁹⁰ Ibid., 107.

place.¹¹⁹¹ On the other hand, he does agree that if a game is going to get a re-launched then possibly the ratings committee could consider rating it at that time as well.¹¹⁹²

Looking towards the future, Lieberman inquired to both Lincoln and Volkwein if they planned to continue monitor their content after the rating system was in place. Lincoln simply stated Nintendo still wanted to do this and had no intent to abandon them.¹¹⁹³ Volkwein disagreed with Lieberman and Lincoln by stating,

Guidelines are a good way for a company to understand who it is as a company, I couldn't imagine that Sega wouldn't want guidelines in place internally, regardless of an industry wide rating system, that would describe what types of games we want on our platform, especially since, we in many respects, have some ability to impact that.¹¹⁹⁴

Finally, Lieberman asked the panel about their third party licenses and if they would submit their products for a rating.¹¹⁹⁵ Jack Heistand admitted that they had not thought about that question yet, and ultimately the industry could not dictate if an individual company would comply as the ratings system relied solely on voluntary basis.¹¹⁹⁶ Lincoln, on the other hand, stated it was in their fullest intention when renegotiating their contracts with the licensees for them to agree in submitting their game for a rating as well as encourage current contracted licensees to do the same.¹¹⁹⁷ Volkwein mirrored the Nintendo chair's statements by stating Sega would expect nothing else than a full compliance with the future ratings system.¹¹⁹⁸

After releasing the first panel, Lieberman called forth the second panel, which consisted of representatives from some of the major retail stores in the United States.¹¹⁹⁹ Representing

¹¹⁹¹ Ibid., 107-8.

¹¹⁹² Ibid., 108.

¹¹⁹³ Ibid., 106.

¹¹⁹⁴ Ibid.

¹¹⁹⁵ Ibid., 108.

¹¹⁹⁶ Ibid.

¹¹⁹⁷ Ibid., 109.

¹¹⁹⁸ Ibid.

¹¹⁹⁹ Ibid.

Wal-Mart was its' Divisional Merchandise Manager Chuck Kerby, Toys 'R Us sent its Vice President of Toys John Sullivan, and Mary P. Evens, Babbage's Vice President of Store Operations, rounded out the group.¹²⁰⁰ Often ignored by many historians, the second group's testimonies was in fact actually extremely important for the overall success of video games. The reason for this came down to one simple reason; the stores executives agreed that they would not sell a game without a label once the video game industry implemented a universal rating system.¹²⁰¹

In his opening remarks, Kerby states that after meeting with Heistand and realizing that his pending ratings system would work, Wal-Mart fully supports the implementation of a credible ratings system in order to help parents buy video games for their children.¹²⁰² Furthermore, Wal-Mart would do anything in their power to support its integration within its stores by providing point of purchase materials that clearly explained the ratings system and work with them in displaying the rating in their advertisements.¹²⁰³ Finally and most important, according to Kerby, "Upon implementation of an industry wide rating system, Wal-Mart will only purchase video games that have gone through the rating process and received a rating."¹²⁰⁴ John Sullivan followed suit agreeing with much of Kerby's statements and agreed in supporting the establishment of the industry wide ratings system, providing point of purchase information, and not carrying games without a ratings label.¹²⁰⁵ Mary P. Evens also concurred with every point mentioned by the other two and stated that "a rating system will help us (Babbages)

¹²⁰⁰ Ibid., 109-10.

¹²⁰¹ Ibid., 110-4.

¹²⁰² Ibid., 110.

¹²⁰³ Ibid.

¹²⁰⁴ Ibid., 110.

¹²⁰⁵ Ibid., 111.

improve its customer service" by providing parents and grandparents vital information so they can make a more informed decision to either buy the game for their child or not.¹²⁰⁶

During the Q&A session, each store's representative all reiterated that 1) they would not sell any game without a rating, 2) supported an industry wide ratings system, 3) all the stores agreed to provide point of purchase information about the ratings as well as intergrading the ratings system into their stores and advertisements.¹²⁰⁷ Furthermore, Kerby and Sullivan stated that both Wal-Mart and Toys 'R Us would not stock any adult only games with sexual content on their store shelves.¹²⁰⁸ In addition, Lieberman asked the witnesses if any of their retailers planned to teach and train their employees about the pending ratings system.¹²⁰⁹ Sullivan stated that while Nintendo or Sega should send representatives to answer questions to consumers, he believed that the consumer should be the ones to educate themselves about the new ratings beforehand.¹²¹⁰ On the other hand, he does state that the cashers at the point of purchase should have some digression in monitoring what games people bought and not allowing some people especially children to buy titles that are more violent.¹²¹¹ Contrasting the above ideas both Kerby and Evens stated that Wal-Mart and Babbage's planned to educate their sales staff on the ratings system once put into effect.¹²¹² Quite pleased with their responses, he dismissed the group and invited the final witnesses to the stand.

Consisting of a two-man panel, both R.A. Green III President of the Amusement and Music Operators Association or AMOA and Steve Koenigsberg President of the American Amusement Machine Association or AAMA served as the representatives of the American

¹²⁰⁶ Ibid.

¹²⁰⁷ Ibid., 112-7.

¹²⁰⁸ Ibid., 115.

¹²⁰⁹ Ibid., 115-6.

¹²¹⁰ Ibid., 116.

¹²¹¹ Ibid.

¹²¹² Ibid.

arcade video game market.¹²¹³ Mainly serving as an after note, the arcade sector of the video game industry had no real control on what content went into the game. On the contrary, the AMMA who represented "125 manufactures, distributors, and parts suppliers of coin operated amusement equipment," and the AMOA whose 1,700 members chiefly consisting of privately owned members who bought such products as coin-operated video games played a role in their overall success.¹²¹⁴

Agreeing that a universal ratings system was needed, both Green suggested to the committee that video game manufactures needed to place their rating on the "Attract Mode" of the arcade game to prevent children from peeling off any external rating sticker.¹²¹⁵ Koenigsberg agreed with this notion as overtime the decal children often picked at them or they were worn down by moving the machines to other venues.¹²¹⁶ Furthermore, when discussing segregating "adult" games from children's Green notes an interesting observation he noticed by stating, "our industry has been changing," he notes that opposed to 1982, the arcade video game fell dramatically as games moved into the home.¹²¹⁷ By 1994, only 25 percent of all coin-op machines were video and the evidence suggested it was going to keep shrinking.¹²¹⁸ Ultimately, he concludes his point with the following statement, "You simply do not have a video game room anymore, It is not on the cutting edge of our industry. Nobody dose those anymore. They are dinosaurs."¹²¹⁹

After the statement from Green, Lieberman was satisfied with what all three panels brought to the table. Seeing actual progress, the senator encourages the continued progress of the

¹²¹³ Ibid., 117.

¹²¹⁴ Ibid., 117, 9.

¹²¹⁵ Ibid., 118.

¹²¹⁶ Ibid., 118, 121.

¹²¹⁷ Ibid.

¹²¹⁸ Ibid., 122.

¹²¹⁹ Ibid.

tentative ratings system and work with the Heistand's committee. While not entirely finished, he adjourned the subcommittee for the second time, but in the weeks ahead both controversy and finality would come once again from the video game industry.

After the March 4 hearing, the evidence of them finalizing the ratings system once again falls in obscurity. Entering a fine-tuning phase, based on transcripts and some secondary sources tell us that Dr. Arthur Pober became part of the project and his expertise helped tremendously in forming the new ratings system.¹²²⁰ Furthermore, despite their work with rating future games, further controversy struck as games featuring more violent came onto the market. For example, on December 10, 1993, one day after the end of the first hearing, id software released *Doom* on the PC, which came out with wide spread critical praise. As already discussed, revaluing in its success the developer began creating its sequel, the 1994 *Doom II: Hell on Earth*, the original's remake, *Ultimate Doom* in 1995, and *Final Doom* in 1996, which upped the carnage and blood.¹²²¹

At the same time, in March 1994, Konami decided to capitalize on the success of *Lethal Enforcers* and make its sequel, *Lethal Enforcers II: Gun Fighters*. Unlike its predecessor, the game takes place in America's Wild West period.¹²²² The enemy terrorists in the first game have been replaced with stereotypical outlaws that shout things like "eat lead sheriff," "die you varmint" and "you can't hit the broad side of a barn."¹²²³ The game also features other stereotypes such as a train and stagecoach robbery, a saloon showdown, and the final showdown at the villains hideout, which the player faces a stereotypical Native American Apache, which could be

¹²²⁰ Kent, *The Ultimate History of Video Games*, 480.

