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The Dissertation Committee for Carly Ann Kocurek Certifies that this is the approved version of the following dissertation:

Masculinity at the Video Game Arcade: 1972-1983

Committee:

Elizabeth S.D. Engelhardt, Supervisor

Janet M. Davis

John Hartigan

Mark C. Smith

Sharon Strover

Masculinity at the Video Game Arcade: 1972-1983

by

Carly Ann Kocurek, B.A.; M.A.

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Masculinity at the Video Game Arcade: 1972-1983

Carly Ann Kocurek, Ph.D.

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Supervisor: Elizabeth S.D. Engelhardt

As the United States shifted toward a service-based economy and an increasingly digital media environment, American youth – particularly young men and boys – found an opportunity to play with these values in the then-novel video game arcade. The video game industry first came of age between the successful commercialization of *Pong* in 1972 and the U.S. gaming industry crash of 1983. In the interim, economic and play practices in the arcade itself and media representations of the arcade and its habitués shaped and responded to the economic and cultural upheavals of the period. Arcade machines were the first computers many Americans confronted. Through public discourse about gaming and gamers, Americans engaged in a critical debate about computerization, the move to digital media culture, the restructuring of the U.S. labor economy, and the competitiveness of American youth – particularly boys – in a Cold War culture conceived as both hostile and technologically oriented. This study demonstrates that video gaming was an arena in which Americans grappled with larger tensions about masculinity, globalization, labor, and digitalization. By analyzing gaming as a practice of everyday life, this work not only offers a cultural history of this period of gaming, but

critical insights into the crystallization of masculine identity in a postindustrial, postmodern economy.

Table of Contents

List of Figures	xi
Introduction: Making Gamers	1
At Home in the Arcade	1
The Root of the STEM.....	6
Playing With History	8
Level Up.....	12
Chapter 1	13
Chapter 2.....	14
Chapter 3.....	16
Chapter 4.....	17
Chapter 5.....	18
Chapter 1: Coin-Drop Capitalism, or, Postmodernity at Play	21
Toward a Phenomenology of the Video Game Arcade	24
Sight 26	
Sound	28
Play 29	
Playing with Free Speech.....	41
Leisure During a Labor Crisis.....	45
From Pinball to Postmodernity	50
Summary	57
Conclusion	61
Chapter 2: Twin Galaxies	64
About Twin Galaxies	68
Arranging the Image	70
The Photograph.....	74
Computer Culture at Play.....	74
Good Technology, Good (Enough) Kids	78

Gamers as Athletes	85
Arcade as Teenage Wasteland	87
<i>Life</i> Magazine's Anthropological Eye	94
Interpreting Gaming.....	96
Conclusion	101
Chapter 3: The Agony and the Exidy	104
Exidy Rising.....	107
Of Silver Screens and Death Screams	111
The Game and Its Discontents	119
Infamy and Its Aftermath.....	131
Panic and Profits	136
Chapter 4: Programmed for Power: <i>TRON</i> , <i>WarGames</i> , and the Violence of the Digital	141
<i>TRON</i> Synopsis.....	152
<i>WarGames</i> Synopsis	154
Reception	156
Reception	160
Conclusion	174
Chapter 5: Reboot: The Arcade is Dead, Long Live the Arcade	179
Barcade: Brooklyn	179
Dave & Buster's: Austin.....	180
The Arcade in Present Tense	182
Remembering the Arcade	189
Arcade as Preservation Project	193
Framing and Interpreting Arcade Nostalgia	203
The Arcade as Childhood.....	204
Original Gamers.....	214
Arcade as Masculine Enclave	217
Arcade as Technological Boom	221
Conclusion	223

Conclusion	226
References.....	241
Vita	262

List of Figures

Figure 4: Value of 1 Quarter in 2011 Dollars from 1972 to 1983	31
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Introduction: Making Gamers

Maybe it's a problem ... that little girls DON'T like to play games that slaughter entire planets. Maybe that is why we are still underpaid, still struggling, still fighting for our rights. Maybe if we had the mettle to take on an entire planet, we could fight some of the smaller battles we face everyday *sic*.

– Nikki Douglas, Grrl Gamer

At Home in the Arcade

By the time Justine Cassell and Henry Jenkins were penning their introductory chapter to the groundbreaking anthology *From Barbie to Mortal Kombat: Gender and Computer Games* in 1998, male consumers accounted for 75 to 85 percent of the video and computer gaming sales and revenues in the \$10 billion gaming industry.¹ Cassell and Jenkins make a compelling and troubling case for the importance video gaming has for leading players to pursue careers in the technology-related fields, saying in part:

The game console may represent the technological equivalent of a 'head-start' program, preparing children for participation in the digital realm, and yet at the same time potentially socializing boys into misogyny and excluding girls from all but the most objectified of positions.²

These points are certainly important and worth consideration. However, statements about the potential misogyny of games and gaming and the "head-start" provided by video gaming, along with the kinds of statistics forwarded in the essay as evidence of the extent to which girls and women are alienated or excluded from video gaming raise other,

¹ Justine Cassell and Henry Jenkins, "Chess for Girls?: Feminism and Computer Games," in *From Barbie to Mortal Kombat*, ed. Justine Cassell and Henry Jenkins (Cambridge: The MIT Press, 1998), 11.

² Justine Cassell and Henry Jenkins, "Chess for Girls?: Feminism and Computer Games," in *From Barbie to Mortal Kombat*, ed. Justine Cassell and Henry Jenkins (Cambridge: The MIT Press, 1998), 3.

historical questions: When did video gaming – or at least the most highly visible kind of video gaming – become a cultural enclave for young men? How did this happen? What cultural and political ends did it serve? What external historical factors contributed to this transformation?

Much has been written about gender and video gaming. Content analysis has revealed significant inequalities in on screen representation and in the treatment of on screen characters. One study of popular games published in 1998 found that, in games with characters, 41% had no female characters and that most characters were white.³ A 2007 study of video games' role in gender socialization confound that magazine depictions of game characters also featured men more frequently than women and tended to portray men as aggressive and women as sexualized.⁴ These and other studies, such as those by James D. Ivory and Marsha Kinder, demonstrate the problematic gender politics of much of video gaming.⁵ However, the existing studies have done little to explain how a major entertainment medium, one currently outpacing Hollywood film production in revenues, became the assumed exclusive domain of men and boys. Studies like Derek A. Burrill's *Die Tryin': Videogames, Masculinity and Culture*, or the 2008 anthology

³ Tracy L. Dietz, "An Examination of Violence and Gender Role Portrayals in Video Games: Implications for Gender Socialization and Aggressive Behavior," *Sex Roles: A Journal of Research* 5-6 (38): 425-442.

⁴ Karen E. Dill and Kathryn P. Thill, "Video Game Characters and the Socialization of Gender Roles: Young People's Perceptions Mirror Sexist Media Depictions," *Sex Roles: A Journal of Research* 11-12 (57): 851-864.

⁵ Marsha Kinder, *Playing With Power: In Movies, Television, and Video Games*, (Berkeley: University of California Press, 1993).

James D. Ivory, "Still a Man's Game: Gender Representation in Online Reviews of Video Games," *Mass Communication and Society*, 9, 1 (2006): 103-114.

James D. Ivory, "The games, they are a changin': Technological advancements in video games and implications for effects on youth," in *The Changing Portrayal of Adolescents in Media Since 1950*, ed. Patrick Jamieson and Daniel Romer, (New York: Oxford University Press, 2008), 347-376.

Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming raise provocative questions about why more women and girls are not interested in video gaming as it currently exists, but they do not explain when, why, or how gaming became so stereotypically male. The presumed masculinity of video gaming is too often treated as a historical inevitability or accepted as an existing state of affairs. The seeming maleness of games is often attributed to producers' choices of narrative and play style, which certainly appears to be a contributing factor.⁶ However, even this explanation is ultimately unsatisfying, as it leaves open the question of why producers of a heavily commercialized medium would alienate a large potential consumer base and often treats these choices as ahistorical fact or self-explanatory truism.

As I began researching video gaming history, I came to see that understanding the transformation of video gaming into a male domain requires a careful consideration of video gaming's early commercial history. The first commercial video games most people saw or played were coin-op arcade machines. These machines were distributed through the coin-op industry's existing infrastructure, which had developed along with jukeboxes, pinball games, cigarette machines and pay-for-play pool tables. Indeed, at the outset, coin-op video games were often seen as a novel twist on earlier games and were often placed in the same kinds of locations – bars, restaurants, bowling alleys, pool halls, and Laundromats – and intended for consumption by a general audience. When companies

⁶ Subrahmanyam Kaveri and Patricia M. Greenfield, "Computer Games for Girls: What Makes Them Play?" in *From Barbie To Mortal Kombat: Gender and Computer Games*, ed. Justine Cassell and Henry Jenkins (Boston: The MIT Press, 1998) 46-71. Sheri Graner Ray, *Gender Inclusive Game Design: Expanding The Market* (Florence: Charles River Media, 2003).

like Atari, Exidy, and Chicago Coin advertised coin-op video games in the 1970s, the advertisements often focused on the machines as physical objects, relying on clear pictures of the cabinets accompanied by technical information intended to lure operators with the promise of the machines' reliability and moneymaking potential. While the occasional flyer features a woman in formalwear – or flowing lingerie – beside the machine, much as in a luxury car advertisement, these ads are somewhat rare.⁷

More frequently, when flyers and print advertisements feature people, they appear either as illustrations of the games' concept or narrative or as players. For example, game flyers for athletic games like *Baseball* (Ramtek, 1974) and *TV Basketball* (Midway, 1974) show cartoon athletes mid-game while western-themed games like *Gun Fight* (Midway, 1975) feature illustrated gunslingers with pistols drawn.⁸ Significantly, advertisements depicting game players often feature men and women playing the games together. These representations of gaming likely owed some debt to the games' role as added amusements in bars, pool halls, and other venues looking to attract adults out on date nights. Flyers advertising games like *Computer Space* (Figure 2) and *Gotcha* (Figure 3) feature man/woman pairs of gamers enjoying the games together.⁹ This advertising

⁷ For example, see Nutting Associates, "Computer Space," Flyer, 1971. Accessed through The Arcade Flyer Archive, October 5, 2011, <http://flyers.arcade-museum.com/?page=thumbs&db=videodb&id=1530>

⁸ Ramtek, "Baseball," Flyer, 1974. Accessed through The Arcade Flyer Archive, October 5, 2011, <http://flyers.arcade-museum.com/?page=thumbs&db=videodb&id=2602>

Midway, "TV Basketball," Flyer, 1974. Accessed through The Arcade Flyer Archive, October 5, 2011, <http://flyers.arcade-museum.com/?page=thumbs&db=videodb&id=1253>

Midway, "Gun Fight," Flyer, 1975. Accessed through The Arcade Flyer Archive, October 5, 2011, <http://flyers.arcade-museum.com/?page=thumbs&db=videodb&id=1680>

⁹ Atari, "Gotcha," Flyer, 1973. Accessed through The Arcade Flyer Archive, October 5, 2011, <http://flyers.arcade-museum.com/?page=thumbs&db=videodb&id=461>

Nutting Associates, "2 Player Computer Space," Flyer, 1971. Accessed through The Arcade Flyer Archive, October 5, 2011, <http://flyers.arcade-museum.com/?page=thumbs&db=videodb&id=1531>

trope was more than wishful thinking, as women doubtless played early games, and manufacturers certainly considered them as consumers. Nolan Bushnell, co-founder of Atari, famously insisted that 40% of the coin-drop – that is, consumer-driven income – from *Pong* (1972) came from women players.¹⁰

These early games were intended for a general audience, and met with some success at reaching that audience. Women and girls played games, even at the competitive level. *Starcade*, a television competitive gaming show that ran from 1982 to 1983, featured a fair number of women as competitors, ranging from teenaged girls to middle-aged housewives. Of the 322 contestants (some paired as married couples, siblings, friends, or even mother and son), 61, or roughly 19%, were girls and women.¹¹ However, even with the intent to design games that would appeal to players regardless of gender and indications that girls and women played games casually and competitively, most games were designed by men, and many arcades were dominated by men generally and by young men particularly. Observational data of the number of men and women playing and watching games in arcades in Pittsburgh, San Diego, and Atlanta in the winter of 1982-3 indicate, for example, indicate that male players were much more likely to play games than watch games, with an average of 11 (92%) males playing games and one (8%) male player watching games. But, they also indicate that women were quite likely to play games as well, with an average of 57 (77%) women playing games compared to an average of 17 (23%) women watching games. So, while it is more likely

¹⁰ Ethan Watters, “The Player,” *Wired*, October 2005, accessed August 13, 2009, <http://www.wired.com/wired/archive/13.10/bushnell.html>

¹¹ “Starcade: Contestants,” *Starcade*, accessed January 6, 2012, <http://www.starcade.tv/starcade/contestantsframe.asp>

that a woman in the arcade chosen at random would be watching a game than that a man in the arcade chosen at random would be watching a game, there were many more women (74) than men (12) in the arcade in total, and most of those women were playing games.¹² As the authors of the study point out, however, despite the significant presence of the women, both as players and as observers, the arcade remained a space perceived as belonging to and being governed by the cultural rules of young men.

The Root of the STEM

The predominance of young men's social rules and standards in the arcade doubtless served to shape the environment, and this in turn may have contributed to significant declines in women gamers over time. According to Jenkins and Casell, women and girls made up just 15 to 25% of spending on video games in 1998. This statistic at first seems to represent a low point in women's interest in games. In fact, just over a decade later in 2009, women made up 40% of all gamers with adult women making up 34% of all gamers. However, the gender divide remains much more skewed among younger players, with girls 17 and younger comprising just 6% of all game players compared to the 18% comprised of boys 17 and younger.¹³ That is to say, the number of boys playing games is roughly three times the number of girls playing games, even as gaming has grown in or returned to popularity among adult women.

¹² Kiesler, Sara, Lee Sproull and Jacquelynne S. Eccles, "Pool Halls, Chips, and War Games: Women in the Culture of Computing," *Psychology of Women Quarterly*, 9 (1985): 451-462.

¹³ Entertainment Software Association, *2009 Sales, Demographic and Usage Data: Essential Facts About the Computer and Video Game Industry*. PDF. Accessed October 4, 2011, http://www.theesa.com/facts/pdfs/ESA_EF_2009.pdf, 2-3.

Given the importance of gaming for leading players to consider and pursue educational and professional opportunities in technology fields, or, as Cassell and Jenkins say “preparing children for participation in the digital realm,” the gendering of gaming among adolescents should remain a concern, particularly as women remain woefully underrepresented in key fields. According to “Why So Few? Women in Science, Technology, Engineering and Mathematics,” a 2010 report by the American Association of University Women, women earn a small fraction of bachelor’s degrees in many STEM fields. In the year 2006, the most recent year for which data is provided, women accounted for just 19.5% of undergraduate engineering degrees and 20.5% of undergraduate computer science degrees. These numbers are particularly unsettling considering that women’s presence in computer science is actually shrinking: in the mid 1980s, just over one third of undergraduate computer science graduates were women.¹⁴

I do not mean to suggest that gaming is a singular explanation for these inequalities, or that a redress of gender inequality in gaming would directly address these professional and educational issues. However, I do want to point out that the marginalization of women in STEM fields does not happen in a cultural vacuum. The fact that the number of girls who play video games is one third the number of boys who play video games – this is to say that the number of girls engaged in participation in the medium through which, to paraphrase Rochell Slovin, founder of the Museum of the Moving Image and curator of the first museum exhibit on video gaming, “We began to

¹⁴ Catherine Hill, Christianne Corbette and Adresse St. Rose. “Why So Few? Women in Science, Technology, Engineering and Mathematics,” *American Association of University Women*. 2010. PDF. Accessed October 5, 2011, <http://www.aauw.org/learn/research/upload/whysofew.pdf>, 9-10.

use computers as culture” – has implications that reach far beyond the game industry’s sales figures.¹⁵ These implications certainly include the alienation of women from digital culture in some key ways, the propagation of misogynistic views of women’s technological abilities and competitive impulses, as well as the subtle exclusion of women from the use of computers as culture, and from the skills and knowledge to be acquired through gaming. This project intervenes in a popular history of video gaming that treats as natural and inevitable these gendered inequalities, historicizing the development of video gaming as popular culture and analyzing the ways in which these inequalities developed.

Playing With History

Video gaming also exists in a cultural context, and much of this dissertation is focused not on the specifics of individual games, but instead on the popular perceptions and representations that developed around video gaming during the earliest years of public consciousness. This work focuses on the early history of gaming not as technological wonder, but as public practice and cultural phenomena.¹⁶ It has emerged from my desire to locate the point at which gaming became a perceived male enclave and the cultural and historical factors that contributed to this perception. This interest in public practice led me away from computer and console games and toward arcade games,

¹⁵ Rochell Slovin, “Hot Circuits: Reflections on the 1989 Video Game Exhibition of the American Museum of the Moving Image,” in *The Medium of the Video Game*, ed. Mark J.P. Wolfe (Austin: University of Texas Press, 2001), 137-154.

¹⁶ For purposes of this work, I am using a definition of public which includes places which are publicly accessible. With this in mind, the “public” discussed here includes the spaces provided by private businesses such as arcades.

which are inherently much more public as, at the peak of their popularity, they were rarely privately owned, and were more frequently owned by operators who placed them in public locations.

In order to explore the historical basis and origins of gender bias in video gaming, this dissertation revisits the historical questions posed earlier and examines them specifically in the context of the “golden age” video game arcade. That “golden age” is framed here as spanning from the successful commercial launch of *Pong* in 1972 to the 1983 industry crash during which the industry plummeted from \$3 billion in sales in late 1982 to roughly \$100 million in 1985.¹⁷ This industrial crash led to significant restructuring in the industry, effectively toppling many companies that had been industrial leaders while allowing for the rapid rise of previously unheard of companies. Atari, perhaps the most famous of the early game companies, fell especially hard; a December 1982 shortfall in sales projections led to stock values for Warner Communications, Atari’s parent company, decreasing in value by a third.¹⁸ While the industry eventually stabilized and then regrew, the crash marks a transitional period in both the gaming industry and in gaming as public practice. The pre-crash period in gaming is foundational and worthy of careful consideration; indeed, the early years of video gaming have much to teach us about the development of gaming as public culture. While this period in gaming history has spawned numerous popular histories and several

¹⁷ John Schwartz, “Zap! Zap! Video Games are Back!” *Newsweek*, March 14, 1988, 39.

¹⁸ Steven L. Kent, *The Ultimate History of Video Games: The Story Behind the Craze That Touched Our Lives And Changed The World* (New York: Three Rivers Press, 2001), 234-235.

documentaries and has become a frequent site of video gaming nostalgia, there has been little to no academic work on the subject.

My methodology derives from the interdisciplinary nature of American Studies, allowing me to develop a tool kit that draws on the practices of media studies, anthropology, cultural studies, and history. These diverse influences have led me to consider the subject through a number of lenses, drawing on methodological training in fields including cultural studies, history, media studies, and literature; and to pursue sources in a variety of forms, including film and video, printed material, and oral history interviews. I have spent countless hours reading magazine and newspaper articles both from popular consumer outlets and trade publications, watching and rewatching dozens of films depicting video gaming and arcades, looking through literally dozens of vintage arcade flyers, and collecting oral histories from world record gamers and other key figures.

The primary print sources consulted in this project have been drawn from archives as established as the Library of Congress and as ephemeral and fan-driven as The Arcade Flyer Archive, an exhaustive collection of arcade flyers shared digitally by collectors across the country. Materials at the Library of Congress and in the Chicago Public Library system include volumes of *RePlay Magazine*, a trade journal serving the coin-op industry published from 1975 to the present. Copies of *Life* and *Time* were located via library, and, when high resolution copies or images could not be found, purchased at antique shops and via eBay. My own rummaging through newspapers and magazine via database was greatly augmented by materials in the personal collection of Walter Day. In

collecting these primary sources, I have assessed them at two levels, noting the factual information they relay, including vital statistics about the rapid expansion of coin-op video gaming, while also analyzing the narrative tropes used to discuss gaming.

I was fortunate to be able to obtain film and video sources most frequently through commercially distributed DVD, as in the case of *Tron*, *WarGames*, and even *Joysticks*, which is now sadly out of print. Further sources, including television advertisements, news broadcasts, and clips of shows, were accessed via YouTube through other websites. Occasionally, as in the case of the *Starcade* website, which includes exhaustive information about *Starcade* as well as most of the episodes aired, a single site has collected a large body of work.¹⁹ My treatment of these sources combines textual analysis with consideration of their production framework and historical context.

While my major focus has been on sources about or concerning video gaming and video gamers, this project is not abstracted from the games themselves. I have also spent numerous hours playing games on a vintage Atari 2600 console and in MAME (multi-arcade machine emulator) at home, as well as playing coin-op machines in bowling alleys, movie theaters, and even in arcades, both in Austin and across the country. These arcades have included Arcade UFO, Pinballz, and the Dave and Buster's franchise in Austin, Texas; Barcade in Brooklyn, New York; the Circus Circus Midway Arcade in Reno, Nevada; Funspot in Laconia, New Hampshire; the Santa Cruz Boardwalk Casino Arcade in Santa Cruz, California; and the Seattle Waterfront Arcade in Seattle, Washington, among others. While only a few of these arcades were in operation during

¹⁹ "Starcade," accessed January 6, 2012, <http://www.starcade.tv/>

the time period I am considering here, most of them have machines dating to the period; those arcades that have opened more recently or that focus on newer machines have contributed greatly to my understanding of the arcade's recent resurrection as nostalgic site.

Level Up

Turning a critical eye to the early commercial history of coin-op video gaming, this dissertation examines early public practices of video gaming and then-contemporary popular representations of video gaming and gamers. In excavating the early cultural history of the video game arcade, I argue that the arcade served as a training ground for emergent economic and cultural practices. I further argue that popular representations of gamers and gaming directly contributed to the consolidation of ties between digital technologies, video gaming, violence, youth, and masculinity. This consolidation of concepts and identities – which I call technomascularity – form a powerful constellation that has significantly influenced perceptions not only of video gaming and video gamers, but of postindustrial labor and employment practices, particularly in the technology sector.

I have arranged my chapters with the most general coming first and providing necessary context for later chapters. For this reason, the chapters are not in a direct chronological order, although there is a chronological progression from the first chapter, which provides a phenomenological and historical overview of the “golden age” arcade, to my fifth chapter, which examines the multiple sources of the nostalgic longing for the

arcade. Between, I devote three chapters to considering specific moments of mediation: the development of video gaming's world-record culture around the Twin Galaxies Arcade in Ottumwa, Iowa and that arcade's role in a well-known image of America's "best gamers" captured by *Life Magazine* in 1982; the first moral panic in video gaming, which was a reaction to Exidy's 1976 *Death Race* arcade game; and the dramatic narrativization of video gamer identity through the Hollywood films *Tron* (1982) and *WarGames* (1983).

Chapter 1

This dissertation begins with a phenomenological tour of the arcade, drawn from oral history interviews, photographs, magazine and newspaper articles, and observations of arcades and individual coin-op video game machines. In reconstructing the arcade as an immersive environment, I consider the economic, competitive, and gaming behaviors embedded in the arcade machines and in the broader context of the arcade. Arcade games directly train players in gaming behaviors by rewarding them through points, game time, the ability to access subsequent game levels, or by explicitly ranking them against other players on top scores lists. Coin-op arcade games also require players to invest financially in gaming, and offer indirect financial awards by allowing the most successful players to enjoy the longest games, thereby requiring they spend less money than less skilled counterparts.

In order to make sense of the phenomenological consideration of the arcade, I also provide some historical context of the coin-op industry, particularly considering the

historical importance of pinball gaming as a precursor to the video gaming craze. Additionally, I consider the larger economic framework of the coin-op industry, which included the manufacturers of games and a complex sales and distribution system in addition to the arcade owners and operators and the end consumers, or gamers who were the industries ultimate source of cash flow. The economic principles of the arcade contributed significantly to moral guardians' uneasiness with arcades in the 1970s and 1980s. This discomfort highlights the way in which the video game arcade represented the emergence not only of the new technology of the computer, but of a new credit-heavy, deindustrialized, service-based economy. While video games are frequently understood as simulations, the arcade itself can also be seen as a simulation of emergent economic values and practices which have persisted long past the eclipse of the arcade's zenith.

Chapter 2

Following on this consideration of the implications of the arcade as an entertainment environment, my second chapter follows the emergence and significance of the “world record culture” which permeated much media coverage of video gaming and helped shape gaming practices at the national and international level. This chapter traces the history of the Twin Galaxies Arcade in Ottumwa, Iowa, which owner Walter Day transformed into the best known keeper of gaming records after launching the Twin Galaxies National Scoreboard in 1982 (later renamed the Twin Galaxies International Scoreboard). True to its name, the scoreboard drew national and international attention to

Day's small-town arcade. Day even succeeded in attracting attention from *Life Magazine*, which featured a photograph of some of the top scoreholders – all teen boys and young men – assembled on Main Street in Ottumwa in the 1982 “year in pictures” issue. The *Life* photograph, one of the most iconic images of arcade culture, shows the gamers standing behind a bank of popular arcade games with a row of high school cheerleaders posed in front.

As a result not only of Day's efforts to put Twin Galaxies on the map as the global scorekeeper of record, but of numerous media depictions of the gamers associated with Twin Galaxies, including the boys and young men photographed by *Life*, competitive video gaming became the dominant popular narrative of video gaming. This key development in the public culture of gaming took place not in video gaming's industrial hubs in Chicago and Silicon Valley, but in local arcades spread across neighborhoods in cities, suburbs and, even small towns like Ottumwa. The Twin Galaxies record holders featured in *Life* present a cohesive picture of gaming: young, male, technologically savvy, bright and mischievous. Day has noted, both in an oral history interview conducted in the process of researching this project and in other published interviews, that the group was kicked out of one hotel in Ottumwa for noisiness, and that two of the gamers in town for the event managed to sleep through the entire photo shoot. The celebration, and even fetishization, of young male gamers helped establish an easily recognizable technomasculine archetype which was frequently invoked in newspaper and magazine coverage of gaming from that point forward. Subsequent chapters examine how

this archetype became tied to violence through popular depictions of gaming, and the deployment of this archetype in fictional works.

Chapter 3

From the first two chapters addressing the video game arcade and the video gamer archetype, I continue to two chapters concerned with the history of violence in video gaming. The establishment of violence as a key theme of video gaming has been integral to the construction of gaming as an arena of male cultural production and consumption, tying video gaming to other areas of culture historically dominated by men, such as military culture and sports competition. These first of these two chapters on violence examines video gaming's first moral panic, which erupted in response to Exidy's 1973 *Death Race*. Although the game was neither licensed nor authorized, it was based on the 1972 cult film *Death Race 2000*. *Death Race* is a crash-and-chase game that allows players to drive on-screen cars and run down stick figure gremlins that scream and turn to tombstones when struck. The broader context of the game, including the infamy of the *Death Race 2000* film, and the game's cabinet graphics, which feature drag racing ghouls wearing neon hoods, bolster the on-screen graphics and led credence to the claim that the game is reveling in a smorgasbord of car-on-pedestrian violence.

Moral guardians decried the game's perceived violence and the game sparked a wide public debate about the propriety of video gaming for young children. Exidy refused to pull the game from the market, and ended production only after sales demand grew sluggish. The public outcry over *Death Race* helped fuel sales of the game and

established the Exidy brand name. And, in the long run, the game established a template not only for future moral panics, but for the process by which violent games create heavily mediated moral panics that add to particularly violent games' infamy and fuel sales. For these reasons, violence and video gaming have a persistent bond in popular perception, which means *violent* video games often stand in for video games more generally in public debates about the medium.

Chapter 4

The second chapter addressing the cultural ties between gaming and violence analyzes the two video gaming related Hollywood films which have had the most enduring popularity, and which provide iconic examples of the deployment of technomascularity in popular narratives: *Tron* and *WarGames*. Released just months apart, these two films have much in common. Both films focus on the exploits of boyish gamer protagonists who display a sophisticated knowledge of computer technologies and a willingness to bend or break established rules in order to pursue their own ends. In both films, anxieties about video gaming and computer technologies are subsumed by celebratory narratives of sophisticated technological abilities and masculine dominance. Even the characters' most egregious activities are easily dismissed either as morally justified, as in the case of *Tron*, or as the result of otherwise harmless curiosity, as in the case of *WarGames*. Further, in both films, the characters' technological expertise and willingness to bend rules in fact prevents significant disaster; in *WarGames*, the main character first triggers an automated defense system but then manages to prevent the

same system from triggering World War III, and in *Tron*, the main character's efforts to prove he authored a hit video game have the additional effect of preventing a megalomaniacal sentient computer program from taking over the world.

While the image of the technomasculine ideal had early emerged in journalistic coverage of video gaming during the preceding decade, these films separated this ideal from reality, reifying the archetype while deploying it to a wide audience. The ongoing popularity of these films — and in particular, the cult film status of *Tron*, which spawned a 2010 sequel, *Tron: Legacy* — demonstrates how salient and culturally relevant this archetype remains. Indeed, with the rise of powerful tech-business icons like Bill Gates, Steve Jobs, and even Mark Zuckerberg, technomascularity has become a dominant framework for biographical narratives of successful tech-industry entrepreneurs. Considering *Tron* and *WarGames* illuminates the historical context for this persistent narrative framework and the characteristics and ideologies embedded in it.

Chapter 5

The fifth and final chapter of this dissertation considers how and why “classic” arcade games, generally those produced during the period under consideration in this work, have experienced a recent resurgence as an object of nostalgic desire. Classic arcade competitions reinscribe the centrality of competition in gaming culture while also helping establish an easily referenced canon of significant or especially beloved games. Documentaries like *The King of Kong: Fistful of Quarters* and *Chasing Ghosts* further contribute to this act of canon building while operating under the authenticating veneer of

the documentary film. Lingered classic arcades, like *Funspot* in Weirs Beach in Laconia, New Hampshire, have become destinations in and of themselves for arcade gamers. Newer businesses, like the Brooklyn arcade-themed watering hole Barcade or Pinballz, Austin's own classic arcade reboot, rely on nostalgia for bygone arcades as a means to attract and retain business.

I do not seek to provide a single unified explanation of the rise in arcade nostalgia, but do offer several potential explanations tying it to the arcade's historical and cultural position. I consider in particular the rise of nostalgia for the "golden era" arcade and its attendant culture in the aftermath of the tech industry crash, or dot-com bubble burst, of the early 2000s. The timing of this focus on the arcade boom of the past at a time when a more recent boom in the tech industry has ended may indicate a longing for the stability and seemingly boundless potential of an emergent economic sector. However, the perceived youthfulness of arcade amusements coupled with this may also indicate longings for leisure, childhood, and play. Additionally, the current wide diffusion of video games also raises the possibility that nostalgic practices of gaming and engagement with gaming's history through nostalgia may serve as a means for gamers to authenticate their own gaming practices. Throughout this chapter, I examine a number of potential interpretations of arcade nostalgia and consider the cultural implications of each.

Coin-Operated Americans provides a careful examination of the way popular representations of video gaming contributed to a narrowing of video game culture in its

earliest years. This narrowing of video game culture has had long-term effects on the development of video gaming as a medium and has limited participation in and access to video gaming. While this work provides a general overview of the history of the video game arcade, it is more concerned with the development of the “gamer” as an archetype of male youth and the role this archetype has played in the development of video gaming specifically and tech culture more generally. Readers should draw from this work not only a cultural history of the video game arcade, but a more nuanced understanding of popular depictions of young men as technologists and of the cultural and political inequalities embedded in these depictions.

Much has been made of gender in video gaming, ranging from critiques of *Tomb Raider’s* impossibly buxom Lara Croft to celebrations of games designed by companies specifically targeting young girls as consumers to energetic debates about how best to hook women into gaming and its perceived intellectual and professional benefits. While these issues are certainly worth consideration, this dissertation is in many ways an intervention in the ongoing conversations about gender and gaming that recenters gaming’s cultural history as integral to understanding the origins and complexity of video gaming’s fraught gender politics. My research argues for the significance of video gaming’s historical and cultural context, moving from the assumption that a full understanding of the role gender plays in game design and in gaming practices requires consideration not only of the games themselves, but of how and where they are played and how play is represented in public discourse.

Chapter 1: Coin-Drop Capitalism, or, Postmodernity at Play

Like all industries and cultural forms, video gaming has its origin myths. One of these myths might go something like this: In 1972, Nolan Bushnell and his company, Atari, released *PONG*, which became the first commercially successful video game. Atari sold the computerized table tennis game to bars, bowling alleys, pool halls, and other amusement spaces targeting adults with money to burn and a desire for novelty. As Atari and other companies released more and more games, the video game cabinets began to crowd out other coin-operated entertainments and were eventually gathered together into arcades dedicated solely to these new machines and frequently habituated not by the leather-jacket clad punks who lurked around pool halls, but by bright young boys with a penchant for technology. By 1976, video games were a source of moral concern, with worry over the violent content of Exidy's *Death Race* causing the first video game moral panic. Adults' worries about youth access to the machines did little to curb enthusiasm.

By the early 1980s, mainstream media outlets from *LIFE Magazine* to the *New York Times* were reporting the youth trend, and arcades had become mainstays in shopping malls, strip malls, and even small town storefronts across the United States. However, the period that many consider to be the real glory days of the video game arcade was short lived. In 1983, the video game manufacturers of both home and arcade systems were confronted with their first industry crash, one with numerous causes, but one major symbolic act, in which Atari shipped 14 truckloads of allegedly defective game

cartridges to a landfill outside of Alamogordo, New Mexico where they were crushed, buried, and ultimately paved over.²⁰ The video game dump in the desert is a tale told with flourish and apocryphal detail – often, the cartridges are claimed to be *E.T.*, frequently cited as the worst game ever made – but the persistence of it as fable of failure renders it significant, as does the kernel of truth at the back, which is that Atari did in fact bury loads of merchandise in a remote area of the southwest. While the industry as a whole recovered and prospered in part due to the growth of the home gaming market, many arcades did not, and within a few years, towns which had previously boasted numerous arcades were left with nothing more than a few grimy machines in the corner of the local laundromat. Today, the video game arcade as a physical space persists as an object of nostalgia, an entertainment gimmick, or a nerd mecca for the truly dedicated.

Unlike like the arcade, however, video gaming has continued to gain significance. The neat cultural narrative that I have presented is one I readily acknowledge as reductive, a popular fiction of a popular medium, and one which this dissertation will ultimately elaborate upon and complicate. However, debate about how the story of video gaming should be told and what its precise details should be does not counter the increasing weightiness of video gaming. Now an entertainment industry so substantial as to out-gross Hollywood's profits, and an arena for competition so fierce as to support an entire professional circuit, video gaming has come of age.²¹ While the history of the

²⁰ "Atari Parts Are Dumped," *The New York Times*, September 28, 1983, D4.

²¹ Matthew Yi, "They Got Game: Stacks of new releases for hungry video game enthusiasts mean it's boom time for an industry now even bigger than Hollywood," *SFGate*, December 18, 2004, accessed October 7, 2011, <http://www.sfgate.com/cgi-bin/article.cgi?f=/chronicle/archive/2004/12/18/MNGUOAE36I1.DTL>

video game as a medium may offer insights into the evolution of the industry, the history of gaming as practice critically illuminates the evolution of a set of cultural beliefs which have become central in the digital age. As the wired generation transitions to the wireless generation, and as digital natives have become the dominant cultural elite, we are seeing the refinement of values and ideals readily observed in the arcade culture of the 1970s and 1980s.

The industry crash of 1983 has proven to be more of a hiccup, with gaming continuing to grow at the level of industry and audience. However, general concepts of what gaming and gamers can and should be formed prior to the crash have, like the industry itself, survived and propagated, and continue to influence popular conceptions of youth, masculinity, and technology; to understand these is to go a long way toward understanding the underpinnings of contemporary digital culture. This culture, considered here, includes not only digital entertainment media, but also the digitization of numerous everyday tasks ranging from reading the news to participating in retail transactions, and, perhaps most importantly, the economic structures and labor practices which have developed in tandem with and as a result of these technological shifts. The video game arcade, after all, provided early exposure to computer technologies for thousands of youth years before computers became commonplace in offices, classrooms and homes across the United States. The arcade may persist in some permutations as a physical space, but more significantly, it persists as a mode not only of play, but of economic decision making and cultural values. Arcade gameplay privileges and values individualized competition, technological fluency, and a type of consumer spending that is often likened

to gambling. As the United States has shifted to a technologically driven service economy, these values have become more broadly diffused through culture. This is to say that in some ways, we are still in the arcade; the values of the arcade have become the values of our daily lives, significantly including our labor practices and financial habits. The arcade may be an entertainment space for youth, but it is a training ground and, for many people, was the first place they encountered computers and learned what it meant to play, to work, and to live in the specter of computerization.

Toward a Phenomenology of the Video Game Arcade

In this chapter, I will be undertaking a phenomenological tour of an imagined golden era arcade, drawing on documentation of actual arcades and surviving arcade cabinets as well as popular press coverage of games and gamers and interviews with arcade owners and gamers. Rather than analyzing individual games, I will instead be reading the machines as objects, specifically as toys with didactic implications, and the cultural and economic environment that they existed in – both the immediate geographic environment of the arcade, and also the historically and nationally defined environment of the United States in the mid-to-late 1970s and early 1980s. I am presenting this tour to enter into a discussion about the meaning of the video game arcade as a place where computers became culture, boys became men, and simulation became a way of living. We will be traveling through this imagined space not by placing one foot in front of another and moving from machine to machine, shedding quarters along the way, but instead by moving from concept to concept, exploring one at a time the arcade's key

components, which I am laying out here as sight, sound, and play. The arcade as imagined here is itself a memorial to the modern era and a map to the postmodern age we have come to know as the present, a place we have been and still are. To think through the arcade is to confront the digitization of culture, a process which has touched everything from banking to education to film production, and also to think critically about the role of money in daily life.

From this tour, I will move to a consideration of the underlying business structure of the arcade, offering some historical perspective on the development video gaming as a public commercial practice which involved not only the individual gamers/consumers, but also manufacturers, distributors, arcade owners, machine operators, and others who worked in and around the industry at a variety of levels. Early video gaming was a set of consumer practices, but it also involved the production, marketing, and distribution of the machines – all of which influenced the format of the games and shaped the kind of consumer behavior that proved essential to the games' early success. While the coin operated industry was nothing new, the seemingly overnight craze triggered by video games was relatively unique, particularly as the games appealed to youth who ultimately became the major consumers of the entertainment form. The vitriolic response many moral guardians had to the games stems not only from the young age of many gamers and the novelty of the medium, but also from the longer history of coin-operated amusements, which had often served as gambling machines and frequently faced regulations and bans. Video gaming then, was a site where old social and cultural worries about youths' access to commercial entertainments coupled with anxieties about emergent technologies, and

broader cultural and economic shifts. However, this discussion of the arcade as a historical site requires an understanding of the arcade as a physical site.

Sight

In approaching any arcade, the machine is first perceived through sight. The arcade beckons visually, its name blasted in neon or cartoonish script, the machines inside visible in flashes through the windows or open doors. The most popular games are surrounded by clusters of onlookers, some of whom may have added a quarter to the top of the cabinet to hold their place in line. The fluorescent lighting is low in much of the space in order to maximize the visibility of the machines' cathode displays and allowing the screens' glow to light players' faces. The cabinets themselves offer the flash of concert posters, screaming their names in lurid orange and yellow, attempting to entice with images of intergalactic robots, implausibly leggy cartoon characters, and bizarre creatures. The unoccupied games play in the attract mode, displaying top scores and titles and short bursts of simulated play. The screens tease. The giant ape takes the girl hostage and rushes to the top of the screen; aliens invade in pixilated unison, making steady progress toward the earth. The alternating images on the screens make the light in the room flash and shift in color.

If this is a particularly modern 1980s arcade, the video games may dominate the space completely; in an older one, pinball machines may line one wall or occupy one corner, or perhaps there are pool tables. If this is the case, the older patrons may be absorbed in rounds of pool or pinball wizardry, leaving the newer machines for the

younger customers. Further from the door, ticket redemption machines challenge players to games of Skee-Ball and Whack-A-Mole, or to try their hand at quarter pushers. Occasionally, someone hits a jackpot, and a machine spews tickets in a long ribbon, but generally tickets are dispensed in short bursts. One ticket for 200 points at Skee-Ball. Two tickets for scores over 240.

A Formica counter tops a glass case along one wall. Plastic toys, temporary tattoos, mood rings and candy fill the case. Labels indicate ticket values. The most luxurious prizes sit on shelves and hang from hooks on the wall behind the counter. Oversized stuffed bears and dogs stare vacantly from plastic eyes. Board games, jumpropes, and classic toys seem less enticing than the RC cars and other top prizes, some of which have sat so long that there is a visible film of dust on the tops of their boxes. At the other end of the counter, there are cans of soda and bags of chips for sale. Peanuts. Funyuns. M&Ms. Even as the arcade sells sodas, they watch with sharp eyes for anyone daring to rest one on the machines, directing transgressors to toss the half-drunk Coca-Cola or relocate to one of the desolate picnic tables.

A manager makes rounds clutching a ring with dozens of keys in one hand. He opens machines to refill ticket rolls, clear quarter jams. Occasionally, he gives up his repair efforts and tells one of the younger staff to mark the machine with a sign, copy paper scrawled "Out of Service" in black marker. Mall security passes through on their rounds. Parents duck in to retrieve their children, sometimes wheedling or threatening to pry them away from especially engrossing games, sometimes giving in and handing them another pocketful of change, telling them they will be back in half an hour.

Sound

Imagine entering the arcade. As the machines blink and blast, players punch and pound at machines, the hard plastic buttons clack against their casings. Change machines spill quarters in a noisy avalanche, or a teenaged employee doles tokens into plastic cups. You can hear the frantic pace of play almost before you see it. There can be no quiet here; even if the place was abandoned during a mid-afternoon dead spell, the machines would continue untended, their MIDI (Musican Instrument Digital Interface) files playing in an infinite loop siren song of computerized audio, the older machines chiming in with 8-bit audio boops and bleeps.²² The pinball machines in the back corner clank mechanically, remnants of the machine age. Other machines bleed even stranger sounds, like the randomized Votrax-speech synthesis generated voices of Q*bert. Perhaps the arcade staff are making announcements over the PA, or a cluster of children are singing “Happy Birthday” at a long table near the heart of the arcade. The voices mix with the machines, they pick up their pace. Conversations here are clipped, efficient, divided neatly into the space between levels.

And, the whole mess mingles with the mall’s piped in Muzak, which bleeds in ever so faintly, a reminder of the cool serenity of the department stores further down, of the perfume counters, shoe departments and handbag sales. Of suits, of ties, of security guards, reminding you, ever so helpfully, not to loiter.

²² The initial MIDI standard was developed in 1982. MIDI specifications allow pieces of electronic music to be played across synthesizers, so that a piece of music composed on one synthesizer may be played back with consistent fidelity on other types of synthesizers.

Joseph M. Pisano, “MIDI Standards: A Brief History and Explanation,” September 15, 2006, accessed September 14, 2011, <http://mustech.net/2006/09/midi-standards-a-brief-history-and-explanation/>

Play

You are inside the arcade. Pick a quarter out from the loose change in your pocket and choose a machine, any machine. Perhaps it is *Pac-Man* or maybe *Centipede* or *Galaga*. It does not matter which you choose. Put your quarter in the slot where the machine swallows it with a faint metallic clank before the game begins to announce itself, waking from its attract mode and switching into assault. Defend the planet from aliens, avoid the chasing ghosts, gobble cherries, dodge barrels. Make it maybe sixty seconds, or survive the first level on your first quarter on a game you have not played before and you have already proven yourself exceptional. Go again. Find yourself dead, confronted with the listing of top players – of players better than you, of players who would not blow through twelve bucks in quarters in 45 minutes, players who know what comes next. After level one, level two, level three. Go again. More quarters. You are sweating in the refrigerated air. Go again. The last quarter burnt, and you hit the machine hard enough that it stings your hand. You feel foolish, but no one notices. They are too busy watching some kid down the row who has been playing steady for an hour on one quarter. Perhaps at this point you say enough and leave. Perhaps you stay. Perhaps you feed the change machine a five and stuff your pocket with more quarters. Perhaps you challenge someone to two player. Maybe you win. Maybe you lose. Maybe it is getting late and you realize you have neglected your algebra homework again.

The Economy of Play

Perhaps you have never been to an arcade, and the experience I have just described is foreign to you. Or, perhaps you spent much of your childhood growing pale and tense in a place like the composite I have described. The arcade nearest my own hometown was the Aladdin's Castle where my brother and I played until the respectability of the mall took a sharp turn south, and rumors spread about a crack dealer operating out of the arcade's back corner.²³ Although that arcade did not close until the mid-1990s, the industry crash of 1983 had sounded the death knell for what became a kind of protracted agony for video game arcades in the United States. The spaces were victim of numerous factors, including a general decline in the industry, and also of inflation (See Figure 4) – the quarters the machines took in were increasingly devalued, which compounded the fact that there were fewer of them in the first place, as more and more gamers switched from the public space of the arcade to the private space of the home, where they plugged in Atari 2600s, Intellivisions, and other early home gaming consoles or booted up personal computers.

²³ Aladdin's Castle in Wichita Falls operated in Sikes Senter Mall. The location closed in the late 1990s. There is currently an arcade called Tilt operating a few doors down from the former Aladdin's location.

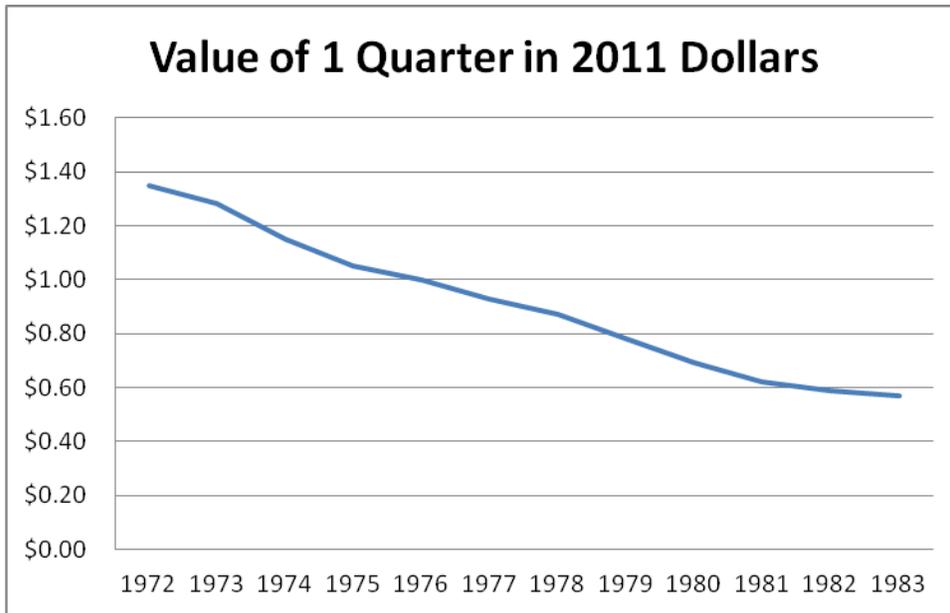


Figure 4: Value of 1 Quarter in 2011 Dollars from 1972 to 1983²⁴

When, in 2008, I popped a quarter into a *Galaga* (1981) machine for the first time at a movie theater in north Austin, my money bought me just 65 seconds of play. I had not previously played *Galaga* that I can remember – by the time I was old enough to be dropped off for a few unsupervised hours at the shopping mall that housed the only arcade in my home county, *Galaga* was obsolete. I was a novice player. That first game, costing me 25 cents and lasting 65 seconds, was followed by a second lasting only 55 seconds. In that round, I played a total of 10 games, which varied in length from 50 seconds to 136 seconds, with an average of just under a minute and a half. Within 15 minutes, I had blown through \$2.50. Prior to the industry crash, however, the cost of gaming was not insignificant, particularly for those who were new to the practice or otherwise lacking in particular skill at it.

²⁴ All data taken from the Consumer Price Index Calculator provided by the Bureau of Labor Statistics. “CPI Inflation Calculator,” accessed 10 October 2011, http://www.bls.gov/data/inflation_calculator.htm.

I mention my experience playing *Galaga* here not to engage with the specifics of that particular game, but to serve as an introduction to the kind of consumer spending demanded by coin-operated arcade games generally. While admittedly I am not good at *Galaga*, many of the players who encountered the game early in its release would not have been either. Even working from the assumption that I am exceptionally bad at *Galaga* and that my average game time is half what it should be, the price of gameplay seems high, with an hour of play likely running between eight and twelve dollars. Presumably arcade players increase their skill and maximize game time – even in the brief time I spent playing *Galaga* at the theater, my skill at the game improved – but doing so requires a substantial financial investment in play. Building on my earlier description of a composite arcade, I am offering here a reading of the cultural values embedded in early coin-operated video game machines and in early coin-operated video game arcades.

These games prepared players to serve both as laborers in the emergent white-collar service economy and as investors/players in an increasingly deregulated marketplace. They introduced thousands of people to computers as approachable, everyday technologies just as the workplace was entering a period of massive computerization. Video games' didactic function made them suspect, as they carried with them an emergent set of values and practices that seemed at odds with existing cultural norms and ideals. These values included an embrace of heavily individualized, as opposed to organizationally based, competition; an acceptance of credit as a part of daily economic life; the acceleration and propagation of novel amusements as a primary

category of spending; and the celebration of technological, specifically computer associated, abilities. The competitive practices demanded by the arcade and celebrated by a broader culture of video gaming are at odds with the midcentury's "organization man" model of success, in which even the most successful individuals would make their names through corporate or military outlets; competitive video gaming is a closer parallel to a postindustrial labor market heavily individualized and celebrates the skills and victories of individual achievements, who fulfill work roles as consultants, contractors, and freelancers. Because gameplay has ideological and didactic value and serves a key role in creating a labor force, both individual games and the places they are played served and continue to serve as lightning rods for moral reformers whose social standards reflect existent norms rather than the emergent values of a society in transition.

Arguments about the moral and economic implications of individual video games have been the bread and butter not only of public moral guardians seeking to police gaming, but of numerous scholars as evidenced by the work of researchers including Steven J. Kirsh, and Lawrence Kutner and Cheryl Olson.²⁵ In writing about *The Sims*, Steven Poole says that the problematic political underpinnings of *The Sims* may be to some degree unavoidable: "Perhaps it is inevitable that, as products of decadent late capitalism, most videogames will, consciously or not, reflect the same values."²⁶ While Poole's argument is specific to a single game, many games work through the cultural

²⁵ Steven J. Kirsh, *Children, Adolescents, and Media Violence: A Critical Look at the Research* (Thousand Oaks: SAGE Publications, 2011).

Lawrence Kutner and Cheryl K. Olson, *Grand Theft Childhood: the Surprising Truth About Violent Video Games and What Parents and What Parents Can Do* (New York: Simon & Schuster, 2011).

²⁶ Steven Poole, *Trigger Happy: Video Games and the Entertainment Revolution* (New York: Arcade Publishing, 2000) 236-237.

values of late capitalism not only at the levels of gameplay and narrative, but also in the kinds of economic and cultural practices they encourage. In particular, the coin-operated video games of the 1970s and 1980s were uniquely positioned to introduce the young to emergent consumer patterns and economic practices through the “pay for play” arcade environment described earlier.

This introduction to a specific set of consumer experiences and values warrants critical inquiry, especially as it offers insight into the nervous response many moral reformers had (and continue to have) to video games.²⁷ While the temptation to dismiss negative responses to gaming as the hand wringing of overly worried moralists may be strong, doing so is unfair – both to those who would have wanted to keep video games far away from children, and to the games themselves. To dismiss would-be moral reformers is to undermine the notion that community standards are in flux, and may change in ways that ultimately prove dangerous. While not everyone who participates in these kinds of discussions proves right in the long run, the issues raised and rhetoric deployed throughout these cultural conflicts provide insight into the concerns of the kinds of community figures (PTA presidents, parents, ministers) who often have profound influence even when they do not garner name recognition for themselves. To argue that video games are not a legitimate source for serious social concern would be to argue against their cultural significance. As Jesper Juul has pointed out, “Games are learning

²⁷ Chapter 3 will specifically address the history of gaming’s earliest moral panic, which was triggered by *Death Race* (Exidy 1976), a game inspired by the 1975 film of the same name.

experiences, where the player improves his or her skills at learning the game.”²⁸ I posit in this chapter that this is true both at the level of the individual game and at the level of the arcade and the surrounding cultural environment, which is to say that the player improves his or skill at learning games at a content level, but also improves his or her skill at working within the values system that these games operate in. In this chapter, I argue that moralists’ concerns about video games result from anxieties over the emergent values system – one marked by the embrace of individual success, technological skill, credit, and spending on entertainment and novelties.

Video games were not the first wave of novel amusements to become a major fad or to provoke cultural anxieties. Neither coin-operated games nor arcades are unique to the computer age; Charles Fey produced the first slot machine in 1895, and the first pinball game dates to approximately 1929. Both of these innovations are American in origin and provide a clear historical link between coin-op games and gambling. While slot machines always had gambling as a central function, by 1934, some pinball machines were designed to offer payouts.²⁹ Not all coin-op technologies can be linked to gambling. The oldest popular motion picture technologies in the United States include coin-op devices like Thomas Edison’s Kinetoscope, released in 1894.³⁰ However, these technologies, too, were often viewed with suspicions, and, while coin-operated

²⁸ Jesper Juul, *Half-Real: Video Games Between Real Rules and Fictional Worlds* (Cambridge: The MIT Press, 2005), 56.

²⁹ “Slot Machines and Pinball Games,” *The Annals of the American Academy of Political and Social Science*, 269 (1950): 62-70.

³⁰ Rochelle Slovin, “Hot Circuits: Reflections on the 1989 Video Game Exhibition of the American Museum of the Moving Image,” in *The Medium of the Video Game*, ed. Mark J.P. Wolf (Austin: University of Texas Press, 2001), 139.

amusements were staples at midways and boardwalks after the turn of the century, they were also persistent targets for moral reformers.³¹ Whether gambling machines or less overtly reward-based amusements, arcade machines of all kinds serve the economic purpose of accruing wealth, one coin at a time, for their owners and operators.

Even cursory analysis of the real cost of gameplay reveals the impact of inflation had on the coin-op industry of the 70s and 80s. Figure 4 shows the progressive devaluation of the quarter, which had become the base monetary of the coin-op industry, during the video game boom. Adjusted for inflation to 2011 dollars, a single run at a quarter-operated video game would have initially cost well over a dollar, with the price dipping below the dollar mark in 1977, then steadily declining to a real cost of less than half of 1972 value by 1981. While some game designers attempted to alleviate this issue by rising the cost of gameplay to 50 cents, the effects of inflation on the coin-op industry were far reaching, and probably hit video game operators especially hard, as the most technologically sophisticated machines usually required the highest initial investment. That the prices for games are often bound by physical limitations of the machines and their settings created difficulties in modifying older machines to accept higher prices, and even on newer machines, prices could likely be raised only in 25 cent increments.

Busnell and Ted Dabney founded Atari explicitly as a video game company, but the manufacturers of video games were a mix of newly-founded companies like Atari and Exidy which produced video games primarily or exclusively, and older manufacturers

³¹ John Kasson, *Amusing the Million* (New York: Hill and Wang, 1978), 98-100.
Roy Rosenzweig, *Eight Hours for What We Will* (Cambridge: Cambridge University Press, 1983), 192-203.

like Bally and Rock-Ola, which had a history of producing other kinds of coin-operated machines including bar games like pool and shuffleboard and jukeboxes. Video games now are part of their own industry, but they were at the outset largely a spin-off of other industries, including the coin-op industry and the television industry. While games developed for play on consoles and home computers have ultimately come to dominate coin-op video games, coin operated initially proved both financially viable and highly visible. And, much as coin-op video games were often produced by some of the same companies that manufactured earlier coin-operated amusements, video game machines circulated through some of the existing networks that supported distribution of earlier coin-operated machines.

Distributors purchased machines from manufacturers and then leased or sold them to operators who would place them at locations like bars, restaurants, bowling alleys, Laundromats, or arcades. The location owner and the machine operator divided the income from the machine or machines, usually on a 50/50 or 60/40 split. Factors influencing the split included the initial cost of a particular machine, its popularity, and the desirability of a particular location. These two parties would split machine revenues, with the machine operator taking responsibility for machine repair and maintenance, and the location operator absorbing the cost of powering the machines on a day-to-day basis. Arcade operators sometimes bought machines outright, which meant they saw a higher percentage of machine revenue become profit as they did not have to divide the income with a machine operator. The division of machine revenues likely contributed to the concentration of video games in arcades. Arcade owners who owned their machines

outright would have seen a higher financial return on individual machines they operated than individuals operating machines at non-arcade locations as they would not have had to split the machine's profits with the location.³²

Although earlier coin operated amusements had persisted, at the time that video games first emerged, none of these alternatives were functioning as a cultural craze, and so video gaming was likely very lucrative for a number of long-term operators and doubtless lured others into the business as the intense media coverage made the games seem like an avenue to fast riches. The opportunity to attract younger customers meant existing operators could expand their market by selling to youth and may also partially explain why video game specific arcades emerged, as other existing outlets like bars had unsavory connotations and were generally considered inappropriate environments for the very young. In the arcade, video games became the primary attraction, not a secondary revenue generator as they were in most other locations. Further, the arcades, which were typically all-ages outlets, enabled operators to reach a broader audience than adult venues could have.

The change in venues contributed to shifts in the audience for video games. Both adults and children would have had incidental encounters with early video games in public spaces outside of arcades, trying a game out of boredom at the Laundromat for example. Games in arcades were less encouraging of this kind of casual interaction as the arcade itself would have been the destination and video games, or video game-related

³² "The Bernstein Report – New York Investment Firm Takes Close Look at the Video Industry," *RePlay*, April 1983, 92.

socializing, the primary purpose of entering the venue. Video game arcades would have served primarily to attract players who already knew they liked video games, even as they attracted casual players curious about video games and passersby, as was certainly the case for arcades operating in busy retail districts and shopping malls. While contemporary representations of classic arcades frequently portray them as male-dominated spaces, this is at most partially true. Bushnell maintains that 40% of the coin drop on Atari's *Pong* came from women, and several of the individual gamers and arcade owners I interviewed have stated that, while girls were a minority among arcade gamers, they still formed a significant percentage of the players.³³ Further, 19% of the competitors on the competitive video gaming gameshow *Starcade* were girls and women, and studies of arcade patrons revealed a significant number of girls in the arcade both as players and observers.³⁴ This discrepancy in how the gender breakdown of arcade gamers is remembered may stem in part from shifts over time. Perhaps the concentration of games in dedicated arcades cut the number of women players as the games were moved into spaces that catered to teenaged boys. *Pong* may have had an unusually high percent of women players because of its initial placement in bars, not arcades. Individual arcades likely had significant differences in patronage as well. Multiple interviewees who spoke

³³ Ethan Watters, "The Player," *Wired*, October 2005, accessed August 13, 2009, <http://www.wired.com/wired/archive/13.10/bushnell.html>

³⁴ "Starcade: Contestants," *Starcade*, accessed January 6, 2012, <http://www.starcade.tv/starcade/contestantsframe.asp>

Sara Kiesler, Lee Sproull and Jacquelynne S. Eccles, "Pool Halls, Chips, and War Games: Women in the Culture of Computing," *Psychology of Women Quarterly*, 9 (1985): 451-462.

to gender divisions in the arcade guessed that girls and women made up roughly 25% of the players.³⁵

The cost of gameplay doubtless also affected who played the games, just as it affected who owned the games and where they were placed. The relatively high cost of individual instances of gameplay likely contributed to the rapid diffusion of video games, as savvy operators would have seen substantial profits. A 1977 advertorial from Amalgamated Industries' North Texas division boasted that "many machines have been known to yield in excess of \$100 a week," which would be the modern equivalent of nearly \$400.³⁶ The advertorial implies that video game machines could be a door to rapid wealth for the people who put games in the right locations; the suggestions for appropriate locations – including cocktail lounges, finer restaurants, yacht clubs, college student centers, and golf clubhouses, among others – speak to an assumption of adult, or near-adult players with disposable incomes. A 1982 article placed the average yield for an arcade machine at a more conservative \$90 weekly, with the investment for a new machine running roughly \$2,500. Working from these numbers and the assumption that the location operator and the machine operator split profits evenly, in just over a year a machine with an average level of income would take in enough money, even after being split among the location and machine operator, for the machine operator to pay off his initial investment and begin making a profit.

³⁵ Tim McVey, interviewed by Carly A. Kocurek, June 17, 2011.
Cindy Toopes, interviewed by Carly A. Kocurek, June 16, 2011.

³⁶ "A lucrative business: Electronic video games in best places," *The Dallas Morning News*. November 2, 1975. Ulrich (1553-846X).

As video games became clustered in arcades and developed a substantial audience among teenagers, for those anxious about the potential dangers of the arcade, the high cost of gameplay began to seem insidious. Numerous articles from the early 1980s document attempts by cities and counties to curb gaming, and these frequently point to the money teens were spending on play. Several of the gamers I interviewed insisted that the money they spent playing video games was not given to them by their parents, but earned through performing household chores, collecting bottles and cans for return deposits, newspaper routes, or other odd jobs.³⁷ While this does not necessarily suggest great affluence, it does suggest a degree of economic stability as it indicates that the players were able to support their own gaming financially largely because the income they earned did not need to be contributed to the family's income and could therefore be reserved for discretionary spending. The cost of gaming imposed real limits on who could game and how much time and money they could spend playing. Mark Hoffman, who worked at Twin Galaxies as a teenager, said he became interested in gaming only after his interest in computers snagged him a job at the arcade, where he enjoyed unlimited play as a perk. For Hoffman, the cost of gaming seemed wasteful, even when he was a teenager, due in part to his family's socioeconomic status.³⁸

Playing with Free Speech

³⁷ Josh Gettings, interviewed by Carly A. Kocurek, June 17, 2009.

Mark Hoffman, interviewed by Carly A. Kocurek, June 18, 2009.

Tim McVey, interviewed by Carly A. Kocurek, June 17, 2009.

³⁸ Mark Hoffman, interviewed by Carly A. Kocurek, June 18, 2009.

While teenaged players were doubtless aware of the money they were spending, they often viewed the income as truly disposable and did not worry about the overall cost. Adults observing the spending habits of these gamers, however, saw these spending habits as a serious community problem. Legal proceedings related to efforts to curtail the spread of video games in Mesquite, Texas demonstrate the ways in which games were seen as a threat to appropriate use of time and money. In a February 1982 article covering the Supreme Court of the United States's (SCOTUS) decision to postpone judgment in *City of Mesquite vs. Aladdin's Castle, Inc.*, a *Los Angeles Times* reporter summarizes the conflict, saying that "City residents and officials complained that teen-agers were wasting time and money on the games."³⁹ Critics of video gaming had been quick to point to the antisocial behavior gamers engaged in outside the arcade, and suggested that gaming contributed to their delinquency. An article covering efforts to curtail arcade openings in Lynbrook, New York summarized citizens' concerns:

The residents said that the centers, which feature games that challenge the player with electronic sounds and flashing lights, had become hangouts for noisy teenagers who drink too much beer, leave garbage around and vandalize the property of nearby residents.⁴⁰

The games were also blamed for encouraging Lynbrook teens to "play hooky" from school, a concern echoed in a number of other towns and communities that tried to limit the spread of arcades. In making the suggestion that arcades contributed to teenage delinquency, these communities attacked the arcades themselves. Numerous communities passed statutes to try to limit the spread of arcades and video games. Concerns about the

³⁹ Jim Mann, "Court Delays Ruling on Video Game Curbs," *Los Angeles Times*, February 24, 1982, B12.

⁴⁰ Barry Abramson, "Game Parlors Face Curbs," *The New York Times*, August 9, 1981, LI11.

effect of video game arcades – that teenagers were minimally supervised, that they were learning to spend their money on junk food and foolish games – reiterated concerns that had accompanied arcade culture for decades. John Kasson documented this anxiety about leisure and youth extensively in his writing on the history of Coney Island. The arcade's dubious history tied it to turn-of-the-century commercial amusements, among them amusement halls, movie theaters, and arcades – all of them too frequently filled with dirty pictures for the liking of many middle-class reformers, who took issue not only with the arcade's appeal to prurient interests, but also with its enticement to shell out cash for frivolities away from hearth and home.⁴¹

The courts ultimately ruled that the ordinance in Mesquite, which restricted those under 17 years of age from playing coin operated video games without a parent or guardian present, was unconstitutional on grounds that video games should be protected as free speech. ⁴² SCOTUS maintained that the ordinance violated both the First Amendment right to free speech and the due process clause of the Fourteenth Amendment. Although some of the Mesquite residents who initially complained about the games may have thought the games constituted some kind of incitement to violence, the court did not show any willingness to consider them as such and has subsequently maintained a general refusal to curtail minors' access to violent materials. Further, the

⁴¹ John F. Kasson. *Amusing the Million: Coney Island at the Turn of the Century* (New York: Hill and Wang, 1978), 98-100.

Kathy Peiss. *Cheap Amusements: Working Women and Leisure in Turn-of-the-Century New York* (Philadelphia: Temple University Press, 1986), 159, 180-181.

Roy Rosenzweig. *Eight Hours for What We Will: Workers & Leisure in an Industrial City, 1870-1920* (Cambridge: Cambridge University Press, 1983), 192, 203.

⁴² *City of Mesquite v. Aladdin's Castle, Inc.*, 455 U.S. 283 (1982).

language frequently deployed in discussions of the Mesquite statute and similar measures taken by communities around the U.S. points to violence as only one factor in a more general concern about the “wasting” of valuable resources (time and money) encouraged by games. With this in mind, the intention of the original ordinance becomes clear. The restrictions on youth access to coin operated video games were intended to force youth to use their time and money more wisely – in ways more in keeping with the values of older community members.

Although the suit was brought by the corporate entity of Aladdin’s Castle, the court was effectively siding not only with Aladdin’s Castle, Inc., but also with the teenagers of Mesquite, Texas, and of other cities and communities attempting to ban gamers. The court’s ruling protected video games as free speech, but also protected the right of entertainment companies to sell their amusements to children and the rights of children to purchase media access without the intervention of parents or guardians. Given the generally marginal legal status of youths in the United States, this granting of rights, indirect as it may be, is still significant in its recognition of the rights of minors.

Further, the ruling nods not so subtly toward the late capitalist assertion that the freedom to consume is a fundamental civil liberty.⁴³ This represents a significant change from modernist conceptions of free speech, which were articulated through obscenity

⁴³ Subsequent court cases had similar results, and in 2011, the Supreme Court of the United States ruled against a California ban on the sale or rental of “violent” games to minors. The ruling in *Brown, Governor of California, et al. v. Entertainment Merchants Association et al.* deployed some of the same rhetoric as the ruling in previous cases, but also explicitly protected the right of youth to access “violent” materials. There is, to date, no legal precedent in the United States for restricting youth access to violent materials, only for restricting access to sexually explicit, pornographic materials. *Brown v. EMA*, 564 U.S. (2011)

trials, including *Roth v. United States*, which focused on authors' right to self expression coupled with printers' and distributors' rights to propagate these materials, and the Berkeley based Free Speech Movement, which insisted on students' rights to engage in political demonstrations on campus as a matter of intellectual and academic freedom.⁴⁴ While these types of speech acts persist and remain contentious in public discourse, discussions of free speech like that in *City of Mesquite v. Aladdin's Castle, Inc.*, do not focus on the issues of obscenity or intellectual or creative freedom that are at the root of these earlier, modernist arguments about the meaning of free speech. Instead, they focus on the right to sell and consume, often with little serious attention given to the materials' content. Subsequent attempts to restrict distribution of games to minors based on violence have been rejected by the courts, which have refused to intervene, arguing that the research on the effects of violent materials on minors is at best inconclusive. The earliest attempts to curtail youth access to video games through the legal system ultimately failed owing largely to the effectiveness of arguments tied directly to neoliberal arguments about the free market; this departure from older justifications of free speech becomes less surprising when placed in historical context.

Leisure During a Labor Crisis

The early period of arcade gaming, placed here as that period between the successful launch of *PONG* in 1972 and the first video game industry crash in 1983,

⁴⁴ *Roth v. United States*, 354 U.S. 476 (1957).

Robert Cohen, "The Many Meanings of the FSM: In Lieu of an Introduction," in *The Free Speech Movement: Reflections on Berkeley in the 1960s*, ed. Robert Cohen and Reginald E. Zelnik (Berkeley: University of California Press, 2002), 1-54.

coincides with substantial upheavals in the U.S. economy. Larger economic trends and crises substantially impacted micro-level economic decisions made by consumers. These crises include the oil crisis, the end of the international gold standard, and the decline of traditional communism. The Organization of Arab Petroleum Exporting Countries (OAPEC) issues and oil embargo of October 1973, which was followed in 1974 by a quadrupling of petroleum prices by OPEC (Organization of Petroleum Exporting Countries). Combined, these two incidents created a shortage of gasoline and heating oil during the winter of 1973-1974 and sparked a broader energy crisis.⁴⁵ 1973 also saw the United States' removal of troops in Vietnam, an action which led in the short term to the rise of communist forces in Vietnam. According to Philip Towle: "The January 1973 agreement and subsequent communist victories in Indo-China were the high-water mark of communist societies through the spread of democratic ideas and the success of Western capitalist economies became even more obvious."⁴⁶ Richard Nixon ended the convertability of U.S. dollars to gold in 1971, a decision made in response to a recession coupled with significant inflation in the U.S., and multiple countries demanding that the U.S. "cash out" their dollars for gold as promised. This decision ended the international gold standard as laid out in the Bretton Woods system, which had tied the international gold standard to the value of the U.S. dollar.⁴⁷

⁴⁵ Carl W. Biven, *Jimmy Carter's Economy: Policy in an Age of Limits* (Chapel Hill: University of North Carolina Press, 2002), 155.

⁴⁶ Philip Towle, *Democracy and Peacemaking: Negotiations and Debates, 1815-1973* (London: The Psychology Press, 2000), 179.

⁴⁷ David Frum, *How We Got Here: The 70's: The Decade That Brought You Modern Life—For Better or Worse* (New York: Basic Books, 2000), 290-302.

In particular, the elimination of the gold standard severed the tie between money and real, tangible goods, definitively abstracting capital. Consumers prove more willing and able to part with abstracted capital, a truth near universally acknowledged by anyone who has ever had a credit card. David Harvey points to two major changes in consumer culture: a “mobilization of fashion in mass (as opposed to elite) markets [which] provided a means to accelerate the pace of consumption not only in clothing, ornament, and decoration but also across a wide swath of life-styles and recreational activities (leisure and sporting habits, pop music styles, video and children’s games, and the like),” and “a shift away from the consumption of goods and into the consumption of services – not only personal, business, educational, and health services, but also into entertainments, spectacles, happenings, and distractions.”⁴⁸ Both trends serve to shorten the lifetime of expenditures and accelerate spending, and enable a move from an industrial, production-based economy to a service-based, consumer economy.

These shifts in the economy were not seamless and triggered a great deal of instability at levels that affected the day-to-day lives of workers. This instability often took the shape of significant economic decline as workers and communities who had depended upon the profitability, stability, and growth of the industrial sector confronted layoffs and plant closures. The decade of the 1970s was marked by economic stagnation. Economist Ernest Mandel argues, in *Late Capitalism* that the economic stagnation begun in the 1970s was inevitable as the global economic boom of the preceding decades

⁴⁸ David Harvey, *The Condition of Postmodernity* (Cambridge: Blackwell Publishing, 1990), 285.

reached its limits.⁴⁹ The impact on U.S. workers was widespread. Profitability for U.S. companies had peaked in the 1960s before entering a steady state of decline and stagnation that lasted fifteen years. National economic growth dropped significantly: After maintaining an average of more than 4 percent annually for three decades, growth reached just 2.6 percent in 1969 then plummeted to negative .3 percent the following year. Growth stood at an average of just 2.87 percent through the 1970s. Simultaneously, the national inflation rate more than doubled, climbing to 5.3 percent in 1971 after averaging 2.5 percent annually through the 1950s and 1960s.⁵⁰

The recession hit manufacturing particularly hard, with massive layoffs in industrial plants which had previously served as the economic backbone for many communities. The post-war boom was decisively over. Labor historian Nelson Lichtenstein notes, “By the early 1980s, they [profits] were approximately one-third less than a generation before; in the manufacturing sector only about one-half.” Although economic growth continued, the annual rate remained low, and real wages remained stagnant into the early 1990s. While wages were stagnant for most workers, young male workers faced drops in real wages of 25 percent.⁵¹ The young men who were playing early coin-operated video games, then, were a population at a seemingly unprecedented level of economic risk, faced both with decreases in their earning power and increases in unemployment caused by palpable economic instability. The appeals of video gaming as leisure activity eluded anxious moral guardians, but for many young people, particularly

⁴⁹ Ernest Mandel, *Late Capitalism* (New York: Verso, 1978).

⁵⁰ Thomas K. McCraw, *Prophets of Regulation* (Cambridge: Belknap Press, 1984), 237.

⁵¹ Nelson Lichtenstein, *State of the Union: A Century of American Labor* (Princeton: Princeton University Press, 2002), 213.

young men, the games presented not only an entrée into computer culture, but an enticing leisure activity that offered opportunities for competition and recognition.

The rise of the coin operated video game industry coincided not only with a rapid increase in spending on entertainment services, but also with a substantial spike the demand for novel entertainments, which is intimately bound to the transition from modernity to postmodernity. Fredric Jameson pinpoints 1973, one year after the release of the first successful commercial video game, as the moment in which postmodernity and late capitalism emerged as dominant cultural and economic forms.⁵² Based on the observations of Harvey and Jameson, the cost of gameplay figured as a commodity in a postmodern, deindustrializing economy makes sense, as gameplay is an entertainment service uniquely desirable in the time period during which video game technology is diffused. The desirability of gameplay as a commodified entertainment service was stimulated by the same shifts that made the financial expenditure required seem particularly risky to older community members. Shifts in the labor market heightened anxiety about the economic practices of the young, particularly young men who were facing limited job prospects and decreased earning power. Discussion of youths' gaming practices point so frequently to the financial and time cost likely because the economic pressures faced by many Americans would have led to increased worry about the

⁵² Fredric Jameson, *Postmodernism Or, the Cultural Logic Of Late Capitalism* (Durham: Duke University Press, 2003), xx-xxi.

In *The Origins of Postmodernity*, Perry Anderson provides a broader historicization of postmodernity as a concept and its deployment. Anderson points out that the term dates at least to the 1930s, however, he, too, places the rise of postmodernity as a lived cultural and economic reality to the 1950s and later. Indeed, the uses of the term he cites through the 1950s are negative, marketing things that are less than modern, and postmodernity as a deliberate intellectual and aesthetic practice is placed as emerging through the 1970s. Perry Anderson, *The Origins of Postmodernity* (New York: Verso, 1998), 4-24.

industriousness and employability of these same youth. Video gaming may be just one among the “entertainments, spectacles, happenings, and distractions” that Harvey points to, but it would have been among the most decidedly novel as it reflected not only the evolution of coin-op entertainment technologies, but the growing visibility of computer technologies. Novelty contributed to the high visibility of video gaming and contributed to its role as a lightning rod issue for those concerned about what values system the nation’s youth were absorbing.

From Pinball to Postmodernity

Decades earlier at the height of the modernist age, the pinball machine fulfilled a similar cultural role. Pinball games first appeared as commercial, coin-operated amusements in the early 1930s, but the “golden age” of pinball did not come until the postwar period—a period of particularly robust economic growth in the United States, as previously mentioned. Real wages doubled from 1947 to 1967, allowing many Americans access to unprecedented levels of economic stability and wealth.⁵³ The rise of pinball coincides with the expansion of Fordist production and consumption principles in the mid-century United States. This expansion of Fordist-style production fueled growth in manufacturing jobs and incomes while also providing an unprecedented array of affordable consumer goods ranging from automobiles and appliances to clothing and furniture. Although Henry Ford had largely developed his principles in his own manufacturing much earlier — perhaps as early as his implementation of the 8-hour, 5-

⁵³ Lichtenstein, *State of the Union: A Century of American Labor*, 99.

dollar workday in 1914 — Fordism as a broader set of practices did not gain traction until the postwar period.

After World War II, shifts both in class relations and in regulatory practices combined with the decentralization of the population through suburban growth to enable a sharp turn toward Fordist production and consumption practices.⁵⁴ The post-war period also saw the rise of the teenager. It was only during the Great Depression that, due to lack of available work, most youths, particularly young men, attended high school. Thomas Hine places the “golden age” of teenagerhood as stretching from the 25 years before World War II to the beginning of the Vietnam War; teenagers of the 1970s were facing significant reductions in their economic security and cultural visibility.⁵⁵ Teenagers in the postwar period were significant consumers, and pinball was, like video gaming later, a contentious way for teens to spend their time and money.

This golden age of pinball was marked by public disputes over the value of the games, and by banning of the machines in cities including New York and Los Angeles, where the games were judged to be a threat to the moral order.⁵⁶ Warren Susman argues that pinball was an amusement uniquely suited to the period’s culture:

The pinball machine was the ideal toy of the machine age, with its spinning balls passing through a series of obstacle pins that meant points for the player if they

⁵⁴ Harvey, *The Condition of Postmodernity*, 125-129.

⁵⁵ Thomas Hine, *The Rise and Fall of the American Teenager: A New History of the American Adolescent Experience* (New York: Perennial, 2000), 141, 225.

⁵⁶ Phillip Sharp, “Peep-boxes to Pixels: An Alternative History of Video Game Space,” In *Situated Play, Proceedings of DiGRA 2007 Conference*, accessed February 12, 2009, <http://www.digra.org/dl/db/07312.18290.pdf>, 278-285.

met, although at the same time the injunction ‘Do Not Tilt’ severely limited the player’s opportunity to interfere with the chance movements of the balls.⁵⁷

Susman’s assessment of the pinball machine is that the notion of play it embodies is derivative of the age that produced it. The games played via these mechanized amusements serve a didactic purpose, instilling cultural values through physical and mental engagement with a device that is, at some fundamental level, a toy. The cultural values of the pinball machine were the cultural values of the era during which they were most effectively produced for the broadest audience – which is to say, the postwar period.

Playthings serve didactic purposes – classic toys like tea sets, model cars, and toy vacuum cleaners allow children to engage with the adult world, inviting them to mimic the tasks of older family members and familiarizing them with the sorts of actions that occupy adults. However, most of these toys allow open-ended play. While most adults would assume that a 5-year-old girl given a tea set would use the objects to stage a pretend tea service for her dolls or friends, the child could as easily stack the pieces into a tower, smash them against a wall, or otherwise play against the toy’s intended purpose. Pinball machines, as Susman so distinctly describes them, do not readily allow for such play, as the games themselves limit the amount that a player may intervene in the game’s outcome. The education pinball games can provide is narrower and more tightly controlled than the learning experience that may be had with a set of crayons or a rubber ball.

⁵⁷ Warren I. Susman, *Culture as History: The Transformation of American Society in the Twentieth Century* (Washington: Smithsonian Institution Press, 2003), 197.

Decades later, coin-operated video game machines demonstrate a similarly limited play principle at two levels – at the level of gameplay permitted by the game’s programmed rules, and at the level of hardware tampering possible. First, at the level of the basic rules governing play, many early arcade video games are, as suggested by Jesper Juul, games of progression rather than emergence, which means that there are real limitations on how the game may be played. Games of progression are those in which “challenges [are] presented serially by way of special-case rules.”⁵⁸ These tend to have a single model of mastery, which is to say, there is a best, right way to play the game. A progressive game can usually be exhausted or beat more readily than emergent games. This is why Billy Mitchell can play a “perfect” game of *Pac-Man*. Games of emergence are those in which “rules [combine] to provide variation.”

While some classic arcade games, notably *Pong* are essentially games of emergence, they usually still have significant structural limitations to play variance. For example, if someone in a 2-player game of *Pong* simply refused to move his paddle, the game would end almost immediately – an outcome unlikely to be mutually desirable for the players at 25 cents a pop. So, even in the case of more emergent coin-operated video games, the game limits the potential for playing against the game’s set objectives, as many early video games will terminate if not played according to their objectives. Discussing the game *Zork* (1980, also known as *Zork I* and *Zork: The Great Underground Empire – Part I*, a text-based adventure game) Terry Harpold summarizes this principle as “to behave badly is to play badly,” further pointing out that the game

⁵⁸ Juul, *Half-Real: Video Games between Real Rules and Fictional Worlds*, 56.

itself will not allow types of play that run counter to the game.⁵⁹ Like pinball machines, most video games were played in public amusement spaces and were owned by businesses, not by individuals who kept them in their homes. Physical alterations or technological tampering with machines was limited by this factor, and, further, arcade machines kept in homes were prestige commodities for serious players invested in preserving the integrity of the game, and, by extension, the credibility of their game scores. The “world record culture” cultivated through the efforts of individual players and media outlets that granted significant attention to the “best” players particularly raises this issue of an individual instance of gameplay’s credibility. Walter Day, the first video game referee, has said that part of the historical role of *Twin Galaxies* in serving as the arbitrating body of video game top scores has been to develop rules of play based on notions of fairness and the perceived purpose of individual games.⁶⁰ In short, both form and ownership effectively limit the types of play allowable and these limitations are further enforced by cultural factors specific to the practices of competitive gaming.

These limitations serve several practical purposes. Most relevantly, they create a player perception of fairness in competition, and they also ensure that games end at regular, usually brief intervals, thus guaranteeing that the amount of play time purchased is relatively small, and that those desiring to play for extended periods will continue to spend money. Most novice players would have confronted a situation not unlike the situation I faced in taking on *Galaga* for the first time, spending a good deal of money in

⁵⁹ Terry Harpold, “Screw the Grue: Mediality, Metalepsis, Recapture,” in *Playing the Past: History and Nostalgia in Video Games*, ed. Zach Whalen and Laurie N. Taylor (Nashville: Vanderbilt University Press, 2008), 96-97.

⁶⁰ Walter Day, interviewed by Carly A. Kocurek. June 17, 2009.

an attempt not necessarily to master the game, but just to gain a firm enough understanding of the rules of engagement and the game's rhythms to play for longer than a minute or two. In the economy of the arcade, the most proficient players spend the least money as their games can stretch to hours. Record-breaking bouts of gameplay, referred to as marathons, often last in excess of 24 hours. The ability to extract hours of gameplay from minimal financial expenditures is exceptional and is complicated by the fact that while it enables the player to "beat the house" in a sense by keeping his or her money, he or she can do this only by following the rules of the game exceptionally well. And, of course, the player's goals were at odds with those of most arcade managers and venue operators. Tim McVey, who became the first person to score a billion points on a video game at Day's Twin Galaxies in Ottumwa, Iowa, in 1984 had several marathon sessions on *Nibbler* cut off by arcade employees. Arcade staff cut the power supply to machines to force marathoning players away from machines they were monopolizing. However, the disruption of gameplay by a factor outside the player or the game is something that game designers could not have accounted for, and is outside the rules system embedded in the game.

These types of disruption circumvent the game's design, altering play in ways that are outside the control of game designers. Within the controlled world of the game itself, Harpold's argument that "to behave badly is to play badly" helps illuminate the point that exceptional players are exceptionally well versed in the rules. They are the best adherents to the cultural, economic, and social standards of the arcade and of the games they play. While the impulse to beat the house may have put players at odds with

machine operators' perception of the games' economic purpose, they can beat the house in this way only by becoming exceptional gamers – usually through hours of play, many of which would have occurred before they became skilled at gaming. To reiterate: one of the principle lessons the arcade teaches players is that there is only one way to play, even in the case of games which can be played using various strategies, a player can sustain the game length-wise only by playing to the game's objectives. This is to say that the better an individual plays by the rules, the more value he receives for his financial expenditure. Further, the longer a player can play, the more points he can earn, and the more clout he has in the competitive social environment of the arcade. Superiority in gameplay is, like superiority demonstrated in other arenas, an opportunity to assert dominance and gain social clout. In the case of both video games and pinball games, this superiority is accrued by an individual, not a team or other organized group. The money fed into an arcade game's coin slot is an investment. Players assume that they will receive for their money not only a chance to play, but a chance to improve, and to become noteworthy, to have the skill required to play individual games that last for hours.

The adherence to rules that is necessary for competitive video gaming suggests in some ways that video gaming is fundamentally conservative in its implications. However, if video gaming is conservative, it is conservative only in this specific way, and only in some cases. Gamers' and game developers' shared obsession with technological advance and novelty, for example, puts gaming at odds with a conservatism that would seek to preserve classical notions of childhood or to resist technological change, even as the increased interest in canonical games offers an interesting counterexample. Further, the

fetishization of individualized competition as the most valuable way of gaming has not precluded the development of collaborative games, nor has it precluded the development of lively social communities around video gaming. Further, much of video gaming in the 1970s and 1980s put gaming and young gamers at odds with the values of moral guardians, which further suggests gaming's disruptive potential. In particular, the high individualization of video gaming competition and skills appears to look forward to the rise of freelance and contract labor as a dominant mode of work.

Summary

At a surface level, the public debates about the social and cultural value of arcade games frequently focused on anxieties about the “wasting” of money they encouraged. These arguments about the frivolous nature of entertainment spending were, as mentioned earlier, nothing new. Commercial amusements have always attracted controversy, as have media forms ranging from the theater to the novel to the Sony Walkman. However, the debates about arcade video gaming came at a critical transitional moment as the United States shifted from a modernist to a postmodernist economy. The teenagers who patronized arcades in the 1970s and 1980s were among the first natives of this new culture. They came of age in a culture filled not only with digital entertainments, but shaped by a white-collar service economy. The discomfort many adults felt at the prospect of teenagers spending hours and endless quarters in arcades doubtless seemed silly to the teenagers who patronized these amusement spaces. And, in retrospect these concerns can often seem farcical, just another set of grumblings set off by generational

differences that have caused conflict over everything from dress hems to novels to mp3 players and cell phones.