¹²²¹ id Software, "Doom 2: Hell on Earth" (MS-DOS Game), GT Interactive, 1994; id Software, "Final Doom" (Windows 95 Game), GT Interactive, 1996; "Ultimate Doom" (MS-DOS Game), GT Interactive, 1995.

¹²²² Konami, "Lethal Enforcers II: Gun Fighters" (Arcade Game), Konami, 1994.

¹²²³ Ibid.

a possible nod to Geronimo.¹²²⁴ However, much like its predecessor, the sequel uses the same realistic sprites, ranking system, a different array of weapons to play around with, blood effects, and a slight modification to the justifier to make it look like a gun found during the 1870s'.¹²²⁵ When released, reviewers gave it mixed positive reviews mainly praising the overall quality of the game especially on the Sega Genesis, but noting the rather hard difficulty that surpassed the original.¹²²⁶ Despite it nearly mirroring the first game, it strangely got a pass this time around since people did not associate gun violence with the game and in comparison to its' more infamous predecessor, it remains largely forgotten about in both historical and cultural terms.

On the other hand, in April 1994, Midway released *Mortal Kombat II* onto the masses. Building upon its original gameplay, the game refined certain aspects such as improving upon and tightening the game's air juggling mechanic as well as giving players more options to string together attacks.¹²²⁷ They also decided to keep all the blood, brutality, digitized sprites, and gave each fighter two distinct finishing moves that upped the gore factor from its predecessor.¹²²⁸ These include newcomer Jax's Arm Rip that feature the character tear the arms clean off the opponent to Shang Tsung's Inside Out where he enters the opponent's body causing them to explode in a sea of intestine and bones.¹²²⁹ Surprisingly though Sub Zero's Spine Rip, the mover that caused so much controversy in the first game, did not make a return in the sequel. The game

¹²²⁴ Ibid.

¹²²⁵ Ibid.

¹²²⁶ "Lethal Enforcers II: Gun Fighters," *Wikipedia*, last modified January 27, 2016, accessed January 28, 2016, https://en.wikipedia.org/wiki/Lethal_Enforcers_II:_Gun_Fighters.

¹²²⁷ "Mortal Kombat II," *Wikipedia*, January 27, 2016, accessed January 28, 2016, https://en.wikipedia.org/wiki/Mortal_Kombat_II.

¹²²⁸ Midway Games, "Mortal Kombat II" (Arcade Game), Midway Games, 1993; "Mortal Kombat II," *Wikipedia*, January 27, 2016, accessed January 28, 2016, https://en.wikipedia.org/wiki/Mortal_Kombat_II.

¹²²⁹ Kent, *The Ultimate History of Video Games*, 480; Midway Games, "Mortal Kombat II" (Arcade Game), Midway Games, 1993.

also marked the return of stage fatalities that ranged from impaled by ceiling spikes, falling from the pit stage, and having the flesh boiled off the body via acid.¹²³⁰

In addition to the improvements, creators Ed Boon and John Tobias upped the playable characters count from seven to twelve.¹²³¹ This included newcomers Kitana, Melina, Jax, Kung Lao, and Baraka alongside returning fighters Raiden, Liu Kang, Johnny Cage, Sub Zero, Scorpion, and former hidden character Reptile.¹²³² *Mortal Kombat II* also marked the first playable appearance of Shang Tsung, the omission of Sonya Blade and Kano, and the origin of the series main antagonist Shao Khan.¹²³³ Moreover, in response to the congressional hearings, the creators decided to add two joke ways to end a fight. The first was the babality, where if the player won both rounds and entered the right button and joystick combinations, they transformed their opponent into a baby.¹²³⁴ The second new way, the friendships, if the player once again won two rounds and entered the right button and joystick combinations, the player's character would do a non-lethal gesture to end the match. These animations ranged from the villainous Shang Tsung forming a rainbow between his two hands to Liu Kang dancing to a short funky beat complete with disco ball.¹²³⁵ Even John Tobias mentioned this to Kent stating, "The 'friendships' were a result of the hearings. They were put in specifically because we were getting so much publicity because of the violence in the game and stuff. We just thought we'd offset the fatalities with friendships."¹²³⁶

Much to the probable chagrin of Senator's Lieberman and Kohl, *Mortal Kombat II* became an overwhelming financial and commercial success. Spending ten million dollars in a

¹²³⁰ Midway Games, "Mortal Kombat II" (Arcade Game), Midway Games, 1993.

¹²³¹ Ibid.

¹²³² Ibid.

¹²³³ Ibid.

¹²³⁴ Ibid.

¹²³⁵ Ibid.

¹²³⁶ Quoted in Kent, *The Ultimate History of Video Games*, 480.

successful global ad campaign, after its release date on September 9, 1994; Acclaim the maker of the console port successfully netted a record fifty million dollars in the first week alone.¹²³⁷ This alone beat out the opening week records many summer films that year such as *Forest Gump*, *The Mask*, and *Lion King*.¹²³⁸ Ironically, when it came to the ports the SNES who in this round decided not sanitizing the sequel game received universal praise from critics. Ed Semrad of Electronic Gaming Monthly gave the game a score of 9 out of 10 calling it the SNES version of *Mortal Kombat II* as ideal choice for home consoles.¹²³⁹ Next Generation's reviewer gave the game a perfect 5 out of 5 score stating, "This SNES version is unquestionably better than the Genesis cart in every way.¹²⁴⁰ The Graphics are richer, the sound is deeper, and the control is smoother."¹²⁴¹ On the other hand, while no slouch, the Genesis version received less than stellar praise. Sushi X from *Electronic Gaming Monthly* gave this version a 7 out of 10 claiming while its' one of the better fighting games for the console, but compared to the SNES version it is not as detailed graphically nor as colorful than its counterpart.¹²⁴² Even Nikos Constant of *Video Games Magazine* gave the game a score of 7 out of 10 claiming that "If you own a Sega Genesis but not a Super NES *Mortal Kombat II* is worth Every Penny. It is fun, fun, fun."¹²⁴³

Ironically, these games appeal in hindsight show why a ratings system was needed. Noting the popularity of *Mortal Kombat* and *Doom*, the gaming magazines and community essentially propelled to increasingly greater success as their notoriety skyrocketed. With

¹²³⁷ "Mortal Kombat Sales," *The New York Times*, September 22, 1994.

¹²³⁸ Ibid.

¹²³⁹ Cyril Lachel, "Mortal Kombat II: What Did the Critics Say in 1994?" *Defunct Games*, May 9, 2014, accessed January 27, 2016, <http://www.defunctgames.com/reviewcrew/40/mortal-kombat-ii-what-did-the-critics-say-in-1994>.

¹²⁴⁰ Ibid.

¹²⁴¹ Ibid.

¹²⁴² Ibid.

¹²⁴³ Ibid.

increasing worries of violence growing, in the minds of concerned citizens, what came from third hearing on video game violence would transform the future of video games to come.

On June 29, 1994, the senate subcommittee reconvened for its' third round of questions with the emphasis revolving around what progress the video game industry made on their prospective ratings system. Opening statements made by Kohl and Lieberman seemed to mirror upon those stated in the previous two hearings. Kohl unwaveringly believed that according to the "evidence" "violent video games do contribute to the violence in our society," and both he and Lieberman were prepared to take action if need be to curb this rising problem.¹²⁴⁴ Lieberman further pushed on Kohl's point by stating, "The best answer here, obviously, is for the video game manufactures to eliminate or reduce the violence and sex in the games."¹²⁴⁵ He elaborates that newer games such as *Doom* and *Mortal Kombat II* "tarnishes the reputation of the video game industry." Though a "credible ratings system" was a step in the right direction, video game makers needed to begin the process of curbing violence and use the technology for the benefit of enriching children's lives.¹²⁴⁶

Joining them was Maine senator William Cohen. Much like his fellow senators, he agreed that the glorification of violence is not just a problem in electronic media, but also America's obsession of putting it onto a pedestal.¹²⁴⁷ In his words, Cohen believed that the popularization of violence threatened children, schools, families, communities, and the "fabric of society itself."¹²⁴⁸ Finally, he further proclaims that while it was not congresses job to shelter children, it is their job to bring awareness to the issue at hand, and encourage both parents and

¹²⁴⁴ US Senate, *Rating Video Games: A Parent's Guide to Games*, 125.

¹²⁴⁵ *Ibid.*, 127.

¹²⁴⁶ *Ibid.*, 128.

¹²⁴⁷ *Ibid.*, 129.

¹²⁴⁸ *Ibid.*

the gaming industry to do the right thing and safeguard the future of the nation from this violent entertainment.¹²⁴⁹ With the senator yielding, the floor opened up to Jack Heistand.

According to Heistand's opening testimony, the newly formed Interactive Digital Software Association, or IDSA, represented the interests of over sixty percent of the electronic entertainment sales that included such members as Nintendo, Sega, Electronic Arts, Sony Electronic Publishing, Konami, and Capcom.¹²⁵⁰ Under the leadership of Dr. Arthur Pober, who served as the Vice President and Director of the Children's Advertising Review Unit of the Council of Better Business Bureau and creator of the Sega VRC, aided the creation of the new ratings system.¹²⁵¹ Under Executive Director Pober, the newly established Electronic Software Ratings Board or ESRB aimed to "met, or even exceeded, each and every one of the standards you (the senate committee) laid out for us."¹²⁵²

Furthermore, according to both his spoken and written submission into the record, Heistand goes in detail about the ESRB and how the previous two hearings inspired the direction the video game industry undertook when creating this new ratings board. In order to develop the ESRB they brought in experts from various fields such as child development, education, and consumer research.¹²⁵³ To ensure fairness, the ESRB serves as a non-profit and independent organization free from the opinions of the video game industry and have a demographically diverse staff to determine the ratings each game sent to them.¹²⁵⁴ Furthermore, experts such as Dr. Parker Page, President of the Children's Television Resource and Education, Mary Ellen Fise of the Consumer Federation of America, and Dr. Lewis Lipstitt, the founding Director at Brown

¹²⁴⁹ Ibid., 130.

¹²⁵⁰ Ibid., 131.

¹²⁵¹ Ibid., 132.

¹²⁵² Ibid.

¹²⁵³ Ibid.

¹²⁵⁴ Ibid.

University the Child Study Center all agreed to serves as part of an advisory board for the ESRB.¹²⁵⁵

The new ratings system, according to Heistand, takes great strides in defining age appropriate games for different age groups, providing clear content descriptors to help parents decide if the game is appropriate, not use deceptive means in advertisements to appeal to an inappropriate age group, and punish offenders who abuse the system.¹²⁵⁶ They also planned a massive campaign in educating parents, consumers, and retailers about the ESRB, which the retailers agreed to print and distribute the information once enforced.¹²⁵⁷ The ratings themselves must be on all packaging, advertisements, and promotions as well as the content descriptors having a clear, constant location on the back of the games retail box were anyone could find them with little trouble.¹²⁵⁸ Finally, all publishers must adhere to these above rules and conditions in order for their game to get a rating and sell their game on the market.¹²⁵⁹

To further cement the ratings system, Pober and the ISDA created five distinct categories to distinguish the different age brackets. First, Early childhood or eC, are games that mainly concerned with the children ages three up and do not contain any objectionable language or images within the game.¹²⁶⁰ The second rating category, Kids to Adults or K-A, encompassed the age group of everyone six and over.¹²⁶¹ Featuring mild animated violence and comic mischief on par of a Road Runner cartoon or slap stick comedy such as *the Three Stooges*, according to Heistand, the bulk of the K-A rated games mainly dealt with such titles as *Mario Bros.*, *Sonic the*

¹²⁵⁵ Ibid., 132-3.

¹²⁵⁶ Ibid., 133.

¹²⁵⁷ Ibid.

¹²⁵⁸ Ibid.

¹²⁵⁹ Ibid.

¹²⁶⁰ Ibid., 138.

¹²⁶¹ Ibid.

Hedgehog, Mega Man, and many sporting titles like Football and Golf games.¹²⁶² The third category, Teen or T, contains games that are appropriate for anyone thirteen years and older.¹²⁶³ These titles feature such content as suggestive sexual themes, descriptions of violence, crude humor, possible strong language, and minimal blood.¹²⁶⁴ In the fourth category, the Mature or M rated category possesses games with intense descriptions of violence and nudity equivalent to a rated-R movie and they recommend that no one under the age of seventeen play these games.¹²⁶⁵ Finally, the last ESRB rating the panel came up with is the Adults only category or AO.¹²⁶⁶ While not giving an exact beginning age, these games feature the content equivalent of a Rated NC-17 or X movie category and include themes such as graphic nudity, extreme graphic violence, excessive profanity, and strong sexual content.¹²⁶⁷

On the other hand, the ESRB also gave parents several content descriptors that attempted to show what content influenced its' rating.¹²⁶⁸ Depending on the rating given, the game may include such descriptors as Cartoon Violence, Strong Sexual Content, Animated Blood, Gore, Profanity, or Comic Mischief.¹²⁶⁹ After its implementation, all games must clearly feature both its rating and content descriptors on the front and back of the box as well as on the cartridge or CD in order for that particular title to be sold on store shelves.¹²⁷⁰

¹²⁶² Ibid., 138-9.

¹²⁶³ Ibid., 139.

¹²⁶⁴ "ESRB Ratings Guide," *Entertainment Software Rating Board (ESRB)*, accessed January 27, 2016, http://www.esrb.org/ratings/ratings_guide.aspx; US Senate, *Rating Video Games: A Parent's Guide to Games*, 139.

¹²⁶⁵ US Senate, *Rating Video Games: A Parent's Guide to Games*, 139.

¹²⁶⁶ Ibid.

¹²⁶⁷ Ibid.

¹²⁶⁸ Ibid.

¹²⁶⁹ Ibid.

¹²⁷⁰ "Frequently Asked Questions: How Can I Find and Use the Ratings to Determine If a Game or App Is Right for My Family?" *Entertainment Software Rating Board (ESRB)*, accessed January 27, 2016, <http://www.esrb.org/ratings/faq.aspx#26>; US Senate, *Rating Video Games: A Parent's Guide to Games*, 139.

Pressing further, Heistand goes in detail on the process of how each game will get its rating. After the video game's publisher sends the ESRB both a submission of materials including a videotape demonstration of its most graphic content and a \$500 dollar fee, the process would begin.¹²⁷¹ Taking five to seven days and on a first come first serve basis, a computer would randomly select three anonymous individuals hired by Pober from its database to individually rate that title and assign a recommended rating and descriptors.¹²⁷² Their submissions would then go to another anonymous full time worker for the ratings board, who then validated their results and sent it back to the publisher for final review.¹²⁷³ If they agree with the rating, they then could proceed shipping the game to stores nationwide, if they disagree however, they can appeal the decision to an appeal council consisting of child development specialists, retail, education and other various fields to discuss the game and if it was judged fairly.¹²⁷⁴ These precautions alongside the other points mentioned by Heistand in the above paragraphs strived to make the ESRB a reputable, independent organization that looked good on paper, but not everyone was happy with this particular ratings board, chiefly the SPA. Therefore, Mark Traphagen, Counsel for the Software Publishers Association, proposed an alternative to the ESRB, the RSAC.

The Recreational Software Advisory Council, or RSAC, aimed to protect the interests of those who published and developed home computer games, while at the same time informed consumers about the content of their software.¹²⁷⁵ Representing over twenty-five member companies, since January 1994 Lucas Arts, id Software, Maxis, and Interplay joined forces with

¹²⁷¹ US Senate, *Rating Video Games: A Parent's Guide to Games*, 139.

¹²⁷² Ibid.

¹²⁷³ Ibid.