However, in the case of video gaming, the conflict develops at a point of massive cultural change and economic upheaval. At the back of the seemingly reactionary treatment of a new entertainment technology is a profound discomfort with radical shifts in the ordering of culture. When the Supreme Court finally ruled on the *City of Mesquite v. Aladdin's Castle, Inc.* in 1982, the court found that the city's restrictions on arcade gaming were in violation not only of the Texas constitution, but of the U.S. constitution as well.⁶¹ Most immediately, this court decision hampered the ability of local and state governments to restrict gameplay by teens. More abstractly, the protection of video games as free speech and the assertion that children cannot be prevented from purchasing gameplay signals a moment in which consumption becomes protected speech. This protection of consumer practices as civil rights signals a shift into a stabilized consumer economy. Under this new model, freedom of choice often means freedom of purchase. The court decision eloquently expresses the implications of this model: Individual identities come to be affixed to consumer products and practices, and disputes over the right to buy – even for children, and even when couched in terms of moral concern – seem increasingly antiquated.

If, as I am arguing, access to the arcade provided access to emergent values and practices, then the issue of access to the arcade becomes not just a question of who had access to a relatively expensive leisure activity, but a question of who had access to the

⁶¹ *City of Mesquite v. Aladdin's Castle, Inc.*, 455 U.S. 283 (1982)

first wave of computerization, and which children would be best prepared for the labor market in which they would eventually come of age. As researchers including James Paul Gee, Elisabeth R. Hayes, and T. L. Taylor have argued, the gendering of video games remains a critical issue in addressing the persistent underrepresentation of women in the tech and related industries as the games provide youth with a point of access to computer technologies.⁶² Access to these earliest video games, rudimentary as they may seem now, is no less important, and in fact, may carry greater importance because of the critical role this period played in shaping not only gaming culture, but public perceptions of gaming and gamers. As video gaming became a major cultural trend, it received significant media coverage in the popular press, which helped solidify notions of who was gaming and why. Dismissals of gaming as a frivolous leisure activity undermines the real lessons being learned by gamers and effectively short circuited early discussion about why various demographic groups were not gaming and what effect limited or no access to gaming might have on young people facing computerization as a major factor in the labor market.

As I have argued throughout this chapter, coin operated video gaming served as an introduction to the spending practices essential to the emergent consumer economy. The period of arcade gaming between 1972 and 1983 corresponded with a shift in consumer spending away from durable goods and toward novel entertainments. This

⁶² James Paul Gee and Elisabeth R. Hayes, *Women and Gaming: The Sims and 21st Century Learning*, (New York: Palgrave Macmillan, 2010).

T.L. Taylor, "Becoming a Player: Networks, Structure, and Imagined Futures," in *Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming*, ed. Yasmin B. Kafai et al. (Cambridge: The MIT Press, 2011), 51-66.

shift, articulated by Harvey and Jameson, also included economic shifts away from Fordist manufacturing and consumption toward postmodernist manufacturing and consumption. Changes in manufacturing and consumption occurred alongside significant upheavals in the U.S. economy as a whole. These changes altered the volume and type of work available across the country, forcing workers away from industrial labor and toward more service-oriented occupations, which were at that point becoming computerized for the first time.

Teenagers feeding quarter into *Galaga* or *Pong* or any number of games were not only playing but learning the cultural and economic values that would allow them to survive and thrive in a de-industrializing work environment that would have seemed as foreign to their parents as the Fordist production lines and clanking pinball machines of the mid-century must have seemed to their grandparents. At an individual level, the coin-operated video games served as a didactic introduction to these new practices, allowing the young to learn by doing and preparing them for participation in a new economy, first as consumers, but ultimately as citizens and laborers. The discomfort with which many parents and moral guardians greeted the rise of the arcade stems not from knee-jerk terror of technology, but instead from deep anxieties about economic and cultural changes which have had profound and long-lasting effects not only on American youth, but on American culture as a whole.

The video game arcade as it existed in its glory days has mutated into several surviving forms, including the entertainment complex as represented by venues like Dave & Buster's, the "classic arcade" in which vintage machines are used to lure nostalgic Gen

Xers, and hangouts for those who were or wish they had been there, like Brooklyn's Barcade. In some ways, this afterlife, which is the subject of the final chapter of this dissertation, represents games going back to where they came from – the first machines had, after all, been sold to bars and advertised as novel amusements for adult consumers. However, while the novelty of the games in 1972 would have been sheer newness, the novelty now is that of other antiquated bits of popular culture. The games that at the time represented the encroachment of the new now represent instead the seeming simplicity of our recent past.

Arcade machines remain one of the earliest broadly-diffused forms of popular computing, and the boards that enabled *Space Invaders* and its ilk were the first computers many people had access to. The machines that now look quaint once looked flashy and new, and although the cost of play may seem sharp when adjusted for inflation, the machines' capacity to seduce clearly often overrode the impulse toward frugality. The seduction proved particularly effective on the young. And, as dedicated video game arcades became common, they overwhelmingly became youth spaces where adolescents engaged in social and economic practices that parents and other moral guardians found at best suspect.

Conclusion

The arcade as considered here presents a compelling moment in cultural history, tied as it is to the novelty of the computer age, the growing compulsion to spend money on novel amusements, and the reshaping of the United States economy and labor market.

To play in the arcade was to participate in a set of emergent cultural practices, and the discomfort many adults felt watching children feed coin after coin into the flashing machines was not simple knee-jerk moralizing, but instead an unease with tangible evidence that children were being inducted into an era that operated on different value principles than their own. The arcade was a training ground for different models of consumption, labor, and culture. Many Americans are living their adult lives by rules of engagement they first encountered in strip mall amusement halls. The video game arcade provided players with an early introduction to these values, preparing them to serve as laborers in a white-collar, technologically oriented service economy, and to engage as investors/players in a heavily deregulated marketplace.

The broad diffusion of video games and their focus on youth as consumers made them uniquely threatening. Moral reformers' discomfort with the hours teens spent playing video games is reflective of uneasiness with the implications of these broader cultural and economic shifts. The children were not growing up with negative moral values so much as they were being brought up as natives of the new economy; adults who had grown up in an era of company men, Fordist production and savings accounts were watching the young grow up in an age of rapid-fire career changes, flexible accumulation, and easy credit. The intense competition of the arcade, filled with 8-bit violence and the enticement to spend this week's allowance and next week's all in one go seemed decidedly unwholesome. The individual games of the arcade may have been simulations of sci-fi and cartoon scenarios, but the arcade itself was a simulation of

generalized economic values, which we are still confronting now not as teenagers, but as consumers, laborers, and citizens.

Chapter 2: Twin Galaxies

As I argued in the previous chapter, anxieties about the arcade's impact on the young echoed broader anxieties about technological, economic, and cultural changes. These anxieties helped fuel attacks on video gaming generally and on individual arcade games, as in the case of Exidy's 1976 *Death Race*, which is the subject of the following chapter. However, the response to the emergent medium and culture was not uniformly negative. Even as moral guardians worried about the violence of video games and the economic imperatives of the coin-op arcade, adult early adapters and popular media looked on video gaming culture through a more favorable lens. Game designers and companies were championed for their innovation and entrepreneurial spirit, and gamers were frequently cast as technologically gifted, highly competitive young men whose more mischievous impulses only reaffirmed their intelligence and creativity. Rather than dueling narratives of gaming, these conflicting perceptions reflect instead a difference in interpretation.

This chapter focuses on one of the most important images in gaming history – the photograph of the top gamers in the world published in *Life Magazine's* 1982 “Year in Photographs” issue. Starting with a brief history of the photograph itself and of the Twin Galaxies Arcade in Ottumwa, Iowa, which served as the site of the gathering of arcade elite, this chapter analyzes several representational threads evident in the image. These threads, which include gender, technology, athleticism, youth, and American national identity, contribute to an idealization of young male gamers as representing desirable

traits. While the photograph ostensibly focuses on the gamers themselves, the gamers are accompanied not only by a series of arcade cabinets, but by a cheerleading squad. The resulting image celebrates the individual competitive prowess of the gamers, who are framed almost as athletes, but also asserts their collective youthfulness and masculinity.

After weeks of selling the concept to *Life Magazine's* editorial staff, Walter Day finally convinced reporter Doug Greenland that his vision – of the top video game players in the world gathered at the Twin Galaxies Arcade in Ottumwa – was a winning way to represent video gaming in the magazine's 1982 year-in-photographs edition. The top gamers, as Day saw them, and as he marketed them to *Life* and later to the magazine's readership, were a pack of bright young men and boys, simultaneously at the cutting edge of a new technology and as all-American and familiar as a small-town baseball or football team.

The arrangements began months in advance, as Day began making plans with the gamers. This process was not easy, as many of the players were still in high school, and their parents were hesitant to allow them to travel hundreds or thousands of miles away from home. *Life* ultimately allowed Day to hand out Greenland's direct number to skeptical parents, and Day not only promised to pay for the hotel rooms of the majority of the players and some of their parents, but signed affidavits assuring parents that he would be responsible for chaperoning their sons.⁶³ Finally, Greenland arrived in Ottumwa with photographer Enrico Ferorelli on assignment for *Life*. The photograph that resulted from

⁶³ Walter Day, "Chapter Four: LIFE Magazine," Twin Galaxies, last modified February 8, 1998, accessed February 2, 2008, <http://oldtgi.twingalaxies.net/index.aspx?c=17&id=616>.

the photo shoot in the middle of downtown Ottumwa's main road has become a beloved bit of cultural ephemera, cited in documentaries about the arcade era and hanging framed in video game arcades. In *The King of Kong: Fistful of Quarters* (2007), a documentary detailing a man's attempt to capture the top score for *Donkey Kong* (Nintendo, 1981), the image is featured, and one interview subject notes that it is frequently hung in arcades.⁶⁴ The documentary *Chasing Ghosts: Beyond the Arcade* (2007), focuses entirely on the golden era of video arcade games as depicted in the photo, even arranging a 2005 reunion in Ottumwa attended by Day and a number of the players featured in the original image.⁶⁵

The photograph Walter Day and *Life* worked so hard to arrange achieved the kind of recognition Day hoped it would, but it also provides a window into how popular media imagined gaming and gamers, and how arcade owners and other members of the video game industry worked to project gaming as wholesome entertainment in the face of public distaste. This chapter details the history of the photograph and analyzes it as an artifact from a specific moment, placing it in a cultural and political context that both amplifies and explains how competitive gaming came to be so synonymous with video gaming.

Historicizing this construction contributes to understanding of the persistent fetishization of individualized competitive achievement in gaming. Further, it suggests that, at its perceived best, classic arcade gaming provided an arena for young, white men with quarters to burn to prove their mettle. The salience of this interpretation of gaming

⁶⁴ *The King of Kong: A Fistful of Quarters*. DVD. Directed by Seth Gordon, 2007; Los Angeles, CA: New Line Home Video 2008.

⁶⁵ *Chasing Ghosts: Beyond the Arcade*. Directed by Leon Ruchti. 2007; Los Angeles, CA: Men at Work Pictures.

has resulted in a persistent cultural trope of the gamer as a young, technologically savvy, man, and has also contributed to assumptions about video gaming as a culture and as a medium, fueling the prominence of specific types of games. Ultimately, the vision of gaming displayed in *Life* is a somewhat defensive measure intended to show the wholesomeness and familiarity of the young men who found success and recognition in the arcade; it is a significant and highly circulated attempt to interpret video gaming as culture, and render it intelligible and familiar to an audience who may never have set foot in an arcade.

As an act of interpretation, an attempt to make sense of an emergent culture, *Life's* photograph is a key image of the golden age of arcade gaming. It reveals the ease with which the maleness of gaming was assumed and naturalized through popular representations. In the fourth chapter of this dissertation, I will be building from this documentary framing of the arcade to explain the construction of gamer identity in popular Hollywood dramas about gaming, *TRON* (1982) and *WarGames*. The *Life* photograph is one of the most widely dispersed and salient representations of video gaming culture from this period. To consider the implications of the photograph is to excavate broad assumptions about what video gaming might mean not only to players, but to a broad public just becoming aware of video gaming as an emergent, and potentially threatening, culture. The producers of the image, including Day, Greenland, Ferorelli, and of course the young gamers, do much work to make gaming appear normal. In the final result, video gaming is represented using the existing codes of young male identity provided by the cultures of sports and technology, presenting the brave new

world of video gaming as simply another arena for America's young men to demonstrate their excellence.

About Twin Galaxies

Just as the *Life* photograph happened at least in part because of Day's dogged insistence, the Twin Galaxies Arcade rose to prominence as a result of Day's entrepreneurial efforts. Even before he and Jon Bloch opened the arcade in November of 1981, Day had begun maintaining a database of top scores for videogames, largely out of personal fascination, by jotting down top scores from machines across the country as he traveled the country selling historical newspapers – Day had acquired a large collection of newspapers and was selling papers with notable historical headlines. As Day traveled town to town attempting to make sales, he would stop in arcades:

Where I'd go, I'd stop and play video games, so I was in a hun – more than hundred arcades just in the summer of 1981 alone. And, in fact in Salt Lake City I remember in particular that a TV, two TV stations were going to interview me, and I arranged for each one of them to show up at the local arcade that I insisted on meeting them at so I could play video games waiting for them and then play video games after they leave.⁶⁶

Returning to Fairfield, Day aspired to open an arcade of his own. His friend Roger Silber, who co-owned arcades in Fort Madison and Dubuke, Iowa, helped Day form connections with route operators, and Day ultimately set up an arcade in Kirksville, Missouri, and one in Ottumwa, Iowa, with Jon Bloch who helped fund necessary renovations.⁶⁷ In February of 1982, Day decided to make these records public information as the Twin Galaxies

⁶⁶ Walter Day, interviewed by Carly A. Kocurek, June 17, 2009.

⁶⁷ Walter Day, interviewed by Carly A. Kocurek, June 17, 2009.

National Scoreboard, an effort doubtless intended to draw more attention to the arcades in Kirksville and Ottumwa. As knowledge of the scoreboard spread, the Twin Galaxies Arcade and Walter Day both gained in fame.⁶⁸ Day launched the scoreboard by calling seven video game manufacturers – Exidy, Midway, Nintendo, Williams, Stern, Atari, and Universal – and the two trade publications, *RePlay* and *Playmeter*. Within the first day, players referred by the manufacturers began calling the arcade to report their scores. Within three weeks, the arcade employees were fielding interview requests almost daily. By April, players from outside the United States began calling to report scores, and Day rechristened the board the Twin Galaxies International Scoreboard.⁶⁹ By maintaining the scoreboard, Day and Twin Galaxies contributed to the standardization of gaming practices. By celebrating achievements like highest scores, longest games, and even perfect games, the scoreboard created a kind of rubric for quantifiable gaming success, much as the similar celebration of player statistics has helped quantify sports like baseball, football, and basketball.

The rise of Twin Galaxies as international scorekeeping entity made the small-town arcades nationally and internationally significant – at least for those who had most fully immersed themselves in video game arcade culture and for those tasked with reporting on the cultural phenomenon – and Day's promise to *Life* that he would round up the top players in North America was far from idle. The players Day convened had

⁶⁸ Walter Day, "Our Unique History," Twin Galaxies, last modified November 3, 2009, accessed October 26, 2011, <http://oldtgi.twingalaxies.net/index.aspx?c=17&id=332>

⁶⁹ Walter Day, "Chapter Three: The Official Scoreboard," Twin Galaxies, last modified November 3, 2009, accessed October 26, 2011, <http://oldtgi.twingalaxies.net/index.aspx?c=17&id=332>
Walter Day. "Chapter Four: LIFE Magazine."

themselves all reported scores, verified by letters of proof from arcade managers, to Twin Galaxies. In submitting scores to Twin Galaxies, players and arcade staff members involved themselves in what was becoming a national and international network of players with Twin Galaxies as a significant hub. While the business of video game design and manufacture may have been run by either old-line pinball manufacturers like Chicago Coin and Midway headquartered in Chicago, or by more tech-focused upstarts like Atari and Exidy based in California, the places where coin-operated gaming became a set of public practices were scattered across the United States. Unlike the manufacturers, which often relied on existing technology hubs as a pool of resources and talent, route operators and video arcade owners needed only a space accessible to young people with pocket change to spend. Indeed, operators and arcade owners often sought out spaces without others in their business to offer competition. Route operators benefited from finding new types of locations for coin-op machines, and from seeking out underutilized locations while maintaining their existing routes. The model of business expansion for a route operator is one that encourages geographic expansion, as an operator would have no other option for growth after saturating their immediate area.

Arranging the Image

When Day began working to arrange the *Life* photo session, he initially had the arcade in Kirksville in mind as the setting. The arcade itself was larger, and Kirksville had a significant student population. However, as Day began planning for the event, he realized the arcade would need some renovations:

So, I started working furiously getting ready for them coming when they said we're going to come. And I suddenly realized, I think I even asked the landlord, 'Hey, will you give me some credit, or will you give me some loan, some money if I renovate your place to get ready for *Life Magazine* to come?' And I think that they said no, that they couldn't afford that, and so I realized that Ottumwa would be easier to renovate. So even though there was a huger following at Kirksville, Ottumwa became the video game capital of the world, by a stroke of fate. No one really knows the story because I've not really told this out. Ottumwa became the video game capital of the world because that's where *Life Magazine* came, and that's where everything – they had to come there, because it was easier to renovate Ottumwa to get ready for such a prestigious event, than it was to do it in Kirksville.⁷⁰

The decision to invite *Life* to the arcade in Ottumwa instead of the arcade in Kirksville may have been a twist of fate, but for *Life* to send reporters out into the Midwest to cover “video games” for the 1982 year in pictures issue made perfect sense. Day's enthusiasm not only sold *Life* magazine, but gained the support of the Ottumwa community. Before the renovations to the Ottumwa arcade were completed, including the addition of an actual display of top gamers (the scores had previously been maintained as a listing but not publicly displayed), the “world record headquarters” of gaming may have, in name, been between Twin Galaxies, but it was in practice Day himself. After all, it was Day who had begun recording the scores and Day who persisted in recording them; in announcing the scoreboard publicly and giving out Twin Galaxies' phone number as the place to report scores, he involved the arcade employees, but without a location – a place where the scores were given physical form of some kind – the scoreboard remained an abstraction. With the renovations, the Twin Galaxies Scoreboard became a real object in a real place, and that place was Ottumwa.

⁷⁰ Walter Day, interviewed by Carly A. Kocurek, June 17, 2009.

With the renovations completed, Twin Galaxies in Ottumwa became not only the place that journalists called for quick comments to fill out articles on the arcade phenomenon, but the place where rivalries were born and carried out, and where competitive players were crowned the best, even if temporarily. Twin Galaxies was unique not only for Walter Day's ambitions but for the amount of community support and national attention it attracted. However, despite these areas of exceptionalism, Twin Galaxies demonstrates a number of important aspects of early arcade culture, and indeed, the ways in which Twin Galaxies seems to have been anomalous are still reflective of broader cultural trends.

For example, the competitive gaming culture so associated with and fostered at Twin Galaxies depended on the participation of thousands of gamers and arcade operators across the United States and abroad. So, while Twin Galaxies was the arcade with the most name recognition as a home for competitive gaming, it could exist as such only because competitive gaming was well established at many other arcades and in many areas. The scoreboard persisted because thousands of gamers had ambitions of high scores; many games had built-in scoreboards which recorded the highest scores attained on specific machines and allowed players to enter their initials when they scored high enough to make the list. This aspect of the games helped reinforce the importance of high scores, and competitive scoring was a key component of gaming and would have been even for players who had never heard of Twin Galaxies and whose ambitions did not exceed the desire to rank on the *Galaga* or *Centipede* machine in their local arcade. The arcade games themselves developed in urban and industrial hubs, but the development of

arcade culture was much more diffuse, drawing on the experience of innumerable game players in thousands of arcades. *Twin Galaxies*'s status as an "exceptional" arcade actually positions it perfectly to provide insight into aspects of gaming which were then common across the United States. *Twin Galaxies* was not a newfangled family entertainment center or megaplex, nor was it part of a boardwalk, amusement park, or other larger tourist destination. It did not offer the competing amusements, such as carnival rides or mini golf, that characterized many of these other sites. The *Twin Galaxies Arcade*, even as it became established as scoreboard and gained attention outside Iowa, was first and foremost an arcade. Further, it was an arcade frequently held up as embodying the broader arcade culture through media attention.

When *Life* decided to buy into Day's vision of how to best represent "video gaming," the magazine's editors were committing not only to *Twin Galaxies Arcade* in Ottumwa as the setting, but to the arcade as the true location of video game culture. Further, they were committing to represent a gaming culture tied in profound ways to individualized competition, technological proficiency, youth, and masculinity. So while the account of how and why *Life* magazine chose to photograph a group of young men gathered behind arcade machines in the middle of the main street in Ottumwa may be a story about a photograph, it is also a story about the way cultural and economic anxieties affect the articulation of youth, about the construction of masculinity and cultural power, and about the deployment of nostalgia in the construction of the future – or what we believe will be the future. This chapter explores several of these threads. I first discuss the role of arcade games as technologies, tying coverage of gamers, like that presented in

Life to early coverage of amateur radio operators. Then, I move through a close reading of the photograph itself as a means of discussing the gender constructions at work in the image. Throughout, I argue that the uneasiness evidenced by this treatment of arcade gamers reflects substantial anxieties about the emergence of postindustrial – potentially postmodern – forms of masculinity near the end of the 20th century.

The Photograph

After weeks of arrangements by *Life* and *Day*, Enrico Ferorelli photographed sixteen players in the middle of Main Street in Ottumwa in November of 1982.⁷¹ The players perch behind a bank of arcade games that have been dragged into Main Street in Ottumwa just for the occasion. In front of the games, members of the Ottumwa High School cheerleading squad strikes a spirited pose. The street, lined with businesses, is largely desolate, a few cars visible only in the remote distance. Movie marquis and business signs are displayed down the block. The scene presents a strange postcard of middle America. And, upon further inspection, the image only becomes stranger, a montage of pop culture, technology and nubile, youthful femininity specially arranged to support the ideological construction of the young men at the center.⁷²

Computer Culture at Play

In 1982, the arcade cabinets that to us look quaint would have looked new – perhaps, in the context of Main Street, Ottumwa, even shockingly new. In significant

⁷¹ “Video Game V.I.P.S.,” *Life*, January 1983, 72-73.

⁷² “Video Game V.I.P.S.,” *Life*, January 1983, 72-73.

ways, the type of masculinity on display in conjunction with the arcade games was also new. To reiterate a point raised in the introduction, Rochelle Slovin, founding director of the Museum of the Moving Image in Astoria, New York, argues that the proliferation of video games as popular entertainment represented a significant shift in Americans' understanding of what computers might mean for the average person. Drawing on Sherry Turkle's description of the movement "from a modernist culture of calculation toward a postmodernist culture of simulation," Slovin says it was "the moment when we stopped using computers as tools and started using them as culture."⁷³ The "computer" technologies on display in the *Life* photograph doubtless fall into the arena of computers as mass culture, the video games providing a relatively approachable form of computerization, accessible to anyone who happened on a machine and had some spare change in his or her pocket. The photograph both shows computers as culture, and shows what the culture of computerization and video gaming might look like.

But, what can we make of this moment of computers as culture? The questions over who would have access to this culture and what that access might mean present a number of troubling quandaries. Writing about the implications of computer-use for the workplace, Shoshana Zuboff warned that the machines would bring with them shifts in the very nature of work:

⁷³ Rochelle Slovin, "Hot Circuits: Reflections on the 1989 Video Game Exhibition of the American Museum of the Moving Image," in *The Medium of the Video Game*, ed. Mark J.P. Wolfe (Austin: University of Texas Press, 2001), 137-154.
Sherry Turkle. *Life on the Screen: Identity in the Age of the Internet* (New York: Touchstone, 1995).

Computer-based technologies are not neutral; they embody essential characteristics that are bound to alter the nature of work within our factories and offices, and among workers, professionals, and managers.⁷⁴

A similar point can be made about computers as mass culture. The essential characteristics that Zuboff sees have implications not only for work, but for leisure and play, which is not to suggest that these arenas are easily separable. As statistics continue to demonstrate inequities of access not only to computer technologies but also to the socioeconomic mobility they can bring, the fact that the wunderkinds presented in this moment of shift from computers as tools to computers as culture are wonder*boys* takes on added significance, as does the seeming racial homogeneity and the fact that these “world”-renowned players were overwhelmingly American.

Even as recently as 2008, when women made up 38% of video game players, they comprised just 12% of those working in the video game industry, a gender inequality that is reflected in other tech-related fields as well.⁷⁵ Further, research has consistently shown that access to computer technologies and the internet is not universal, even in affluent nations like the United States, and more pronounced inequalities of technological access in the developing world have become a serious policy concern as internet access has become essential to many industries and a lack of access usually exacerbates limits on

⁷⁴ Shoshana Zuboff. *In the Age of the Smart Machine: The Future of Work and Power* (New York: Basic Books, 1988), 7.

⁷⁵ Matt West, “Wooing women gamers – and game creators,” *CNN*, June 20, 2008, accessed June 30, 2008, <http://www.cnn.com/2008/TECH/ptech/02/27/women.gamers/index.html>

educational and economic opportunity.⁷⁶ A broad overview of internet access in the United States in 2000, for example, revealed that even while there was gender parity in the online population, women lagged behind men in participation. Further, while 50% of whites had internet access, only 36% of blacks and 44% of Hispanics had access. Household income directly affects who has access. In the 2000 report, less than one third of those in households earning less than \$30,000 yearly were online. Those in rural areas also had less access.⁷⁷ Young, white, American men were and are among those most likely to have access to emerging technologies.

The seemingly homogeneous racial composition of video game players as represented not only in the *Life* photograph, but through many of the other representations discussed in later chapters, bears noting. That the top gamers themselves appear to be all or mostly white may reflect in part socioeconomic inequality along racial lines, which is to say that white teens are more likely to have the kind of disposable income necessary to pursue competitive gaming. However, this explanation is not wholly satisfactory, particularly when considering this racial exclusion as part of a larger trend in representations of gamers from this period. Certainly there were video games in neighborhoods that were predominantly African-American and Latino. Walter Day noted in interview that operators had told him that some machines were more profitable in

⁷⁶ Justine Cassell and Henry Jenkins, "Chess for Girls? Feminism and Computer Games," in *From Barbie to Mortal Kombat: Gender and Computer Games*, ed. Justine Cassell and Henry Jenkins (Cambridge: The MIT Press, 1998), 11.

⁷⁷ Amanda Lenhart, et. al. "Who's not online: 57% of those without Internet access say they do not plan to log on," Pew Internet and American Life Project, September 21, 2000, accessed October 24, 2011, http://www.pewinternet.org/~media/Files/Reports/2000/Pew_Those_Not_Online_Report.pdf.pdf

black neighborhoods, while others would make more money in white neighborhoods.⁷⁸ This evidence is anecdotal, but does suggest that coin-op video games were placed in minority neighborhoods with some regularity. If this is true, then the choice of which games to include in the photograph would have affected the racial diversity of the gamers included. Additionally, the group of gamers who competed on *Starcade* reveals some racial diversity, which suggests that competitive gaming as well was likely not entirely homogeneous.⁷⁹ The representation of gaming, and of video gamers, is bound to certain ideals of white middle class male identity in part through the exclusion of diverse narratives of gaming and through the exclusion of gamers who do not fit assumed notions of race and gender.

Good Technology, Good (Enough) Kids

The approach to computer technology represented by the group portrait in *Life* may, as Turkle and Slovin have suggested, been new, but it was simultaneously backward-looking, participating in an existing – and persistent – discourse of manhood and technology. The identities invoked by the young people in the photograph also exist at this intersection of the new and the established. The novelty of video games had been preceded by decades upon decades of technological novelty packaged through narratives of progress and prowess. The “new” man, buttressed by his affinity for and close

⁷⁸ Walter Day, interviewed by Carly A. Kocurek, June 18, 2009.

⁷⁹ “Starcade Contestants,” accessed January 11, 2012, <http://www.starcade.tv/starcade/contestantsframe.asp>.

association with cutting edge technologies had also been preceded by a long history of narratives of masculinity.

Susan J. Douglas writes about the celebrity of William J. Willenborg, an amateur radio experimenter who, at the age of 26 in 1907, was featured prominently on the front page of the *New York Times Magazine*. His technological achievements were constructed as feats of manly prowess – the writer was sure to point out that Willenborg could “destroy” messages from other operators, and that he had built his radio station himself. Later articles claimed that Willenborg, though boyish and well-mannered, spoke like “a man of science.”⁸⁰ Willenborg and his peers were examples of nascent modernist masculinity – they were boy geniuses expected to become good organization men and, most likely, experts in science or technology who would channel their boyish curiosity and passion into acts of invention that would benefit society.

Boys’ culture in the postwar period further supported the centrality of scientific and technological pursuits. While boys culture generally stressed “physical competition, construction, and rough-and-tumble play,” the period also saw an intensified focus on science, math, and foreign language as public school subjects. This focus resulted from a perceived crisis in education triggered in part by the Soviet Union’s successful launch of Sputnik, the first satellite.⁸¹ While girls often received much of the same science instruction at school as their male peers, professional limitations for women in the postwar period proved significant barriers to women’s entry to these fields.

⁸⁰ Susan J. Douglas, *Inventing American Broadcasting 1899-1922* (Baltimore: The Johns Hopkins University Press, 1989), 189.

⁸¹ Steven Mintz, *Huck’s Raft: A History of American Childhood* (Cambridge: The Belknap Press of Harvard University Press, 2004), 284-287.

During this period, scientists and engineers emerged as valuable fighters in the U.S.-Soviet “space race,” and educational reforms reflected this focus. The success of the Manhattan Project cemented the national interest in scientists and popular narratives of atomic science cast scientists as potential heroes. Several films of the 1950s showed scientists as world saving protagonists.⁸² Astronauts gained a kind of celebrity status during this period. Both astronauts and the engineers and technicians who made space travel possible also embodied idealized concepts of masculine identity, as summarized by Roger D. Launius, curator of Planetary Exploration Programs at the Smithsonian Institution’s National Air and Space Museum:

The Apollo astronauts all had an image of hard-working, fun-loving, virile representations of masculinity. The expression of public comfort with the white male establishment is palpable throughout the recounting of the story of Apollo. The quintessential company many worked for NASA during Apollo. The engineering ‘geeks’ of Mission Control, with their short-sleeved white shirts, narrow black ties, slide rules hung on their belts like sidearms, and their pocket protectors complete with compass and ruler and myriad pens and mechanical pencils all personified a conservative America that many look back on with fondness and nostalgia.⁸³

Popular perceptions of astronauts and Mission Control engineers as summarized by Launius demonstrate an ongoing investment in and fascination with technologically skilled men. Launius’s identification of these type of masculinity as an object of nostalgia also suggests the way that these ideals have shifted or been effaced over time.

⁸² Cyndy Hendershot, “The Atomic Scientist, Science Fiction Films, and Paranoia: *The Day the Earth Stood Still*, *This Island Earth*, and *Killers from Space*,” *Journal of American Culture*, 20 1 (2004), 31-41.

⁸³ Roger D. Launius, “Heroes in a Vacuum: The Apollo Astronaut as Cultural Icon,” 43rd AIAA Aerospace Sciences Meeting and Exhibit, January 10-13, 2005, Reno, Nevada, accessed January 10, 2012, http://klabs.org/history/roger/launius_2005.pdf

Henry Jenkins has argued that video games are an extension of the gendered play spaces developed in nineteenth-century boy culture. Gaming comes as a progression in a set of cultural tropes that have deep roots in nineteenth century boy culture, and which were sustained well into the postwar period. To summarize Jenkins, boy culture helped young men cultivate social bonds that trained them for participation in social organizations like clubs and fraternities while also helping initiate them into a male business culture.⁸⁴ Coverage of early video games contained echoes of the coverage of Willenborg and his peers, and celebrated technological skill similarly celebrated throughout coverage of the space and through midcentury educational reforms. However, coverage of gamers also demonstrated some breaks with this legacy that speak to significant shifts in labor and economic expectations of young men.

While writers at the turn of the century worked to assure readers that amateur radio operators would be good organization men, as the end of the century drew near, the necessity of such appeals had substantially lessened. For one thing, in a post-Watergate, post-Vietnam era, many were skeptical, if not downright suspicious, of the ethics of the organization mentality that had so marked the modernist culture of the mid-century United States. And, as discussed in the previous chapter, stagnation in economies at the national and global level had contributed to an increased sense of instability among U.S. workers in the face of a restructuring of labor. For another, the viability of such claims was limited. Gamers were often engaged in illegal or semi-legal activity, including

⁸⁴ Henry Jenkins, “‘Complete Freedom of Movement’: Video Games as Gendered Play Spaces,” in *From Barbie to Mortal Kombat: Gender and Computer Games*, ed. Henry Jenkins and Justine Cassell. (Cambridge: The MIT Press, 1998), 274-276.

phreaking practices, using audio frequencies to manipulate the phone system to score free long distance and conference calls. Phreaking is, of course, tied culturally to hacking. Although Day wrote later, “They were all super brilliant, computer proficient, clean-cut kids,” he referred to the group in the same piece of writing as “bored, mischievous pranksters.” None of the players to his knowledge smoked, drank, or used drugs, but he still had to handle the headaches of them being thrown out of two hotels in Ottumwa, and two of the players actually slept through the photo session, missing it entirely.⁸⁵ In an interview in 2008, Day again reiterated that the champion gamers were intelligent, mostly well-behaved teens:

Essentially the champions would be 16, 17, or 18 usually. Very rarely older. And they were all smart, they were all like genius type people, and they hard—and none of them ever drank. They weren’t like drinkers, they didn’t smoke cigarettes, and they didn’t take drugs. They were very much like athletes. Very clear, bright, creative young kids. Didn’t drink, who didn’t smoke, who didn’t take drugs. It was an interesting phenomenon.

He further suggested some of the same characteristics that made these young men exceptionally good gamers may have inclined them to mischief:

I think that what it is, is that they have so much creative energy. The creative force that gives them the understanding to uh understand how to solve a game, that creative force also just wanna bust out, it’s just like a, just too much dynamism, too much energy, too much creativity, so they just become just driven to do more things. I think, I think that they didn’t like restrictions and that’s why they were so mischievous, because they just had so much creative force going on. I think that’s the only way I can describe it. They were just too talented and they didn’t like structure or restrictions or limitations, so they misbehaved a bunch in

⁸⁵ Walter Day, “Chapter Four: LIFE Magazine” Twin Galaxies, last modified February 8, 1998, accessed February 2, 2008. <http://oldtgi.twingalaxies.net/index.aspx?c=17&id=616>.

the hotel and found ways to creatively express themselves in mischievous ways, so I think that sort of sums it up.⁸⁶

Day frames the players' troublemaking as a positive indicator of creativity and intelligence. The late twentieth century romanticization of "thinking outside the box" and "innovation" has made it easy to redeem these behaviors as markers of intellectual and entrepreneurial inclination. As discussed further in the next chapter, examples abound of the way that a specific kind of technologically oriented boyishness has become a desirable quality for entrepreneurs. This propensity towards trouble-making, or at least giving the appearance of trouble-making, may have as its totem the Jolly Roger flag that flew above Macintosh headquarters in the 1980s.⁸⁷ However, at the time, in the face of a widespread uneasiness with video gaming's influence on youth, these behaviors may have been more difficult to reframe as positives.

In thinking about the ways mischievousness has been framed as a desirable quality, the differences in perception of this quality based on the race, class, and gender of individual actors is important to bear in mind. For example, studies have shown that the same actions deemed "youthful hijinx" when carried out by white boys are often considered signs of delinquency if carried out by African-American boys. In a similar way, socioeconomic class has a strong impact on the consequences juveniles face for drug- and alcohol-related infractions. Girls often face more rigid limitations on social behaviors than boys, a cultural reality succinctly summarized in the phrase "boys will be

⁸⁶ Walter Day, interviewed by Carly A. Kocurek, June 17, 2009.

⁸⁷ Christopher Breen, "Steve Jobs: Informed by his era." *MacWorld*, October 7, 2011, accessed October 24, 2011. http://www.macworld.com/article/162899/2011/10/steve_jobs_informed_by_his_era.html.

boys.” This saying implies that mischief is integral to boyishness, and therefore excusable or even admirable as boyishness is a positive quality in an androcentric culture. I do not mean to imply that these inequalities are comparable or that they are the only inequalities that affect the cultural construction of mischief; rather, I am offering them as a few examples of how the kind of “mischievousness” that Day highlights as an easily redeemable quality is limited by categories of identity.

All of this is to suggest that the troublemaking of the young men and boys in the *Life* photograph could be recast as symptoms of socially desirable qualities such as intelligence and creativity because of their sociocultural position. This interpretation of the limitations of “mischief” is bolstered by the word’s etymological origins. The root “chief” in the term refer to head or rule, and is the same root as the modern “chef” who serves as head of the kitchen.⁸⁸ Mischief then, is a poor exercise of power or authority, a meaning which carries the implication that only the powerful can engage in mischief. These implications explain why “mischeviousness” as a neutral or even endearing characteristic is generally ascribed only to the most enfranchised of youth. While youth lack the level of authority that adults wield, the discrepancies in relative power and privilege among youth populations reflect more general hierarchies of power based on race, class, and gender. White young men are often mischievous while other youths are deviant or delinquent.

⁸⁸ *Oxford English Dictionary*, s.v. “mischief.”

Gamers as Athletes

In addition to framing the boys' mischievous behavior, Day also makes explicit the connection between athletic competition and gaming competition that is suggested, visually, in the photograph by the squad of cheerleaders. This connection between athletic competition and gaming competition predates *Twin Galaxies* and has persisted as a trope as competitive video gaming has been professionalized. The notion of gaming as “all-American pastime” and competition was salient enough that in 1977, Coca Cola ran a television advertisement set in an arcade. In the advertisement, a group of teen girls challenge a group of teen boys to a video game. The main actors, one boy and one girl, are both wearing a shirt emblazoned “Champ.” The two compete at *PONG*, with the girl winning the match. The girl then offers the boy a Coke and a kiss. The writer who summarized the advertisement in *RePlay* considered it a conscious nod to Billie Jean King and Bobby Riggs.⁸⁹ The engagement with gaming as athletic competition here are overt. The ad also exists in a moment of high visibility for feminism, and seems to offer a postfeminist reassurance that competitive women can still be attractive to and attracted to men.

Route operators and others who worked in the video game industry worked to cultivate the ties between gaming and athleticism. At the 1980 Winter Olympics in Lake Placid, NY athletes could also choose to compete in the Olympic Arcade Tricathlon in the Olympic Village. The event had been proposed by coin operator Jack LaHart of Lake

⁸⁹ “Coke Picks Arcade Set For New TV Commercial,” *RePlay*, May 1977, 13.

Placid who worked with companies to secure a collection of pinball machines, video games, and foosball tables. The winners of the Arcade Tricathlon included Canadian ski jump team member Steve Collins, Alex Michaelides of Cyprus and British biathlete Paul Gibbons. Collins, aged fifteen, scored impressively on the pinball game *Harlem Globetrotters* and on Midway's video game hit *Space Invaders*, performing well enough to take the top title despite winning no foosball games. In coverage of the event, RePlay cites Collins as saying that pinball and skiing require similar levels of talent, discipline, and reflexes.⁹⁰ In a perhaps unwitting historical echo of this promotional event, the Global Gaming League made efforts to bring video gaming to the 2008 games as a demonstration sport.⁹¹

Efforts to tie video gaming to the perceived wholesomeness of athletic competition were a calculated effort to raise the visibility of video games and produce a positive image of gamers and gaming. These efforts drew on a long history of sport as a means of deterring young men from criminal activities and preparing them to participate appropriately in civic, familial, and corporate life. As early as the 1890s, "Muscular Christianity," an ideology which combined Christian activism and athleticism and is perhaps most directly associated with the Young Men's Christian Association (YMCA), and athletic organizations were seen as essential to maintaining order as the American

⁹⁰ "Jumper Wins Olympic Arcade Tricathlon," *RePlay*, March 1980, 15.

⁹¹ Chris Morris, "Video games push for Olympic recognition: Global Gaming League talking with China to bring competitive gaming to the Beijing 2008 games," *CNNMoney*, May 31, 2006, accessed October 27, 2010, http://money.cnn.com/2006/05/31/commentary/game_over/column_gaming/index.htm.

frontier closed.⁹² While the YMCA and other organizations served working class men, colleges and universities had begun fielding organized teams in a range of sports including football, tennis, golf, and rowing in the nineteenth century. According to sports historian Harvey Green, participation in these sports was intended to prepare young men for the workforce:

The growth of collegiate athletics was itself a result of the efforts of physical education instructors, coaches, and eager alumni who in one way or another envisioned ‘manly sport’ as a way to develop the strength of mind and body that would aid American men as they endeavored to meet the challenges of a new corporate industrial order.⁹³

Framing of video gaming as athletic competition tied gaming to this legacy of sport as a means of socializing young men for adult pursuits. By presenting video gaming as a new type of sport, industry advocates argued that video gaming should be embraced as a new one of socializing young men.

Arcade as Teenage Wasteland

The aggressive response to the video game arcade was part of a more general attack on the public culture of adolescence, which had a long history but which had a great deal of momentum in the 1980s. Youth mall culture died out in part because of the institution of private restrictions on loitering and on minor access to businesses without adult chaperones. By the late 1970s, communities had begun taking measures to prevent

⁹² Harvey Green, *Fit For America: Health, Fitness, Sport and American Society* (Baltimore: The Johns Hopkins University Press, 1986), 215.

Clifford Putney, *Muscular Christianity: Manhood and Sports in Protestant America, 1880-1920* (Cambridge: Harvard University Press, 2001).

⁹³ Harvey Green, *Fit For America: Health, Fitness, Sport and American Society*, 203.

video arcades from proliferating, and zoning ordinances and other hurdles helped slow the pace of arcade openings and machine placements. By December of 1976, the coin-op trade magazine *RePlay* was warning that zoning measures were posing an acute threat to the industry. Certainly such efforts were not new, but the craze for video games seemed to inspire fresh vigor. An unsigned editorial in *RePlay* warned operators of the dangers these regulations posed:

How many of you realize that arcades are being zoned out of existence, regardless of the type of equipment placed in them; TV games, or flippers, or rifles, it makes no difference. Once classified as an arcade, they are not permitted. ... Let us determine the places where we are being hampered the most. Let us examine the psychological reasons for the prejudices that still linger against us as a business community. Let us not be afraid to defend ourselves against unfair attacks.⁹⁴

Arcade owners and route operators saw these provisions as efforts to clip the wings of the industry based on an unfair assumption that the businesses contributed to delinquency or were themselves tied to organized crime. To be fair, the coin operated industry had in the past served as an easy money laundering racket, but by the mid-1970s, the U.S. Department of Justice claimed this was no longer the case.⁹⁵ Perhaps associations lingered despite the Department of Justice's assurances. The newness of video games may have helped sever associations between the coin-op industry and criminal elements as they presented a new, yet unsullied type of coin-op game. At least one *RePlay* editorial claimed that video games raised the overall profile of the industry, helping coin operators

⁹⁴ "Editorial: Where are the powerful voices?," *RePlay*, December 1976, 3.

⁹⁵ "Interestingly, the new machines do not seem to have aroused the curiosity of the Mafia, once a big operator of coin machines in New York and Chicago. 'That all seems to have been cleared up,' says Edward Joyce deputy chief of the Organized Crime and Racketeering Section of the U.S. Department of Justice."

Peter Ross Range, "The Space Age Pinball Machine," *The New York Times*, September 15, 1974. ProQuest Historical Newspapers The New York Times (1851 - 2007). (AAT 03624331).

place machines in formerly unlikely locations like hotels, airports, and department stores.⁹⁶ However, the same proliferation likely helped efforts to curtail the spread of video games and arcades gain traction.

These efforts may have reflected an anti-coin-op bias, but they also reflected efforts to curtail the proliferation of crowds of young people in public places. The number of '70s and '80s horror films that feature children and adolescents as monsters suggests how acute discomfort with youth had become. This fear of children was contrasted with a fear *for* children. The 1981 kidnapping and murder of 6-year-old Adam Walsh and subsequent made-for-TV movie sparked a public frenzy, which was further fueled by a hotly contested Department of Health and Human Services estimate that put the number of children kidnapped annually at 1.5 million.⁹⁷ Regardless of the statistics' accuracy, the scare they caused was pervasive and a very real part of the daily lives of most children and caretakers in the 1980s. Terrorized parents were inundated with milk carton pleas for the safe return of sweet-cheeked children and news reports warning against satanic rituals, unmarked white vans and strangers with candy. The full-fledged paranoia of child-snatching creeps only furthered the uncertainty many adults felt about the wholesomeness of arcades, shopping malls, and other youth spaces.

⁹⁶ Louis Boasberg, "TV Video Games and Respectability," *RePlay*. 1976 Showbook, 20-21.

⁹⁷ Neal Karlen et al. "How Many Missing Kids," *Newsweek*, October 7, 1985, 30.

Joel Best, "Rhetoric in Claims-Making: Constructing the missing Children Problem," *Social Problems* 34, 2, (1987): 101-121.

David Finkelhor, Gerald Hotaling and Andrea Sedlak, "Children Abducted by Family Members: A National Household Survey of Incidence and Episode Characteristics," *Journal of Marriage and Family*, 53,3 (1991): 805-817.

In addition to the more longstanding unease surrounding arcades, and the period's general uneasiness with public youth culture, authority figures raised specific concerns about the effect video games might be having on young people's physical health. C. Everett Koop, who served as U.S. Surgeon General at the time, and other health experts warned of the dangers of injuries like "video elbow" and "arcade arthritis," ailments similar to carpal tunnel syndrome that were caused by the repetitive motion required for effective game play. "Video elbow" is a reference to and pun on the well-known sports injury commonly referred to as "tennis elbow," and may be another example of the linkage between sports and video gaming previously discussed. Both of the creatively named ailments, however, make the point that video gaming may be physically dangerous to young people.

These ailments are also an interesting link between the seeming leisure of video game play and the labor of the computerized workplace. The association of physical injury with specific occupations has a long history; carpal tunnel syndrome (CTS) was previously known by the specific occupations that seemed to cause it, as in "telegraphist's cramp" and "tailor's cramp." CTS gained attention as an occupational injury in the 1980s largely because strikes at meat packing plants drew attention to the prevalence of repetitive motion strain injuries among workers. In the case of the meat packers, repetitive motion injuries became another of many physical risks faced by factory laborers. However, in the case of white collar jobs, the rising number of CTS cases spoke to the potential dangers of jobs frequently assumed to be less risky to physical health.

In the aftermath of this increase in public awareness, the number of worker's compensation claims related to CTS increased over 500% between 1986 and 1992, despite increased awareness of risk and improvements to work environments.⁹⁸ With computerization, the risk of repetitive motion injuries including CTS among white collar workers has risen, and indeed, CTS is today most associated with those whose work involves a high volume of typing. Repetitive motion strain injuries have become so common in the computerized workplace that companies like Hewlett Packard have ergonomic specialists on staff to help address the physical safety of their white collar staff.

Leisure-related injuries “Arcade arthritis” and “video elbow” may have been an early warning of emerging occupational hazards for a wide range of white-collar workers. That young people were suffering ailments associated with the old or overworked as a result of their leisure activities made these activities suspect. Youth were playing video games too much, they were taking the games too seriously, and both of these problems demonstrated the bigger problem that video gaming was bad for children. These young people, however, were suffering the same kinds of injuries that would confront them after they entered the workforce, and in this way, the physical rigors of video gaming can be seen as a precursor to the physical rigors of occupations such as, for example, computer programming.

⁹⁸ Stephanie Y. Kao, “Carpal Tunnel Syndrome As an Occupational Disease,” *The Journal of the American Board of Family Practice*, 16 (2003): 533-542, accessed November 8, 2010, <http://www.jabfm.org/cgi/content/full/16/6/533>.

In addition to the physical hazards the games posed, the games were suspected of presenting an array of psychological or mental dangers. An August 1980 *New York Times* article raised the possibility that video gaming could trigger compulsive or even addictive behavior. Although the experts cited in the article were ambivalent, several suggested that they or their organizations had been contacted by parents concerned about their children's gaming habits.⁹⁹ Koop was quoted in the copy that accompanied the photograph in *Life* saying, "There is nothing constructive in the games." The implication of the statement, of course, was that video gaming was at best a waste of time that would be better spent on more meaningful pursuits. Koop's assertion is relatively mild when contrasted with more forceful criticism from journalists and the National Safety Council, which held that many games were outright destructive, promoting war through simulated warfare, or reveling in violence.¹⁰⁰

The persistence and variety of the attacks on the video game arcade make a clear case for why arcade owners, route operators, and others invested in the coin-op video game industry felt a need to defend the industry and so actively campaigned to create a more positive impression of the arcades and the gamers who hung out in them. Human interest pieces about exceptional gamers, the opening of clean, modern, family-oriented arcades, or industrial entrepreneurs all helped create a strong counter narrative. The gamers were not delinquents, they were bright young men. The arcades were not for

⁹⁹ Glenn Collins, "Children's Video Games: Who Wins (or Loses): No Great Demand for Help 'A Seductive World,'" *The New York Times*, August 31, 1981, B4.

¹⁰⁰ Judy Klemersud, "Bang! Boing! Ping! It's King Pong : 'A Sense of Control' Began in Amusement Park Prescription for Eye Ailments Balls and Strikes," *The New York Times*, April 23, 1978. ProQuest Historical Newspapers The New York Times (1851 - 2007). (AAT 03624331).

teenaged troublemakers, they were for families. The game designers were not opportunists sending out violent games without a care for their consequences, they were brilliant engineers and business men. The effort to help craft this alternate vision of video gaming is evident in the amount of effort people like Jack LaHart, who organized the gaming tricathlon at the Olympic Games, and Walter Day went to in order to draw attention to arcade games and shape the image of gamers.

In addition to these physical maladies, and aside from the debatable effects of video game violence, which had been a topic for intense scrutiny since the video game version of *Death Race 2000* set off a national moral panic in 1976, the games demonstrably fostered a culture of intense individual competition.¹⁰¹ (For further discussion of *Death Race*, see Chapter 3.) The players on hand for the *Life Magazine* photo session spent most of their time in Ottumwa challenging each other on various games, a process by which Steven Sanders was revealed to have reported a false score for *Donkey Kong* (1981) – he proved incapable of replicating his reported high score, or a score even close to it, and several of the other players easily beat him at the game.¹⁰² He remained in the photo, regardless. This individualized competition had a veneer of antisocial behavior as it pit players directly against each other, leaving little room for the assumed camaraderie of team sports and other valorized competitive outlets for young people.

¹⁰¹ Steven L. Kent, “Super Mario Nation,” in *The Medium of the Video Game*, ed. Mark J. P. Wolfe (Austin: University of Texas Press, 2001), 35-48.

¹⁰² *The King of Kong: Fistful of Quarters*. DVD. Directed by Seth Gordon. 2004; Los Angeles, CA: Picturehouse, 2007.

Life Magazine's Anthropological Eye

In many ways, *Life Magazine* took on the type of outsider-looking-in posture that had become common with ethnographic films and writings at the turn of the century, and, of course, a quick perusal of vintage copies of the publication confirms that this perspective had long formed the magazine's bread and butter. *Life* applied this perspective rather broadly, deploying it with equal skill in articles about Australian aborigines and in articles about teenaged rock and roll fans and mods. By the time the 1982 "Year in Pictures" issue hit the stands in January of 1983, *Life* had a long history of translating youth culture for those whose lives kept them at a distance from the practices of teens. As suggested by James Gilbert, the magazine had, by the 1950s, become one of the primary interpreters of American youth, running story after story about the seemingly bizarre cultural practices of juveniles:

Life ... assumed the role of responsible guide for social change. It mixed equal measures of warning and reassurance into a recipe followed closely by almost every other periodical of the decade [1950s] writing about teenage culture.¹⁰³

In these explorations, the magazine frequently alternated postures, simultaneously stimulating fears of delinquency and bad behavior while working to assure adults that the kids were basically all right. In the pages of *Life*, youth were always exotic and in need of explanation to adults who worried about these strange creatures wandering the streets of the suburbs and participating in unfamiliar cultural rituals. *Life* approached the foreignness of American youth with an anthropological eye much like that with which *National*

¹⁰³ Brian Gilbert, *A Cycle of Outrage: America's Reaction to the Juvenile Delinquent in the 1950s* (New York: The Oxford University Press, 1986), 11.

Geographic peered at the peoples and cultures of developing nations. In this role, *Life* alerted adult readers to youth trends and guided them towards conclusions about these trends. The mix of warning and reassurance generally took the form of trying to convince adults that the new was somehow old, that the shocking was easily understood, and that any upheavals at work would certainly right themselves soon enough.

Placed in this context, the coverage of arcade gaming was in some ways unexceptional, and, indeed, the issue of the magazine in which the photo under discussion appeared also included articles on other youth trends and current events. Articles in the issue included a piece on “rap,” and another exploring the cuteness craze as represented by the Smurfs, Strawberry Shortcake and other “kids’ stuff.” More serious coverage of national and international affairs appears alongside these pieces on pop culture. Articles addressed the national unemployment crisis, the Palestine Liberation Organization, and the conflict in the Falkland Islands. One piece features Nancy Reagan’s breathless recounting of her trip to Europe. A particularly jarring photograph shows young women at the Illinois state house, fasting to show their support of the Equal Rights Amendment.

Throughout the magazine, the insider/outsider age dichotomy dovetailed and worked with similar divides along rural/urban, male/female, and old/new. Arcade gaming was located at an intersection of many of these dichotomies. Some adults, like Walter Day, quickly latched on to the new entertainment technologies. However, they were relatively far between, forming a small but significant group of “early adapters” who did not represent the reactions of the general public. Many small towns had arcades for at

least a few years, and many arcades existed in the suburban sprawl where they were easily accessible for teens. Even urban arcades were quickly marked as spaces for youth, and doubtless many adults would have found the darkness, flashing lights and constant noise an effective deterrent. *Life's* coverage of youth cultures ultimately worked toward several goals: interpreting and translating youth culture for adult readers, simultaneously soothing and stimulating fears raised by the otherness of the young and by the threat of urban decay.

Interpreting Gaming

Walter Day's collection of "the world's best video gamers" as photographed by Fiorelli fit well within *Life's* effort to expose youth culture as both foreign and familiar. The gamers also fit into the framework of the most desirable gaming type: bright, clean-cut boys and young men from small towns, suburbs, and other regular places who were, at their very worst, a bit mischievous or a hair too competitive. This image of video gamers was one that those working in the coin-op business had a strong investment in, as it served as a counter to moral guardians' insistence that arcades were hotbeds of delinquency. The worst qualities on display in the *Life* photograph were qualities easily redeemed through comparison to earlier boy technologists or to athletes; at their worst, the boys were harmless troublemakers, at their best, they were entrepreneurs and innovators on the rise. Other aspects of the photograph help render the gamers familiar, from the setting in Ottumwa's neatly kept Main Street to the poses taken by the players.

To glamorize the top gamers was, inherently, to glamorize a competitive posture highlighted again and again in representations of the boys and men selected as the ambassadors of this new technocultural vanguard. Again, however, the new is shown tied to the old. The arrangement of the players and their games in neat rows is much like group portraits of sports teams – an impression again driven home by the presence of the cheerleaders. In the individual shots that accompany the group photograph, most of the gamers stand with their arms crossed, a posture that visually references the poses struck by athletes in numerous portraits taken over the preceding century and reflects gendered standards of portraiture.¹⁰⁴ (And, as previously discussed, this tie to sports was a cultural connection that numerous others would make in the ensuing decades.) The exceptions are Ned Troide and Billy Mitchell. Troide, who stands with one hand on his hip, gained notoriety for playing Defender for 62.5 consecutive hours on one quarter. Mitchell, who in the group portrait is holding a stuffed gorilla, was featured prominently in the 2007 documentary *The King of Kong: Fistful of Quarters*, and remains one of the most famous classic arcade gamers in the world. In the *Life* portrait, the teenaged Mitchell stands with his shoulders squared and his fists on his hips, wearing a gray sweatshirt with his high score for Centipede – a substantial 25,000,000 points – printed on it in heat seal letters. However, both Troide's more lax pose and Mitchell's posture, too, ultimately echoes the poses struck by varsity athletes, even if Mitchell's does seem to gesture toward the overstated macho of professional wrestling.

¹⁰⁴ Judith Butler, "Athletic Genders: Hyperbolic Instance and/or the Overcoming of Sexual Binarism," *Stanford Humanities Review* 6 (1998): 2, accessed October 24, 2011, <http://www.stanford.edu/group/SHR/6-2/html/butler.html>.

The individual visual nods toward modernist masculinity are furthered by other components in the group photograph. Heterosexual male desire is everywhere and nowhere in the photograph, revealed in background elements, and in the cheerleaders who serve almost as props in the image. The movie theatre is playing *Night Shift*, billed on the marquis as the “comedy sleeper of the year.” In *Night Shift*, Bill Blazejowski (Michael Keaton) convinces straight-laced Chuck Lumley (Henry Winkler) that they should run a brothel out of the City Morgue, where they work the deadly dull nightshift.¹⁰⁵ The film is a patriarchal fantasy of deadend employment – take the job, make solid money running a sexy, illicit side business dependent on masculine authority because you want to “help” women stuck working for abusive pimps, then find and fall in love with your very own hooker with a heart of gold. Further, of the six arcade games featured – *Tempest* (1980), *Defender* (1980), *Ms. Pac-Man* (1981), *Tutankham* (1982), *Centipede* (1980), and *Donkey Kong* (1981) – only five are from the Twin Galaxies Arcade. The *Ms. Pac-Man* machine in the photograph was obtained after a number of phone calls to other businesses in town, including rival arcades. The only one that could be located was, in fact, in a topless nightclub located just yards away from Twin Galaxies.¹⁰⁶ The machines in the photograph were intended to match one-to-one with the players, meaning one of the players in town for the shoot had made his name with a top score at *Ms. Pac-Man*. Neither the marquis advertising *Night Shift* nor the topless nightclub are central to the photograph, but they are there on the edges like flying

¹⁰⁵ *Night Shift*. DVD. Directed by Ron Howard.1982; Los Angeles, CA: Warner Home Video, 1999.

¹⁰⁶ Walter Day “Chapter 4: LIFE Magazine.”

buttresses intended to support the image of the young men at the center. The presence of these elements does not directly counter the presumed wholesomeness of the setting; doubtless, most viewers likely overlooked these details. However, their subtle, matter-of-fact presence drives home the extent to which such neutral territory was heavily marked by masculine superiority and power.

Of course, the presence of the cheerleaders is inescapable. They drive home not only the attempt to frame the gamers in the rhetoric of wholesome athletic competition, but also the attempt to locate them within a familiar framework of young manhood. The five young women featured are white, thin and fresh-faced, wearing the pleated skirts and saddle shoes typical of cheerleading uniforms. The cheerleaders are anonymous; nowhere on the pages that feature the photograph are they named, nor have they been sought after by documentary makers invested in producing “where are they now?” pieces about the players. The cheerleaders are, for better or worse, props present to bolster the visual impact of the men displayed behind them, despite being physically removed from them by the looming arcade machines. The young woman in the center, who is wearing a different uniform shirt and appears to be the captain, is holding pompoms over her lap, a pose that not only adds a further touch of varsity glamour to the image, but also reduces the risk of unintentionally providing an upskirt view to the camera's prying eye. The other four cheerleaders each have arm raised at an angle, a flat-palmed hand pointing toward the center of the bank of games. The cheerleaders here are blank slates, stand-ins for a specific kind of American feminine beauty presented so often as the rightful spoils of

other kinds of American champions, normally reserved for football captains and other hometown heroes.

In many ways, the 16 gamers in the photograph look much like other such heroes – one player near the center is even wearing a facsimile of a letterman's jacket featuring a patch advertising the Reflexions Fun Centre with a crude Pac Man logo. The setting, aside from the arcade games, is almost right. If they were baseball players or football players, they would be featured on the modernist pastoral scene of the sports field, or, if basketball players or other indoor athletes, in the gym, that shrine of turn-of-the-century physical fitness. But, these young men are a new kind of competitor, and so are shown in a new kind of setting. The scene seems to revel in the developed, heavily civilized background. There are neon signs and movie marquis, neat storefronts and street signs – one of which designates a certain stretch of curb as “for taxis only.” In this setting, the cheerleaders may seem a little bizarre, their manicured fingers reaching skyward, their knees pressed to the filthy blacktop, but their presence makes an ideological sense that is apparent in the other aspects of the photo; if these players are champions, then the cheerleaders are necessary, a marker of success.

According to Day, the crew from *Life* had initially wanted to haul the machines into a cornfield, but had decided against the idea after visiting an actual cornfield and getting a better handle on the logistics involved in such a city slicker stunt. The idea had been to emphasize the quasi-rural, agricultural character of Ottumwa, to highlight the unlikelihood of the seemingly sleepy Midwestern town becoming the video game capital

of the world.¹⁰⁷ However, even having settled on the less technically challenging tactic of placing the machines in Main Street, the arrangement remains visibly precarious. At least two of the young men in the photograph have their eyes closed; the detail suggests the photo was snapped hastily, which could be an indication of the photographer's frustration at trying to wrangle a group of teenagers. Several of the players grip the arcade machines or clench their fists with white knuckles. The two cheerleaders furthest from the center are delicately balanced, and are also clinging to the machines to keep themselves from toppling. The struggle, then, to render these individuals intelligible to the audience manifests itself in the image where each of the human subjects struggles to maintain composure long enough for the camera's shutter to close. The hurry implied by the failure to capture a photograph in which all group members are looking at the camera and the uneasiness evidenced by the tense knuckles highlight the tensions in the image itself and suggest similar tensions in the cultural context that produced it.

Conclusion

The photograph exists at a moment of cultural, economic, and technological uneasiness. Even as the image overtly engages with new technologies, it presents compelling evidence that the “new” technologies and the attendant cultural changes need not be threatening. In fact, the details of the image suggest that these changes will not be so dramatic; the emerging technological culture will still be the domain of white, heterosexual men. The prodigies of this emerging technological order may be young, but

¹⁰⁷ Walter Day, “Chapter 4: LIFE Magazine”

their youth will enable them to adapt to the changing demands of the economy and the workplace. Their very youth, their boyishness, will help them to succeed and the youthful qualities that seem to distinguish them, when placed in coverage of earlier boy geniuses like early radio operators, is not so novel. As *Life* magazine presented them, then, the young men of the early 1980s arcade were different from their predecessors in their technological fluencies and their cultural obsessions, but were otherwise familiar.

In the *Life* photograph, we are viewing the struggles between familiar forms of industrial modern masculinity and emergent forms of postindustrial postmodern masculinity. The machines' newness is contracted against the cheerleaders' traditional uniforms and the players' athletic posturing. The photo presents a complex exploration of what it might mean to be an American man in an era long after the deployment of Theodore Roosevelt's rugged masculinity, in a historical moment just as the Space Race was giving way to Star Wars, when headlines were warning again and again that Japan and other Asian economies were outpacing the U.S. and threatening the nation's role as a world power and technological innovator. The *Life* photograph attempts to frame the gamers – the best in the world and overwhelmingly from the U.S. – as all-American, drawing on the ethos of athletic display and of boy genius narratives. In entering into this negotiation between the old and the new, the producers of the image, including Walter Day, Enrico Ferorelli, Doug Greenland, and the young men and women in the photograph, attempt to render themselves and this new mass culture intelligible and familiar, suggesting that the new medium of the video game and, by extension, the newly

domesticated technology of the computer were nothing to worry about, they were merely further arenas for American men to prove their masculinity and superiority.

Chapter 3: The Agony and the Exidy

Efforts by arcade and video game industry members, like Walter Day, to represent gaming and gamers through familiar, positive tropes of boyhood served as an opposing representation in the face of negative assumptions – that gaming was a waste of time and money, that there was nothing to be learned from gaming, or that those playing games were troublemakers or had nothing better to do. The gamer as character type, as displayed on the pages of *Life Magazine* and in narrative films like *TRON* and *WarGames*, which I will be discussing in the next chapter, offered a counter narrative to negative assumptions about the effects of gaming on young men. These negative perceptions of gamers and gaming find clear articulation at the points where gaming is met with the most resistance.

While in the previous chapter I touched on efforts to curtail the spread of video games and arcades through civic regulations, in this chapter, I examine the first notable video gaming moral panic, which was sparked by Exidy's 1976 coin-op game *Death Race*. Careful consideration of this panic not only offers insight into the specific anxieties video gaming provoked, but also provides useful historical context for considering the subsequent history of criticisms of gaming. To trace the history of *Death Race* and the moral panic that greeted it is also to explore a period during which gaming and violence are fused in public imagination. In this chapter, I will begin by giving an overview of *Death Race 2000* and placing it in its historical and cultural context. From there, I will provide a history of Exidy's *Death Race* game and the public response to the game's

perceived violence. By placing Exidy in a context of changing cinema production codes, I will show how the game served as a flash point in broader discussions about what constituted appropriate subject matter for popular media. Additionally, I will show that the game existed in a market filled with games depicting militarized violence, suggesting that the game triggered outrage not merely because it was violent, but because it depicted violence which clearly questioned the state's monopoly on legitimized violence and did not exist in other culturally accepted narratives of violence, such as the western. Through this chapter, I will be arguing that the reaction to *Death Race* did little to squelch the game's distribution, and instead had the contrary effect of driving sales and vaulting Exidy into the national spotlight.

The discourse surrounding *Death Race* helped forge a strong tie between video gaming and violence in the public imagination, effectively ensuring the development of similarly violent games. This bond has persisted to the present, and has led to the development of several similar games, including most famously the controversial *Grand Theft Auto* franchise, which is the progeny of *Death Race* in both theme and controversial reception. This bond between video games and violence has in turn helped sustain assumptions about the gendered nature of gaming, as women are assumed to be uninterested or averse to violent media. Jeffrey H. Goldstein, in his study of audiences for violent film and television, found viewers were disproportionately young men, other studies have similarly found men are more likely to prefer violent film content than

women are.¹⁰⁸ Many narrative models for violent games rely on narrative components such as war, the wild west, or police action, that are still heavily gendered as male, both as narratives and, as in the case of the military and police work, as real life experiences. Both gender stereotypes and violence have been shown to alienate women and girls from gaming.¹⁰⁹ The high profile of violent games may deter some girls and women from gaming. Further, this focus on violence as thematic content contributes to perceptions of gaming as a gendered activity. To consider why video gaming has become a perceived male enclave is also to consider why video gaming has become so bound to violence as a narrative and thematic concern; in this and the subsequent chapter, I turn directly to this question of violence.

As a final note before proceeding, I would like to provide a working definition of violence which will cover its use in this chapter. Violence can be a rather elastic concept, referring to everything from name-calling to axe-murdering. For the purposes of this chapter, I will define “violence” as causing deliberate physical harm to people, animals, or property. I do not wish to argue for or against other definitions or uses of the term, but only clarify what that term will mean in the confines of this work. Discussions of “violent” media have most often centered on displays of physical acts such as simulated

¹⁰⁸ Jeffrey H. Goldstein, *Why We Watch*, (New York: Oxford University Press, 1998), 100-102, 223. Tara M. Emmers-Sommer, Perry Pauley, Alesia Hanzal, and Laura Triplett, “Love, Suspense, Sex, and Violence: Mens’ and Women’s Film Predilections, Exposure to Sexually Violent Media, and their Relationship to Rape Myth Acceptance,” *Sex Roles*, 55: 5-6 (2006): 311-320.

¹⁰⁹ Jeroen Jansz and Mirjam Vosmeer, “Girls as Serious Gamers: Pitfalls and Possibilities,” in *Serious Games: Mechanisms and Effects*, ed. Ute Ritterfeld, et al. (London: Routledge, 2008), 236-247. Kaveri Subrahmanyam and Patricia M. Greenfield, “Computer Games for Girls: What Makes The Play?” in *From Barbie to Mortal Kombat: Gender and Computer Games*, ed. Justine Cassell and Henry Jenkins (Cambridge: The MIT Press, 1998), 46-71. Thomas W. Malone, “Toward a Theory of Intrinsically Motivating Instruction,” *Cognitive Science* 4 (1981): 333-369.

killing, fighting, or – in the case of the game most discussed here – running over figures. The “violent” media up for discussion in this chapter have been key to this longstanding debate about propriety and morality.

Exidy Rising

The production of *Death Race* resulted in part from the manufacturer’s willingness to position itself as an industry upstart. In 1973, H.R. Pete Kauffman founded video game manufacturing company Exidy, Inc. in Sunnyvale, California. Taking for the company’s name a portmanteau of the phrase “Excellence in Dynamics,” Kauffman tried to define his company as leaders in technical quality and in responsiveness to the needs of distributors and route operators. Interviews with Kauffman from the mid-70s suggest he thought of his company as an upstart or underdog, a perception that is not without merit. At the time, the coin-op market was dominated not by video game manufacturers, but instead by older coin-op machine companies, many of which had branched into video game production. Sega and Williams both date to the 1940s and Chicago Coin dates to the 1930s, which gave the companies a significant edge in brand recognition among operators during the early years of the video game industry. Although Nolan Bushnell and partner Ted Dabney launched Atari just a year before Exidy in 1972, the outstanding success of *PONG* had made the company an instant darling in the industry; as the first commercially successful video game *PONG* brought Atari a high profile and a reputation as a cutting edge innovator. And, in fact, by 1982, Atari would control 80 percent of the

U.S. video game market.¹¹⁰ Although Kauffman had a background in engineering, he relied on his previous work in sales to differentiate his company as exceptionally friendly to operators and distributors. He stressed the high quality of the company's products and said he founded the company because "he felt manufacturers should be 'more responsive to the distributors and operators needs.'"¹¹¹

With limited resources, Exidy distributed its first games exclusively on the West Coast, primarily in California, but the success of *TV Pinball* (1975) eventually enabled Exidy to expand distribution across the United States and into foreign markets.¹¹² *TV Pinball* was effectively a pinball game transposed onto a video game upright. Advertised selling points for the game included that it would offer a similar attraction as a traditional pinball machine while occupying significantly less space. In a flyer, Exidy played heavily on the familiarity of the game's format: "EXIDY SHOWS YOU HOW TO WIN AT THE OLD MONEY GAME WITH THE INDUSTRY'S MOST REVOLUTIONARY DEVELOPMENT."¹¹³ Exidy began making a name for itself in part by collaborating with other manufacturing companies, a practice which helped expand Exidy's portfolio of games and the company's name recognition and geographic reach:

During the summer of 1975, when distributors and operators were learning about Exidy, other game manufacturers began calling on the firm to help solve production and service problems they were experiencing. One even worked with Exidy on the joint development of what has become a successful game.¹¹⁴

¹¹⁰ Giselle Bison, "Atari: From Starting Block to Auction Block," *InfoWorld*, August 6, 1984, 52.

¹¹¹ "Exidy Feeling Growth Pains," *RePlay*, March 1976, 12.

¹¹² "Factory Report: Exidy—Riding High In the Video Novelty Market," *RePlay*, June 1976, 20-21

¹¹³ Exidy, "TV Pinball by Exidy: The Money Game," Flyer, 1975. Accessed through *The Arcade Flyer Archive*, April 27, 2011, <http://flyers.arcade-museum.com/?page=thumbs&db=videodb&id=2518>.

¹¹⁴ "Exidy Feeling Growth Pains"

The collaboration may have been unorthodox, but Exidy's limited production and distribution capacity made such a deal particularly appealing. The collaboration helped establish the Exidy name in regions outside the company's limited West Coast distribution range.

The "successful game" developed in collaboration with another gaming company likely refers to Chicago Coin's *Demolition Derby* (1975) and Exidy's *Destruction Derby* (1975), which was an early success for Exidy. A reference to *Destruction Derby* as "a joint development with one of the old line flipper game manufacturers" – a description which would have certainly fit Chicago Coin – further suggests that this is the game in question.¹¹⁵ By late 1975, Exidy had *TV Pinball* (1975), *Table Pinball* (1975), *Table Foosballer* (1975), and *Destruction Derby* on the market.¹¹⁶ However, the June 1976 article on Exidy makes clear that the product of the product of this collaboration was not *TV Pinball* or *Table Pinball*, and there is no suggestion that *Table Foosballer* had performed exceptionally well. Industry coverage of subsequent games cited *Destruction Derby* specifically as evidence of Exidy's success, and the company considered *Destruction Derby* notable enough to reference it in advertisements.¹¹⁷ In fact, *Destruction Derby* had performed well enough that Exidy decided to license *TV Pinball* so that their production resources could be devoted entirely to *Destruction Derby*, and the entire company eventually moved from its original location in Sunnyvale to a larger

¹¹⁵ "Factory Report: Exidy—Riding High In the Video Novelty Market"

¹¹⁶ Exidy, "Four Great Games From Exidy," Flyer, October 1975. Accessed through The Arcade Flyer Archive, September 22, 2010, http://www.arcadeflyers.com/flyers_video/exidy/23002201.jpg.

¹¹⁷ "Death Race From Exidy," *RePlay*, April 1976, 22.

facility in Mountain View, California.¹¹⁸ In his history of the video game industry, *The Ultimate History of Video Games*, Steven L. Kent cites Pete Kauffman as claiming that Exidy's initial goal had been to develop games for other companies. Kauffman says that *Destruction Derby* was purchased by Chicago Coin, but the company never made good on their payments. In response, Kauffman/Exidy went on to revising the game and releasing it himself. According to Kauffman:

Death Race was a spin-off from a game we did for Chicago Coin called *Destruction Derby*, in which you hit other cars. We licensed that to Chicago Coin, and they forced us into competing with ourselves by not paying royalties. We came out with *Death Race* to compete with our own game.¹¹⁹

While this is possible, it eliminates Exidy's *Demolition Derby* from the equation. The idea that *Death Race* was intended to compete with *Destruction Derby* makes sense, however, and the advertisements which position *Death Race* as a kind of extreme version of *Demolition Derby* by default place it in competition with *Destruction Derby* and *Demolition Derby*. *Destruction Derby* had doubtless outsold *Demolition Derby* despite being practically the same game. Exidy did not enjoy the mainstream publicity of newcomer Atari, which had become a household name thanks to *PONG*, or of older companies like Chicago Coin which had had decades to establish them among pinball players and other amusement seekers. Regardless, Kauffman's decision to release *Death Race* made waves far beyond the confines of the coin-op industry.

¹¹⁸ "Factory Report: Exidy—Riding High In the Video Novelty Market"

¹¹⁹ Steven L. Kent, *The Ultimate History of Video Games: The Story Behind the Craze That Touched Our Lives and Changed the World*. (New York: Three Rivers Press, 2002), 91.

When *Death Race* began attracting attention, the response was largely hostile. For those suspicious of or outright hostile to the budding culture of video gaming, the game became the most egregious example of video games' depravity and corrupting influence. The story of Exidy's rise to notoriety is the story of the first video gaming moral panic. It is a story that depends not only the then-recent rise of video gaming as a significant cultural form, but also on the notoriety of Paul Bartel's film, *Death Race 2000*, and by extension, of the changes to legal standards of obscenity, and of the destruction of the Hays Code, which had enabled *Death Race 2000* and the milieu of high-shock cult films it was a part of. It is a story of the early ubiquity of video games as public amusements and of discomfort with new media reaching fever pitch and boiling over. And, finally, it is also the story of the earliest shot in what has now become a decades-long battle about the potential harms of violent video games. The story starts not with *Death Race* the game, but with *Death Race 2000*, the 1975 film of which *Death Race* the game was an unlicensed spinoff.

Of Silver Screens and Death Screams

An examination of *Death Race* and its cultural legacy, requires a firm grasp on the film which inspired the game. In the film *Death Race 2000*, set in the year 2000, the United States has collapsed in the wake of a financial crisis and a military takeover. In the wake of the upheavals, the United States has been reconceived as the United Provinces. The Bipartisan Party has subsumed all previously existing political parties, creating a one-party system. In addition to serving as the only major political

organization, the Bipartisan Party serves as the nation's religious leadership, as church and state have been unified. The nation's figurehead is the charismatic Mr. President (Sandy McCallum), who leads the country from a distance and who, in public statements, alternates between soothing assurances and fiery incitements like the most skilled cult leader. The citizens of the United Provinces remain placated in part through the spectacle of a slew of ultraviolent sports. The most popular of these bloody public contests is the Annual Transcontinental Road Race. The race, considered an important symbol of the nation's values (which include "the American tradition of no holds barred") and way of life, is a cross-country road race in which motorists run down pedestrians for points. Elderly victims are worth a whopping 70 points, while women are worth 10 more points than men in all age brackets, teenagers are worth 40 points, and so on. For efficiency's sake, the race is scheduled to coincide with the ever-popular Euthanasia Day, so that motorists can further contribute to the public good by mowing down pensioners whose wheelchairs and hospital beds have been specially rolled out for the occasion.

The film is intended as dystopic social satire. Despite a sense of general malaise, the citizens of the United Provinces are not universally content. The film details multiple plots to do away with Mr. President and bring about radical change. A resistance group, called "the Army of the Resistance," led by Thomas Paine's descendant Thomasina Paine (Harriet Medin) works to assassinate the racer Frankenstein (David Carradine) and replace him with a double. The resistance believes that Frankenstein is a personal friend of Mr. President and that the leader will permanently end the race in exchange for the safe return of Frankenstein. Annie (Simone Griffeth) is Thomasina's granddaughter and

Frankenstein's navigator; she plans to lure Frankenstein into an ambush. She learns, however, that Frankenstein wants to win the race in part so he can blow up Mr. President with a grenade disguised in his prosthetic hand. Disruptions to the race caused by the Resistance are blamed on the French, who are also blamed for problems with the phone system and the economy. Frankenstein becomes the winner – and only survivor – of the race, but his hand grenade plan is derailed by an injury. Annie dresses in his costume and plans to stab Mr. President, but she is shot and wounded by her grandmother in a case of mistaken identity. Mr. President is ultimately mowed down by Frankenstein in his race car. In the film's epilogue, Frankenstein and Annie are married and Frankenstein has become the new President. He overhauls the United Provinces legal system, and includes among his reforms the abolition of the Transcontinental Road Race.

The bloodbath of outrageous deaths and car stunts the film's premise precipitates allows for a smorgasbord of cinematic violence. The cars are equipped to perform as killing machines with spiked fronts. A construction worker performing road maintenance is gored, and his freshly-minted widow is later interviewed on national television and informed that as the widow of the race's first victim, she has won an apartment in Acapulco and a 50" three-dimensional television. A racer delights in an opportunity to run over a baby who turns out to be a disguised bomb, planted by the resistance. A fan, who has won the opportunity to meet Frankenstein, insists "Scoring isn't killing ... it's part of the race." Another racer chases a fisherman down a creek and flattens him. These and other scenes of violence present a deliberate excess. The film makes explicit its cultural critique in the epilogue. The reporter, Junior Bruce (Don Steele) badgers now-

president Frankenstein, who has just announced the end of the race as his first executive act:

President Frankenstein, you can't call off the race. The American people won't stand for it ... The race is a symbol of everything we hold dear, our American way of life. Sure it's violent, but that's the way we love it. Violent, violent, violent! And that's why we love you.

When Annie asks Frankenstein if they have to listen to this, he says no before slamming the gas pedal to the floor and running over Junior.

The tongue-in-cheek satire of a society hooked on violent sport may have been painted with too broad a brush, appearing to delight a little too easily in the same culture of violence it ostensibly critiqued. Critics were divided over whether the film was scathingly funny or simply a crass bloodbath. Writing for *The New York Times*, Lawrence Van Gelder dismissed the film by suggesting it had failed as a satire:

In the end, it [*Death Race 2000*] reveals itself to have nothing to say beyond the superficial about government or rebellion. And in the absence of such a statement, it becomes what it seems to have mocked – a spectacle glorifying the car as an instrument of violence.¹²⁰

Roger Ebert, writing for the *Chicago Sun-Times*, awarded the film zero stars, and, in a move somewhat out of character for the critic, did not engage with the film much at all in his review, choosing instead to meditate on his concerns about the future triggered by seeing an audience full of children watch the movie with glee.¹²¹

¹²⁰ Lawrence Van Gelder, "Death Race 2000' Is Short on Satire," *The New York Times*, June 6, 1975, The Screen. proQuest Historical newspapers: The New York Times (1851-2007). (AAT: 03624331).

¹²¹ Roger Ebert, "Death Race 2000," *Chicago Sun-Times*, April 27, 1975, accessed April 8, 2010, <http://rogerebert.suntimes.com/apps/pbcs.dll/article?AID=/19750427/REVIEWS/808259998>.

While the critical response to the film was largely negative, it was not by any means universal. In *The Los Angeles Times*, Kevin Thomas said the film “demonstrates that imagination can overcome the tightest budget.” In addition to praising several actors’ performances, he dismissed criticisms of the film’s violence saying, “There’s much slaughter in ‘Death Race 2000,’ but it’s presented so swiftly that the film avoids an unduly hypocritical exploitation of that which it means to condemn.”¹²² *The Dallas Morning News* announced the film’s opening with a relatively neutral summary: “‘Death Race 2000,’ scheduled for a Friday multiple opening, deals with a futuristic race in the year 2000, in which the winner is determined by the fastest time and the highest body count.”¹²³

As in the case of many other cult films, critical distaste for *Death Race 2000* did not necessarily mark the film as a failure – the visual pleasures of this particular piece of cinema relied not only on narrative, but on scenes of hilarious, goofy gore. The appeal of *Death Race* was in keeping with the appeal of other exploitation films like Herschell Gordon Lewis’s splatter films or Russ Meyer’s nudie-cuties, and even Corman’s own larger body of work, which included biker movies like *The Wild Angels* (1966) and gangster movies like *The St. Valentine’s Day Massacre* (1967). Little in the film’s production background would have slated it for critical success, and the outrage evident in reviews like Ebert’s and Van Gelder’s may have served the contrary purpose of driving

¹²² Kevin Thomas, “MOVIE REVIEW: Barbarism in Big Brother Era. Review of *Death Race 2000*,” *The Los Angeles Times*, May 2, 1975. ProQuest. (AAT 03624331)

¹²³ Philip Wuntch, “An Antonioni Ride with ‘Passenger,’” *The Dallas Morning News*, May 11, 1975, C2.

audience members *to* the theaters. Exploitation films had – and still have – an audience of devotees who came to them for bare breasts, violence, and scandalous subject matter.¹²⁴

Intended to compete with *Rollerball*, *Death Race 2000* performed well, despite having a budget of only \$300,000.¹²⁵ There are significant parallels between the plot of *Rollerball* and the plot of *Death Race 2000*, but *Rollerball* had a significantly larger budget and major studio support. *Death Race 2000*, produced not by a major studio, but by shock king Corman, featured an exceptional amount of on-screen gore. The same visual orgy of visceral pleasure that delighted many audience members – some of them quite young – also outraged moral guardians. As Ebert had noted, the film’s R rating did not seem to serve as an adequate barrier between the film and the minds of impressionable youngsters.¹²⁶ Despite the film’s modest budget and relatively low box office take, it gained a high profile. Put shortly, *Death Race 2000* was infamous. The reviews in major newspapers reached a wide national audience. The film became an easy example of the morally degraded nature of popular media.

In addition to fitting within the historical production category of the exploitation film, *Death Race 2000* was also in keeping with an emergent mainstream cinema more prone to displays of violence and overt sexuality. The end of the Hayes Code and its replacement with the voluntary Motion Picture Association of America ratings system in

¹²⁴ *Schlock! The Secret History of American Movies*. DVD. Directed by Ray Greene. 2001; Los Angeles, CA: Pathfinder Home Entertainment, 2003.

¹²⁵ “Death Race 2000 (1975),” *Internet Movie Database*, accessed September 21, 2010, <http://www.imdb.com/title/tt0072856/>

¹²⁶ Note that Motion Picture Association of America ratings are industry standards and do not carry the force of law. While theaters may choose to enforce age restrictions for certain films, there are no legal penalties for refusing or failing to do so.

1968 had precipitated significant changes in the movie industry; these changes were only furthered by the U.S. Supreme Court's decision in *Memoirs v. Massachusetts* in 1966, which held that only materials which could be shown to be both "patently offensive" and "utterly without redeeming social value" did not qualify for protections as free speech under the First Amendment.¹²⁷ *Miller v. California* in 1973 went even further, extending constitutional protections to obscene materials providing they were not distributed to minors or to third parties who had not specifically requested these materials.¹²⁸ These changes were far from seamless, in no small part because as policy scholar Richard S. Randall wrote two years after the decision, the court's decision effectively denationalized the definition of the obscene:

In 1973, the Supreme Court decided *Miller v. California* and held that 'contemporary community standards,' a never satisfactorily defined element of the original *Roth-Alberts* test, referred not to the national community, as many had supposed and as many libertarians had urged, but to the state or local community. In so doing, it took an unusual step toward denationalization of a constitutional right.¹²⁹

By taking this position, the court created room for uneven changes in the regulation of materials. What was obscene in Boise, Idaho, for example, would likely not have lined up with what was considered in obscene in New York City. The court's decision allowed room for the development of regionalized limitations on first amendment protections, an issue still somewhat unresolved as indicated by state-based efforts to limit free speech for minors, an issue which is currently at the heart of the debate in *Schwarzenegger v.*

¹²⁷ *Memoirs v. Massachusetts*, 383 U.S. 413 (1966)

¹²⁸ *Miller v. California*, 413 U.S. 15 (1973)

¹²⁹ Richard S. Randall, "Obscenity: Denationalization and the Conflict of Cosmopolitan and Local-Popular Values," *Policy Studies Journal*, 4, 2 (1975): 151-156.