¹²⁷⁴ Ibid.

¹²⁷⁵ Ibid., 173.

other smaller computer software developers to form their own ratings system, but what did it look like?¹²⁷⁶

Conducted under the research of Dr. Donald F. Roberts of Stanford University, much like the ESRB they strived for an independent, nonprofit organization free of the influence of the video game industry.¹²⁷⁷ Surprisingly, in both his testimony and submitted statement to the record, Traphagen never gives any clear idea of what the RSAC would even look like. Using outside sources available, the SPA backed ratings board utilizes a bare bones level system ranging from suitable for all ages to level four and based its' ratings on three categories, violence, nudity/sex, and language.¹²⁷⁸ The Suitable for All Ages rank has no violence, no nudity, and sex, and no language found in the game.¹²⁷⁹ Level 1, on the other hand, featured the harming/killing of creatures, characters with provocative attire, and mild language.¹²⁸⁰ Level 2 ups the ante with the killing of humans, mild blood, expletives, and partial nudity.¹²⁸¹ In Level 3, titles featured more blood and gore, frontal nudity with non-explicit sexual activity, and strong vulgar language throughout the game.¹²⁸² The last level, level 4, had themes of "wonton and gratuitous violence; torture; rape;" provocative nudity with either explicit sexual activity, sexual crimes or both and "crude or explicit sexual references."¹²⁸³ At best, these descriptors are vague and are open to excessive interpretation, unlike the ESRB, which had definitive and clear-cut descriptors and ratings.

¹²⁷⁶ Ibid., 171.

¹²⁷⁷ Ibid., 173.

¹²⁷⁸ "RSAC Rating Explanations," *3D Realms Site*, accessed January 27, 2016, <http://legacy.3drealms.com/tech/rsac.html>.

¹²⁷⁹ Ibid.

¹²⁸⁰ Ibid.

¹²⁸¹ Ibid.

¹²⁸² Ibid.

¹²⁸³ Ibid.

Furthermore, featured in the published text for the hearings, in a submission sent by Computer Game Ratings Working Group, which consisted of a jointed effort of the 3000 developers, publishers, and distributors of personal computer software and spearheaded by the SPA also did not provide many clear answers about the RSAC.¹²⁸⁴ Mainly summarizing much of Traphagen's remarks, their post-hearing contribution to the record did establish however, how the RSAC ratings board and ratings procedure would look like.

Consisting of four different boards, each of them had a different purpose. The Executive Director main job consisted of running the day-to-day operations of the RSAC, train those who will serve on the Ratings Review Panel, and act as a nonvoting member of the Advisory Board.¹²⁸⁵ The Governing Board served as the body that oversaw the "policy, operations, and finances of the ratings program" and "decide on possible appeals sent by publishers who disagreed with the rating given."¹²⁸⁶ The voting nine-man board itself consisted of many fields that included four members of the SPA and shareware organizations, two representing parental organizations such as the PTA and the members representing the interests of the education, public health, and law enforcement sectors.¹²⁸⁷

The Advisory Committee assisted on researching and reporting upon "media research, violence in society, and other matters designated by the governing board."¹²⁸⁸ This group representative body came from various backgrounds that included software developers and publishers, the software gaming community, experts from the fields of media research, violence in society and psychology.¹²⁸⁹ On the other hand, the forth panel, the Ratings Review Panel

¹²⁸⁴ US Senate, *Rating Video Games: A Parent's Guide to Games*, 171, 246.

¹²⁸⁵ *Ibid.*, 248-9.

¹²⁸⁶ *Ibid.*, 249.

¹²⁸⁷ *Ibid.*

¹²⁸⁸ *Ibid.*

¹²⁸⁹ *Ibid.*

mainly consisted of teachers, parents, and others chosen by the Executive Director.¹²⁹⁰ Their job involved rating each game before and after the release, the responsibility to answer inquiries by the various publishers, and assigning final ratings to both appealed and voluntarily submitted games for review.¹²⁹¹

In the actual ratings process itself, as described by the Computer Game Ratings Working Group, instead of sending a videotape or CD demonstration of the game, the RSAC system utilizes a questionnaire to help determine the rating.¹²⁹² Before final release of the software can commence, the publishers and developers must send an application via computer to the RSAC.¹²⁹³ Once received, based on the applicants' responses, a worker tallies the responses based on the game's questionable material and sends it to the Executive Director for final review.¹²⁹⁴ There if the application is incomplete, the ratings board would contact the publisher for further questioning, but if authorized, the director will submit the video game's final rating and send it back to the publisher or developer.¹²⁹⁵ The resulting rating then must be prominently displayed on all "packaging, retail displays, self-running demonstrations, and splash-screens for interactive computer games sold in the retail channel."¹²⁹⁶ Failure to do so or producing fraudulent information would result in penalties such as expensive relabeling and monetary fines for offenders.¹²⁹⁷

With the ESRB and RSAC ratings showcased, the nature of the July hearing soon quickly evolved from a progress report to more of defending your ratings system of choice. In the case of

¹²⁹⁰ Ibid.

¹²⁹¹ Ibid.

¹²⁹² Ibid., 250.

¹²⁹³ Ibid.

¹²⁹⁴ Ibid.

¹²⁹⁵ Ibid.

¹²⁹⁶ Ibid.

¹²⁹⁷ Ibid.

the ESRB, Lieberman praised the work of Heistand particularly noting the ease of understating the ratings, number of categories present, the ESRB actually establishing itself before the Christmas rush, and the expected percentage of games reviewed by 1994 and 1995 respectively.¹²⁹⁸ Conversely, Senator Kohl was much more skeptical when it came to some of the ESRB's flaws particularly the one-year's difference between Mature and Adult rated games and the appointment of Dr. Arthur Pober, whose job was to select and train the anonymous raters.¹²⁹⁹ Responding to this, Heistand defended Pober's appointment as his expertise in child development and his network of experts helped them design the ratings system and invited the subcommittee to visit them to see the process in action.¹³⁰⁰

Unsurprisingly, one of the biggest supporters of the ESRB that spoke was Jack Kerby, who just recently accepted Dr. Pober's invitation to join the ESRB's Business and Industry Advisory Board as a representative of the Wal-Mart brand.¹³⁰¹ Representing the largest retailer in the United States selling video games, Kerby re-pledged the retailers support for the rating system and its commitment not to sell any video or computer software game without a rating.¹³⁰² Furthermore, he restated their earlier support for all advertisements and displays for video games would include their proper rating as well as display signs clearly defining the ESRB ratings to customers.¹³⁰³ In addition, according to Kerby, besides removing certain arcade machines from their retail outlets stated that all coin-operated arcade games found in Wal-Mart's stores must also carry a rating before being placed in any of their locations.¹³⁰⁴ Overall, he believed that

¹²⁹⁸ Overall, Heistand stated that they could rate roughly fifty percent of the total game volume sold by Christmas 1994 and one hundred percent of all games starting in 1995; *Ibid.*, 145-7.

¹²⁹⁹ *Ibid.*

¹³⁰⁰ *Ibid.*, 148-9.

¹³⁰¹ *Ibid.*, 159.

¹³⁰² *Ibid.*, 160.

¹³⁰³ *Ibid.*

¹³⁰⁴ *Ibid.*

while not yet finalized, the ESRB system provided both parents with adequate information in order for them to make an informed decision, but also be extremely user friendly so that all parties can understand it with little trouble.¹³⁰⁵

Another supporter of the ESRB, Dr. Robert Chase, represented the interests of the National Education Association.¹³⁰⁶ Chase who spoke back at the first hearing in December got a chance to review the ISDA new ratings board and overall he was pleased on what he found. In his brief testimony, he praises the content descriptors as both comprehensive and appropriate.¹³⁰⁷ He also commends the establishment of an independent board, which in his judgment "help assure our objective judgments in a highly subjective process."¹³⁰⁸ Overall, while he was concerned about the voluntary nature of the ratings process as well as the need to keep mature and adult rated games out of the hands of children, Chase still praised the ESRB's "necessary clarity, thoroughness, and independent judgment necessary to provide consistent information."¹³⁰⁹

Further support for the IDSA came from AAMA's President Steve Koenigsberg. Since the March hearing, both the AAMA and IDSA came together to address concerns surrounding the arcade video sector of the video game industry.¹³¹⁰ The issues presented mainly revolved around labeling arcade machines and trying to find ways to prevent attracting younger children from playing Teen and Mature rated games.¹³¹¹ In addition, the AAMA also raised concerns that since arcades do not have definitive sales season, how the ESRB will in turn rate those games

¹³⁰⁵ Ibid.