Electronic Gaming Association, a case addressing a California state effort to limit youth access to violent video games which is slated to be heard by the U.S. Supreme Court in 2011.

The *Memoirs* and the *Miller* decisions and the demise of the Hayes Code were not universally viewed as signs of progress. These looser definitions of obscenity led to a proliferation of violent and risqué films which would not have passed muster under the preceding regulatory standards. Many like *Death Race 2000* or even pornographic films like *The Devil in Miss Jones* (1973) and *Deep Throat* (1972) gained cult status which sustained their popularity long enough to make them early video rental favorites later that decade. These shifts were not seamless and continue to meet with resistance from moral guardians, some feminists, and others who see the availability of various kinds of smut as a significant cultural ill. And, indeed, changes in the obscenity laws doubtless helped usher in the sexual revolution of the 1960s and the move towards what John D’Emilio and Estelle B. Freedman have dubbed “the sexualized society.”¹³⁰

The relaxing of both governmental and industry regulation of film production meant that films like *Death Race 2000* could make some claim to cultural legitimacy and were less likely to face outright banning or suppression. All of this is to say that film’s position at its time of release was enabled in part by the changes in regulation and the subsequent changes in the film industry. *Death Race 2000* may have been a low-budget film, but it had a cast of legitimate actors and a production team with enough clout to

¹³⁰ John D’Emilio and Estelle B. Freedman. *Intimate Matters* (Chicago: The University of Chicago Press, 1997), 327.

Beth L. Bailey, *Sex in the Heartland* (Cambridge: Harvard University Press, 1999), 13-44.

garner reviews in major papers. The film was a recognizable name and became a cult hit; film listings for *Dallas Morning News* indicate that theaters in the area were still screening the film with some regularity in 1978, three years after the film's release, with screenings also occurring in 1979 and 1980, often alongside domestic and international horror/action films like *Death Rage*, *Master of the Flying Guillotine*, *School Girls in Chains*, and *Chain Gang Women*.¹³¹ Despite Ebert's concerns about the film reaching a young audience, *Death Race 2000* ultimately found its audience at drive-ins and late-night screenings catering to devotees of oddball cinema. In the end, *Death Race 2000* gained enough attention and persisted long enough to become a recognizable name.

The Game and Its Discontents

When Exidy selected the name *Death Race* for a new driving chase-and-crash game, they were deliberately attempting to cash in on the film's infamy and readily identifiable name, a strategy which guaranteed the game a certain level of name recognition and invited controversy. The game was not licensed, and the film's copyright

¹³¹ Advertisements indicate screenings of the film in January 1978, February 1978, March 1978 (when the film was showing in at least four venues), as well as November 1979 and February 1980. A sampling of these listings:

"Movie Guide," *The Dallas Morning News*, January 9, 1978, 19. NewsBank/Readex, Database: America's Historical Newspapers.

"Movie Guide," *The Dallas Morning News*, February 14, 1978, 28. NewsBank/Readex, Database: America's Historical Newspapers.

"Movie Guide," *The Dallas Morning News*, March 13, 1978, 16. NewsBank/Readex, Database: America's Historical Newspapers.

"Movie Guide," *The Dallas Morning News*, November 15, 1979, 93. NewsBank/Readex, Database: America's Historical Newspapers.

"Movie Guide," *The Dallas Morning News*, February 21, 1980, 82. NewsBank/Readex, Database: America's Historical Newspapers.

holders were not consulted. Authorized or not, however, consumers readily made the connection between the game's pixilated graphics and the film's gleeful automotive violence. This connection precipitated what became the first important moral panic in the history of video gaming. Atari's *Gotcha* (1973) had attracted a bit of attention several years earlier owing to its pair of round pink rubber controllers which looked a bit too much like breasts for the comfort of some critics – especially since the controllers had to be squeezed to operate the game. Ironically, these controllers had been decided upon after the company ruled that dual joysticks looked too phallic for public decency, and decided to make the game more feminine. Employees at Atari reportedly referred to *Gotcha* as “the boob game.” Later, the pink globes were replaced with standard joysticks.¹³² The response to the perceived lewdness of *Gotcha* could not hold a candle to the full-throttle outrage that greeted *Death Race*.

Although the game design for *Death Race* can at least partially be attributed to the prolific Howell Ivy, who had become vice president of engineering at Exidy in early 1976, the game is uncredited and likely represents the work of a number of Exidy employees.¹³³ *Death Race* followed on the success of *Demolition Derby*, which had sold well. However, while *Destruction Derby* was one of at least three car crash games on the market, *Death Race* was presented as something innovative and exciting.¹³⁴ The first of a series of advertisements for the game to appear in trade journal *RePlay* boasted of the game's unique design and linked it to a variety of historical car and motorcycle-loving

¹³² Brenda Braithwaite, *Sex in Video Games* (Hingham: Charles River Media, 2007), 27, 81

¹³³ “Exidy Names Two,” *RePlay*. February 28, 1976, 8.

¹³⁴ Chase-and-crash games available in 1976 would have included *Demolition Derby* (Chicago Coin, 1975), *Destruction Derby* (Exidy, 1975), and *Crash 'N' Score* (Atari, 1975).

bad guys.¹³⁵ The advertisement features the marquee picture from the game cabinet complete with muscle-car racing ghouls, and the first line describing the game is punctuated with tiny skull-and-crossbones graphics. The advertisement does not directly reference the film from which the game took its title, although the category of '70s street racers could perhaps be construed as a subtle nod. The statement that the player will have to “‘get involved’ in whatever what he wants” does suggest a male audience, but more importantly, it suggests that the game will provide an immersive, engrossing environment that players will feel invested in.

The advertisements in *RePlay* do not target players directly, but in fact target the route operators who purchase and place coin-op machines in public places, the ad’s appeal makes sense. The goal is not to convince individuals to play the game, but instead to convince operators that the game is sufficiently interesting and accessible to hook a general audience and prove a moneymaking investment. This also explains the somewhat technical slant of the last line of large type on the ad “1 or 2 players—25¢ per player—adjustable playing time,” and the ad’s appeal to “contact your nearest distributor” to learn more. Exidy considered the cabinet graphics to be a major selling point for *Death Race*, and so the flashy marquee graphic dominates the advertisement. Individual coin-op machines represented significant investments for route operators, and the move toward video games had only served to increase the investment required for each machine purchased. For this reason, operators could be hard to sell on new games, especially when

¹³⁵ “Exidy introduces: Death Race 98,” *RePlay*., March 1976, 29.

I am considering *Death Race 98* and *Death Race* as the same game. The company appears to use the names somewhat interchangeably, with the only difference between the two being the inclusion of the “98” on the cabinet graphics.

they could instead purchase and place more copies of games that had already proven successful on their routes. The reference to *Destruction Derby* links the game to Exidy's past success while the text as a whole suggests, none too subtly, that the game is different enough to hook a larger audience of players, whether they're interested in '50s dragsters, '30s mobsters, or '70s street racers, while ensuring that it will surely be at least as good an investment as *Destruction Derby*.¹³⁶

The second advertisement for *Death Race* to appear in *RePlay* ran the next month in the April 1976 issue. Perhaps in acknowledgement of a feature covering the game's release in the issue, the ad relies features relatively simple typography with a photographic image of the game cabinet.¹³⁷ Exidy's marketing and sales manager Linda Robertson suggests that the graphics were at least as important to the game as the gameplay:

The artwork alone on this game ... showing the skeletons, gremlins and graveyard ... is certain to invite immediate player interest. The play of the game is so much fun they'll come back again and again.¹³⁸

More obviously appealing directly to operators, the ad includes promises of high profits and excellent technical service:

**STEP ASIDE!
HERE COMES THE LEADER OF THE PACK!
DEATH RACE by EXIDY**

¹³⁶ Exidy actually continued to advertise *Destruction Derby* in the same issue of *RePlay* to include the first advertisement for *Death Race 98*. The market for coin-op machines was such that particularly games would continue to be strong sellers for several years, and companies would usually continue to offer them as long as there was a reliable market for new machines.

¹³⁷ "STEP ASIDE!" *RePlay*, April 1976, 15.

¹³⁸ "Death Race From Exidy," *RePlay*, April 1976, 22.

A CHASE AND CRASH GAME WITH A TWIST

This text is followed by a bulleted listing of the game's technical specifications, such as setting options and screen size. The advertisement ends by stressing the game's profit potential, based in part on the claim that gamers will want to replay the game¹³⁹

The advertisement appeals to profit motives at several points, promising the opportunity to double profits, that players will become repeat customers, and that service will be readily available to save operators from profit-sucking downtime. In a third ad, elements of the cabinet graphics make up most of the ad, with a photographic image of a cabinet shown as well. The ad shows the Exidy name several times, but the main text reads simply, "New! Death Race. It's fascinating! It's fun chasing monsters."¹⁴⁰ Although the controversy about the game did not begin brewing until the spring buying season had ended and operators had begun placing machines, the ad seems almost a preemptive strike, making explicit that players are chasing "monsters," not to be confused with people.

The gameplay of *Death Race* should be familiar as it is similar to more recent games like *Carmageddon* (1997) and *Grand Theft Auto* (1997), which I will discuss in more depth later in this chapter. At the time, the combination of chase-and-crash with "monster" killing was unique in the marketplace. *Death Race* can be played as a one- or two-player game. The operator could adjust the game to give players between 80 and 135

¹³⁹ "STEP ASIDE!" *RePlay*, April 1976, 15.

¹⁴⁰ "New! Death Race by Exidy," *RePlay*, May 1976, 9.

seconds of playtime per purchased game with games costing 25 cents for a single-player game and 50 cents for a two-player game. Because of the time limit, the game challenges players to gain the highest number of points in a fixed time. Each player operates one of two on-screen cars using a steering wheel, pedal, and a shift lever. The pedal allows players to move the car forward in two speeds, described in the parlance of the game as low or high gear. With the shift lever in reverse, a player may move the car backward in low speed. Players may not move backward in high speed. If the pedal is not depressed, the car will not move forward or backward, but will rotate in place if the steering wheel is moved. The objective of play is to hit as many “gremlins” as possible. Each struck gremlin leaves behind a cross-shaped tombstone which becomes an in-game obstacle for the duration of the game; because of this, each possible iteration of the game would have a somewhat unique playing field depending on how many gremlins were struck and where they were struck.

Gremlins can only be struck when they are in the central “legitimate playing field” of the game. The far left and right fields, designated by dotted lines, are safe areas for the gremlins; gremlins cannot be struck in these areas, and cars entering these areas will “crash,” causing them to pause for a few seconds. Cars will also crash if they contact the screen’s top or bottom solid lines. It is possible to crash and then proceed into the zones on the edge of the screen, although Gremlins cannot be struck on these parts of the playing field. Gremlins do not pass into the top and bottom boundaries. In two-player mode, players are competing against one another for the most kills. A player therefore might choose to deliberately crash into the other player to prevent him or her from

striking a gremlin.¹⁴¹ The game ranks players depending on the number of points they scored. These rankings – skeleton chaser for 1-3 points, bone cracker for 4-10 points, gremlin hunter for 11-20, and expert driver for scores greater than 21 – further the horror-inspired theme of the game.¹⁴²

As opposed to the lush cabinet graphics, the on-screen graphics in *Death Race* are rudimentary. The “gremlins” are stick figures and the cars are simple blocks with wheels. The “violence” of the game then is much dependent on context. However, to perceive pixilated black-and-white graphics as simple as those in *Death Race* as violent gore is not some simple act of fantasy. As is likely obvious from the description of gameplay above, whether players were striking people or gremlins, the objective was certainly death and destruction. Labels like “bone cracker” and “gremlin hunter” would have further suggested that the game was immersing players in a violent fantasy world. If there were room for doubt, the cabinet graphics featuring a pair of skull-faced ghouls in pink and purple hoods racing muscle cars across an eerie landscape worked to remove it. The game was meant at the least to be creepy, if not downright horrific.

As demonstrated earlier in this chapter, context contributed to the certainty reformers felt when criticizing the game. The film from which the game took its name had already become a notable example of violent trash cinema, familiar even to those who had not seen the thing – the box office numbers indicated that not many had seen the initial run. Even passing knowledge of the film would have included the impression that

¹⁴¹Exidy.. *Death Race Exidy Service Manual*, 1976, accessed April 8, 2009, <http://www.arcade-museum.com/manuals-videogames/D/DeathRace.pdf>.

¹⁴² “Death Race From Exidy,” *RePlay*. April 1976, 22.

it was too violent for children. If the film is inappropriate for children, then clearly the game, too, must be inappropriate. The story of the film effectively became the narrative world of the game. Even while *Death Race* certainly had its adult fans, the fact that *Death Race* was so appealing to children eager to spend their pocket change, and in some ways as readily available as other coin-op machines only further contributed to its potential as an explosive issue. Within a few months of its release, *Death Race* was attracting national scandal and earning coverage in major news outlets, including *The New York Times* and *60 Minutes*. Exidy's efforts to make *Death Race* eye-catching seem to have paid off. Interviews with Exidy executives made clear that the company found the controversy a combination annoyance and good source of publicity.¹⁴³

One peculiar aspect of the controversy worth drawing attention to is the larger context of other coin-op video games available in 1976. While the lively used market accessible to route operators certainly expanded the number of games available for purchase at any given time, I would like to focus here on the games immediately accessible as new machines sold through distributors. Even a cursory glance at listings of new machines makes clear that *Death Race* was not the only violent game on the market. Atari's offerings in 1976 included five games which could be categorized as violent: the rather self explanatory *Cops 'N' Robbers*; the chase and crash *Crash 'N' Score*; the wild west-themed gunfighting game *OUTLAW*; *Jetfighter*, which featured simulated jet

¹⁴³ Steve Harvey, "Postscript: :Controversial 'Death Race' Game Reaches 'Finish' Line," *Los Angeles Times*, August 10, 1977. ProQuest Historical Newspapers: The Los Angeles Times. (AAT 04583035) Ralph Blumenthal, " 'Death Race' Game Gains Favor, But Not With the Safety Council," *The New York Times*, December 28, 1976. ProQuest Historical Newspapers: The New York Times (1851 - 2007). (AAT: 03624331).

dogfighting; and *TANK 8*, an 8-player tank warfare game. Chicago Coin, of course, had their chase and crash, *Demolition Derby*, available. Electra's offerings included *AVENGER*, a scrolling shooter game in which the player piloted a fighter plane. Digital offered a jet fighting game with the rather self-explanatory name *AIR COMBAT*. Meadows was manufacturing *Bombs Away*, in which players piloted bomber planes and sunk ships, and Fun Games had a seek-and-destroy aircraft game named *BI PLANE*.¹⁴⁴ And, pre-video gaming has a long association with violence; chess, mastery of which is often considered a marker of intelligence, is a board game simulation of warfare.

All of this is to say that *Death Race* was not an isolated incident of violent video gaming; it existed in a field littered with competitor games with equally violent premises. A wide array of military-styled games offered players simulated warfare on land, air, and sea. Other chase and crash games invited players to crash cars and create automotive mayhem. And, the quick-draw game *OUTLAW* required players to shoot or be shot, a simulation of a gun duel set in the era of vigilante justice. Despite the overt violence in these games, they did not attract the scrutiny that greeted *Death Race*'s entry into public consciousness. None of these games offered the sidestep Exidy had carefully constructed for its game by claiming that the stick-figure pedestrians were "monsters" or "gremlins." However, the public response indicates that the game's monster chasing was considered more horrifying than the human-on-human violence featured prominently in many other games at the same time.

¹⁴⁴ "Video Uprights," *RePlay*, September 1976, 39-43.

Several factors may have contributed to the specificity of the response to *Death Race*. At a basic level, the game's flashy graphics may have set it apart from other games in the arcade. Or, perhaps, as the game's advertisements claimed, it really was something remarkably different. The game's graphics, rudimentary as they look in retrospect, were relatively unique in featuring human-esque figures as general targets. Atari founder Nolan Bushnell maintained that Atari deliberately avoided such human violence:

We were really unhappy with that game [*Death Race*]. We [Atari] had an internal rule that we wouldn't allow violence against people. You could blow up a tank or you could blow up a flying saucer, but you couldn't blow up people. We felt that that was not good form, and we adhered to that all during my tenure.¹⁴⁵

Other games, like *OUTLAW*, that featured human-on-human violence fit within broadly accepted cultural and historical narratives of violence. The militarized violence of most of the other games similarly fell under accepted cultural narratives of violence. Further, they did not disrupt the accepted governmental monopoly on violence. War is commonly justified, or even glorified, as a defensive practice at the very least, as well as a means of preserving certain ideals or even proving national vigor. The vigilante justice of the wild west is often romanticized as a critical step in the "civilizing" of the region. In these ways, the violent fantasies of the other games listed here would have fit within accepted violent realities. Further, the violence of many of these games may have been overlooked because it was not considered violence against human actors; although the tanks, airplanes, and submarines would presumably have been operated by people, these human actors never appear on screen and are rarely, if ever, alluded to.

¹⁴⁵ Steven L. Kent, *The Ultimate History of Video Games: The Story Behind the Craze That Touched Our Lives and Changed the World* (New York: Three Rivers Press, 2002), 92.

Regardless of where the line was drawn about human actors, the violent realities depicted by Atari and other companies, however, were like games in being governed by specific rules of engagement which were generally accepted. The quickdraw contest starts reliably at ten paces, limited warfare of any kind predicates on agreed-upon rules of engagement. In this way, as James Campbell suggests, once it has been reduced to a historical narrative draped in nostalgia, even the proverbial hell of war can operate ludologically, which is to say, as a game.¹⁴⁶ That the war-themed video games available on the market in 1976 focus on technologies associated most directly with WWII and previous wars bolsters the idea of war as play because the games then become points of nostalgic engagement with “good” wars. As the controversial Vietnam War had lurched along until spring of 1975, WWII may have seemed an appropriate historical topic for children’s games, a lesson in what a “good” war looked like. Video games based on war and gun duels, then, may not have offended because they were based on realities that were already experienced as games at some level. *Death Race* did not fit within these violent realities, instead presenting a fictional landscape that most closely echoed the reality of the pedestrian hit and run accident. The reality presented is too unregimented, too suggestive of violent chaos. The objection, then, may not be the violence per se, but the lawlessness of that violence, and the suggestion it carries of violence outside the accepted social order.

¹⁴⁶ James Campbell, “Just Less Than Total War: Simulating World War II as Ludic Nostalgia,” in *Playing the Past: History and Nostalgia in Video Games*, ed. Zach Whalen and Laurie N. Taylor (Nashville: Vanderbilt University Press), 183-200.

In addition to these narrative and contextual differences between *Death Race* and violent games marketed at the same time, Exidy's game may also have served as a flashpoint, a single text that stood in for "violent games" as a more general category, and in some ways defusing the broader critique and absorbing most of its impact. Efforts to curtail the spread of video games, through zoning, code restrictions, and other local measures speak to a more general discomfort with the games. Prompted by the financial success of Pong, video games diffused rapidly along coin-operated routes. While *Pong* seemed radically new at the point of its release, by 1976 there were several dozen video games on the market and route operators were clamoring to place the most successful of these machines in prime locations.

By the time *RePlay* reported on the top performing games in October 1975, just three years after video games became the hot new thing in the coin-op industry, video games already made up a significant percentage of route collections.¹⁴⁷ Within a few years, video games went from being nowhere to being seemingly everywhere. The machines had cropped up overnight, and worse, they had cropped up in places where young children had ready access to them. The violent actions depicted in *Death Race* could have served as a catalyst to the growing uneasiness regarding games, particularly with regards to youth access. Several of the factors outlined above likely contributed to the reaction to the game, and different factors may have helped to mobilize different people.

¹⁴⁷ "Replay Route Analysis," *RePlay* October 1975, 38.

Infamy and Its Aftermath

The number of individuals who took notice of *Death Race*, in particular the number of newswriters and newscasters who took notice, was unprecedented. Even coverage that appeared as news, rather than editorial, would have helped perpetuate the controversy by legitimizing concerns and raising awareness of the issue. An article in *The New York Times* in December of 1976 indicated that the game had attracted the attention not only of local authorities, but of the National Safety Council. In the article, the author refers to the game's stick figure targets as "symbolic pedestrians" and quotes extensively from the manager of the NSC's research department, behavioral psychologist Gerald Driessen. Driessen notes that nearly 9,000 pedestrians were killed in the past year, presumably in driving accidents, and argues that video game violence is categorically different from television violence:

On TV, violence is passive [...] In this game a player takes the first step to creating violence. The player is no longer just a spectator. He's an actor in the process [...] I'm sure most people playing this game do not jump in their car and drive at pedestrians [...] But one in a thousand? One in a million? And I shudder to think what will come next if this is encouraged. It'll be pretty gory.¹⁴⁸

In the article, Exidy's response, delivered by way of general manager Phil Brooks, is that the game is not actually depicting graphic violence: "If we wanted to have cars running over pedestrians, we could have done it to curl your hair." He goes on to that the sound that accompanies the gremlins' destruction is a "beep" not a scream or shriek: "We could have had screeching of tires, moans and screams for eight bucks extra [...] But [...] we

¹⁴⁸ Ralph Blumenthal, "Death Race' Game Gains Favor, But Not With the Safety Council," *The New York Times*, December 28, 1976. ProQuest Historical Newspapers: The New York Times (1851 - 2007). (AAT: 03624331).

wouldn't build a game like that. We're human beings, too." At the time of the *New York Times* article, Exidy had already built and sold 900 *Death Race* units, and Brooks explicitly said the coverage of the game, no matter how negative, had driven sales.¹⁴⁹

A *New York Times* article published in August of 1977 again summarizes the game and quotes from Driessen. However, here, the tone is different. Titled "Postscript: Controversial 'Death Race' Game Reaches 'Finish' Line," the article presents itself as a close to a controversy that had made headlines for the better part of a year. Exidy had ceased manufacture of *Death Race* earlier in 1977, and while the remaining machines might be problematic, the game seems less of a clear and present danger. The article does recount a scene from Westwood Electronic Amusement Center in Los Angeles, where the reporter saw a young girl score 6 hits on the machine while under the supervision of her father, who encouraged her by saying "You sure were chasing them." The article closes by quoting a 13-year-old fan of the game who responds to the suggestion the game may make him violent: "That's stupid, and besides I don't even know how to drive."¹⁵⁰ The issue is presented as somehow resolved, no longer a serious threat, even though children are still playing the offending game. The issue specifically of *Death Race* may have settled enough to lurch out of the spotlight, but the overall issue of video game violence has persisted, and the continuing history of video gaming violence is inextricably bound to considerations of gender in the medium.

¹⁴⁹ Ralph Blumenthal, "Death Race' Game Gains Favor, But Not With the Safety Council," *The New York Times*, December 28, 1976. ProQuest Historical Newspapers: The New York Times (1851 - 2007). (AAT: 03624331).

¹⁵⁰ Steve Harvey, "Postscript: Controversial 'Death Race' Game Reaches 'Finish' Line," *Los Angeles Times*, August 10, 1977. ProQuest Historical Newspapers: The Los Angeles Times. (AAT 04583035)

When Exidy first began manufacturing *Death Race*, they had not considered it as one of their more important designs. According to Paul Jacobs, who served as Executive Vice President for Exidy in the 1980s, the game was “originally viewed by the company as nothing more than an intermediary piece with a limited run.”¹⁵¹ The game had been performing well, but had not attracted much attention and did not seem slated to become a hit when an Associated Press reporter based in Seattle wrote a story raising questions about how child-appropriate the game was.¹⁵² The story seemed to capture public interest and triggered coverage in a variety of other outlets. Jacobs repeated the believe that the publicity had been good for the company’s image, had driven sales of the game, and had raised the image of the video game industry:

We’re not at all ashamed to talk about ‘Death Race’ ... The net result was that we handled the whole thing very well and the publicity was good for the industry As for the game, the media attention made it more popular than we ever imagined it would be ... We built over ten times the number of machines in the original release.

Apart from the proclamations of Exidy executives, the claim that controversy drove the sales of *Death Race* makes logical sense, too. In the case of *Death Race 2000* and other cult films, efforts to decry the films as explicitly violent or otherwise inappropriate likely helped attract an audience looking for cheap thrills. Similarly, the coverage of *Death Race*, while negative, would have alerted many people to the existence of the game, and likely prompted a percentage of them to seek out the game to play. By driving gameplay, the coverage would have effectively heightened the value of the *Death Race* units for

¹⁵¹ Kathy Brainard, “Exidy: Ten Years of EXcellence in DYnamics,” *RePlay*, October 1983. 93-99,100-102.

¹⁵² Kathy Brainard, “Exidy: Ten Years of EXcellence in DYnamics”

operators, because the machines would have taken in more per week than less notorious games. Therefore, if *Death Race* became an especially valuable asset for operators, they would have been more likely to purchase machines to place on routes, because of or in spite of the controversy. The coin-op industry was much maligned in popular media and imagination, and so operators may have been less inclined to sway with the winds of public sentiment.¹⁵³ Additionally, coin-op machines sold in no small part based on their perceived reliability and on recognition of the manufacturer's name. As media outlets cast attention, even negative attention, on the Exidy brand and interviewed Exidy executives, they even further raised the profile of the company among operators choosing games for purchase.

The infamy of the *Death Race* game not only drove sales of the original game, but prodded Exidy to release a sequel to the game, *Super Death Chase* in 1977. The only major difference between *Death Race* and *Super Death Chase* was that the onscreen targets were already deceased. *Super Death Chase* did not make the splash that *Death Race* had; perhaps the demons had already been exorcised. Although *Death Race 98* is sometimes referenced as a sequel to *Death Race*, based on advertisements, *Death Race* and *Death Race 98* appear to be the same game. Even the cabinet graphics are identical save for the insertion of the "98" on the banner displaying the name of the game. *Death Race 98* is first advertised in *RePlay* in March 1976 and *Death Race* is first advertised in the April 1976 issue. Given the proximity of these ads to each other and to other coverage

¹⁵³ "Editorial: Where are the powerful voices?," *RePlay*, December 1976, 3.

of the game *Death Race*, with no mention of *Death Race 98*, they appear to have been part of the same publicity campaign. The evidence offered by industry coverage from the time period does not support the categorization of *Death Race 98* as a sequel, and the two names likely represent something as minor as different versions of the cabinet graphics. Regardless, even one sequel to the game speaks to the company's confidence in the game's success.

As the hubbub over *Death Race* settled, the other violent games mentioned earlier in this chapter and the companies that had manufactured them continued to escape the same level of scrutiny. In a *RePlay* article giving a 10-year retrospective on Exidy's early success, Kathy Brainard says that *Death Race* received "more media attention than any other game prior to 'Pac-Man.'"¹⁵⁴ *Pac-Man* (Namco, 1980) had become a pop culture phenomenon, spawning a bevy of licensed merchandise, and even a novelty tune, "Pac-Man Fever."¹⁵⁵ While *Pong* should perhaps be added to this list of early games that sparked frenzy, the prominence of this first game does not undermine the volume of attention heaped on *Death Race*, and while *Pong* hit the news as a novel amusement or fad, much as *Pac-Man* did in 1980, *Death Race* presented as a cultural crisis. As discussed in the previous chapter, the video game arcade grew to be a source of significant anxiety by the early 1980s, but in 1976, these amusement halls had not quite reached prominence; most machines, as indicated by the *RePlay* route surveys, would

¹⁵⁴ Kathy Brainard, "Exidy: Ten Years of EXcellence in DYnamics"

¹⁵⁵ Buckner & Garcia, *Pac-Man Fever*, CBS Records, 1982.

have been in bars, restaurants, and other non-arcade venues.¹⁵⁶ At this first moment of crisis, then, the concern was not the loosely supervised, dimly lit arcade, but the video games themselves – and specifically, *Death Race*.

Panic and Profits

Death Race not only helped establish the Exidy brand, the game helped establish a pattern for future moral panics regarding video games. Perhaps because moral guardians lacked broad knowledge of the games available on the market, they would most frequently focus on the perceived sins of a particular game. *Death Race* may have been the first of these, but controversy greeted a variety of subsequent games, many of which, like *Death Race* enjoyed a spike in sales because of the publicity. The issue of video game violence has been anything but a sleeping dog. While for the remainder of the '70s and the early part of the '80s the public debate on video games moved from concerns over specific text to worries about the arcades themselves, the issue of violence remained simmering in the background, boiling over at the release of certain games or in the face of particularly horrifying acts of violence perpetuated by youth. Two particularly infamous game franchises, *Carmageddon* (1997) and *Grand Theft Auto* (1997) draw inspiration from *Death Race 2000* and the legacy of the *Death Race* game. In both cases, the public debate echoed the debate that surrounded Exidy's 1976 game.

In a somewhat striking parallel to the response to *Death Race*, the British company Stainless Games released *Carmageddon*, in 1997. Originally distributed as a

¹⁵⁶ "Replay Route Analysis," *RePlay* October 1975.

CD-ROM, the game was later ported for PlayStation in 1999, Nintendo 64 in 2000, and for Game Boy Color in 2001. In the United States, the Entertainment Software Ratings Board gave the game a rating of “M,” the board’s second-most restrictive rating, intended to indicate that the game is suitable only for players who are at least 17 years of age. The game was censored in other countries, including the UK where censors demanded pedestrian victims’ blood be changed from red to green, presumably to give credence to the claim – an echo of Exidy’s defense two decades earlier – that the victims were not human.¹⁵⁷ As in the case of *Death Race*, the game’s controversial nature did little to stifle sales and likely drove them. The game fared well enough to become a trilogy with *Carmageddon II: Carpocalypse Now* (1998) and *Carmageddon: Total Destruction Racing 2000* (2000). Also as in the case of *Death Race*, the game was released by a little-known company that used the game to help establish its reputation. According to lead programmer and company co-founder Patrick Buckland:

We weren’t known, the brand wasn’t known ... The game had to stand on its own two feet, and it might not have done that without the violence – though it did get fantastic reviews.

The *Carmageddon* series went on to sell approximately 2 million copies, a modest figure for a more established company but represented a triumph for a game produced by a pack of newcomers.¹⁵⁸

Another twist on the gleefully violent car game is Rockstar Games’ *Grand Theft Auto* franchise, which originally appeared in the same year as the first *Carmageddon*

¹⁵⁷ Steven Poole. *Trigger Happy*. (New York: Arcade Publishing, 2000), 207.

¹⁵⁸ “The Making of ... Carmageddon,” *Edge Magazine*, June 27, 2008, accessed September 30, 2010, <http://www.next-gen.biz/features/the-making-of%E2%80%A6-carmageddon?page=0%2C0>.

game. Developed primarily by the Scottish Rockstar North company, the *GTA* games follow protagonists attempting to make their fortune in the criminal underworld. Each game takes place in a different city based on a well-known U.S. city such as New York City or Miami. The sophisticated graphical interface of the *GTA* series has only heightened the sense of urgency that permeates public debates about the games, which have been criticized not only for violent content, but also for sexual activity including full frontal nudity, drunk driving, and for depictions of illicit activities such as prostitution. Several high-profile cases in which the games were blamed for acts of violence have helped fuel controversy. In one such incident in 2003, William Buckner, age 16, and his stepbrother Joshua Buckner, 14 killed one person and seriously wounded another by shooting at their cars. The boys told authorities they had decided to take rifles and shoot at vehicles because of the game *Grand Theft Auto III*.¹⁵⁹ In another suit, *Grand Theft Auto*, plaintiffs blamed *Grand Theft Auto* for the shooting deaths of two police officers and a dispatcher at the hands of 17-year-old Devin Thompson.¹⁶⁰ In fact, the franchise has proven so controversial that the Guinness Book of World Records named it the most controversial video game series in history.¹⁶¹ But, the pattern of media attention and moral concern that has led to *Grand Theft Auto*'s controversial status follows the pattern set years earlier with *Death Race*.

¹⁵⁹ "Lawsuit filed against Sony, Wal-Mart over game linked to shootings." *CNN*. October 23, 2003, accessed September 30, 2010, <http://www.cnn.com/2003/LAW/10/22/videogame.lawsuit.ap/index.html>.

¹⁶⁰ "Suit: Video Game Sparked Police Shootings," *ABC News*, February 15, 2005, accessed September 30, 2010, <http://web.archive.org/web/20050307095559/http://abcnews.go.com/US/wireStory?id=502424>.

¹⁶¹ *Guinness World Records 2009 Gamer's Edition* (New York: Time Home Entertainment, 2009), 108–109.

As evidenced not only by *Death Race*, but by the example of these two more recent franchises, controversy has done little to still the production of violent video games; in fact, public discourse about violence reiterates that video games are violent by making the connection between video games and violence over and over again and by raising the profile of particularly violent games. Violent games become the most popular in part because they draw the most attention, which further normalizes the violence of video games. This is to say there is much more discussion about a game like *Death Race* than there is over abstract or nonviolent games and that this discussion, in reaching people who would not necessarily be playing games reifies video game violence and renders it an integral part of video games *as a medium*. Research into the effects of violent games has remained vexingly inconclusive, and the U.S. court system has proven reluctant to restrict the circulation of materials – even to minors – without a solid rationale. In the interim from 1976 to the present, violent games have become so common that it is nearly impossible to separate violent video games from the broader category of video games more generally. Particularly in the face of historical and continued support of the video gaming industry by the U.S. military, both through less public research investments and more public licensing deals which have resulted in games like the *America's Army* game franchise/military recruiting tool, this violence is historically and culturally explicable.¹⁶²

Violence as a key characteristic of gaming has both reinforced gaming's assumed maleness and has helped curtail the disruptive potential of video gaming as a pursuit for

¹⁶² Steven Poole, 208-209.

young men. Much as the *Life* photograph works to package young gamers as athletes or boy geniuses, violent gaming bolsters a narrative framework in which gaming is an echo of the competitive fields of war, sports, and other traditionally male domains. If gaming becomes simulated war or simulated sport, then it is less threatening to the established gender order, and young men who game are more readily intelligible through the standards and assumptions of this existing order. Further, as I will argue in the next chapter, this violence has become intimately bound to popular representations of gamers and remains pervasive in even the most fantastical imagining of what gamers are capable of.

Chapter 4: Programmed for Power: *TRON*, *WarGames*, and the Violence of the Digital

While the previous two chapters have focused on journalistic coverage of video gaming, in this chapter, I turn to the production of fictionalized narratives following gamers as unlikely heroes. The depiction of gamers in Hollywood narrative cinema drew heavily on the tropes already being deployed in popular media coverage as well as on the existing codes of the action and science fiction genres. These films draw on a longer tradition of movies addressing cultural uneasiness with emerging “smart” machines, but they infuse them with the emergent culture of video gaming and hacking, and, in the case of *TRON* and *WarGames*, the two films that I will discuss at length here, suggest that the boy technologist/gamer is the solution to the problem of smart machines, an independent, flawed hero to be positioned as an unlikely line of defense against the dangers of computer technologies run amuck.¹⁶³

By the 1960s, the potential of emerging computer technologies proved a ripe topic for filmmakers, particularly those working in the action and science fiction genres. Cinematic considerations of the new machines often revealed significant uneasiness with their potential power. Stanley Kubrick found computerization a particularly troubling topic, exploring it both in *Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb* (1964) through the computer network-operated Doomsday Device, and in his landmark science fiction work *2001: A Space Odyssey* (1968), in which the HAL 9000

¹⁶³ *TRON*. DVD. Directed by Steven Lisberger. 1982; Los Angeles, CA: Walt Disney Pictures, 2011. *WarGames*. DVD. Directed by John Badham, 1983; Los Angeles, CA: MGM Video & DVD, 1998.

computer malfunctions and terminates much of the *Discovery One* crew.¹⁶⁴ As computers shifted into consumer markets in the 1970s and 1980s, both through personal computing and the proliferation of computer technologies in products ranging from sophisticated calculators to coin-op games, computerization became a source of increased anxiety.

As I examined at length in Chapter 2, video games proved a uniquely vexing form of computerization, alarming moral guardians. However, troubling or not, these games also provided one of the most widely accessible and approachable computer technologies.¹⁶⁵ Despite worries about the effects video game play might have on youngsters, the games gained in popularity in part because they provided access to emergent computer technologies. Although video games gained traction beginning with the release of *Pong* in 1972, the arcade did not emerge as a celebrated hub of youth culture until several years later. *Life Magazine*'s feature of video games in the 1982 "year in pictures" issue encapsulates the arcade as cultural craze. Films about video gaming demonstrate just how much the arcade had captured the popular imagination, providing fictional narratives about the possibilities and risks of gaming culture.

The popularity and financial success of video games in the United States made them an appealing topic for commercial filmmakers looking to cash in on the games' existing visibility. The best known of these early video game films, *TRON* (1982) and *WarGames* (1983) were released shortly before the crash that rocked the U.S. video game

¹⁶⁴ *2001: A Space Odyssey*. DVD. Directed by Stanley Kubrick, 1968; Los Angeles, CA: Warner Home Video, 2007.

Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb. DVD. Directed by Stanley Kubrick, 1964; Los Angeles, CA: Sony Pictures Home Entertainment, 2001.

¹⁶⁵ Rochell Slovin. "Hot Circuits: Reflections on the 1989 Video Game Exhibition of the American Museum of the Moving Image," in *The Medium of the Video Game*, ed. Mark J.P. Wolfe (Austin: University of Texas Press, 2001), 137-154.

industry in 1983. In both films, a boyish protagonist is pitted against a dangerous computerized entity enabled by reckless adult use of computer technologies. While both films end happily ever after with humans prevailing over the digital risks facing them, the films' major narrative tension stems from widespread uneasiness with these rapidly proliferating technologies, their social role, and their potential power. Drawing on a cinematic tradition set by films like the two Kubrick films referenced above, which featured computers as malevolent or at least dangerous characters, the two movies serve as benchmarks in the consolidation of ties between masculinity, violence, and youth in the new digital landscape.

While the two films work with divergent visual aesthetics, both rely heavily on the generic conventions of action movies and target a young, presumably male audience. Both follow the exploits of male leads and engaging significantly with both video gaming and hacking as practices – practices which these films often conflate. And, in both films, computers have the sheen of novelty; given the obsession with emergence that drives the market for computer technologies, this sense of novelty has become a trope readily deployed in films and television programs addressing topics including crime, espionage, and even medicine over the past several decades and continuing into the present.¹⁶⁶ In *TRON* and *WarGames* specifically, and in films addressing computerization more generally, mastery of computer technologies is the domain of the technocultural youth elite. Older characters often fail to understand the machines, demonstrating unwarranted

¹⁶⁶ Many crime procedurals, including the series *Bones* (2005-), the *CSI* franchise (2000-), the series *Criminal Minds* (2005-), and the *Law & Order* (1990-) franchise serve as examples of this tendency. Medical dramas like *Nip/Tuck* (2003-2010), *House M.D.* (2004-), and *Nurse Jackie* (2009-) while ostensibly focused on the treatment of patients frequently glory in the use of medical technologies.

trepidation or blind allegiance. The two films under examination here display a thematic flirtation with the implications of virtuality, engaging characters in situations that teeter at the edge of “the real,” and, in the case of *TRON*, pulling the characters into a disembodied “virtual” world. However, in both, to confront computer technologies is to enter into direct confrontation with significant real-world implications. The “virtual” world as presented in these films is no safe haven for play, but instead a foreign landscape that routinely threatens the safety of the “real” world outside the machines. Throughout these films young men – specifically, tech-savvy gamers – are depicted as the most capable explorers of this unfamiliar and hostile landscape.

These digital landscapes, rife with violence, are the domain of highly sophisticated programs – programs so advanced, in fact, that their artificial intelligence threatens to outpace the organic/natural intelligence of the humans who have designed them. This threat of human obsolescence is coupled with fear of human eradication or enslavement, the possibility of an inversion where the human masters are reduced to serving the machines they had manufactured. As Tom Engelhardt notes in *The End of Victory Culture*, by the early 1980s, filmmakers began to dwell on the extent to which war had become mechanized and computerized. These changes also meant that war films and conflict narratives could be targeted directly to children. As Engelhardt puts it, “Future war would be a machine-versus-machine affair, a bloodless matter of special effects, in the revamped war story designed for childhood consumption.”¹⁶⁷ The reliance on technology to estrange us from the physical violence of war drove a number of

¹⁶⁷ Tom Engelhardt. *The End of Victory Culture* (New York: Basic Books, 1995), 269.

Reagan-era research efforts, including the Strategic Defense Initiative, intended to provide an antimissile shield to protect Americans from attack.¹⁶⁸

The computerized conflict narratives of *TRON* and *WarGames* are certainly part of a cinematic interest in technologized warfare. Engelhardt notes specifically that *WarGames* is also part of a culture of growing antinuclear sentiment of the early 1980s.¹⁶⁹ While in other action films from the period like *First Blood* (1982) or *Red Dawn* (1984) the conflict is one between human actors, who live and die to defend their nationalist beliefs, in *Tron*, *WarGames*, and later related films like *The Terminator* franchise and *The Matrix* franchise the conflict is between computers/machines and humans.¹⁷⁰ The lengthy run of *The Matrix* and *The Terminator* franchises and their success as transmedia narratives that stretch across media forms serves to underscore the wide the appeal of human/computer conflict narratives.¹⁷¹ The most desirable quality for the protagonists in these films, then, is not the brute strength of *First Blood's* John Rambo, but instead the intellectual acumen to take on a hyperintelligent machine. In considering how *WarGames* compares to “hero revival films” like *Rocky IV*, the action

¹⁶⁸ Tom Engelhardt 272.

¹⁶⁹ Tom Engelhardt 271.

¹⁷⁰ The *Terminator* franchise includes (including films from 1984, 1991, 2003 and 2009, and the 2008 television series *The Sarah Connor Chronicles*. The *Terminator* series has also spawned a shockingly large number of video games, with the first officially licensed game being the *The Terminator* DOS game released in 1990. To date, there are 18 games based on *Terminator* films, and eight additional games based on *The Terminator* character and concepts but not directly on *Terminator* movies. These include, notably, *RoboCop versus The Terminator* (1992) based on both *The Terminator* and *The Robocop* (1987, 1990, and 1993 films as well as television series, video games, and comics) franchises. The *Matrix* franchise includes (including the original film from 1999, the two sequels released in 2003; a collection of animated shorts in 2003; video games including 2003's *Enter the Matrix*, and 2005's *The Matrix: The Path of Neo*, and a MMORPG called *The Matrix Online*, which ran from 2005 to 2009.; and *The Matrix Comics*, which ran from 1999 to 2004.