¹³⁰⁶ Ibid., 161.

¹³⁰⁷ Ibid., 162.

¹³⁰⁸ Ibid.

¹³⁰⁹ Ibid.

¹³¹⁰ Ibid., 177.

¹³¹¹ Ibid., 178.

due to having a different market from PC and home consoles.¹³¹² Despite this, Koenigsberg at the end of his Q&A reaffirmed that the AAMA would support the ESRB and put their full support behind it once established.¹³¹³

While most parties threw their support behind the ESRB, Product Safety Director of the Consumer Federation of America's Ellen Fise opposed the ratings system.¹³¹⁴ The CFA whose work already included rating and labeling children toys believed that the ratings system proposed by the IDSA was rather inadequate for the average consumer.¹³¹⁵ Fise also berates the content descriptors, which provide little to no in guessing the games graphic content.¹³¹⁶ Furthermore, while applauds the effort put into creating the five ESRB ratings, she claims that they can still be confusing and instead proposes that the video game industry labels their games with a clear age range on the packaging.¹³¹⁷ Other problems she points out include video games needing a comprehensive review before release that includes visual footage of the most graphic content, a complete pre-market review of the game, and taking time to play through each game, which the planned ESRB simply does fulfill in their ratings process.¹³¹⁸ Finally, Fise stresses while a single system is needed to keep ratings from becoming redundant, she heavily emphasized that whatever rating system is chosen, it must prepare a through education program.¹³¹⁹ That way, in her belief, this newfound enlightenment will guide parents, retailers, and consumers in understanding "the terminology of the ratings the graphics that convey the ratings, the types of

¹³¹² Ibid., 179.

¹³¹³ Ibid., 179-80.

¹³¹⁴ Ibid., 153.

¹³¹⁵ Ibid.

¹³¹⁶ Ibid.

¹³¹⁷ Ibid., 154.

¹³¹⁸ Ibid.

¹³¹⁹ Ibid., 155.

descriptive information, the means to obtain more information and the procedure for appealing a rating."¹³²⁰

Though paned by Fise, the ESRB ratings system received praise by both the subcommittee and the majority of the witnesses, the RSAC, however, met harsh criticism. At the time, many at the hearing such as Chase, Fise, Kerby, and Koenigsberg, unlike the IDSA proposed ratings board had no experience with the SPA proposed board, so no parties present at the time could say much about it. Despite this, after the hearing, Fise talked to representatives behind the project and from her meeting submitted a report to the subcommittee record. In it, she elaborates on the number of concerns presented in the RSAC. Most notably, when talking about the ratings she criticizes the described phrases used as confusing.¹³²¹ However, her own words, she states,

Consumers will have to guess what the descriptive phrases mean--for example, they may be unsure about terms such as "revealing clothing" (is this a bathing suit?) or "mild expletives" (what is mild?). Until a consumer has purchased many games and has some basis for comparison, it will be very difficult to use this combination rating system and to know what ratings are appropriate for what age child.¹³²²

Other problems she notes include the use of a rather small rating logo used for the game's box. While done to fit on the CD-ROMs, the small one and one quarter inch sized rating featured on the CD could become rather difficult to find and read according to Fise.¹³²³ Moreover, when looking at the application questionnaire's strange yes and no format, which went on to determine a games' overall rating puzzled her as well as a game only being reviewed if the publisher asked for a ruling or the game is appealed.¹³²⁴ Pushing this matter further, she goes on to say that unless

¹³²⁰ Ibid.

¹³²¹ Ibid., 155-6.

¹³²² Ibid., 156.

¹³²³ Ibid.

¹³²⁴ Ibid., 155.

the game is appealed, there is no requirement for the RSAC to properly review the game, therefore making the whole process hinge on paper information produced by the producer and no way to tell if they are actually lying until it is too late.¹³²⁵ Overall, near the end of the Prior Review of Games section, when comparing the two ratings systems, she throws her support towards the ESRB by stating that, "a system that allows actual review of the game is superior to "yes" and "no" answers to questions about content."¹³²⁶

Back at the hearing, Traphagen had no luck when answering Lieberman's questions. As the Q&A progressed, the senator poked numerous holes in the witness's testimony and the RSAC ratings in general, which in itself puzzled Lieberman with the direction the SPA was taking.¹³²⁷ Throughout the remaining testimony, it was clear that they rushed to create this particular rating system as the weak questionnaire system, lack of age categories, and the rather convoluted ratings scale turned the subcommittee against their proposed ratings system.¹³²⁸

Traphagen, when responding to Lieberman inquiry, simply tried to divert attention by claiming the PC software and home console market were in fact two vastly different markets.¹³²⁹ In his defense, he states, "If for the first time we are going to be bringing different industries under a single ratings system, then we need to be concerned that the process be open and that the administration of the process for the rating system be open and neutral for all the industries concerned."¹³³⁰ He also states that both financial reasons of the small developers competing with the larger developers and general apprehension between the two led to the creation of RSAC in the first place.¹³³¹

¹³²⁵ Ibid.

¹³²⁶ Ibid.

¹³²⁷ Ibid., 180.

¹³²⁸ Ibid., 182-3.

¹³²⁹ Ibid., 180.

¹³³⁰ Ibid.

¹³³¹ Ibid.

After hearing this statement, the subcommittee invited Heistand back to the witness table. In response to Traphagen, he points out two observations. First, he states on the rather fragmented PC software industry by noting that most of the smaller PC game developers view major companies such as Nintendo, EA, Sega, and Capcom as threats to their success and in turn fear that they not get equal representation under the ESRB ratings.¹³³² On the other hand, he also mentions that many smaller PC developers and publishers could not afford the estimated initial \$500 rating fee.¹³³³ Therefore, he proclaimed that they planned to reduce the fee and make it a fraction of the initial cost once the rating system got up and running.¹³³⁴ Conversely, however, Heistand's second observation stems from the supposed incompatibility of the two markets and the ratings process. Having experience with EA as its Vice President, his company published and made games many for both PC and consoles causing Heistand to state that all products that undergo the ESRB rating process would get equal treatment in the end.¹³³⁵ These statements made by the IDSA chair effectively shut down Traphagen who throughout the remaining part of the Q&A session remained on the defensive. In the end, Senator Lieberman suggested to the SPA's Counsel to abandon his ratings system and become part of the much larger ESRB system.¹³³⁶

After finishing with the last panel, Lieberman began his closing thoughts. While violence is a part of human nature and glorified in today's media, boundaries in his opinion, were needed in order to create more civility and order in our society.¹³³⁷ Ultimately, somewhere on that line, Video games played some part for the growth of said violence and while this problem still

¹³³² Ibid., 181.

¹³³³ Ibid.

¹³³⁴ Ibid.

¹³³⁵ Ibid.

¹³³⁶ Ibid., 184.

¹³³⁷ Ibid., 184-5.

existed, self-control, he argued, remained the best policy.¹³³⁸ In the end though, he states, "We may never achieve perfection, but I would like to work with you to see if we can get as close as possible."¹³³⁹ With those words, the hearing on violence in video games finally ended with both parties coming out satisfied.¹³⁴⁰

Following the weeks and months that followed, both the ESRB and RSAC officially began rating games by November 1994.¹³⁴¹ While the RSAC faded into relative obscurity, the ESRB still goes on strong even today. Furthermore, over the past few years, they have continuously evolved their ratings by dropping the K-A rating and replacing them with the E for everyone in 1998 and E10+ in 2005 as well as coming up with new content descriptors that better explains a game more accurately.¹³⁴² Despite recent controversy of its ineffectiveness and not using the Adults only rank, the rating board has managed influence the creation of Europe's PEGI and the Japan's CERO ratings. While this should be the end of the conversation, congress, the video game industry, and even the retailers, all made a serious mistake after the establishment of the ratings system.