¹⁷¹ For a comprehensive definition of transmedia storytelling, see Henry Jenkins, “Transmedia Storytelling,” *Technology Review*, January 15, 2003, accessed November 2, 2011, <http://www.technologyreview.com/biomedicine/13052/>.

films of Chuck Norris, and the *Rambo* franchise, Michael Ryan and Douglas Kellner note that the movie is relatively liberal, carrying a criticism of militarism.¹⁷²

The anxiety over machines' competition with human laborers and thinkers is a topic which has a long tradition that predates cinema. Concern over machines replacing men rushed in at the very earliest signs of modernity. The folk hero John Henry, who famously battled a steam powered hammer to save his job and the jobs of his crew members, is likely based on a real nineteenth-century railroad worker; but the myth of the larger-than-life character, who is supposed to have died of exhaustion after winning the contest, has long outlasted the era of railroads.¹⁷³ That early Hollywood films – themselves a product of modernity – might address these kinds of anxieties is unsurprising. In *Modern Times* (1936), Charlie Chaplin is terrorized by a hyperefficient assembly line that assaults him in an attempt to mold him into an ideal worker; while the situation is played to comedic effect, the film speaks to a real anxiety about efforts to rationalize and mechanize the motions of human workers in modern factories.¹⁷⁴ In a 1952 episode of “I Love Lucy” titled “Job Switching” Lucy and her friend Ethel confront a situation similar to that faced by the Tramp; they take jobs at a candy factory where they find themselves struggling to handle the pace set by the conveyer belt.¹⁷⁵

¹⁷² Michael and Douglas Kellner, *Camera Politica: The Politics and Ideology of Contemporary Hollywood Film*, (Bloomington & Indianapolis: Indiana University Press, 1988), 228.

¹⁷³ William Grimes, “Taking Swings at a Myth, With John Henry the Man,” *The New York Times*, October 18, 2006, accessed March 7 2011, http://www.nytimes.com/2006/10/18/books/18grim.html?_r=1&ex=1168750800&en=2c72dddac54265&ei=5070.

¹⁷⁴ *Modern Times*. Directed by Charles Chaplin. 1936; Los Angeles, CA: Charles Chaplin Productions.

¹⁷⁵ “Job Switching.” *I Love Lucy*. Desilu Productions. New York, NY: CBS, September 15, 1952.

Computerization added a new dimension to these modern anxieties, lacing them with the threat not just of mechanical competition with human laborers for jobs, but human/machine competition for decision making and authority. As previously mentioned, Kubrick's *2001: A Space Odyssey* follows a space mission that fails in part because the ship's intelligent computer turns from a benevolent assistant/caretaker into a goal-obsessed egomaniac unconcerned with the safety of the ship's human crew. Sometimes, computerized or robotic intelligence is portrayed as friendly, or even nurturing. In a 1962 episode of "The Twilight Zone" written by Ray Bradbury based on his short story "I Sing the Body Electric," a family adapts to life with an electric grandmother, who cares for the family with the same love as a regular grandmother, but with no impending threat of mortality, as she will likely outlast her young charges.¹⁷⁶ In the *Star Wars* franchise begun in 1977, the droid character C-3P0 is a quirky cultural expert intended to help humans with language, etiquette, and customs; his counterpart, R2-D2 communicates in musical tones and seems rather sympathetic to the humans he serves.¹⁷⁷ While used for comedic effect throughout the *Star Wars* franchise, C-3P0 and R2-D2's characterization serves to blur the line between the human and the computerized or robotic, an uneasiness explored much more deeply in the sci-fi neo-noir *Blade Runner*

¹⁷⁶ "I Sing the Body Electric." *The Twilight Zone*. Cayuga Productions. Los Angeles, CA: CBS, May 18, 1962..

¹⁷⁷ *Star Wars: Episode IV – A New Hope*. DVD. Directed by George Lucas, 1977; Los Angeles, CA: 20th Twentieth Century Fox Home Entertainment, 2006.

Star Wars: Episode V – The Empire Strikes Back. DVD. Directed by George Lucas, 1980; Los Angeles, CA: Twentieth Century Fox Home Entertainment, 2006.

Star Wars: Episode VI – Return of the Jedi. DVD. Directed by George Lucas, 1983; Los Angeles, CA: Twentieth Century Fox Home Entertainment, 2006.

(1982), in which renegade androids, called replicants, are hunted and destroyed by “bladerunners.”¹⁷⁸

TRON and *WarGames* both occupy an important role in the cinema of human/machine conflict; the conflict, here, however is experienced through computerized gaming, a fact which makes the films unique among related science fiction and action films. Further, this focus on human/machine conflict also distances the two movies from other teen films of the same period. In particular, the arcade-focused *Joysticks* (1983) takes its cues not from *TRON* and *WarGames*, but instead from *Porky's* (1982).¹⁷⁹ The arcade in *Joysticks* serves primarily as a convenient, teen-centric setting for a generational conflict set into motion when a wealthy businessman enlists his two nephews to try to shutdown the arcade in an attempt to keep his mall hair-ed, gum popping, sunbathing daughter from spending her time there. The discomfort of moral guardians with arcade-focused youth culture has been well documented, and the theme doubtless carried some weight, but this particular tension takes a backseat in the computer-action films discussed here. While the conflict between young and old plays a part in *WarGames* and *TRON*, the essential motivating conflict remains that between humans and computers. Centered as the two films are on the conflict between man (women in the two films play auxiliary, quasi-romantic roles exclusively) and machine, both films suggest intimate ties between masculinity and computerization and imply that youthfulness is a key characteristic, necessary for both protagonists' success.

¹⁷⁸ *Blade Runner*. DVD. Directed by Ridley Scott, 1982; Los Angeles, CA: Warner Brothers, 2007.

¹⁷⁹ *Joysticks*. DVD. Directed by Greydon Clark, 1983; Los Angeles, CA: Liberation Entertainment, 2006.
Porky's. DVD. Directed by Bob Clark, 1982; Los Angeles, CA: Twentieth Century Fox Home Entertainment, 2002.

As the example of *Joysticks* should make clear, the two films I am most interested in here, *TRON* and *WarGames*, were not the only films of the period to address video gaming. *The Last Starfighter* (1983) is another compelling movie about video gaming.¹⁸⁰ In the film, a teenager worried he will live out his days in the isolated desert trailer park where he grew up is recruited as a gunner – or, starfighter – by an intergalactic defense force defeating the game *The Last Starfighter*. While the film certainly touches on the ties between masculinity, video gaming, and the military, the movie plays out as a kind of science fiction military coming of age film. The film’s protagonist, Alex, is not presented as a technologist or even as unusually bright; he is instead a talented gamer with ambitions driven by his desire to move away from his hometown and see the world. Near the beginning of the film, Alex is rejected for a student loan and is disappointed to realize he will not be able to move away for college. His recruitment as a Starfighter is based on his gaming ability, and by the end of the film, Alex finds his way out of his hometown by committing to long-term intergalactic military service. Alex’s experience, here played as fantastical, parallels in meaningful ways the experience of many Americans – men and women – who join the military as a means of funding higher education or finding work opportunities that will take them away from their home communities. The use of video games as military recruiting tools also has a real-life parallel, most notably with

¹⁸⁰ *The Last Starfighter*. DVD. Directed by Nick Castle, 1984; Los Angeles, CA: Universal Studios, 2010.

America's Army (2002), a video game released as a public relations and recruiting tool for the U.S. military.¹⁸¹

Alex's position as a working class youth puts him at a real remove from the lead characters of *TRON* and *WarGames*, as does his aforementioned lack of specific technical ability. Finally, his presentation as part of a social group of peers, including his girlfriend Maggie Gordon (Catherine Mary Stewart), suggest a character far removed from the socially awkward David and the romantically aloof Flynn. Aside from his exceptional skill as a Starfighter, Alex is an average working class teenager. He is not remarkably bright. He is not especially technologically adept. And, without a student loan, he has little opportunity for economic advancement. So, while *The Last Starfighter* is certainly worthy of lengthy consideration – particularly in light of the United States military's long interest in and recruitment through video games – it presents a narrative and a lead character quite removed from those of *TRON* and *WarGames*. The overlap between Alex with Flynn and David is limited to his age and his gaming ability. He lacks the technological abilities that make Flynn and David exceptional, and, even in these fantastical, science fiction-inspired narratives, Alex's class position far removes him from David and Flynn.

Given the Cold War rhetoric of technological achievement and knowledge as arenas for international competition, the consolidation of masculinity, youth, and violence is a point of continuation and not departure; what makes the moment noteworthy

¹⁸¹ Nina B. Huntemann, "Interview With Colonel Casey Wardynski," in *Joystick Soldiers: The Politics of Play in Military Games*, ed. Matthew Thomas Payne and Nina B. Huntemann (London: Routledge, 2009), 178-188.

is the explicit attachment of youthful masculinity to a nascent entertainment medium and the configuration of that medium to address and simulate violence. Over time, the ties between masculinity, violence, technological literacy and gaming have become so tight and so persistent as to be naturalized. Abstract ideas of what manhood might mean in the era of computerization have been reified through popular depictions of gamers which have helped entrench these ties and limit the possibilities of video gaming as a medium. This process has significantly shaped the development of the video game industry as it has influenced notions about both what kinds of people play games and what kinds of games should be made. The establishment of gaming as a specifically male pursuit has doubtless contributed to the obscurity of women gamers as they are believed to be atypical and therefore less interesting to producers intent on making money in a commercial marketplace where the customers are assumed to be male. This process is one that occurs across media, as pointed to by my analysis of early video game world record coverage in print outlets in Chapter 2. Whether gaming is framed as beneficial and admirable, as in the case of the world record coverage, or as detrimental and dangerous, as in the coverage of *Death Race*, that gaming is primarily the domain of young men and boys is taken as a given. While the print and television coverage discussed earlier certainly intersects with the kind of gamer identity presented in *TRON* and *WarGames*, the two Hollywood films represent a unique moment. In the films, video gaming and video gamers are characterized and narrativized, then presented to national audiences. Released from the boundaries imposed on documentary and journalistic coverage of

gaming, these fictional gamers demonstrate what video gaming looks like through the lens of popular imagination.

In narrating 1980s computerization, *TRON* and *WarGames* serve not only to anchor these technologies to masculinity, but also to articulate emergent forms of manhood and stress a strong bond between computer technologies, militarization, and real-world violence. This bond emerges in part from the historical origins of computers, video games, the internet, and related technologies as military technologies intended to aid in war and defense efforts. However, the understanding of the risks, values, and capabilities of the digital landscape demonstrated in *TRON* and *WarGames* is not simply military in nature. It persists, its key tenets affixed not only to the now long-established character type of the gamer, but also to contemporary ideas of entrepreneurship, technological development, and success. By consolidating the ties between masculinity, technology, and violence as they pertain to gaming, these films have served as establishing texts in the construction of a distinctive, late twentieth-century form of masculine identity which has had profound implications for the development of video gaming and of the tech industry more broadly. To further explore these themes, the connections between the two films, and their historical implications, a summary of the two is necessary.

***TRON* Synopsis**

TRON follows Flynn (Jeff Bridges), a brilliant programmer and adept gamer. While working at tech firm ENCOM, Flynn had designed five games, including the

smash hit *Space Paranoids*. Colleague Ed Dillinger (David Warner) had taken credit for these games, leveraging their success into professional ascent and corporate promotions before firing Flynn. Flynn goes on to open a successful arcade named Flynn's, but continues to obsess over taking down Dillinger by proving the authorship of *Space Paranoids* and the other games. The fired programmer has received no financial benefit from his games' success, aside from the quarters taken in by the machines in Flynn's – an insufficient reward for his brilliance. At night, Flynn accesses ENCOM's computer system looking for evidence to use against Dillinger. Flynn's hacking triggers Dillinger to temporarily limit access to the ENCOM system, which closes out Alan Bradley (Bruce Boxleitner), an ENCOM programmer who has been developing *TRON*, a program which will detect and prevent unauthorized actions in ENCOM's system. Alan and his current girlfriend Lora (Cindy Morgan), who is Flynn's ex girlfriend, seek out Flynn as they believe he is the hacker whose actions triggered the shutdown.

Flynn, Lora, and Alan then return to ENCOM after hours, and Lora logs Flynn into her workstation in a room where she and Dr. Walter Gibbs (Barnard Hughes) have designed a laser which can convert matter into digital information and back to matter. As Flynn confronts the Master Control Program and the MCP's minion Sark (both played by David Warner), Alan and Lora log in to terminals elsewhere in the building. The MCP recognizes Flynn and confronts him, using the laser to suck the intruder into the game. Inside the game, Flynn, a "user" interacts with programs which were piloted by users outside the network before being seized by the MCP and forced to participate in gladiator-style games with destruction as the penalty for losing. With Alan's Tron

program and a second program called Ram, Flynn escapes the game field. The three are chased across ENCOM's mainframe, and Ram dies. Tron/Alan meets Yori/Lora, and they go to the input/output communication tower where Tron communicates with Alan the user, receiving data which the trio of Flynn, Tron, and Yori use to defeat the MCP. With the MCP vanquished, Flynn returns to the "real" world outside the computer with the files necessary to prove he authored *Space Paranoids*. The film concludes with Flynn, who has rejoined the staff at ENCOM as an executive, arriving at work via helicopter where he is greeted by Alan and Lora.

WarGames Synopsis

While the action of *TRON* occurs within the relatively small world of the ENCOM mainframe, *WarGames* is a caper on a much grander scale, taking characters to locations across the West coast. *WarGames* opens on a missile command exercise where a missile commander refuses to turn his key to enable an attack, worrying that the attack is a false alarm and that he will be facilitating the deaths of thousands of innocent people. At headquarters, military officers and government agents assess how to improve the missile command response rate, noting that 22% of the missile commanders had failed to launch. McKittrick (Dabney Coleman) proposes taking the men out of the loop and relying on the judgment of the War Operation Plan Response (WOPR) computer. After a dispute in which General Berringer (Barry Corbin) is figured as a good ol' boy with a misplaced faith in his human missile commanders, a decision is made to turn control over the missile system to WOPR. Meanwhile, in Seattle, David (Matthew Broderick) is

playing *Galaga* (1981) at an arcade, before rushing out to arrive late at his biology class, where he is sent to the principal's office for cracking a joke.

High school heartthrob Jennifer (Ally Sheedy) offers David a ride home on her scooter, where he invites her upstairs to show her why he will not have to make up biology in summer school. He enters the school's network and changes his and Jenny's grades using a password he saw while in the office. Jenny demands he change her grade back, which he does, only to re-raise the grade after she leaves. The next day, Jenny interrupts David playing *Galaga*, asking if he can change her grade again. At his house, he tells her he had already re-raised the grade, and she sees him making illegal long-distance calls (phreaking) to California using his computer system. He explains he is trying to obtain information on *Protovision*, a game he has read about in a magazine. He finds an unidentified computer, and believing the unidentified machine to be related to *Protovision*, attempts to log in. When his login fails, he asks the system for help. The system says help is not available, but responds to "help games" with the message, "Games refers to models, simulations, and games that have tactical and strategic applications" and a list of games running from "Falken's Maze" to "Global Thermonuclear War." David visits some hacker friends, who advise him to look for the system's backdoor, which they suspect is related to the "Falken's Maze" game.

In an effort to locate the game's backdoor, David begins researching Falken. At the library, David discovers Stephen W. Falken, a game and computer expert who died in 1973 following the death of his wife and son, Joshua, whose name turns out to be the login for the system. David logs in and launches a game of *Global Thermonuclear War*. The

“game” David is playing triggers a flurry of activity back at the military control center, where officials believe the Russians are attacking. The next day, David is arrested by FBI agents outside a 7-11. He surreptitiously logs into the system while in custody and realizes the system Falken named Joshua does not know the difference between reality and a game. David escapes and goes to Oregon with Jenny to find Falken, who he has learned is living under an assumed name. Falken initially refuses to help, but eventually acquiesces, and the three return to headquarters to attempt to prevent World War III. Ultimately, David logs in and challenges Joshua to tic tac toe. The game ends in a tie. He then sets Joshua to play himself, and Joshua plays again and again, ending in a draw each time and sucking power from the rest of the system. Joshua, realizing there are no possible winning versions of the game, then runs iterations of global thermonuclear war and decides that the only winning move is not to play. The movie ends with the crisis averted and the drawling General’s judgment revealed as superior to McKittrick’s.

Reception

Both *TRON* and *WarGames* faced significant problems during production and initial release. Disney had not ventured into computer animation prior to *TRON*, and although the movie remains a landmark of technological innovation in filmmaking, the film’s initial reception was lukewarm. The release triggered a significant drop in the price of Disney’s stock.¹⁸² *TRON* may have been doomed to a negative reaction by stockholders, as it came in the midst of significant changes to the company, including the

¹⁸² “‘Tron’ hurts Disney stock,” *The New York Times*, July 8, 1982, D5.

opening of the grossly over budget EPCOT Center, the launch of the Disney Channel, and Touchstone Pictures, and ultimately the ousting of CEO Ron W. Miller.¹⁸³ That Miller's projects, including the more adult-oriented Touchstone Pictures and the foray into premium cable television with the Disney Channel, became rather lucrative is an irony worth noting. Regardless, stockholders were still skittish about the changes, and, additionally, Disney's live-action studio had long been floundering – at the time of *TRON*'s release, the most recent hit was still 1968's *The Love Bug*. E. Cardon Walker, who had been installed by founder Walt Disney to handle advertising and public relations, seemed to have a fundamental distrust of both marketing and advertising. At the time of *TRON*'s release, other studios spent up to \$10 million per picture in publicity and advertising. Walker refused to raise even miniscule budgets for promotional efforts, citing Disney's conviction "that the only publicity worth the money was free."¹⁸⁴ The underwhelming publicity effort did the film no favors. Despite the lack of publicity support from Disney, *Tron* attained moderate success over time, costing Disney roughly 17 million to produce and grossing 33 million.¹⁸⁵ These earnings were not enough to make the film a considerable success, and doubtless, Disney management was disappointed with the film's earnings. *WarGames* had also faced problems before its release, with director John Badham replacing Martin Brest as the head of the project over

¹⁸³ James B. Stewart, *Disney War* (New York: Simon and Schuster Paperbacks, 2005), 45-48.

¹⁸⁴ James B. Stewart, 45.

¹⁸⁵ The Internet Movie Database. "Box office/business for TRON (1982)." May 2009, accessed May 3, 2009, <http://www.imdb.com/title/tt0086567/business>.

differences between Brest and the studio and producers.¹⁸⁶ However, in sharp contrast to *TRON*, *WarGames* was a blockbuster success for MGM, grossing over 79 million in the U.S. alone on a budget of just 12 million, making it the fifth-highest grossing film in the U.S. for 1983, behind films including *Star Wars Episode VI: Return of the Jedi*.¹⁸⁷

Both films received some critical encouragement. *TRON* received Oscar nominations for costume design and sound,¹⁸⁸ and *WarGames* garnered nominations for cinematography, sound, and writing. Reviewing *TRON* in 1982, Roger Ebert referred to the film as “a technological sound-and-light show that is sensational and brainy, stylish, and fun” and awarded it four stars.¹⁸⁹ He had similarly high praise for *WarGames* in 1983, calling the movie “a scary and intelligent new thriller that is one of the best films so far this year,” and awarding it the same star rating.¹⁹⁰ However, other critics did not join Ebert in his warm embrace of *TRON*. *Variety* summed up the film by saying the plot was underwhelming: “Screenwriter-director Steven Lisberger has adequately marshalled a huge force of technicians to deliver the dazzle, but even kids (and specifically computer

¹⁸⁶ “Badham replaces Brest as ‘War Games’ helmer; cite usual ‘differences’.” *Variety*, September 8, 1982, 7.

¹⁸⁷ The Internet Movie Database. “Box office/business for WarGames (1983).” accessed May 3, 2009, <http://www.imdb.com/title/tt0086567/business>.

The Internet Movie Database, “Box office/business for Star Wars Episode VI: Return of the Jedi (1983),” accessed January 13, 2011, <http://www.imdb.com/title/tt0086190/business>

Box Office Mojo, “1983 Domestic Grosses,” accessed November 8, 2009, <http://boxofficemojo.com/yearly/chart/?yr=1983&p=.htm>.

¹⁸⁸ The Internet Movie Database. “Awards for TRON (1982),” accessed May 3, 2009, <http://www.imdb.com/title/tt0084827/awards>.

¹⁸⁹ Roger Ebert, “Tron.” *The Chicago Sun Times*. January 1, 1982, accessed May 3, 2009, <http://rogerebert.suntimes.com/apps/pbcs.dll/article?AID=/19820101/REVIEWS/201010350/1023>.

¹⁹⁰ Roger Ebert, “WarGames.” *The Chicago Sun Times*. June 3, 1983, accessed May 3, 2009, <http://rogerebert.suntimes.com/apps/pbcs.dll/article?AID=/19830603/REVIEWS/306030301/1023>.

game freaks) will have a difficult time getting hooked on the situations.”¹⁹¹ *The New York Times* perhaps best summarized the negative critical responses to the film, saying simply, “It is beautiful – spectacularly so, at times – but dumb.”¹⁹² The plot of *TRON* manages to be both convoluted and facile, reviews provided conflicting accounts of what exactly had happened in the film but often agreed that what had happened was not particularly interesting.

WarGames fared better with critics, and made a strong showing at the Cannes Film Festival.¹⁹³ *WarGames* generally received solid reviews and fared well in outlets including *Variety*, which credited the film’s director with much of its success: “Although the script has more than its share of short circuits, director John Badham solders the pieces into a terrifically exciting story charged by an irresistible idea ...”¹⁹⁴ However, some critics were less enamored, and *New York Times* reviewer Vincent Canby dismissed the film, saying that it “is an entertaining movie that, like a video game once played, tends to disappear from one’s memory bank as soon as it’s finished.”¹⁹⁵ Canby’s assessment of the film has ultimately proven false, as *WarGames*, like *TRON*, has remained popular among audiences.

¹⁹¹“Tron.” *Variety*, January 1, 1983, accessed May 2, 2009,

<http://www.variety.com/review/VE1117795896.html?categoryid=31&cs=1&p=0>.

¹⁹² Janet Maslin, “Tron (1982),” *The New York Times*, July 9, 1982, accessed May 2, 2009,

<http://movies.nytimes.com/movie/review?res=9500E7DB103BF93AA35754C0A964948260>.

¹⁹³ “Crowd boos Bresson at Cannes prize ceremony; ‘WarGames’ plays well,” *Variety*, May 25, 1983, 5-7.

¹⁹⁴ “Wargames.” *Variety*. January 1, 1983, accessed May 2, 2009,

<http://www.variety.com/review/VE1117796199.html?categoryid=31&cs=1&p=0>.

¹⁹⁵ Vincent Canby, “‘Wargames,’ A Computer Fantasy,” *The New York Times*, June 3, 1983, accessed May 2, 2009,

<http://movies.nytimes.com/movie/review?res=9F0DE6D9103BF930A35755C0A965948260&scp=4&sq=wargames,%20movie&st=cse>.

While *WarGames* received both more positive critical attention and much greater financial success than *TRON*, both films have fared well in the long run, attaining substantial cult followings and retaining a high level of cultural visibility over two decades later. This persistent attention has carried both films through multiple VHS and DVD releases, and has contributed to the push to produce sequels of both, including *WarGames 2: The Dead Code* (2008) and *TRON 2.0* (2011).¹⁹⁶ Less sanctioned celebrations of the films, particularly *TRON*, persist as well: *TRON* fan and computer consultant Jay Maynard has made a name for himself as “The Tron guy” appearing at public events in a true-to-film *TRON* suit which he designed and constructed.¹⁹⁷ The afterlife of these films speaks to their continuing salience; regardless of whether they are “good” in the sense of attaining critical or financial success, they have retained significance for audience members, including those who first viewed the films as children and have now grown up to become part of the contemporary technological and cultural elite.

Reception

The ongoing popularity of *TRON* and *WarGames* owes not only to the nostalgia of computer aficionados like – at the extreme – Jay Maynard, but also to the persistent cultural relevance of the narrative elements and character types set out in the films. The protagonists of both films draw on character types which were emergent in the late 1970s

¹⁹⁶ Interestingly, while the sequel to *WarGames* was a low-budget affair that went straight to DVD upon its release, *TRON 2.0* was a major studio release, given the full backing of Disney’s now substantial publicity and promotional efforts and featuring Jeff Bridges, now an acclaimed actor, as a major character.

¹⁹⁷ Jay Maynard. “All about Jay Maynard, the TRON guy,” accessed 2 May 2009, <http://tronguy.net/>.

and throughout the 1980s, and have subsequently become part of the stock narratives of the computer age. This narrative, as I have been arguing throughout, is one in which computer technologies are closely associated with violence and masculinity. David and Flynn overlap significantly as characters. They operate under a similar moral code and exhibit similar intellectual and cultural habits. The two are some of the earliest examples of a character type that would become further developed and entrenched in films like *Sneakers* (1992), *Hackers* (1995), and *Takedown* (2000). The narratives around these fictional characters are further echoed in popular discourse surrounding both computer industry superstars like Bill Gates¹⁹⁸ and Steve Jobs¹⁹⁹ and high profile hackers like

¹⁹⁸ The public image of Bill Gates is one dependent on his image as a young (or, as he ages – youthful) computer whiz with a sharp eye for business. The fact that Gates dropped out of Harvard has become part of this myth, allowing him to play the role of the boy genius and the self-made man even as his greatest achievements seem to have been the accrual of significant wealth. Gates is an exemplary computer-age capitalist. John Steele Gordon and Michael Maiello describe Gates as an opportunistic upstart and “one of the most serious (and contentious) capitalists in the subculture of geeks who freely shared new ideas in a group called the Homebrew Computer Club.” (John Steele Gordon and Michael Maiello. “Pioneers Die Broke,” *Forbes.com*, December 23, 2002, accessed November 3, 2009, http://www.forbes.com/forbes/2002/1223/258_print.html.) Giving a commencement speech at Harvard after receiving an honorary degree from the university he’d dropped out of 1976, Gates made light of his non-standard career path, which has been a key part of the public biography of Gates: “I want to thank Harvard for this honor. I’ll be changing my job next year, and it will be nice to finally have a college degree on my resume ... For my part, I’m just happy that the Crimson called me ‘Harvard’s most successful dropout.’ I guess that makes me valedictorian of my own special class. I did the best of everyone who failed. But I also want to be recognized as the guy who got Steve Ballmer to drop out of business school. I’m a bad influence. That’s why I was invited to speak at your graduation. If I had spoken at your orientation, fewer of you might be here today.” (Gina Hughes, “Bill Gates Gets Degree After 30 Years,” *The Techie Diva*, June 8, 2007, accessed November 3, 2009, <http://tech.yahoo.com/blog/hughes/13653>.)

¹⁹⁹ Jobs’s image, like that of Bill Gates, hinges partially on his dropping out from college – in Jobs’s case, the institution was Reed, not Harvard. Like Gates, he also had early ties to the Homebrew Computer Club. His interest in music culture is played up in many profiles, and is further bolstered by the market dominance of the iPod as the portable music player of choice. A piece circulated by AARP depicts Jobs a music-obsessed iconoclast in a turtleneck and jeans (Alexandra Starr, “Never Settle! Secrets of an Innovator: Apple CEO Steve Jobs exemplifies lifelong learning and creativity,” *NRTA Live and Learn*, December 18, 2007, accessed November 3, 2009, http://www.aarp.org/aarp/live_and_learn/Cover_Stories/articles/Never_Settle__Secrets_of_an_Innovator.html.) A profile in *The Guardian* quotes Jobs as suggesting Gates would “be a broader guy if he had dropped acid once or gone off to an ashram when he was younger.” (Duncan Campbell, “The Guardian profile: Steve Jobs,” *The Guardian*, June 18, 2004, accessed November 3, 2009, <http://arts.guardian.co.uk/features/story/0,11710,1241745,00.html>.) Profiles depicting Jobs as having been a

Kevin Mitnick (a speaker and security consultant formerly considered most wanted computer criminal in the U.S.), Jonathan Joseph James (a.k.a. c0mrade, the first juvenile convicted and incarcerated for cybercrimes in the United States), and Robert Tappan Morris (who created the Morris Worm and became the first person prosecuted under the 1986 Computer Fraud and Abuse Act).²⁰⁰

Although Flynn and David were written into existence during the lifetimes of several of the people mentioned here, their national notoriety came near the beginning of the rise of the computer culture that made celebrities of Gates, Jobs and others. Many viewers of *WarGames* and *TRON* would have been peering into computer culture as outsiders who lacked not only immediate familiarity with but even second degree-knowledge of the culture depicted on screen. The films circulated nationally in areas far removed from the industry's hubs, and as mainstream releases, reached relatively rural areas where computerization of work and education would have likely been particularly slow – even if video games were appearing at local gas stations or other outposts. These films then, serve in some ways as introductory cultural texts, particularly for young viewers.

The Flynn and David characters earned their iconic status in part because of the work done by the screenwriters. In the case of *WarGames*, the screenwriters developed their plot and characters in part by talking with computer enthusiasts, enabling them to

bright and mischievous child imply, not too lightly, that these characteristics remain key to his successes as an adult (Amanda Andrews, "Steve Jobs, Apple's iGod: Profile," *The Telegraph*, January 14, 2009, accessed November 3, 2009, <http://www.telegraph.co.uk/technology/apple/4242660/Steve-Jobs-Apples-iGod-Profile.html>.)

²⁰⁰ "The 10 Most Famous Hackers of All Time," *IT Security*. April 15, 2007, accessed November 3, 2009, <http://www.itsecurity.com/features/top-10-famous-hackers-042407/>.

create a film that greatly appealed to technologists despite their own lack of technological know-how and the somewhat minimal level of tech savvy evidenced in the film. *WarGames* evolved from a 1979 script titled *The Genius*, in which a dying scientist must pass his knowledge on to a smart-alecky teenager. Walter F. Parkes and Lawrence Lasker, the writers of *The Genius*, later met Stanford Research Institute-associated futurist Peter Schwartz, who told the pair about the developing youth hacker culture. The teenaged smart aleck with a solid head for technology, that unlikely heir to the throne of scientific achievement in the original script, was in fact a rough summarization of the young men who were finding their way into the computer industry by hook or by crook. According to a 2008 article, “Schwartz made the connection between youth, computers, gaming, and the military,” which sparked changes to the script of *The Genius* that resulted in *WarGames*. According to Schwartz:

There was a new subculture of extremely bright kids developing into what would become known as hackers. SRI was in Palo Alto, and all the computer nerds were around: Xerox PARC, Apple just starting — it was all happening right there. SRI was node number two of the Internet. We talked about the fact that the kinds of computer games that were being played were blow-up-the-world games. Space war games. Military simulations. Things like Global Thermonuclear War. SRI was one of the main players in this.²⁰¹

The writers also interviewed real-life hacker David Scott Lewis, who is considered the basis for the character of David Lightman.²⁰² The success of *WarGames* owes in part to the careful negotiations made between technological knowledge and mass appeal. The

²⁰¹ Scott Brown, “*WarGames*: A Look Back at the Film That Turned Geeks and Phreaks Into Stars,” *Wired*, July 21, 2008, accessed May 2, 2009, http://www.wired.com/entertainment/hollywood/magazine/16-08/ff_wargames?currentPage=all.

²⁰² Dean Takahashi, “A Q&A That is 25 Years Late: David Scott Lewis, the Mystery Hacker Who Inspired the Film ‘War Games.’” *VentureBeat*, August 12, 2008, accessed May 2, 2009, <http://venturebeat.com/2008/08/12/a-qa-that-is-25-years-late-david-scott-lewis-the-inspiration-behind-the-film-war-games/>.

writers represent hacking and phreaking in a way that actual hackers and phreaks found accurate at a cultural level without overloading the film with details that would have overwhelmed less technologically savvy viewers. They also manage to retain the connection between youth, computers, gaming, and the military that had caught Schwartz's attention. This distillation of identifying characteristics helps serve to frame a distinct type of masculinity. *WarGames's* roots in the experience of real hackers doubtless helped contribute to the film's resonance, and also helped to imbue the film's hero with characteristics that were valued in this emergent subculture. The movie, in turn, helped to abstract and solidify those valued characteristics.

Using a different set of tactics, the developers of *TRON* aspired to make a computer-focused narrative that would be accessible to a wide audience. Steve Lisberger and business partner Donald Kushner had previously had some success with *Animalympics* (1980), an animated television special spoofing the Olympics. Lisberger had seen a sample reel of computer-generated imagery from MAGI (Mathematical Applications Group, Inc.) in 1976, shortly before being exposed to *PONG*. Lisberger and Kushner initially conceived of an entirely animated film set in a computer world, and took the idea to several studios, none of whom expressed interest. The pair found an unlikely home for their project at Disney, a company which had little history of accepting projects from outside producers. The animators reconceived the film as a mix of animation and live action which likely disappointed Lisberger, who was an early convert to computerized effects, claiming in 1982 that computer graphics would eventually

replace all visual effects.²⁰³ As a film, *TRON* serves primarily as a vehicle for the then cutting-edge visual effects. Although ultimately mere minutes of the film were completed as computer animation, the distinctive style still proved eye catching. The film's visual aesthetic is the work of a trio of influential artists including French comic book artist Moebius; Syd Mead, an industrial designer who had worked on the film *Blade Runner* (1982) and would later work on *Aliens* (1986); and commercial artist Peter Lloyd.

While *WarGames* seduced through its depiction of an emergent youth subculture, *TRON* relied instead on the novelty of its visual content. Critics who found fault in *TRON* often focused on the seeming vapidness of the film's aesthetic obsessions. However, even though the plot and characters of *TRON* are largely subsidiary to the film's imagery, they carry a set of implications about computer technologies, masculinity, violence, and intellectual prowess echoed in *WarGames*. *TRON* and *WarGames* share significant thematic content. Both hinge on a slippage between reality and virtuality, and both address anxieties about the risks of computerization. Additionally, both were written and produced near the pinnacle of the arcade craze, and were released just months before the U.S. video game industry entered its first crash period. However, the most compelling reason for reading these films in tandem emanates from connection made explicit in *WarGames* – that between youth, computers, gaming, masculinity and the military.

Although *TRON* is less explicitly militarized than *WarGames*, the MCP's stated goal is domination of the human world, an imagined global takeover not too far removed

²⁰³ John Culhane, "Special Effects are Revolutionizing Film," *The New York Times*, July 4, 1982, May 3, 2009, <http://www.nytimes.com/1982/07/04/movies/special-effects-are-revolutionizing-film.html?sec=technology&spon=&pagewanted=all>.

from the enslavement or eradication of humanity conceived in *Terminator* and *The Matrix*; the domination of humans by machines has proven one of the most persistent plots in narratives addressing our uneasiness with smart machines. In both *TRON* and *WarGames* the computer is figured as sentient. In *WarGames*, the personified computer system Joshua demonstrates a capacity not only to experience ludological pleasure, but also to learn, while in *TRON* the MCP has a maniacal desire to control the human world, believing itself a more capable manager than the flawed users who currently boss around most programs.

These monster computers or computer programs tend to fall into two general categories: machines similar to Joshua, which make poor judgment calls based on some fundamental inability to understand complex situations, or machines like the MCP, which desire to control or harm humans for their own gain. In some related narratives, the focus is on what makes characters human in the first place, asking viewers to consider whether the story's artificially intelligent character may deserve some of the same empathy afforded human characters. Famously, in the case of *Blade Runner*, different edits of the film provide different answers to the question of whether or not the film's titular character, the blade runner Rick Deckard (Harrison Ford) is himself a replicant, and the last of the two replicants Deckard is tasked with retiring are, themselves, unnervingly human, carrying out a romance and trying to escape the forced menial labor that is the lot of all replicants. Neither *TRON* nor *WarGames* venture into this murky territory. Joshua may be rather personable in its presentation through voice, but exists only as a computer program, not as an embodied humanoid character; the MCP is sentient, but so power

hungry and malicious as to seem completely unhuman. While Joshua and the MCP differ in their reasons for their actions, both constitute a significant threat to humans, and both have to be stopped by the protagonists, who are figured as whizkid technologists, young men – or at the very least, boyish men – who are uniquely suited to address the threats of real-world violence posed by computerized entities.

TRON and *WarGames* both bear the fingerprints of late Cold War politics. The officials at Missile Command in *WarGames* mistakenly believe that the Russians are attacking, in what is perhaps a not-too-subtle reference to *Dr. Strangelove* (1964). The FBI agents handling David treat him as a communist agent, with one character noting, “He fits the profile perfectly. He’s intelligent but an underachiever, alienated from his parents, has few friends, a classic case for recruitment by the Soviets.” This description of David, of course, parallels the negative traits associated with video gamers both during the time of the film’s production and release and in the present. *TRON*’s corporate setting less directly addresses global politics, but the MCP’s treatment of the lesser programs he lords over echoes the actions of a tyrannical dictator. The MCP and his agent Sark demand that the programs sent to the game grid renounce their belief in “users,” and threaten those who refuse to make such a renouncement with lesser training for the gladiatorial games they will be forced to play. In this context, Flynn as a user from outside the system, fulfills the role of a wisecracking digital Christ, not only validating the beliefs of the faithful, but also enabling them to overthrow their tormentor and restore freedom. In this way, the plot incorporates themes from anti-communist propaganda distributed in the U.S. during the decades-long cold war, which represented communists

as “godless” and warned that communist takeover would result in the suppression of Christian faith.

Tron and *WarGames* are not the only popular films to engage with these kinds of issues. The early 1980s saw a spate of Hollywood films that more than flirted with anti-communism as a key plot point. In *Red Dawn* (1984) a band of teenagers defend themselves against the invading forces, utilizing guerrilla tactics and calling themselves “Wolverines” after their high school mascot; in *Invasion U.S.A.* (1985), Matt Hunter (Chuck Norris) forms a one-man defense against Latin American communist guerrillas led by a Soviet operative; and in *Rocky IV* (1985), Rocky Balboa (Sylvester Stallone) challenges Soviet boxer Ivan Drago (Dolph Lundgren) after the brutish Drago pummels Apollo Creed (Carl Weathers) to death in the ring.²⁰⁴ The engagement with Cold War policies may now serve to date these films but would have, at the point of their release, anchored them to then-current concerns which were common film fare in the mid-1980s.

A further similarity between *TRON* and *WarGames* is the significant overlap in their main characters. Flynn and David both embody a set of cultural and political values that emerged with video gaming and computerization in the 1970s and 1980s. Characterized by youthfulness, a high level of technological knowledge and intelligence, fierce competitiveness and independence, and a willingness to disregard rules and standards, these boyish early adopters survive and excel by showing themselves particularly adept at playing by the emergent standards of a society in flux. They

²⁰⁴ *Invasion U.S.A.*. DVD. Directed by Joseph Zito. 1985; MGM Video and DVD, 2001.
Red Dawn. DVD. Directed by John Milius. 1984; Los Angeles, CA: MGM Video and DVD, 2007.
Rocky IV, DVD. Directed by Sylvester Stallone. 1985; Los Angeles, CA: MGM Video and DVD, 2005.

distinguish themselves as exceptional embodiments of the technomasculine. This form of masculinity, first evolving in the 1970s and 1980s, has proven particularly salient in both fictional and documentary narratives regarding the development and diffusion of computer technologies, in which the accomplishments of individual entrepreneurs are fetishized and the names of successful individuals are often as well known as the products of the corporations they found or helm.

TRON's Kevin Flynn is markedly older than *WarGames*' David, but Flynn is figured as juvenile, a gamer king in jeans and sneakers who holds court over the arcade he owns and draws significant audiences to his record-breaking bouts of play; at one point, Lora reacts to one of Flynn's wisecracks by saying "Now you can see why all his friends are 14 years old." This comment, intended as a dig, may actually flatter Flynn who seems to see his own boyishness as a particularly valuable personality trait. Allen serves as a sober, bespectacled foil to Flynn, which further underscores the latter's boyishness. Even while Lora may have ultimately chosen Allen over Flynn, there is a clear implication that Flynn is cooler and smarter than either. David's young age is highlighted throughout *WarGames*, and his young age seems to particularly alarm the military and governmental experts who try to handle him; notably, Falken, himself a gifted computer scientist and researcher, seems less shocked.

In *Die Tryin': Video Games, Masculinity and Culture*, Derrick A. Burrill argues that the proliferation of gaming has facilitated the expansion of boyhood, which now exists not only as a premature form of manhood, but also as a gendered identity

accessible to adult men at any point.²⁰⁵ While Burrill suggests that this use of boyhood may enable regressive, immature behavior, the narrative of gamer identity presented in both *TRON* and *WarGames* suggests instead that boyhood is essential to success in the digital landscape and is not the hobble that Burrill might suggest it to be, even while his concern for the apparent sexism embedded in this construction is something I share. These boyish technoheroes in some ways complicate modernist ideals of masculinity and in fact offer their geek credentials not as a social or professional limitation, but instead as their most valuable asset. They are neither organization men nor men in gray flannel suits; age-wise, or at least interest-wise, they are barely men at all, and they are detached from many institutional sources of male power even as their gender is presented as integral to their achievements.²⁰⁶

The type of boyishness embodied by the teenaged David and the adult Flynn allows both to exercise their intelligence in unorthodox ways, enabling both to take risks with little concern for potential pitfalls. They are reckless in a youthful way, but that very recklessness is what makes them so brilliant. Neither shows much concern for the consequences of their actions, assuming that they will be protected by their own abilities or – as suggested explicitly by David when he tells Jenny that he cannot go to jail for making illegal long-distance phone calls because he is not yet eighteen – by their youth. The films articulate widely circulated assumptions about the identity, values, and cultural practices of gamers – who are, in these films, synonymous with hackers. These

²⁰⁵ Derrick A. Burrill. *Die Tryin': Video Games, Masculinity, and Culture*, (New York City: Peter Lang Publishing, 2008).

²⁰⁶ William H. Whyte, *The Organization Man*, (Philadelphia: University of Pennsylvania Press, 2002). Sloan Wilson, *The Man in the Gray Flannel Suit*, (New York: De Capo Press, 2002).

assumptions had taken shape over the previous decade in coverage of the coin-operated video game craze and the young players, figured simultaneously both as brilliant technowizards and as potential social deviants in need of careful attention from moral guardians. *TRON* and *WarGames*, then, serve, in part, to reclaim the boy genius gamer/hacker as desirable, a potentially powerful fighter in the Cold War race of arms and ideas. As the films lead viewers to conclude, the boyishness of the two protagonists is an asset which does not necessarily separate them from adulthood, but instead allows them to enact adulthood differently. Although their youthful behavior may alienate them from more conventional concepts of manhood, boyishness allows them to solve problems and confront potential enemies in innovative ways. The same tendencies that enable both protagonists to break rules and laws with bravado also enable them to take novel approaches to resolving broader conflicts. They are positioned as potentially powerful, if unconventional, assets both in military and governmental defense strategies, and in capitalist corporate endeavors.