First, in the case of congress, did not follow up after the June 1994 hearing. Satisfied with what Jack Heistand brought to the table, Lieberman, Kohl, and other US congressional representatives eventually resumed ignoring the video game industry once again. What makes this attitude stranger came from Congresses ongoing war against TV violence especially with the passage of the Telecommunications Act of 1996 and the creation of the V-Chip which aimed to help create a voluntary television ratings system and if necessary block certain violent or sexual

¹³³⁸ Ibid., 185.

¹³³⁹ Ibid.

¹³⁴⁰ Ibid.

¹³⁴¹ Herman, *Phoenix: The Fall & Rise of Video Games*, 190.

¹³⁴² "ESRB History," *Entertainment Software Rating Board (ESRB)*, accessed January 27, 2016, <http://www.esrb.org/about/chronology.aspx>.

content before it reached more innocent viewers.¹³⁴³ In regards to the above, it would make sense for them to check up on the video game industry especially during the late 1990s where pop culture once again made headlines for their negative influences on children. However, it seems like unless the matter is pressing, congress will ignore it until makes national news and then react to the situation. Unfortunately, this matter came to a head on April 20, 1999 after the Columbine High School shooting and video games once received heat as the killers played games such as *Doom* and many concerned parents just like in 1993 called upon congress to once again to looking into the matter in the weeks and months that followed.¹³⁴⁴

The second failure came on the part of retailers and parents. After the establishment of the ESRB, the board began trying to inform parents about the new ratings seen on the games via an explanation at point of sale and training employees who work around video game to recognize the ratings. However, somewhere along the way, the stores simply stopped caring and information became limited or often ignored during the latter part of the 1990s and even in today's market. Granted, with the advent of the commercial Internet, it made researching video games much easier, but many retailers partially broke their promise to keep parents informed about the ratings in store. What makes this issue important is despite the ratings being there at the point of purchase in some stores, many clerks both knowingly and unknowingly allowed the sale of inappropriate games to minor's especially mature rated games. Furthermore, with the rise of popular M-Rated games of the late 1990s like *Grand Theft Auto* and later seen in today's culture with online shooting games, children's access has gone unchecked as many can acquire these games with little trouble. Finally, while not a figure from this time, according to the ESRB,

¹³⁴³ "V-chip: Viewing Television Responsibly," *Federal Communications Commission*, last modified May 16, 2012, accessed January 30, 2016, <http://transition.fcc.gov/vchip/>.

¹³⁴⁴ Kushner, *Masters of Doom*, 272-3; Lt. Col. Dave Grossman and Gloria DeGaetano, *Stop Teaching Our Kids to Kill*, 7-8.

as of August/September 2014 only 84% of parents with children know about the ratings system and 69% check the rating on the game before buying the game.¹³⁴⁵ While somewhat impressive, the apathy presented in this study shows that roughly 31% of parents do not even check the rating shows how mainstream games have become in the years after the hearings.¹³⁴⁶

The third and final failure comes from the video game industry itself. In the December 9, 1993 hearing, in regards to the ratings system, Howard Lincoln says something interesting. On the topic he claims, "The point that I have been making all along and the point that I made to both of you this morning individually was that we are concerned that a rating system by itself just be an open season on more violent games."¹³⁴⁷ As gaming evolved in the late 1990s, Lincoln's statement started slowly became a self-fulfilling prophesy the more violent games featured more carnage, more death, and more violent and sexual themes as consoles and PC got more advanced and capable in telling a richer story. As a result, many of today's mature rated games make the violence, sexism, and gore featured in *Lethal Enforcers*, *Night Trap*, *Doom*, and the first *Mortal Kombat* look antiquated and childish in comparison.¹³⁴⁸

In a way, the ESRB created a blank check for the video game industry. Now with a rating system, they could have near unlimited freedom to create the game they want, slap a rating on the box, and hope the right age group plays that game. Even less violent titles such as the Teen and Everyone rated categories still have questionable violent tones such as suggestive dialog and somewhat generous fan service with both male and female characters. These factors have many questioning the credibility of the ESRB, when they see violent or suggestive content in a game

¹³⁴⁵ "Frequently Asked Questions: How Effective Is the Rating System? Do Parents Trust and Use It?" *Entertainment Software Rating Board (ESRB)*, accessed January 27, 2016, <http://www.esrb.org/ratings/faq.aspx#26>.

¹³⁴⁶ *Ibid.*

¹³⁴⁷ US Senate, *Rating Video Games: A Parent's Guide to Games*, 71.

¹³⁴⁸ For further reference, please review Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011.

meant for everyone. Granted, while the board is partially at fault, so too is the video game maker who put out the game. Finally, many companies ended up going lax or abandoning their content guidelines after the creation of the ESRB. This surprisingly happened to Nintendo as the North American branch started allowing more mature violent and profane games onto their platform such as the already mentioned *Mortal Kombat II* in 1994 and the infamous, but acclaimed *Conker's Bad Fur Day* in 2001.¹³⁴⁹

Ultimately, the ESRB did its one job and one job only; to rate the games the companies send to them on a daily basis. Frankly, what we see in the video game controversies post 1994 and today came from the hearings on violent video games. From the increasingly violent content coming out at the time, the boundaries pushed of what is acceptable in American society to the recent debates on video games and first amendment rights all have their roots stemming from this one event. In retrospect, the whole trial was a successful failure. The failure came in the form of the ever growing concern of violence in video games and its ongoing "problem" in today's society; however it did succeed in bring awareness to the video game industry and from it, allowed gaming to solidify itself as part of America's mainstream culture. No longer considered a niche medium, video games soon found new life in controversy and from it a brand new generation of home console and home computers emerged as the end of the fourth generation of games led into uncharted territory with gaming's coming of the fifth generation of video games.¹³⁵⁰

¹³⁴⁹ For further reference, please review Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011; Midway Games, "Mortal Kombat II" (Super Nintendo Game), Acclaim, 1993; Rare, "Conker's Bad Fur Day" (Nintendo 64 Game), Nintendo, 2001.

¹³⁵⁰ For further reference, please review Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011.

In the years that followed, gaming continued to evolve from 2D sprite work and pre-rendered 3D graphics to full on 3D graphics. The Sony PlayStation, today's modern console brand leader started its life as a failed partnership between Sony and Nintendo.¹³⁵¹ Officially released to the Japanese market in 1994 and coming stateside in 1995, became one of the greatest systems developed for its time selling roughly 102.49 million consoles during its 13-year lifespan.¹³⁵²

Nintendo, on the other hand, despite having 1994 in the United States fell to a distant second place by the year 2000 after losing several third parties support to Sony.¹³⁵³ Despite this setback, Nintendo still had a few aces that proved fruitful. The partnership with there then British second party developer Rare LTD became a blessing in disguise. Producing many top quality games that included the likes of *Banjo and Kazooie*, *Banjo Tooie*, *Donkey Kong Country* trilogy for the SNES, *Donkey Kong 64*, *Conker's Bad Fur Day*, and *Killer Instinct* just to name a few.¹³⁵⁴ Nintendo's own first party creations or the Nintendo 64 and Game Boy even met wide spread acclaim. *Super Mario 64*, *The Legend of Zelda: Ocarina of Time*, its popular sequel *Legend of Zelda: Majora's Mask*, *Super Smash Bros.*, and the worldwide phenomenon *Pokémon* all revitalized interest in the company despite running second to Sony selling only twenty million N64s from 1996-2001.¹³⁵⁵

¹³⁵¹ Kent, *The Ultimate History of Video Games*, 45; Reiji Asakura, *Revolutionaries at Sony: the Making of the Sony PlayStation and the Visionaries Who Conquered the World of Video Games* (New York: McGraw-Hill, 2000), 35.

¹³⁵² Bill Loguidice and Matt Barton, *Vintage Game Consoles*, 246.

¹³⁵³ Dominic Arsenault, "System Profile: Sony PlayStation." In Mark J.P. Wolf, ed., *The Video Game Explosion*, 179.

¹³⁵⁴ "IGN Presents the History of Rare," *IGN*, July 28, 2008, accessed February 3, 2016, <http://www.ign.com/articles/2008/07/28/ign-presents-the-history-of-rare?page=4>.

¹³⁵⁵ Herman, *Phoenix: The Fall & Rise of Videogames*, 279; Stephen Kline, Nick Dyer-Witthford, and Greig de Peuter, *Digital Play: The Interaction of Technology, Culture, and Marketing*. (London: McGill-Queen's University Press, 2003), 156-7.

Another winner during this period came from the growing PC market. Again coinciding with the growth of the consumer Internet and the easy operation of Windows 95 onward, the once niche market began growing rapidly. With the Home Computer unifying both casual gamers with games such as *Minesweeper* and the *Sims* with more hardcore oriented followers with titles like *Team Fortress*, *Quake*, *Ultima Online*, and *Thief: The Dark Project*, *Baldur's Gate*, *System Shock 2*, and *Half Life* allowed once unknown and known developers such as Blizzard-Activision and Valve to thrive. Finally, with its exclusive genres and more popular titles featured on consoles coming to the PCs created a unique community that differentiated their product from the home consoles, however, not everything was golden in video game land.¹³⁵⁶

During the years between 1995 through 2001, many successful companies folded as the market continued to evolve. One such tragic example came from Sega. The once dominating force and rival to Nintendo during the early 1990s fell quite hard thanks to the poor worldwide reception of the Sega Saturn failed to compete with Sony's machine. Furthermore, after losing many primary licensees gained during the bit war era to Sony, their inability to produce any signature first party titles for its fifth generation console and poor leadership in the American branch division effectively killed their chances to compete with the Nintendo 64 and PlayStation. Even the Sega Dreamcast in 1999 failed to capture the attention of the American market, yet akin to a Swan Song, the console makers produced several memorable titles as *Shenmue*, *Crazy Taxi*, near perfect arcade ports of the *Street Fighter III* series and its signature title *Sonic Adventure* made the console into a nostalgic cult favorite. Yet, what finally killed them as a hardware maker

¹³⁵⁶ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Mark J.P. Wolf, ed., *The Video Game Explosion: A History from Pong to PlayStation and Beyond*, Greenwood Press, 2011.

simply came down to simple timing as the Sony, Microsoft, and Nintendo launched the PlayStation 2 in 2000 and the Xbox and GameCube in 2001. With competition abound and heavily in debt, Sega officially bowed out as a hardware developer in August 2001 and started making games for their former competition as a third party licensee.¹³⁵⁷

Moreover, the arcade market also took a major hit. After the fighting game craze of the early to mid-1990s abruptly ended uneventfully, the arcade machine fell to the wayside as the home consoles managed to singlehandedly replace the medium. Without that popularity sparked by a massive craze, many arcades simple became niche, as they are still around, but not as abundant as the 1980s or early 1990s. This led to several arcade development teams dabbling in both arcades and consoles switch to permanently home consoles and produce only a handful of arcade titles for the American market. Nevertheless, what does the above information have to do with the issue of violence let alone the ESRB ratings system?¹³⁵⁸

The specter of the violence issue is one trope that video games never have seem to get rid of in the past twenty plus years. As games, progressively get more realistic with real life themes and tropes, many step back and call out the video game industry for creating such a game. Despite taking measures in creating appropriate advertisements for children with the 1995 advertisement conduct code many critics now point to a games appeal online is what draws

¹³⁵⁷ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Sam Pettus, *Service Games: The Rise and Fall of Sega: Enhanced Edition*, CreateSpace Independent Publishing Platform, 2013; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

¹³⁵⁸ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014.

underage children to these types of video games.¹³⁵⁹ The *Call of Duty* series, the *Mortal Kombat* series, *Grand Theft Auto V*, and the still popular but now classic *Doom* are targeted constantly as prime suspects of the violence trend as their stories and gameplay feature excessive violence and using realistic weapons that can desensitize players to real world violence.

Furthermore, if a tragic disaster such as a mass shooting occurs somewhere in the country, news affiliates will immediately point to video game violence as a perpetrator. Since the Columbine School Shooting in 1999, a perverted connection between violence in gaming and mass shootings highlighted in such unfortunate scenarios as the 2012 Aurora Colorado Theater shooting and Sandy Hook all try to pin video games as a train tool for the killers.¹³⁶⁰ This scapegoating trend over the past few years has also picked up traction around the world as Anders Behring Breivik shot over sixty-eight people in Norway.¹³⁶¹ In a post capture interview, he boldly stated *Call of Duty* and other violent video games was his favorite training tool in order to prepare for the shootings.¹³⁶²

Nevertheless, what happened in those seven months from December 1993 to July 29, 1994 would forever mark the evolution of video games from pop culture to serious entertainment. From these three senatorial hearings, a brand new video game industry emerged, that would not only challenge conventional morals but at the same time cause pause for many and force both fan and critics to ask is video gaming an art. The three trials coupled with later tragic events caused the masses to question if video games had a greater role in their children and their own lives especially when it came to violence and gender roles. Finally, the three hearings

¹³⁵⁹ “ESRB History,” *Entertainment Software Rating Board (ESRB)*, accessed January 27, 2016, <http://www.esrb.org/about/chronology.aspx>.

¹³⁶⁰ Lt. Col. Dave Grossman and Gloria Degaetano, *Stop Teaching Our Kids to Kill*, 7-9.

¹³⁶¹ John D. Sutter, “Norway Mass-Shooting Trial Reopens Debate On Violent Video Games,” *CNN*, April 20, 2012, accessed February 3, 2016, <http://www.cnn.com/2012/04/19/tech/gaming-gadgets/games-violence-norway-react/>.

¹³⁶² *Ibid.*

freed the once confined video game industry and guided them into a direction no one ever expected. The birth of the modern age of video games had come.

Conclusion

As we wrap up the thesis, we once again must ask one poignant question, why should we care about the history of video games? Why should we care about the third and fourth generation of home consoles, computers, and arcades games? Finally, what can be said about the historical significance of the video game industry, its ties to American culture, and today's modern market?

Answering the argument we need to turn back around to the thesis statement as the years between 1985 and 1995 forever shaped how American culture perceived video games. After the meteoric fall of second generation of gaming and the rise of Nintendo in 1986, the expansion of home computer gaming, and the reemergence of coin operated arcade games, the long ten-year battle to remove the stigma of being labeled as a fad commenced. In order to be successful, video game companies needed to regain the trust of the consumers and companies that was burned by the greed of Atari, Coleco, and countless others who tried to cash in on the video game craze of the early 1980s. Learning from their mistakes, Nintendo, Sega, Capcom, Komani, and other began rigorous testing before releasing a game on the market at while the occasional lemon made it through, it was not as ubiquitous as the previous generation.¹³⁶³

Furthermore, these same companies began producing top quality titles. Games featured in the third generation include *Legend of Zelda*, *Super Mario Bros.*, *After Burner II*, *Castlevania*, and *Mega Man* is considered as today's classic gaming.¹³⁶⁴ Furthermore, the next generation continued this trend with *Legend of Zelda: A Link to the Past*, *Super Metroid*, *Sonic the Hedgehog*, *Final Fight*, *Contra: Hard Corps*, and *Street Fighter II: The World Warrior* are often

¹³⁶³ For further reference, please review Leonard Herman, *Phoenix: The Fall & Rise of Videogames*, 3rd edition, Rolenta Press, 2001; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

¹³⁶⁴ "Nintendo Games," *IGN*, accessed May 1, 2016, <http://www.ign.com/companies/nintendo/>; "Sega Games," *IGN*, accessed April 25, 2016, <http://www.ign.com/companies/sega/>.

regarded as some of the best titles ever made on consoles or PC.¹³⁶⁵ Speaking of which, the home computer titles, while not as documented as the consoles, they too had some great games come out during the 1980s and 1990s such as *Wolfenstein 3D*, *Doom*, *Sim City*, *Civilization*, and countless others.¹³⁶⁶ This standard of high quality AAA titles eventually brought back many disgruntled fans burned by the second generation and rebuilt a bridge between them and the video game industry.