The skills that Flynn and David apply to the conflicts in the films are related to a deep understanding of games and gameplay, and by extension, of computerized systems and computer security. The games that both David and Flynn excel at are violent and, the situations that the two encounter because of their interest in these games are even more violent; there is in this a subtle suggestion that the violence of the games may prepare them for addressing violent situations outside the games – a potential that the military has long been interested in, funding the development of games for both training and

recruiting purposes, a historical fact that doubtless helped inspire *The Last Starfighter*.²⁰⁷ Both Flynn and David are competitive gamers, Flynn at *Space Paranoids* and David at the intergalactic shoot ‘em up, *Galaga* (1981), and both are hackers of some kind. David manipulates the grades he and Jennifer have received in their chemistry class; he makes illegal phone calls via his terminal; and he first encounters Joshua via an unidentified computer in California, which he accesses in an attempt to uncover information about an unreleased game. Although Flynn’s objective ostensibly stems from a rather adult concern over having his intellectual property claimed by former colleague Dillinger, his strategies are removed only by degrees from David’s. The hacking activities of the two characters display a similar disregard for rules and regulations and an easy willingness to transgress established boundaries – legal and social – in order to locate information, demonstrate technological skill, or correct some perceived wrong. While much of what Flynn and David do is purposeful, the two gamer/hackers also work from an innate and seemingly insatiable curiosity.

The youthfulness presented in *Tron* and *WarGames* is posited as a form of masculinity unique to the computer age. As discussed in Chapter 1, the bright, capable, mischievous tech-savvy boy has a long history in U.S. popular culture that traces at least to coverage of early modern technologies like the light bulb and radio. However, these earlier boy geniuses were assumed to grow up to be good organization men, while the

²⁰⁷ Sebastian Deterding, “Living Room Wars: Remediation, Boardgames, and the Early History of Video Wargaming,” in *Joystick Soldiers: the Politics of Play in Military Video Games*, ed. Nina B. Huntemann and Matthew Thomas Payne. (London: Routledge, 2009), 21-38.
Randy Nichols, “Target Acquired: *America’s Army* and the Video Game Industry,” in *Joystick Soldiers: the Politics of Play in Military Video Games*, ed. Nina B. Huntemann and Matthew Thomas Payne. (London: Routledge, 2009), 39-52.

gamer/hacker is presented as something of a rogue operator. Even at the end of *TRON* when Flynn has ascended to take Dillinger's place, the character flies solo, arriving at work via helicopter where he is met by his ex-girlfriend/employee Lora and Allen, who is not only Lora's current boyfriend, but also, like Lora, Flynn's underling. Whether or not Lora and Allen's role in the destruction of the MCP and the uncovering of Dillinger's treachery has been rewarded is unclear, but it is obvious that Flynn has received the greatest benefit for his role in their shared exploits.

David is finally exonerated at the end of *WarGames* in part through the "expert" McKittrick's loss of status. Teenaged, mischievous David, not McKittridge the overly confident technological evangelist or Falken, the disenchanted AI expert, best understands how to outthink Joshua and save the day. David, in saving the world from nuclear war, effectively erases his earlier misdeeds, removing himself from suspicion and proving himself, not a communist agent, but, in fact, a good all-American boy. Similarly, Flynn, by working with Allen and Lora to expose Dillinger, proves himself not a security threat or substandard employee, but the best software engineer that ENCOM has ever seen – a title he had apparently held prior to his dismissal by the corrupt Dillinger. Both Flynn and David are revealed as the rightful heroes of their stories – not to the audience, who has been led to identify with the characters throughout their respective films – but to the other characters in their narrative. In both films, audience members are privy to information, such as David's relatively benign intentions or Flynn's unfair firing, which is either misunderstood or suppressed in the world of the film. In this way, the films put audience members in the position of participating vicariously in the exoneration and

celebration of Flynn and David, as they, like David and Flynn, knew better all along than the institutionalized experts.

Conclusion

TRON and *WarGames* serve as key texts of computer culture, emerging as computers were first becoming prevalent in the day-to-day lives of ordinary people and contributing to what has become a dominant cultural narrative regarding the uses and abuses of computers in the digital age. The characterization of the gamer/hacker computer whiz presented in the two films has both retained its significance and continued to evolve, appearing not only in the telling and retelling of the founding of key tech companies, but also in subsequent films, ranging from *Sneakers* (1992), to *Hackers* (1995) to *Office Space* (1999) to *The Social Network* (2011).²⁰⁸ In disseminating a cohesive, broadly accessible narrative of computer technology tied to violence, youth, and masculinity, *TRON* and *WarGames* established a blueprint for meaning making in the emerging realm of the digital. Drawing heavily on observations of emerging hacker culture, and engaging, intentionally or otherwise, with popular press coverage of the video gaming phenomenon, these films helped reify gamer identity.

Flynn and David are the prototypes not only for fictional characters in more recent texts, but also for real-life tech entrepreneurs who present themselves, and are

²⁰⁸ The representations of gender roles in these films, particularly with regards to women characters' engagement with technology and male technologists, are deeply fraught and worth further consideration. While some of these films replicate the auxiliary roles filled by female characters in *TRON* and *WarGames*, in others, particularly *Hackers*, women are presented not only as expert technologists, but as objects of intense sexual desire. Variances in female roles in these films is worth further consideration, as are more recent depictions of women as hackers, particularly on television with the character of Penelope Garcia on the series *Criminal Minds* (2005-).

presented through mediated narratives, as embodiments of a similar values system. Although the two protagonists are reclaimed as the good guys by the films' ends, similar narratives of tech-savvy whiz kids with a willingness to bend the rules cropped up in less celebratory coverage of hacking and phreaking. Based on the exploits of some of the earliest computer literate youth, David and Flynn brought narratives of hacking, gaming, and technological wizardry to millions of viewers across the United States and beyond, expanding and reinforcing the masculine identity already emerging with the new computer technologies. *TRON* and *WarGames* did much to establish the archetype of the gamer boy genius and effectively broadcast this identity nationally and internationally to an audience largely composed of children who would become early natives of the era of computerization.

By consolidating ties between computer technologies, youth, violence, and the military, *Tron* and *WarGames* helped establish the emerging digital landscape in the popular imagination as a dangerous proving ground for young men coming of age in the era of computerization and helped cement the perceived bond between gaming and potential social deviancy. Not only did the films valorize the exploits of their characters, they helped reinforce the presumed male-ness of computer technologies including video games, and echoed moral guardians' worries about the social effects of computerization and video game violence. In depicting the emergent computer society, Hollywood narratives conceived of a culture in which the virtual and the real converged at messy borders, with potentially catastrophic effects for inhabitants on both sides of the divide – the threat barely contained by the efforts of young men willing to play against previously

established rules. As computer technologies have neared ubiquity, narratives like those presented in *Tron* and *WarGames* remain salient, influencing public perception not only of computer technologies, but more importantly of technologists, ranging from teenaged gamers to middle-aged tech industry entrepreneurs to potentially threatening hackers.

As computer technologies have become normalized, they still have retained a powerful mystique, as demonstrated in the recent film *The Social Network*, which provides a dramatic retelling – and fictionalization – of how Mark Zuckerberg (played by Jesse Eisenberg) founded Facebook. In the film, Zuckerberg displays a willingness to break rules and a wardrobe of jeans and hooded sweatshirts, similar to the earlier cinematic characters of David and Flynn. However, the boy genius narrative here is less than celebratory, unfolding through legal proceedings regarding allegations that the film's main character had ripped off the idea for Facebook from other students at Harvard, and that he had deliberately bilked his friend and cofounder out of his share of the company's earnings. For added bad-guy credit, when Zuckerberg is dumped by his girlfriend, he retaliates against her by berating her on the internet. The Zuckerberg revealed in the narrative is joyless, bitter, and lonely. He has a chip on his shoulder about the privileges enjoyed by wealthier students, he endures the legal proceedings that provide the film's narrative structure with slumped shoulders and snide commentary, and he pines for the young woman who, near the film's opening, assured him as she was breaking up with him:

You are probably going to be a very successful computer person. But you're going to go through life thinking that girls don't like you because you're a nerd. And I want you to know, from the bottom of my heart, that that won't be true. It'll be because you're an asshole.

His willingness to break rules has so infested his own social life that he is shown as incapable of connecting with other people in meaningful ways. The film ends by revealing that the Facebook founder is the world's youngest billionaire after showing him obsessing over whether or not to send a Facebook "friend request" to the ex girlfriend the audience watched dump him. Even his pining seems too self-serving to be pitiable. Despite the poor-little-rich-boy spin at the narrative's closure, the Zuckerberg of the film is shown throughout as emotionally stunted and jealous – a far cry from the charming and brilliant characters at the center of *TRON* and *WarGames*.

If David and Flynn embody the most socially and culturally desirable gamer/hackers, the fictionalized Zuckerberg exists at the end of the line. While this character is clever enough to gain financial success, his boyishness and willingness to break the rules may make him financially successful, but also make him socially unpalatable to the point that his *Citizen Kane*-style loneliness seems well deserved. *The Social Network* (2011) gained wide critical acclaim and numerous Academy Award nominations, including in the coveted Best Picture and Best Director category, and winning Best Film Editing, Best Screenplay Adaptation, and Best Original Score.²⁰⁹ The popularity of the quasi-biography may point to significant shifts in the way young male technologists are viewed in the popular imagination. While David and Flynn both save the world, Zuckerberg develops a highly successful social networking site while alienating everyone in his real-life social network. The presumed "real"-ness of this more recent narrative certainly plays a part, but the brilliant boy gamer complete with the

²⁰⁹ *The Social Network*. DVD. Directed by David Fincher. 2011; Los Angeles, CA: Sony Pictures, 2011.

proverbial heart of gold seems to have been displaced by the blindly ambitious young entrepreneur.

To understand the rise, diffusion, and cultural effects of computing requires a critical understanding of early mass narratives of these technologies and the culture surrounding them. The vision of computerization in *TRON* and *WarGames* is one that has, in many ways, both come to pass and persisted, lasting several decades, and finding real-world expression in attempts to characterize successful entrepreneurs and technologists. In present cinema, the character types imagined in *TRON* and *WarGames* seem to have split with films like *The Social Network*, which ostensibly provide real life accounts of young technologists, exploring the real world potential of boyish tech entrepreneurs, and films like *Death Race* (2008, a remake of the 1975 *Death Race 2000*) and *Gamer* (2009) taking the consolidation of gaming, masculinity, violence, and youth to horrifying and bloody extremes. Although computer technologies and video gaming technologies have become every-day technologies, they have retained an air of novelty and a tinge of potential terror, particular in an age of proliferating surveillance.

Chapter 5: Reboot: The Arcade is Dead, Long Live the Arcade

Barcade: Brooklyn

In the fall of 2010, while traveling between a research trip and a talk I am supposed to give, I stop overnight in New York to visit a friend who lives in Brooklyn. During a night out, we land at Barcade, a combination bar-arcade, which is billed as “Celebrating American Craft Beer and Classic Arcade Games.”²¹⁰ Vintage video game machines line the walls of Barcade; classics like *Tetris* (Atari 1988), *Frogger* (Konami 1981), and *Ms. Pac-Man* (Midway 1981) are mixed with more obscure games and machines of a more recent vintage, including 1987’s anti-terrorist run-and-gun *Contra*. Drinks, including a wide selection of local and regional beers for those with more epicurean tastes, are available at the bar which is nearly as packed as the machines. Patrons trying to attract the bartenders’ attention hold up crumpled bills in their hands. Patrons waiting their turn to play video games line up their quarters on the cabinets, a practice which has long held as an arcade standard for queuing up. The patrons at Barcade are, for the most part, younger than my friend and me. When my friend says he remembers a game from childhood, the player behind us in line asks how old he is, only to respond with visible surprise to my friend’s admission that he is thirty. To say that the crowd is young is almost an understatement; many of them are college students just old enough to drink. At least one young woman tells me confidentially that she has a fake ID. The average age of a Barcade customer is likely younger than the average age of a

²¹⁰ “About,” *Barcade*, accessed January 14, 2012, <http://barcadebrooklyn.com/>

Barcade game. However, the customers appear to have strong feelings about particular machines.

Those machines with the longest lines are usually the older, most famous games. *Ms. Pac-Man* is utterly surrounded. Perhaps these hit games deserved their success, and the attention paid them in this neo-arcade is reflective only of the games' superior design. Or, perhaps the arcade, too, has developed its canon and customers simply gravitate to those games they have heard of before entering the bar. The truth is probably somewhere between the two, with games' popularity resulting both from exceptionally good design and from a few decades of notoriety. Barcade is a children's playspace reimaged as an adult entertainment avenue. It is also a place where the history of the video game machine folds back into itself – here, the video game returns to its origins as a bar amusement.

Dave & Buster's: Austin

At Dave & Buster's outlets across the United States, the arcade is reborn as a multi-attraction entertainment center. It is a bar and a grill, an arcade, a midway. Or, maybe it is whatever makes money. Friday nights at the D&B's in Austin usually find an oddball assortment of patrons ranging from working-class families to teenagers to groups of twentysomethings dressed in their finest club attire. On a Friday night in January, I drag a group of friends with me for field work. The arcade tokens have been replaced

with plastic cards – called “Power Cards” – every machine outfitted with a card reader.²¹¹ Game credits are purchased then stored electronically in customer accounts; the tickets dispensed as prizes by the machines can also be turned in at the prize counter to be stored electronically, accessible by card. Arcade currency has gone digital. We purchase cards and load them up at kiosks, feeding the machines paper money or swiping our debit and credit cards then selecting an amount. A couple watches me reload my card, one of the pair explaining to the other the way the machine works. “She’s not from America,” he tells me. I smile and say the machine hardly makes sense to me, either.

The chain’s vernacular calls the arcade a “Million-dollar Midway,” but the space’s arcade roots are showing. Shoot ‘em up and racing games are mixed with Skee Ball machines and quarter pushers – the machines with the sliding shelves of quarters, always threatening to spill into the hopper if you drop yours in at just the right moment. Machines spew tickets, and the trade-in counter – really more of a trade-in room at this particular location – does a brisk business in stuffed animals, grillz, knickknacks, and even blenders and other small appliances. On the arcade floor, I hit the jackpot on Big Bass Wheel, a spin-the-wheel type game I had just been informed is surely rigged, then spend way too much time trying to top myself at Skee Ball. There are midway style games – basketball shooting games, a game that you operate by jumping as hard as you can on a platform, a horse race game where players compete by rolling balls up a ramp to move their numbered horses forward.

²¹¹ “Power Cards,” *Dave and Buster’s*, accessed January 14, 2012, <http://www.daveandbusters.com/play/powercards.aspx>

I wander the floor after blowing all my credits and notice a college student with a fancy camera and tripod shooting his friends playing various light-up games for a class project. Eventually, I stumble across a veritable *Dance Dance Revolution* (Konami, 2009) virtuoso.²¹² As he plays on and on, a crowd gathers. He falls into backbends to hit the machine's sensors with his hands before popping back onto his feet. In a place where so many of the gamers are either very young, or very drunk on neon cocktails, to see someone so exceptionally skilled is a treat. I watch for a while, but can only determine that he seems young – his hair hangs in his face, his t-shirt is oversized, and his jeans are faded. When the game ends, he slouches off, nothing in his movements to suggest the fleet footed the performance he had just given. I do not have the opportunity to speak to him, but I am pretty sure I know his name; the teenagers at the youth center where I volunteer have told me in awed tones about some guy named Kevin – “kinda shy, but pretty nice” who is a total rock star at DDR. As he disappears into the crowd I realize I have just seen a rare bird – an arcade legend in his natural habitat.

The Arcade in Present Tense

²¹² *Dance Dance Revolution* has gone through several arcade releases. The release details provided here provide to the first of these. *Dance Dance Revolution* pioneered the rhythm and dance genre. Players compete by “dancing” on a platform or stage with colored arrows on it. Using their feet, players repeat sequences shown on the game's screen. This repetition of sequences has a predecessor in the popular 1978 electronic memory game, *Simon*, which was released by Milton Bradley. *Simon* was developed by toy designer Howard J. Morrison in collaboration with Ralph H. Baer, who is known for several innovations in video gaming, including the first light gun.

Tim Walsh, *Timeless Toys: Classic toys and the Playmakers Who Created Them*, (Kansas City: Andrews McMeel Publishing, 2005), 175.

From the 1970s to the present, much has changed, both in the video game industry and in the arcade game's cultural position. The industry crash that began in 1983 significantly reshaped video gaming. Atari had been an industrial giant, controlling 80% of the U.S. videogame market before shortfalls in profits and poorly received games took a toll both on Atari and parent company Warner Media.²¹³ In 1983, Atari lost more than \$356 million, laid off 30% of its 10,000 employees, and moved all manufacturing to Hong Kong and Taiwan. While Atari was the most significant of the video game companies operating at the time, other industry leaders were flailing as well. In 1983, Mattel's electronics division ran at a deficit of \$201 million and laid off more than a third of its staff. Activision lost somewhere between \$3 and \$5 million during a three-month period, and profits at Bally sank precipitously.²¹⁴ Nervous about the market crash, Coleco sought to diversify, releasing the Adam Computer and venturing into the toy business by licensing Xavier Roberts's dolls as Cabbage Patch Kids; the dolls' success was not enough to keep the company from filing for bankruptcy in 1988.²¹⁵

These industrial crash cleared the field of some key competitors. Even as the industry rose from its ashes, it rose in different forms. The growth of home computing greatly increased the popularity of computer games, and many gaming startups focused on these in the wake of the 1983 crash. The crash also cleared the way for companies like Sega and Nintendo to make inroads into the U.S. market, and, in the case of Nintendo, to

²¹³ Giselle Bison, "Atari: From Starting Block to Auction Block," *InfoWorld*, August 6, 1984, 52.

²¹⁴ Steven L. Kent, *The Ultimate History of Video Games: The story Behind the Craze That Touched Our Lives And Changed The World*, (New York: Three Rivers Press, 2001), 239.

²¹⁵ Steven L. Kent, *The Ultimate History of Video Games*, 252-255.

dominate the home console market.²¹⁶ Changes to the video game industry have allowed the industry to recover and thrive over time, but the once booming U.S. coin-op video game market is radically reduced. During the crash and in its immediate aftermath, many arcade owners shuttered their businesses. However, even while the number of arcades has greatly reduced, the arcade, as demonstrated by the vignettes that open this chapter, persists.

Dave & Buster's and Barcade represent two contemporary versions of the video game arcade. While Barcade uses video games as an advertised attraction and a means of distinguishing itself from other bars in the neighborhood, many other bars use video games – both classic and new – as on-site amusement options. As during the heyday of the video game arcade, many of these machines are owned by route operators, some of whom have been in business for years. In other cases, the games are bought outright by the business owners, who use the machines to lure and hold the attention of their paying customers and as a secondary means of generating income. Dave & Buster's has its roots in the video game arcade – one of the chain's founders started in the business by operating an arcade.

Although the arcade business entered a state of rapid decline after the video game industry crash of 1983, it did not die outright, and arcades today occupy a different, diminished, but still visible part of the entertainment and amusement business. Many of

²¹⁶ Steven L. Kent, *The Ultimate History of Video Games*, 278-289.

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

Chris Kohler, *Power-Up: How Japanese Video Games Gave the World an Extra Life*, (Indianapolis: Brady Games, 2004).

the largest operators persist to the present day, either as chains or as exceptionally large individual arcades. For example, the arcade chain that fought all the way to the U.S. Supreme Court for its right to operate an arcade in Mesquite, Texas, has undergone buyouts and spin offs, but is now part of one of a very large chain of arcades. Aladdin's Castle, Inc., spun off from its parent corporation in 1989 and operated independently until 1993, when it was purchased by Namco Limited. Namco Limited merged Aladdin's Castle with Namco Operations to form Namco Cybertainment, which remains the largest arcade operator in north America, currently operating 20,000 machines in over 1,000 locations.²¹⁷

The Dave & Buster's chain of entertainment centers, intended to appeal to both children and adults, uses the slogan "Escape into Play" and advertises itself as "the only place with a restaurant serving everything from wings to New York Strips, a bar with the best happy hour and a Million Dollar Midway filled with the latest interactive and video games."²¹⁸ The first Dave & Buster's opened in Dallas in 1982, the brainchild of two men from Little Rock, Arkansas, one of whom ran a restaurant/bar, and the other who ran an arcade and games joint next door. The two business owners developed the idea for a combination restaurant/bar and arcade after noticing the overlap in their clientele. Today, more than 50 Dave & Buster's locations are scattered across the United States.

While Dave & Buster's advertises itself as a family fun center, the company's website clearly features pictures of adults, many of whom appear to be dressed for a post-

²¹⁷ "Namco Cybertainment – About Us," accessed February 17, 2011, <http://www.namcoarcade.com/About.asp>.

²¹⁸ "Dave & Buster's Restaurant, Bar and Arcade for Family Fun, Parties, Meetings and More," accessed January 1, 2011, <http://www.daveandbusters.com/>.

work happy hour, with ties askew and shirt sleeves rolled up. The explicit appeal to adults, even if it is masked by claims of providing “family fun,” is one strategy that has distinguished Dave & Buster’s from competitors and likely helped the business continue to expand even as other arcades were closing up shop across the country. Further, the chain’s multiple offerings (food, drink and entertainment), and its courting of corporate parties and events has helped ensure that the business has multiple moneymaking strategies. The arcade at Dave & Buster’s may be an integral part of the business, but it is not the only source of revenue.

Television advertisements for Dave & Buster’s demonstrate this reliance on multiple revenue streams. A 2010 advertisement utilizing the chain’s “Escape Into Play” slogan features adults in business casual attire, including high heels and suiting-style skirts on women and shirts and ties on men, playing in the arcade. These scenes of play are intercut with footage lingering over the preparation of “one of eight incredible entrees.” The advertised “Eat & Play combo” includes one of the aforementioned entrees and a \$10 game card for \$15.99. The attire featured in the spot makes a clear suggestion that the “Eat & Play combo” is an appropriate post-work activity for young professionals.²¹⁹ The company’s advertisements also, at times, place Dave & Buster’s in the history of the video game arcade. Notably, a campaign launched late in 2011 utilizes 8-bit-style audio including recognizable bits of the original *Pac-Man* (Namco 1980) soundtrack along with 1980s-style typefaces to advertise the launch of *Pac-Man Battle*

²¹⁹ “Dave and Buster’s Escape Into Play,” Dave & Buster’s, accessed January 14, 2012, <http://youtu.be/VCdtS9Qu56w>

Royale (Namco 2011) at Dave & Buster's in December 2011. *Pac-Man Battle Royale* is a four-person multiplayer *Pac-Man* game utilizing the game franchise's original visual and audio style. Dave & Buster's has proven forward looking in its efforts to maintain a diversified business and in its efforts to attract adult consumers, both through advertising and through its bar-and-grill style restaurant. However, in this backward-looking advertisement, the chain relies on old stereotypes of the arcade. Despite the gender inclusivity evidenced by many of the company's advertisements, this one, which deliberately references the classic arcade era in its aesthetic, features only three people, all of them young men.²²⁰

While Dave & Buster's has benefited from efforts to expand the audience for the arcade and diversify revenues, other arcades rely heavily on their historic roots and their old-fashioned games. Arcades in tourist areas, like the Casino Arcade at the Santa Cruz Beach Boardwalk and the Playland Arcade at the Santa Monica Pier, predated the popularity of video games and survived the crash, in part because they benefit from a steady stream of vacationing customers. Further, these tourist-trap arcades' long history means they had an established presence that predated the fad for video games and often retained a diverse spread of machines. Video games may have taken up prime real estate during the height of the craze, but they did not completely displace older moneymakers like the claw machines that never quite manage to scoop up the stuffed animals packed inside or the pinball machines and other mechanical games. Some of the more famous

²²⁰ "Pac-Man Battle Royale at Dave & Buster's," Dave & Buster's, accessed January 14, 2012, <http://youtu.be/3Sq6dkbw6u0>

arcades, like the Funspot Family Fun Center in Weirs Beach in Laconia, New Hampshire, which originally opened in 1952, have become tourist destinations in and of themselves. Funspot houses the American Classic Arcade Musuem, which features 180 classic games from the 1970s and 1980s at any time; it is also home to the Annual International Classic Video Game and Pinball Tournament, and, in 2008, Guinness World Records named Funspot “The Largest Arcade in the World.”²²¹ The annual tournament has helped Funspot gain notoriety and has also built a loyal following among classic gaming devotees.

There are also newer arcades, which include both a variety of “Japanese style” arcades and arcades which are intended specifically to appeal to retro and classic gamers. The arcades that bill themselves at “Japanese style” tend to focus on shoot-‘em-up and fighting games genre-wise, and on newer rather than vintage or classic games. Japan’s popular “game centers,” which have become a part of everyday life for many Japanese people, have become an object of fascination for Americans fixated on Japanese culture.²²² Other new arcades focus on classic machines from the video game era and earlier. For example, the Pinballz Arcade in Austin has a variety of games, but focuses on pinball, housing over 80 machines, including a few dozen video game uprights, and also offering machine sales and game repair on a variety of arcade amusements.²²³

²²¹ “Funspot ... The Spot for Fun!,” accessed February 4, 2011, <http://www.funspotnh.com/>.

²²² Rol Kelts, *Japanamerica: How Japanese Pop Culture Has Invaded the U.S.*, (New York: Palgrave Macmillan, 2006).

²²³ “Pinballz Arcade,” accessed February 17, 2011, <http://www.pinballzarcade.com/>.

Remembering the Arcade

Those arcades which have survived and thrived have done so in part by tapping into the intense nostalgia with which many Americans remember the arcade. Nostalgia, as I use it here, refers to a longing for the past, which cannot be recovered. The nostalgic past is irrecoverable at least in part because it is idealized, and this idealized form of the past often points not to the superiority of the past, but to the shortcomings and disappointments of the present. This is to say that nostalgia often expresses a displaced desire for a better present.²²⁴ Arcade nostalgia is a product of the digital age and is postmodern; while nostalgia for the 1950s expresses a longing for the promises of modernity made good, the nostalgia for the arcade seems to express a longing for a more pleasant postmodern era.

Arcade nostalgia manifests itself both in the attachment to the arcade as a place, or as an environment, but also in the attachment to specific games that are directly associated with the arcade. Adults old enough to have their own families now take their children to arcades to experience something they themselves remember fondly from childhood; others continue to use the arcade as an amusement space for themselves and their peers. Younger players visit arcades for some of the same reasons that youths visited those original video game arcades in the 1970s and '80s, but their attraction to older "classic" games is doubtless shaped by the historical and cultural notoriety of these games. Even arcades which specialize in newer games often rely on "golden era" ideas of

²²⁴ Fredric Jameson, "Nostalgia for the present," *The South Atlantic Quarterly*, 88:2 (1989), 527-260.
Linda Hutcheon, "Irony, Nostalgia, and the Postmodern," *Methods for the Study of Literature as Cultural Memory, Studies in Comparative Literature*, 30 (2000), 189-207.

what an arcade should be; the campaigns evident in *RePlay* to make arcades neat, orderly, well-supervised and family friendly has certainly left a legacy, as evidenced by chains like Main Event Entertainment, based in Dallas, which combines an array of amusements including arcade games, billiards, bowling, laser tag, glow-in-the-dark mini golf and rock climbing into sprawling “family fun centers.”²²⁵

The arcade industry has persisted admirably given reports of its death, which, to paraphrase Mark Twain, may have been greatly exaggerated. Certainly the arcade is no longer a mainstay of every small town and shopping mall in America. The form of the video game arcade has changed, and the popularity has declined from the time when video gaming made *Life*'s “year in pictures” as a hot new trend. However, as computer technologies and video games have both become more broadly diffused and familiar, the arcade has come to be seen as a keystone to the history of digital culture. The arcade as it is remembered has become a symbol of a bygone era, and a site ripe for cultural and historical nostalgia. Nostalgia has been a significant factor not only in shaping the contemporary arcade, but in shaping our cultural memory of the historical video game arcade. Not only has nostalgia affected the way that we imagine and re-imagine the arcade as physical site, but it has affected the way we conceive of the historical arcade. The rehabilitation of the video game arcade has become a major project. The arcade, once a cultural fad, has now become a privileged cultural site in need of protection; particularly successful games have become part of the arcade's canon. The classical

²²⁵Louis Boasberg, “TV Games and Respectability,” *RePlay*, Showbook 1976, 20-21.

“Where are the Powerful Voices?,” *RePlay*, December 1976, 3.

Roger Sharpe, “U.S. Arcades: Some Good, Some Bad, Some Ugly,” *RePlay*, March 1977, 39-40.

“Main Event Entertainment,” accessed January 25, 2011, <http://www.maineventusa.com/>.

arcade is presented as a kind of living time capsule that consumers can visit and play in, and even newer arcades are often presented as part of a proud cultural tradition.

Outside the arcade, consumers are invited to revisit the arcade as cultural site through consumer products from sweatshirts and t-shirts to toys and games, and through media products including not only adaptations and rereleases of now-historic games, but major film and television releases. These products, while they suggest a kind of preservation or celebration of the arcade are themselves part of a process of editing and revision. Much has been written about the way that documentary efforts bear the fingerprints of their creators, reflecting the editorial decisions, interests, and even biases of those performing the labor of documentary production; documentaries addressing the history of video gaming are no exception to this set of issues. Even novelty items like candies packed in *Pac-Man* themed tins participate in this editorializing of the past as certain games such as *Pac-Man* and *Donkey Kong* are reiterated over and over again in a marketplace of licensed merchandise. This process may reflect individual companies' willingness to license their games' characters – and the persistence of these companies, as many out-of-print titles belong to companies which have long folded. However, as pointed out by Matthew Thomas Payne in his critique of plug-and-play systems, it also serves to reinforce and amplify the significance of certain games, limiting the canon of video gaming.²²⁶ While *Pac-Man* and *Donkey Kong* are doubtless important, their perceived importance serves to obfuscate the diversity of games on the market during the

²²⁶Matthew Thomas Payne, "Playing the Déjà-New: 'Plug it in and Play TV Games' and the Cultural Politics of Classic Gaming," in *Playing the Past: History and Nostalgia in Video Games*, ed. Zach Whalen and Laurie N. Taylor (Nashville: Vanderbilt University Press, 2008), 51-68.

same historical period. This historical canon of the video game arcade machine, like all canons, is a limited one.

The arcade is reconstructed through memory as is the field of gaming and the gamers themselves. As I have suggested throughout this dissertation, popular depictions of gaming both during the peak of arcade culture and in the aftermath have focused on specific types of gaming and certain kinds of gamers. The celebration of competitive gaming, in particular, has had a significant impact on the conceptualization of what gamers looked like, how they played, and why. Just as the average runner is probably not an Olympic athlete or even a marathoner, the average arcade gamer likely was not a world record holder or similarly competitive gamer. Pinning down just how prominent highly competitive gamers were in the average arcade is difficult, and certainly there was some variance as certain arcades, particularly those which made a habit of hosting tournaments, likely had a more prominent community of competitive gamers. After the fact, however, the presence of competitive gamers has increased as the narratives of competitive game play have become more prominent than narratives of casual or social gameplay. Just as the content of arcades and the diversity of games played has narrowed in memory, so has the diversity of players and ways of playing been narrowed by a focus on the most notable players. Both of these factors have altered the ways in which the arcade is remembered after the fact, as certainly has personal nostalgia and the shifting of memory among gamers, arcade owners, industry insiders, and others who experienced and help shape the culture of the video game arcade.

Arcade as Preservation Project

Despite their persistence and the warm nostalgia with which many patrons seem to view independent arcades, these businesses frequently face difficulties in surviving. The popular narrative of the arcade for the past few years has been one of endangerment, of something in need of saving. Arcades have been beleaguered businesses in many areas since their outset; unfavorable zoning ordinances, licensing and registration requirements, and other civic codes often placed a financial burden on arcades and placed them in opposition to other local business owners. Moral crusades against the arcade itself or against specific arcade games further isolated arcades from local business communities. While the Supreme Court of the United States ruling in *City of Mesquite vs. Aladdin's Castle, Inc.* discussed in Chapter 1 dampened efforts to regulate arcades, arcade owners in many cities had to carefully negotiate appealing to young customers while placating parents and other moral guardians. The 1983 film *Joysticks*, discussed briefly in Chapter 4, is based on the struggles of a group of teens to “save” their local arcade from a wealthy business man’s efforts to have the joint shut down. While the film is a *Porky’s*-style romp complete with bikini-clad co-eds and subculture stock characters, the idea that narrative of an arcade under attack might particularly resonate with teens is not farfetched. The arcade in *Joysticks* is a bit cartoonish, and the farce is certainly not invested in depicting a “real” arcade, but despite this, the movie does convey a genuine affection for the arcade, a set of feelings perhaps already amplified and altered by nostalgia as the arcade’s “golden age” was already reaching its ending. The anti-arcade faction in the film is given

the face of an uptight fat cat, but the idea that established business owners might not welcome an arcade as part of the local business community, again, may reflect as through a funhouse mirror the experience of arcade owners and patrons struggling to maintain respectability.

All of this is to suggest that in many places, the arcade may have needed saving during the heyday of coin-operated video gaming. Even before the industry crash of 1983, measures aimed at limiting youth access to arcades and the spread of arcades had a significant impact on the amount of work arcade owners had to do in order to stay in business. After the crash, the situation became untenable for many arcade owners, and waves of closures rocked the industry further.²²⁷ Not all arcades closed, but many did, and many dedicated arcade-goers found themselves without a local arcade. For many, the closure of a beloved neighborhood or town arcade seemed to signal the closing of an era. Those arcades which still persist have come to be seen as holdouts; the ones which have retained a commitment to stocking now-vintage machines have become informal historic landmarks in their own right, serving as living museums of a bygone era of gaming. Because the arcade is so established as the fertile soil from which all of video gaming grew, the arcade is a privileged site not only for those gamers who grew up going to arcades, but for those who grew up without them as well. In this way, the preservation of the arcade has become a cultural preservation effort much like efforts to preserve beloved record stores or movie theaters. This is not to suggest that the arcade is the sole point of origin for video gaming more broadly, given the integral role played by PC-based

²²⁷ Steven L. Kent, *The Ultimate History of Video Games*, 175-177.

computer games and of the home console market; it is, however, to suggest that the public nature of video game arcades granted them an especially high profile in part because this publicness meant they appealed to journalists and other media makers and attracted the attention of moral guardians.

The nostalgia for the arcade is often expressed through and coincides with nostalgia for specific games. The surprisingly ephemeral nature of arcade machines meant that many gamers experienced the “loss” of beloved games even in places where there never were arcades or where the arcade survived the crash. Individual games installed in coin-op Laundromats, bowling alleys, convenience stores and other non-arcade locations helped establish video games as part of everyday life; they also helped extend exposure to arcade machines far beyond the confines of the arcade. The nostalgia for the arcade as a space and the nostalgia for the arcade as represented by individual arcade games are not mutually exclusive, and many people who feel nostalgia for one likely have nostalgia for the other. Because the history of the video game arcades and the history of the games that occupied those arcades are so intimately intertwined, that this would be the case seems perfectly reasonable. It also means that efforts to “save the arcade” or to save individual games often serve similar ends even when they are ostensibly discrete projects. Arcade preservation efforts help create demand for vintage arcade machines, and interest in “classic” video gaming helps fuel the desire to preserve arcades. Preservation efforts take a variety of forms, and include commercial and nonprofit efforts from a wide range of organizations.

The methods of preservation and the specific aspect of the arcade deemed worth preserving vary greatly. The development of the Multi-Arcade Machine Emulator (MAME) platform beginning in 1997 and continuing to the present is perhaps one of the best-known efforts at preserving arcade culture. The initial MAME release was made by Italian software developer Nicola Salmoria; since then, the coordination of the project has passed through several people with Angelo Salese serving as the current coordinator. MAME has helped preserve access to numerous classic arcade games, making them available for play on home computer systems.²²⁸ However, as a project, MAME has the preservation of the hardware – the machines themselves – as its primary objective; enabling users to play the games is a secondary objective or side effect:

MAME is strictly a non-profit project. Its main purpose is to be a reference to the inner workings of the emulated arcade machines. This is done both for educational purposes and for preservation purposes, in order to prevent many historical games from disappearing forever once the hardware they run on stops working. Of course, in order to preserve the games and demonstrate that the emulated behavior matches the original, you must also be able to actually play the games. This is considered a nice side effect, and is not MAME's primary focus.²²⁹

In focusing on preservation, the MAME development team has signaled a commitment not to arcade *games* but to arcade *machines* as significant cultural artifacts. By focusing on “the inner workings of the emulated arcade machines,” MAME’s developers have committed themselves not to the games, but the hardware that enabled them. Arcade machines relied on a very diverse range of hardware types, and the ROM formats utilized varied from circuit boards to laserdiscs to magnetic tape, many of which are difficult to

²²⁸ “MAME|Project History,” accessed January 27, 2011, <http://mamedev.org/history.html>.

²²⁹ “MAME|About MAME,” accessed January 27, 2011, <http://mamedev.org/about.html>.

preserve or to copy. This commitment to the hardware means that the project is one explicitly of *technical* preservation rather than *cultural* preservation. Obviously, these two areas overlap, but the focus on the technologies that enable the games distinguishes MAME from most preservation efforts.

While MAME explicitly states that the ability to play the games is “a nice side effect,” the project has yielded more than two thousand playable games. MAME users are incredibly dedicated to replicating the experience of arcade play, building or modifying cabinets to accommodate computer systems so that the MAME interface more closely resembles the physical interface of an arcade game, or purchasing readymade “MAME cabinets” from makers such as X-Arcade.²³⁰ MAME’s goal may be the preservation of hardware systems and interfaces, but the “side effect” of playable games has attracted the loyalty of many gamers. The playable game ROMs allow older gamers to play games from their childhood and enable younger gamers to play games unavailable in public places. The sheer number of games accessible through MAME has made the project one of the most comprehensive efforts at preserving classic games, even while the project’s purpose remains the emulation of arcade hardware.

The interest in game archiving sparked by MAME has helped drive interest in ephemera related to video games as MAME gamers went looking for graphics relevant to their MAME experience. The Arcade Flyer Archive (TAFA), an online archive of numerous video game, pinball, and arcade game flyers, developed from personal

²³⁰ “Arcade Machines,” accessed January 27, 2011, <http://www.xgaming.com/store/category/arcade-machines/>.

collections. TAFE resulted from the merging of The MAME Flyer/Poster Archive, founded by Gerard Maathuis to provide Flyer Packs for MAME, and Arcade Nostalgia, founded by Eric Jacobson. Today, TAFE is overseen by Jacobson and Dan Hower, a serious collector who has contributed roughly half of the flyers accessible through TAFE. Utilizing the slogan, “Remember the games. Feel the nostalgia,” since the launch of its current site design in 2005, the site is positioned as a nostalgic enterprise, and clearly has gamers/fans as its intended audience. While TAFE is not a professionalized archive, it holds one of the most extensive catalogs of arcade fliers in the world. Further, the archive positions itself as a tool for preservation efforts, including MAME, and for a useful cultural history resource:

The Arcade Flyer Archive (TAFE) is a digital repository for advertisement flyers that are used by the coin-operated amusement industry to promote the sales of its games. Over time flyers represent much more than a marketing brochure. They capture a unique blend of the industry's history, graphic design trends and advertising campaigns. Most importantly, they bring out the nostalgia of countless people who have grown up with the culture of video games, pinball machines and arcade games. Unique cabinet designs, attractive artwork and real screen shots – all of which represent the visual language of coin-operated games, make flyers sought after items for collectors and effective tools for restoring games to their original factory specifications.²³¹

While both TAFE and MAME engage in preservation efforts, MAME is framed a technical, rather than a cultural enterprise. TAFE, while explicit in its cultural preservation efforts, is not a professional archive, in the sense that the people engaged in curating and preserving the flyers are not trained archivists.

²³¹ The Arcade Flyer Archive – About Us,” accessed February 21, 2011, <http://flyers.arcade-museum.com/?page=about>.

At present, TAFE has more than 6,000 video game flyers, 1,300 pinball game flyers, and 1,700 arcade game flyers.²³² The collection continues to grow as individuals are encouraged to share their collections by scanning and uploading the images. While enabling trips down an arcade-focused memory lane is presented as a core motivation for continuing TAFE, the archive is simultaneously framed as a rich resource for historians interested in the video game industry, graphic design, and advertising. Further, the flyers are presented as a valuable resource for helping with game restorations.

While TAFE is fundamentally a volunteer or amateur effort at archiving arcade culture, it serves as a kind of bridge between fannish collecting and professionalized archiving. TAFE and similar projects have doubtless helped fuel interest in the cultural history of video gaming and have helped demonstrate the interest in and necessity of preserving video gaming culture. Although Rochelle Slovin mounted *Hot Circuits*, the first retrospective of the video game, at the Museum of the Moving Image in 1989, sustained interest in the arcade as historical topic has only taken hold at academic institutions more recently, with the first significant archival efforts being mounted only in the past decade. The International Center for the History of Electronic Games, part of the Strong National Museum of Play, holds over 20,000 items related to the history of electronic gaming, the largest collection in the world.²³³ Since its founding in 2008, the UT Video Game Archive, housed at the Dolph Briscoe Center for American History at the University of Texas “seeks to preserve and protect the work of videogame developers,

²³² “The Arcade Flyer Archive,” accessed February 21, 2011, <http://flyers.arcade-museum.com/>.

²³³ “The International Center for the History of Electronic Games,” accessed November 16, 2011, <http://www.icheg.org/>.

publishers and artists for use by a wide array of researchers.”²³⁴ In the UK, the National Media Museum and Nottingham Trent University announced the National Videogame Archive, a joint project intended “to preserve, analyse and display the products of the global videogame industry by placing games in their historical, social, political and cultural contexts.”²³⁵ In all the examples cited here, these professional archives are affixed to existing institutions.

These recent heavily institutionalized efforts at video game preservation are matched by the dedicated work of less conventional preservationists – the owners, for example, of Funspot who have maintained a large collection of arcade games, or of Twin Galaxies, which has documented, in exacting detail, the top score records for hundreds of games while also carefully documenting the organization’s own history.²³⁶ The preservation of the arcade, like much of cultural preservation, is not a solely academic pursuit; indeed, much preservation work is led by individual gamers and industry members who engage in their own preservation and documentary efforts or who contribute to larger projects by donating materials or helping publicize broader projects. The vogue for preserving video game history is not isolated and seems to tie heavily to the vogue for geek chic arcade history, which I define here as the glamorization of arcade

²³⁴ “Mission,” UT Video Game Archive, accessed January 27, 2011, <http://www.cah.utexas.edu/projects/videogamearchive/mission.php>. Note that the UT Video Game Archive also houses oral histories and photographs I collected in researching this dissertation. Anyone interested in these materials should contact the archive to access them.

²³⁵ “About,” National Videogame Archive, accessed January 27, 2011, <http://nationalvideogamearchive.org/about>.