Today video game companies continuously keep producing these high quality games as they display them at events such as E3. Today, we do not concenter video games as a fad any longer, but as a serious entertainment sector of our economy. However, breaking away from the word fad took some time, by constantly protecting consumers and producing top quality titles ensured their overall success.

On the other hand, this same period also broke many taboos. The once "child friendly" image of the video game market has long since died since the 1990s. Today, video game developers feature many titles with blood, gore, profanity, nudity, and graphic violence, drug use, and even violence against women. This again this goes back to the rather "progressive" games that came out from 1986-1995, which experimented with different themes and scenarios for the various titles. *Final Fight* featured Poison, one of the first transgender character as well as one of the first "female" characters that a player could fight, which at the time was a severe taboo.¹³⁶⁷ Furthermore, the 1987 *Splatter House* is one of the first gory arcade titles, which featured blood, gore and the graphic killing of various monsters. Finally, games such as

¹³⁶⁵ Ibid.

¹³⁶⁶ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001; Tony Mott, ed., *1001 Video Games You Must Play Before You Die*, Universe, 2010.

¹³⁶⁷ Capcom, "Final Fight" (Arcade Game), Capcom, 1989.

Wolfenstein 3D and *Doom* feature controversial locations for its time primarily Nazi Germany and Hell.¹³⁶⁸ This experimentation emboldened many developers as the above tropes have become more common in today's Teen and Mature rated games.

Conversely, one of the legacies of the third and fourth generation of games that continues even today is the issue of violence in video games. As note in the previous paragraph, as the conventional taboos and boundaries in search of expanding the demographic have produced some of the more graphic titles of the later generations of home consoles and PC. Even in recent current events such as the shootings in Norway, Sandy Hook, and Columbine High School all point to video games acting as a catalyst for this type of behavior. Unfortunately, in the case of video games, unlike the accepted television and movie violence they have become the scapegoat as many adults did not have a deep connection to gaming as younger generations and could more easily pin society's faults upon its games.

Finally, the legacy and historical significance of the third and fourth generation of video games comes in the form of their successors. After 1995, the market once again consolidated itself as many consoles began dropping out of the market in favor of either making software for the other consoles or pulling out completely. Today, three console and game makers dominate the US market. In 1995, Sony debuted their landmark console, the PlayStation, which took off in sales and by 2003 resulting in the console selling over 102.49 million units worldwide.¹³⁶⁹ Thirteen years later with a majority share in today's US and world markets, the new console, the PlayStation 4 continues that dominance with exclusive games as *Street Fighter V*, *Uncharted 4*,

¹³⁶⁸ For further reference, please review such software as id Software, "Doom" (MS-DOS Game), GT Interactive Software, 1993; id Software, "Wolfenstein 3D" (MS-DOS Game), Apogee, 1992.

¹³⁶⁹ Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time* (Boston, MA: Focal Press, 2012), 246.

and the highly anticipated remake of Final Fantasy VII.¹³⁷⁰ Paralleling their success, Microsoft, who serves as one of the only US technology manufacture making a console in 2001 debuted the X-Box as the alternative to the PlayStation and GameCube.¹³⁷¹ As of 2016, their current gen console, the X-Box One mainly deals with "Adult" audiences and features games such as *Halo 5*, *Dead Rising 3*, and *Killer Instinct*.¹³⁷² Sitting as the last of its kind, Nintendo solidified itself as the last of the old guard console developers and the winner of the bit wars after Sega dropped from the hardware console market in 2001.¹³⁷³ Today, they continue create new IP's for example such as the unexpected cultural phenomenon in 1998 called *Pokémon* and the 2015 surprise hit *Splatoon*, while continuing old franchises such as the 2014 *Super Mario 3D World* and the 2016 game, *Star Fox Zero*.¹³⁷⁴

On the other hand, the PC market grew on its own merit as they officially managed to break away from the console connection, and build their own unique gaming culture. With the advances of Windows 95 and advent of the commercial Internet, the growth of computer games started to go mainstream thus creating a definitive challenger against the rising home consoles. Furthermore, PC gaming as the medium provides the players with endless upgrading possibilities, a dedicated modding community, and a host of games ranging from racing and flying simulators to shooters and MMO's creating a unique experience all its own. Today

¹³⁷⁰ "PS4 Games vs Xbox One Games," *IGN*, February 19, 2016, accessed May 5, 2016, http://www.ign.com/wikis/xbox-one/PS4_Games_vs_Xbox_One_Games.

¹³⁷¹ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Game Consoles: An Inside Look at Apple, Atari, Commodore, Nintendo, and the Greatest Gaming Platforms of All Time*, Focal Press, 2014; Winnie Forster, *Game Machines: 1972-2012: The Encyclopedia of Consoles, Handhelds, & Home Computers*, GAMEplan, 2014.

¹³⁷² "PS4 Games vs Xbox One Games," *IGN*, February 19, 2016, accessed May 5, 2016, http://www.ign.com/wikis/xbox-one/PS4_Games_vs_Xbox_One_Games.

¹³⁷³ For further reference, please review Sam Pettus, *Service Games: The Rise and Fall of Sega: Enhanced Edition*, CreateSpace Independent Publishing Platform, 2013; Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

¹³⁷⁴ "Nintendo Games," *IGN*, accessed May 1, 2016, <http://www.ign.com/companies/nintendo>.

MMORPGs that rose in popularity during the late 1990s takes up a good majority of the games available with titles like *World of Warcraft* and *Final Fantasy XIV* using this particular style of gameplay. Not to be outdone, alongside the MMORPG's the first person shooters made popular by the likes of *Doom*, *Quake*, *Painkiller*, and *Duke Nukem*, the genre still have a massive following with games like *Team Fortress 2* and *Call of Duty* taking top honors.¹³⁷⁵

Conversely, the only video game sector that did not fare well transitioning past the fourth generation of games was the coin-operated arcade games. With video game consoles and PC constantly getting better over time and could replicate the arcade experience for many popular games, with no major graphical advancements, stand out titles, or craze to support the medium, people stopped coming in mass droves. Developers who grew during the fighting game craze such as SNK found themselves in a full on crisis and liquidated their assets to remain in the black, yet nothing could bring back the popularity seen during the early 1990s. Even today, the arcades while still around remain rather niche. A novelty of the past, these relics still connects us to an older era where 25 cents would let you play a round of *Pac-Man* or *Donkey Kong*. Nevertheless, these machines do still have a cult following as those who wish to explore gaming's arcade roots can still put in their quarters or dollars to square off against an old foe.¹³⁷⁶

Finally, the unique thing that came from the legacy of the third and fourth generation of video games came from its massive worldwide appeal. Why is this important? Simply put the people themselves made video games such a success, as today's younger generations who grew up during the 1980s and 1990s are now the adults who pass along these games to their children

¹³⁷⁵ For further reference, please review Bill Loguidice and Matt Barton, *Vintage Games: An Insider Look at the History of Grand Theft Auto, Super Mario, and the Most Influential Games of All Time*, Focal Press, 2012; Brad King and John Borland, *Dungeon's and Dreamers: The Rise of Computer Game Culture from Geek to Chic*, McGraw-Hill, 2003.

¹³⁷⁶ For further reference, please review Steven Kent, *The Ultimate History of Video Games*, Prima Publishing, 2001.

who both can enjoy the same hobby. Interestingly however, people have oddly embraced the video game culture in America as more people attend comic and video game conventions more frequently while dress like one of their favorite characters to going online and debating the pros and cons of their favorite games. Today we no longer shun video games as something that rots children's brains, but embrace it as part of our expanding culture, though some issues are still up for debate.

Since 1985 and well into the 1990s, the early modern video games served as gatekeepers to a new technology while also carving a path for a future industry. Its impact in the United States was even greater as the new form of entertainment not only rivaled the popularity of TV and movies, but also caused its fair share of controversy that helped mold it into the industry that we see today. Ultimately, as noted before what the early modern video games did exceptionally well was break the fad stigma. Unlike a passing trend, Video games, on the other hand, thanks to the efforts of Nintendo, Sega, the home computer game makers, and all the third party developers proved that notion wrong and showed that despite controversy and stigmas, something good could grow from the bleeps, glitches, and fictional characters.

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