²³⁶ “American Classic Arcade Museum at Funspot,” American Classic Arcade Museum, accessed January 14, 2012, <http://www.classicarcademuseum.org/> “Twin Galaxies,” Twin Galaxies, accessed January 14, 2012, <http://www.twingalaxies.com/>

culture through the celebration and propagation of arcade games themselves and affiliated cultural artifacts through consumer goods, art works, and popular media. While most professional preservationists may cringe to hear their work reduced to an act of nostalgia, and I do not wish to do that, “nostalgia” may be one of the easiest ways to track public interest in a topic, so it makes sense that the professional preservation of arcade culture and games gains momentum at a time when nostalgia for the arcade is running particularly high. My own research has been heavily influenced and inspired by popular efforts at preserving or documenting the arcade, and in fact, I began pursuing this project after seeing *The King of Kong* at a theater in Austin – I was captivated by the *LIFE Magazine* photograph when it flashed on the screen, and I began my research by scrolling through rolls of microfilm looking for the photograph’s context.

Educational institutions and nonprofits are not the only organizations invested in the preservation of the “classic” gaming era. In 2009, Stride Gum launched a “Save the Arcades” promotion, which tapped into the idea of the arcade as an endangered cultural institution. Stride invited gamers to play *Zapatur* online and give their points to their favorite arcade; the arcade with the most points would win \$25,000 to help keep their business afloat. The competition highlighted four arcades: Arcade UFO in Austin, Texas; Game Galaxy in Nashville, Tennessee; Starbase Arcade in San Rafael, California; and Star Worlds Arcade in DeKalb, Illinois. As part of the promotion, Stride gave \$10,000 to Challenge Arcade in Wyomissing, Pennsylvania to help sustain the struggling arcade.²³⁷

²³⁷ Levi Buchanan, “Save the Arcades: Classic arcades are dying. You can help,” *Retro IGN*, August 11, 2009, accessed January 25, 2011, <http://retro.ign.com/articles/101/1012795p1.html>

The winner of this first round, however, was not Challenge Arcade, which received its cash infusion as part of a public relations effort for the larger campaign. Arcade UFO won the first “Save the Arcades” campaign.²³⁸ The promotion was so successful that Stride followed up the competition with “Save the Arcades 2” in 2010 with Ground Kontrol Classic Arcade in Portland, Oregon winning out over Arcade Infinity in Rowland Heights, California and Rocky’s Replay in Winter Park, Florida.²³⁹

Although many of the arcades featured in both Save the Arcades and Save the Arcades 2 are actually relatively young, the language used to mobilize gamers to help, either by playing the relevant game and donating points or by helping publicize the campaign through social networking channels, is a language of endangerment and preservation.²⁴⁰ The arcades, like Bald Eagles and Giant Pandas, need saving. The campaign presents itself as a direct appeal to gamers and is an effort by the chewing gum company to capture gamers as a consumer demographic. Those visiting the Save the Arcades website after the conclusion of the second campaign are greeted by a brief message summarizing the competition’s results and then encouraging the audience, interpellated by the site as “gamers” to continue their preservation efforts: “Continue to keep classic gaming alive by hanging out at your neighborhood arcade.”²⁴¹ The language here stresses the arcade’s largely eclipsed role as neighborhood fixture and insists on

²³⁸ Omar L. Gallaga, “Austin Arcade wins \$25k in ‘Save the Arcades’ Contest,” *Digital Savant*, October 9, 2009, accessed January 1, 2011, http://mo.statesman.com/blogs/content/shared-gen/blogs/austin/digitalsavant/entries/2009/10/09/austin_arcade_w.html

²³⁹ “Help Save the Arcades 2 with Stride,” accessed January 25, 2011, <http://savethearcades.stridegum.com/>.

²⁴⁰ “Arcade Profiles,” *Save the Arcades 2*, accessed November 14, 2011, <http://savethearcades.stridegum.com/arcadeprofiles.php#2?from=%2Findex.php>.

²⁴¹ “Save the Arcades,” accessed January 25, 2011, <http://www.savethearcades.com>.

gaming as a kind of community activity. While certainly the arcade has served that role at various historical points, the number of people who experience the arcade as a community gathering place in the present is finite; the number of neighborhoods which house a local arcade has dwindled to the point that the neighborhood arcade is an anomaly, a destination.

Framing and Interpreting Arcade Nostalgia

The nostalgic remaking and reimagining of the arcade results from and serves various social, cultural, and political purposes. There is no singular correct reading of arcade nostalgia, and the more widespread and salient the arcade becomes as nostalgic site, the truer this is. Bearing that in mind, this chapter addresses nostalgia for the video game arcade in a somewhat nonlinear, nonintegrated manner; there are many threads of meaning to pull on and interpret, and to untangle these threads in hope of arriving at a singular analysis of what arcade nostalgia might mean is less helpful than to consider them each and see how they interact. Those nostalgic for the arcade as childhood pleasure zone may also be nostalgic for a feeling of mastery provided by gaming, for the arcade as elite gamer enclave, or even for the arcade as the embodiment of a moment of expansion and affluence in the tech industry. In looking back to the arcade as a model, or as a privileged site, cultural producers and consumers both use the arcade to stand in for specific values.

There are many primary examples of the forms that arcade nostalgia takes – from classic gaming championships to the cooption of 8-bit aesthetics in movies and

advertisements such as the Dave & Buster's *Pac-Man Battle Royale* launch advertisement discussed earlier. By critically examining the ways in which the arcade circulates in the present, I will provide insight into the kinds of popular meanings the arcade has taken on and position the nostalgic arcade in its historical and cultural context. I use the term the "nostalgic arcade" as a means of differentiating this contemporary imagined and somewhat abstract arcade from the historical arcade in which it is rooted and the arcades, both new and old, which are currently operating as businesses. This is to say that the nostalgic arcade, while inspired by history, tells more about the present than it does about the past. As Fredric Jameson has theorized, this "nostalgia for the present" – a longing for a different present expressed as a desire for the past – shapes the way the past is remembered and revisited. Nostalgia is a deeply emotional perspective, and the nostalgic arcade is more an emotional site than a historic one. The resurrection of the arcade is not a documentary project, even when it takes the form of documentary film; it is instead an excavation and reinterpretation of the past that is contingent and partial.

The Arcade as Childhood

Although both children and adults served as patrons of early arcades, the most visible customers of these amusement halls were often teenagers and children. Arcades often served as meeting points for youths who were allowed to roam out to meet with their friends, and they also housed events like birthday parties or other celebrations, and visits to the arcade may have served as a kind of reward or treat for certain children. All of these helped cement the idea of the arcade as a happy or comfortable place and

associated it with more positive aspects of childhood. For players who experienced the arcade unsupervised as teenagers, the arcade may also represent an opportunity to exercise early economic and social autonomy away from parental guidance. The arcade, then, can be a stand-in for childhood more generally, and the nostalgic attachment to the arcade can be a nostalgic attachment to youth itself.

Related to the idea of the arcade as a stand-in for the pleasurable aspects of childhood or adolescence is the idea of the arcade, and in particular, of individual arcade games, as beloved toys. Attachment to childhood toys in a consumer culture is a profound one. Toy manufacturers at various price points invest heavily in trying to inspire the kind of intense connections that turn child owners into adult collectors and aficionados. The manipulation of adult nostalgia for childhood playthings has been an incredibly profitable marketing technique for companies like Mattel, which cater to adult collectors of their children's playthings and attempt to create demand for specific products, both new and old, by manufacturing scarcity and keeping an eye on trends that affect not only children's Christmas wishlists, but adult consumer desires.

In 2010, Mattel launched an incredibly successful campaign that allowed consumers to vote on the next career for the Barbie "I Can Be" line; the winning Computer Engineer Barbie received attention both in the mainstream press and in tech-focused publications including *Wired*, *Gizmodo*, and *PC World* and helped increase sales of the line by 144%.²⁴² Mattel received half a million votes for the winning career, and

²⁴² "Product Brand Development Campaign of the Year 2011: Winner Ketchum West and Mattel/Barbie: After 125 Careers, Barbie Gets Her Geek On," *PR Week*, March 10, 2011, accessed April 4, 2011, <http://www.prweekus.com/product-brand-development-campaign-of-the-year-2011/article/197737/>.

the doll's accessories and design were chosen with input from professionals from the Society of Women Engineers and the National Academy of Engineering.²⁴³ The voting process helped identify and build a likely consumer base of adults – including women who themselves work in computer engineering and related fields and of parents and others who want to encourage young girls to consider careers in those fields. Even more transparently, Mattel releases numerous dolls marketed to adult collectors, including an annual holiday Barbie line and re-issues of classic Barbie dolls.

Walter Benjamin, who wrote several pieces on the importance of toys and was himself a toy collector, believed that the brutality of World War I had helped fuel a growing interest in old toys. In 1928, he wrote:

When the urge to play overcomes an adult, this is not simply a regression to childhood. To be sure, play is always liberating. Surrounded by a world of giants, children use play to create a world appropriate to their size. But the adult, who finds himself threatened by the real world and can find no escape, removes its sting by playing with its image in reduced form. The desire to make light of an unbearable life has been a major factor in the growing interest in children's games and children's books since the end of the war.²⁴⁴

According to Benjamin, the kind of nostalgia that draws adults to toys – both older toys and newer children's playthings – is much more complex than a simple longing for childhood. With a nod to Benjamin, I would argue that even when the nostalgic arcade becomes a key site for revisiting childhood, the notion of childhood is one that needs to be considered carefully and to end the analysis at "childhood" is too simple and

²⁴³ Claire Cain Miller, "Barbie's Next Career? Computer Engineer," *The New York Times Online*, February 12, 2010, accessed April 4, 2011, <http://bits.blogs.nytimes.com/2010/02/12/barbies-next-career-computer-engineer/>.

²⁴⁴ Walter Benjamin, "Old Toys," in *Walter Benjamin: Selected Writings Volume 2, Part 1, 1927-1930*, ed. Michael W. Jennings et al. (Cambridge: The Belknap Press of Harvard University Press, 1999), 100.

reductive. Childhood is not a monolithic category or experience, and individuals' attachments to specific artifacts of childhood doubtless draw on complex emotional sources. Further, Benjamin's notion that nostalgia can be driven by historical circumstances which make life more difficult in meaningful ways is an important one, and one which I will revisit.

The specificity of individual people's nostalgic attachments is something well illustrated by individual narratives. In addition to informing corporate marketing and manufacturing decisions, the longing for childhood as embodied in childhood playthings has served as a narrative trope in cultural works such as *Citizen Kane* (1941) and the gamer novel classic *Lucky Wander Boy*.²⁴⁵ In Orson Welles's famous film, a reporter explores the mysterious dying word of newspaper magnate Charles Foster Kane; the word, "Rosebud" turns out to be the name of Kane's beloved childhood sled, a stand-in, in the film, for the window of Kane's childhood during which he was actually happy. Similarly, in D.B. Weiss's novel, the main character, Adam Pennyman works in a cubicle farm at a dot-com entertainment company while completing *The Catalogue of Obsolete Entertainments*. The eccentric catalog of video games is a personal project which ultimately consumes Pennyman entirely as he obsesses over his favorite game, "Lucky Wander Boy."

The book is peppered with Pennyman's encyclopedia entries, which include intense analysis of the games' cultural –and presumably personal – meanings. As

²⁴⁵ *Citizen Kane*, DVD. Directed by Orson Welles. 1941; Los Angeles, CA: Warner Bros., 2011. D.B. Weiss, *Lucky Wander Boy*, (New York: Plume, 2003).

Pennyman delves into MAME versions of game after game, it becomes apparent that he is trying to make sense of his own life, of his transience, his lack of connection, and his profound boredom. The titular “Lucky Wander Boy” has been an obsession of Pennyman’s since high school, when he spent hours playing the game only to have it unplugged and carted off just as he was about to enter the game’s mysterious third level. Pennyman’s beloved game is, of course, rare, leading him to spend much of the novel trying to track down a working arcade machine. At the same time, the game’s creator seems almost accessible as the company Pennyman works for has inexplicably purchased the movie rights for a game that failed so abysmally that most cabinets were destroyed. Pennyman eventually grows so disgusted with his employer that he vandalizes the work site and gives the company’s servers and computer equipment away to a group of day laborers. What happens next is somewhat ambiguous.

Weiss offers several possible endings for the narrative, each labeled “replay.” The book’s structure at this point takes structural pointers from video games that offer multiple possible endings depending on player action, much like the “Choose Your Own Adventure” book series, an “interactive” style of book first published in the late 1970s. The books, aimed at young readers and still published by the Choose Your Own Adventure Company, allow readers to make choices about how characters should behave; these choices then shape the unfolding of the narrative and the story’s conclusion.²⁴⁶ In *Lucky Wander Boy*, the varied endings are presented with no warning or choice. The

²⁴⁶ “Choose Your Own Adventure – 30th Anniversary Timeline,” 2008, accessed April 6, 2011, <http://www.cyoa.com/public/30thanniversary/index.html>.

notion of a “replay” suggests that each of these outcomes is possible and may, as in a video game, exist in the text simultaneously.

In the ending in which Pennyman manages to meet the game’s designer, Pennyman travels to Kyoto only to find that she has no interest in preserving the integrity of a game design she sees as fundamentally poor and who had sold the options to the game to fund her current venture, Super Lucky Spank, a spanking parlor catering to Japanese businessmen. Itachi tells him that the future is not in video games: “I am the future. The future is not in silicon or fiber optic cable or in a million polygons a second. The future is infantile. The future is humiliation. The future is punishment. For me, the future is money. We do extremely well.”²⁴⁷ In another ending, Pennyman does not go to Kyoto, choosing instead to reconcile with his girlfriend Clio, who has supported his encyclopedia project and whom he has neglected as a result of his obsession with *Lucky Wander Boy*; in this version, the couple moves to Chicago and Pennyman does not think of the game again much until he is on his deathbed. In all versions of the narrative, however, Pennyman’s obsession with seeing the third level of the game is clearly mirrored to a desire to figure out some grand life secret; he believes that the enigmatic, surreal game is a puzzle to be solved and that the solution will somehow enable him to be fundamentally *better*.²⁴⁸

In this way, the game is not only a return to his own childhood obsessions, which it most certainly is, but a porthole or an opportunity to reframe his life, as if the failure to

²⁴⁷ D.B. Weiss, *Lucky Wander Boy*, 251.

²⁴⁸ D.B. Weiss, *Lucky Wander Boy*, 251-288.

reach level three on the game has triggered a longer chain of shortcomings and failures. All of this is to say that what Pennyman is grasping at is not the game itself, but happiness, or at least his own nostalgic idea of what happiness might look like – a game level he never saw, and therefore believes capable of imparting some meaningful and transformative intellectual and emotional experience. The game designer herself rejects this kind of role, rejecting the idea that the game means anything or reflects the future. Her insistence that the spanking parlor she currently runs is not only more lucrative, but in many ways more meaningful is a tremendous disappointment to Pennyman; it is also an interesting twist as Pennyman had himself become sexually fixated on the game’s developer.

Lucky Wander Boy is part of a narrative tradition that dates at least to *Citizen Kane*, but it is also part of a more recent legacy created by books that detail the lives of pop culture obsessives. One example which gained unusual popularity, and later infamy owing to the author’s flamboyant personal life, is Frederick Exley’s *A Fan’s Notes*; it is the “fictional memoir” of a man who fixates on professional sports and in particular the career of NFL star Frank Gifford.²⁴⁹ More recently, the British author Nick Hornby has made a career writing about pop culture obsessed men. In perhaps his best-known work, *High Fidelity*, a record store owner comes of age by realizing that people should be

²⁴⁹ Frederick Exley worked in advertising, suffered from bouts of mental illness, and struggled with alcoholism. He was obsessed both with the football player Frank Gifford and with Ernest Hemingway. After the initial success of his writing career, he began using letterhead which featured a photograph of Exley looking similar to Hemingway. He also liked to be referred to as “Papa,” as the nickname was often applied to Hemingway. Late in life, Exley became absorbed by conspiracy theories involving his brother and the CIA.

Frederick Exley, *A Fan’s Notes* (New York: Vintage, 1988).

Jonathan Yardley, *Misfit: The Strange Life of Frederick Exley*, (New York: Random House, 1997).

judged not by what they like but what they are like, a realization he has partially after confronted with the deplorable record collection of a nice couple he has just met.²⁵⁰ In the more recent *Juliet Naked*, a woman winds up meeting and becoming involved with the obscure American songwriter her boyfriend has obsessively followed for years.²⁵¹ That *Lucky Wander Boy* has its own cult following, and that the novel has gone out of print and itself become a collectible object is worth noting. New copies of the paperback sell for upwards of \$50 on Amazon.com's used book marketplace.²⁵²

In both *Citizen Kane* and in *Lucky Wander Boy*, the toy or game in question represents something outside itself, and this is surely the case with other collectable toys and games; the most obvious connection may be childhood or youth, but toys can also stand in for more specific emotional states or even for more abstract values associated with youth, such as “innocence” or “ambition.” Arcade games are particularly ripe for this kind of emotional attachment as they were so rarely owned by the children and teens who most enjoyed playing them. They were objects to be visited at arcades and other sites, and, for young fans, may have seemed to simply disappear at the point they were removed from locations. That arcade games existed in public places served to make them appear more permanent even as it meant that they were fundamentally transient. The owners of the machines often lacked sentimental attachment to them, viewing them as money making investments – which they certainly were. Machines which were lagging in popularity were often removed from locations, sold, or converted using conversion kits,

²⁵⁰ Nick Hornby, *High Fidelity*, (New York: Riverhead Trade, 1996).

²⁵¹ Nick Hornby, *Juliet Naked* (New York: Riverhead Hardcover, 2009)

²⁵² Prices based on search for “Lucky Wander Boy” in the “Books Department” on Amazon.com, April 5, 2011.

their cabinet graphics painted or otherwise covered and their boards ripped out and unceremoniously replaced. The fact that individuals rarely owned the arcade machines they loved means that the sense of loss may be particularly profound, as the machines may have seemed particularly stable in existing in a set place, but were often rather transient.

While individual games can trigger loyalty and fervor, this dedication often also tends to the arcade itself. The arcade as physical, real-world space, was an important landmark for many teens and children during its heyday. Although I have argued throughout this dissertation that the arcade served numerous purposes, and in particular served to train young gamers to engage in specific cultural and economic practices, the video game arcade had leisure as its primary purpose. The arcade was a place to play. The longing for the arcade, particularly among those who work in tech fields characterized by extraordinarily demanding work schedules, may represent a longing for play as privileged pursuit.²⁵³ In this case, again, the connection to childhood is significant as many may recall childhood as a time during which they had leisure as their primary occupation.²⁵⁴ Again, this concept is intimately bound with broader conceptions of youth or of play. However, the longing for leisure sites also has more adult examples, such as when people develop intense emotional attachments to vacation homes or even to

²⁵³ “In Britain and the United States children legitimately and regularly engage in what is called play, in contrast with the work punctuated by leisure pursuits which is said to typify adult life.” Pauline Hunt and Ronald Frankenberg, “It’s a Small World,” in *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood*, ed. Allison James and Alan Prout (Bristol: Falmer Press, 1997), 119.

²⁵⁴ “In many cases, the activities of play carry nostalgic and class-informed notions of free time, leisure, and access.”

Mary Flanagan, *Critical Play: Radical Game Design*, (Cambridge: The MIT Press, 2009), 24.

destinations which served as the site of particularly memorable leisure trips. In either case, the arcade's function as a playscape is important.

This function of the arcade is important even for those who came to the arcade as older teens or adults, and is one that has some resonance even for younger gamers who never had access to a "classic arcade" before the arcades began struggling. Nearly every person who I have interviewed about their experience in the video game arcade has suggested the arcade was a social space; they went with friends, met friends there, or befriended other patrons who enjoyed similar games. In this way, the arcade may have served a similar function to a neighborhood bar, providing an easy social meeting space. In this way, nostalgia for the arcade is nostalgia both for idealized past childhood and for an idealized present adulthood. The emotional tie to the arcade in this case would be strengthened by the emotional bond to friendships associated with the arcade. As much of gaming has moved online and fewer adults join organizations like bowling leagues, the decline of the arcade may be tied to memories of routine social interaction with a closely networked community.²⁵⁵

Persistent social ties around the childhood experience of the arcade can also help fuel interest in preservation efforts. In several interviews touching on the history of the Twin Galaxies Arcade, players mentioned the time spent in the arcade as a significant social outlet. Indeed, the lasting friendships among gamers have helped drive efforts to establish a Video Gaming Hall of Fame and Museum in Ottumwa, Iowa. Josh Gettings,

²⁵⁵ Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community*, (New York: Touchstone Books, 2001).

who played at Twin Galaxies during his childhood and who now owns a bike shop in the town, became involved in the project through his friendship with Tim McVey:

Tim McVey had his – there was a documentary being filmed of, of him recently and I was interviewed as part of that and during the interview they asked me what my plans were for the twenty-fifth anniversary of Tim’s billion point score, and I hadn’t really thought of it and I told them I would probably have a quiet moment of reflection. And, they said maybe you could crack open a beer during that quiet moment of reflection, and I said yeah, that could happen and maybe I’d get a couple friends together and we’d do that and they were like yeah, now we’re going somewhere with this. So, Mark and Tim and I decided for this 25th anniversary we were going to get together and recognize Tim’s achievement and so we did.²⁵⁶

After celebrating the anniversary of his record, McVey e-mailed Walter Day to thank him for his support over the years. McVey copied Gettings, who is active in community revitalization efforts, on the message. Gettings contacted Day to ask his opinion on how he would suggest Ottumwa recognize their role in video gaming history. Day wrote back suggesting building a hall of fame and museum, an idea he had originally had in the 1980s. Much of the energy behind the push to build the International Video Game Hall of Fame has come from McVey, Gettings, and their peers, people who, as children, frequented Twin Galaxies, and who, as adults, have retained their social ties to each other and their interest in gaming.

Original Gamers

There is a running, somewhat cheap, joke that if every aging rock and roll fan who responds “I was there, man” to stories about Woodstock had actually been there, the

²⁵⁶ Josh Gettings, interviewed by Carly A. Kocurek, June 17, 2009.

concert would have been several times its size. In the case of Woodstock, these claims attempt to establish authenticity with regards to music and participation in the attendant subculture; the arcade can serve a similar authenticating function. Events like the Classic Gaming Expo (CGE), “the world’s first and largest event paying tribute to the people, systems, and games of yesteryear” allow thousands of people to converge and share their interest in classic games. As geek chic has risen, so, likely have the number of people who claim to have been dedicated habitués of the video game arcade – CGE began in 1999 and has steadily grown in scope and attendance since then.²⁵⁷ Claims of youthful arcade obsession serve the dual function of authenticating a specific kind of gamer identity and of demonstrating some kind of long-running investment in electronic gaming and related technologies. In this way, the nostalgia for the arcade is expressed via an often competitive effort to authenticate membership in arcade gaming’s original insider elite by proving themselves the most authoritative sources of gaming lore or skill.

This particular subset of arcade nostalgia finds clear articulation in arguments about how older arcade games were “better” despite their relative lack of technical sophistication. Justifications of this ranking of classic games over contemporary games include the claim that the games were more challenging or more engaging, or that the games required a higher level of skill to play. These kinds of claims, again, are a routine part of nostalgia, particularly among adults who want to impress upon younger folks that while they may have had things harder than today’s kids, they were better for their

²⁵⁷ “Classic Gaming Expo,” 2010, accessed April 6, 2011, <http://www.cgexpo.com/index.htm>.

additional efforts. For adults who were exceptional gamers as children, the arcade may stand in for youthful feelings of accomplishment, mastery, or competence.

In the documentary *The King of Kong: Fistful of Quarters* (2007), protagonist Steve Wiebe decides to pursue the world record in *Donkey Kong* after being laid off from his job as a software testing engineer.²⁵⁸ Wiebe had played video games before but had not previously been a competitive gamer. Throughout the film, Wiebe's decision to pursue the world record is presented as an attempt to ameliorate insecurities brought on by being unemployed. Wiebe's wife notes that he was a gifted musician, but none of his musical projects ever quite took off, and that he was a standout high school athlete, but did not pursue sports past graduation – claims that are backed up by footage of Wiebe playing drums and pictures of Wiebe in high school baseball and basketball uniforms. The editorial choice to contrast Wiebe's youthful ambitions and current unemployment is likely intended to win over audience sympathies, making him seem like a nice guy underdog in need of some kind of victory. Wiebe is contrasted to Billy Mitchell, one of the young men featured in the photograph taken by *Life* in Ottumwa, Iowa. Mitchell is a small business owner and remains active in competitive gaming, and, throughout the film, is portrayed as an accomplished insider with a momentous ego. I do not want to comment on the accuracy or inaccuracy of the portrayals of these two men, but rather on the way these portrayals bolster the notion that gaming is achievement oriented and that kind of achievement is satisfying and desirable for both children and adults. Both Wiebe

²⁵⁸ *The King of Kong: A Fistful of Quarters*. DVD. Directed by Seth Gordon, 2007; Los Angeles, CA: New Line Home Video 2008.

and Mitchell have a string of youthful accomplishments to look back to, and in the context of the film, classic arcade gaming is a means of either accessing or reinscribing those boyhood and adolescent accomplishments.

Arcade as Masculine Enclave

The arcade of history was certainly frequented by more men than women, but the nostalgic arcade seems to be an exclusive male enclave. In *King of Kong*, for example, the focus is on two male gamers, but the images of the arcade shown throughout, including the *Life* photograph that is the subject of Chapter 2, show the arcade as a male-exclusive space. While there is much historical evidence to suggest that the arcade attracted more male consumers, there is little to suggest that it was a particularly exclusive environment. Nolan Bushnell claimed that 40% of the income from *PONG* machines came from women players, and oral history evidence suggests that arcades usually had a small but significant female consumer base. Further, women worked in the game industry in a variety of capacities, including public relations and graphics and game design. Keeping this in mind, the question of why the arcade exists in cultural memory as a male domain raises interesting questions about gender socialization for youth and the conditions under which adult men are allowed to wax nostalgic about their own childhoods.

In one way, the nostalgic arcade seems to express a longing for an adolescent homosocial space and transposes it onto the arcade. Examples of such environments are easy to find, given the sex-segregated nature of youth activities ranging from scouting to

sports. And, indeed, the ease with which many individuals seem to remember the arcade as a particularly male place may, in fact, reflect more the memories of people who tended to socialize in sex-segregated ways as children; this is to say, men reflecting on the arcade visits of their youth may remember the arcade as a particularly male place because they simply did not notice, or at least, did not significantly interact with, the girls who were in the arcade. Their experience of the arcade may have been of the arcade as a homosocial environment even while the actual arcade population had a small but significant number of women in its ranks.

Further, as I have suggested elsewhere in this dissertation, popular press coverage of the arcade often focused exclusively on the young, male gamers or on top scoring players, helping to establish the arcade as a kind of technoplayground for boys and; films and other popular depictions of the arcade further reinforced this perception. For these reasons, the nostalgic perception of the arcade may reflect just how effectively the arcade was shaped by media representations and how consistent popular representations of the arcade were. These representations establish the arcade as a kind of natural habitat for the technomasculine. Even cursory research into the arcade or a brief viewing of one of the several recent documentaries about classic arcade gaming provides evidence to support this interpretation of the arcade. So, those men remembering the arcade would likely remember their own experience of the arcade as being one of boyish camaraderie, and this impression would be strongly reinforced by popular representations of the arcade both during the period and after the fact. The *Life* photograph discussed at length in Chapter Two may be one particularly famous example of this, but numerous examples of

similar coverage at a smaller scale are available from local and regional media outlets and have continued to the present, as evidenced by the films discussed in the previous chapter and by the extensive newspaper coverage of Twin Galaxies events.

A more subtle reason that nostalgia may have rendered the arcade so explicitly male may have to do with the social and cultural limitations placed on sentimentality for men. Cultural stereotypes of appropriate masculine behavior not only shape the different ways boys and girls experience childhood, but likely create significant differences in the way adult men and women speak about their childhoods. Under pressure to “be a man,” many men may find it risky or uncomfortable to verbalize general nostalgia for childhood. However, if the arcade is rendered a particularly masculine place, it may, like high school football teams and youthful pranks, serve as a safe topic for men who wish to express a sentimental longing for their youth. To long for a hypermasculinized, hypercompetitive environment would minimize men’s potential for gender transgression when engaging in nostalgia. In this way, the masculinization of the arcade in cultural memory may have to do with the desire to have a childhood site that is a safe subject of nostalgia for men.

Indeed, in discussing the closeness he feels to other competitive gamers with whom he grew up with, Tim McVey, who gained fame as the first person ever to score 1 million points on a video game, explicitly ties video gaming to the most privileged kind of buddy story, the war story:

This is going to sound goofy, but the way I could put it I guess is maybe somebody that was in Vietnam with somebody. You – Video games aren’t a war, and I don’t want to downplay it and make it like that. I don’t mean it that way it

all. I just mean unless you were there and knew what was, what that was about, it's kind of hard to relate maybe on some level so I, I've seen where Vietnam vets can talk to other Vietnam vets because they know what each one went through. They've got a really good understanding. Well, you know you were there years ago with these people from Twin Galaxies and you talk about the old days and they're like yeah, I remember that and I was there and Tim was there and everybody remembers it so it's kind of a camaraderie, and uh the nostalgia and uh just the competition. ... the best want to play the best, and ah that's what I think has kept a lot of us together.²⁵⁹

While McVey himself indicates some hesitation in drawing too close a parallel between the bonding opportunity provided by the arcade and the kind of bonding that occurs in warzones, his choice of analogy drives home the way that the masculinization of arcade stories may reflect men's desire to express nostalgia or social intimacy while retaining masculine credibility.

McVey, who has remained a noteworthy gamer and who is the subject of a documentary currently in production, grew up in Ottumwa, Iowa, and so has had a unique closeness with the competitive gaming community. Twin Galaxies was his local arcade during the peak of its visibility, and he remembers playing against top gamers during summer vacations when many would come to town. McVey's personal attachment to gaming is unique, both because of McVey's own exceptional skill as a gamer, and because of his long-running friendship with many classic competitive gamers. However, his sense of gaming as a community based activity and his sense of the arcade as a particularly treasured community space doubtless reflects a more broadly held sentiment. In his oral history interview, McVey estimated that roughly one third of the arcade's

²⁵⁹ Tim McVey, interviewed by Carly A. Kocurek, June 17, 2009.

customers were women, but suggests that the girls played different games. Regardless, his closest gaming friendships have been with men, and he expresses those relationships in particularly masculine terms.²⁶⁰ For McVey and for many other gamers who frequented arcades in their youth, the arcade was a male environment despite the presence of girls; for those who have come to know the arcade after the fact, the historical record has provided ample evidence that the arcade belonged to men and boys. The historical and contemporary focus specifically on *competitive* gaming in so much coverage of gaming further entrenches the notion of the arcade, and of gaming, as a masculine enclave.

Arcade as Technological Boom

The video game arcade developed largely because of the high commercial success of video games. During their first few years on the market, video game uprights significantly displaced long-time moneymakers like cigarette machines, pool tables, and pinball machines as the top earners for route operators. The earnings potential of individual games helped fuel their further distribution, and the lure of creating a hit game helped draw old-line coin-op makers into the video game market and inspired startup companies like Exidy. As detailed in Chapter 1, video games were some of the first computers many people encountered, and they were certainly one of the very first places where computers became culture. Similarly, the video game arcade, with quarters pouring out of change machines and into coin-op games, became one of the most visible signs of

²⁶⁰ Tim McVey, interviewed by Carly A. Kocurek, June 17, 2009.

a boom in the technology and coin-op sectors. The late '90s marked the rise of another boom in the technology sector, signaled by significant growth in ecommerce and other online businesses.²⁶¹ For many professionals, this period was one of unprecedented success and prosperity.

That arcade nostalgia began to emerge during this boom is worth noting, as is the fact that it has persisted and expanded in the wake of the dot-com bubble burst of 2000. The NASDAQ peaked on March 10, 2000 at 5132.52, roughly doubling its value a year earlier. From March 2000 to October 2002, however, the stock market entered a crash that resulted in the loss of \$5 trillion in companies' market value.²⁶² Companies failed, and even those which managed to stay open for business often implemented significant layoffs. For many who worked in the tech and dot-com industries, the halcyon days of the boom were over.

Nostalgia for the arcade rose with the boom of the '90s and continued through the crash. Many adult technologists of the period had developed an early interest in computers through youthful exposure to video games played either in the arcade or on home systems. As the economic promise of computing careers seemed increasingly unreliable, video games became a symbol of pre-crash computing; that the specific games which seem to be so at the heart of this nostalgia are those that predate the industrial crash of 1983 is unsurprising. In the wake of the post-'90s crash, the appeal of the pre-

²⁶¹ Bruce Abramson, *Digital Phoenix: Why the Information Economy Collapsed and How it Will Rise Again* (Cambridge: The MIT Press, 2005).

Roger Lowenstein, *Origins of the Crash: The Great Bubble and Its Undoing* (New York: Penguin Books, 2004).

²⁶² Chris Gaither and Dawn C. Chmielewski, "Fears of Dot-Com Crash, Version 2.0," *Los Angeles Times*, July 16, 2006, accessed February 7, 2011, <http://articles.latimes.com/2006/jul/16/business/fi-overheat16>.

crash, pre-1983 arcade with all of its promise of a future of technological progress, and individual success makes sense. That is to say, at the moment when these promises are proven to ring hollow, those most affected by exaggerations of economic and professional potential turn back to moments when those promises seem not to be exaggerated, and when possibilities seemed more reliably accessible.

Conclusion

The arcade embodied ideas about technology, about money, and about success that teens and young men carried with them into adulthood. In the wake of an industrial crash that seemed to demonstrate just how untenable those ideas might be in the real world, the arcade may have seemed an especially idyllic environment, an especially treasured part of childhood, a place that embodied the kind of youthful ambition and confidence which had fueled so much of the dot-com boom. Again, however, this is a kind of nostalgia for the present – the arcade comes to stand in for the way that people *wish* the present felt. The history of the arcade itself is submerged as it is reduced to a cultural style, something that is perceived and circulated as fundamentally *better* than the present. In this way, the nostalgic arcade as imagined in the present represents the late 1970s and early 1980s just as, say, the television series *Happy Days* might represent the actual 1950s.²⁶³ The nostalgic arcade is not imaginary in the sense of being fabricated. After giving and expanding on a list of cultural markers included in a 1959 Philip K.

²⁶³ Fredric Jameson, “Nostalgia for the Present,” in *Postmodernism, or, The Cultural Logic of Late Capitalism* (Duke University Press: 1990), 279-296.

Dick novel, Jameson notes: “The list is not a list of facts or historical realities (although its items are not invented and are in some sense ‘authentic’); but rather a list of stereotypes, of ideas of facts and historical realities.”²⁶⁴ The nostalgic arcade exists in this way, as a constellation of stereotypes, of fragments of facts and historical realities mixed seamlessly with the values and desires of the present.

Like most nostalgias, this postmodern nostalgia for the arcade is fundamentally conservative, expressing a longing for an eclipsed era. It is also nostalgic in glamorizing specific aspects of arcade culture which are proscribed by class, race, and gender. While the arcade as it existed was likely a stopping off point for many youths and even adults (as suggested by the interviews and primary sources I have cited throughout this work), the arcade of nostalgic representations, including those in documentary films like *Chasing Ghosts* and *The King of Kong*, is one populated almost exclusively by young white men with both the time and the money to play video games as much as they wanted – a competitive desire which drove many of these young gamers to become competitive at the national and international level. The longing for the arcade of memory is a longing not only for the arcade’s aesthetic properties, but for a glamorized technoculture where young white men were dominant – as gamers in the arcade, and as professional technologists in the public sector.

The conclusion suggested in chapter one, that we are still in the arcade, holds here; the boy genius is still fetishized, and the idea of brilliant tech geeks remaking the economic and cultural landscape should not seem too outlandish to anyone who has

²⁶⁴ Fredric Jameson, “Nostalgia for the Present,” 279.

picked up an issue of *Wired* magazine or who saw any of the media coverage of the death of Apple CEO and co-founder Steve Jobs.²⁶⁵ The celebration of Jobs as a visionary, and the public outpouring of grief at news of his passing show how enthusiastically technological advances are heralded, and demonstrate the extent to which technomasculine ideals are celebrated and accepted as models of success. Even as the arcade itself has become an endangered cultural site, the social, political, and cultural ideologies learned, tested, and taught in the arcade have become prevalent modes. The values of the arcade have gone mainstream, and even when their moral rightness is questioned, the political, social and monetary rewards available to those who embrace them are significant.

²⁶⁵ Yukari Iwatani Kane and Geoffrey A. Fowler, "Steven Paul Jobs, 1955-2011," *The Wall Street Journal*, October 6, 2011, accessed January 14, 2012, <http://online.wsj.com/article/SB10001424052702304447804576410753210811910.html>
Ned Potter, Colleen Curry, and Michael S. James, "Steve Jobs Dies: Apple Chief Made Early Personal Computer, Created iPad, iPod, iPhone," October 5, 2011, accessed January 14, 2012, <http://abcnews.go.com/Technology/steve-jobs-dies-apple-chief-innovated-personal-computer/story?id=14383813#.TxHubPKJmSo>

Conclusion

In 1999, a teenaged Jonathan Wendel spent \$500 to travel to Dallas, Texas and compete in a *Quake* (1996-, id Software) series video game tournament. Placing third in the tournament, Wendel won \$4,000. The prize impressed Wendel's father and encouraged Wendel to pursue competitive video gaming as a career.²⁶⁶ Since then, Wendel, known as Fatal1ty, has won over \$500,000 in tournament prizes, and become one of the best-known professional gamers in the world. He holds twelve world titles in five separate games, and has attracted media attention outside the limited confines of gaming sites and magazines, covered by publications like *Forbes* and *Business Week*, and featured on *60 Minutes* and MTV's *True Life*.²⁶⁷ Wendel's success on the professional gaming circuit has garnered him a number of lucrative licensing deals and helped drive his own entrepreneurial efforts. At present, the Fatal1ty brand sells computer gaming hardware including sound cards, headsets, motherboards, custom computers, and other components.²⁶⁸ While the \$125,000 prize purses available in contemporary game tournaments far exceed the spoils available to young competitive gamers in the late 1970s and early 1980s, the language through which competitive gaming is defended and

²⁶⁶ Forbes Video, "Playing Video Games for a Living," May 26, 2006, accessed December 5, 2011, <http://www.youtube.com/watch?v=Q275Qh4ESao>.

²⁶⁷ Fatal1ty, "About," accessed December 5, 2011, <http://www.fatal1ty.com/about/>
"Game Boy: Can Jonathan 'Fatal1ty' Wendel win credibility for pro gaming – and for himself?," *Business Week*, October 10 2005, accessed December 5, 2011, http://www.businessweek.com/magazine/content/05_41/b3954113.htm.

Schorn, Daniel, "Cyber Athlete 'Fatal1ty'," *60 Minutes*, January 22, 2006, accessed December 5, 2011, <http://www.cbsnews.com/stories/2006/01/19/60minutes/main1220146.shtml>.

"I'm a Gamer", *True Life*, MTV productions, original broadcast date March 13, 2003.

²⁶⁸ Fatal1ty, "Products," accessed December 5, 2011, http://www.fatal1ty.com/index.php?option=com_content&view=article&id=130.

celebrated today demonstrates continuity for its focus on competitive gamers discipline and technological skill, their intelligence, and their similarities to athletes.²⁶⁹

Wendel is often called the first professional gamer, and while this is debatable, he certainly is the most famous one at present. Certainly Wendel's competitive record is impressive. However, I bring him up here not to celebrate him as a pinnacle of gaming achievement, but to highlight the ways in which his career demonstrates the continued importance of the historic period of video gaming I have excavated in this dissertation. Wendel's rise to prominence as professional game player, as world champion with endorsement deals and branded merchandise and media interviews, has clear ties to video gaming's early world record culture. The language through which Wendel is celebrated, and through which Wendel himself expresses both his gaming achievements and his personal interests, echo early defenses of video gamers from advocates like Walter Day. For example, in 1983, when United States President Ronald W. Reagan spoke to a group of students with exceptional math and science scores at Walt Disney World's Epcot Center, he spoke positively of skills teens were acquiring from video games:

Many young people have developed incredible hand, eye and brain coordination in playing these games. The air force believes these kids will be outstanding pilots should they fly our jets.... Watch a 12-year-old take evasive action and score multiple hits while playing 'Space Invaders' and you will appreciate the skills of tomorrow's pilot ... Now don't get me wrong. I don't want the youth of this country to run home and tell their parents that the President of the United States says it's all right for them to go ahead and play video games all the time. Homework, sports and friends still come first.

The *RePlay* article quoting Regan ends by comparing coin-op games to sports:

²⁶⁹ Note that these large purses are frequently funded by game development companies, ensuring that tournaments feature their games and effectively buying the game a great deal of publicity.

Very true, Mr. President. But the amusement machine industry is truly pleased that you have considered our ‘sport’ as a positive force in the leisure/educational activities of tomorrow’s leaders.²⁷⁰

Special events, like the Olympic Arcade Tricathlon discussed in Chapter 2, further highlighted this connection to sports. At least one tournament invited players to compete against a professional athlete. The 1983 *Super Pac-Man* Tournament in Denver, Colorado invited gamers to compete against NBA Denver Nugget Billy McKinney. The tournament included hundreds of players competing at 14 arcades across the city, with 500 participants receiving NBA tickets to watch the top two participants compete as part of half-time entertainment.²⁷¹

While Walter Day and other video game boosters defended young gamers as being similar to athletes, today’s gamers sometimes claim they are athletes and that their video gaming is itself a kind of sport. Wendel is quick to point out that in addition to training eight hours a day on games, he runs daily, claiming his physical fitness contributes to his gaming excellence. He also frequently references his own background with sports, having played tennis and golf during his youth and adolescence.²⁷² Further, Wendel’s company and brand celebrate Wendel as an “E-Sportsman” and note that his training regimen echoes that of any other athlete. Further, while the lucrative licensing and endorsement deals available to Wendel may reflect a recent expansion of video gaming as a market sector, his interest in entrepreneurship and his framing as an entrepreneur again reflect the celebration of young male gamers as bright and innovative,

²⁷⁰ “President Reagan Makes Pro-Video Remarks In Recent Florida Speech,” *RePlay*, April 1983, 16.

²⁷¹ “Tournament News,” *RePlay*, May 1983, 111.

²⁷² Fatal1ty, “About,” accessed December 5, 2011, <http://www.fatal1ty.com/about/>

and as particularly well suited to the challenges and opportunities provided by a technologically advanced, service-based economy. The non-game achievements of competitive gamers continue to be used as justification or defense of their gaming, the implication being that the skills and habits learned from gaming have helped these people to cultivate desirable qualities.

The role of violence and competition as integral values of video gaming find clear expression in contemporary tournament culture as well. The heralding of individual achievement through video game competition is at the very heart of tournament culture. Further, tournaments tend to privilege certain violent game genres. Wendel has made his name as a champion with first-person shooter game franchises like *Doom* (1993), *Quake* (1996), and *Painkiller* (2004); while tournaments and records exist for a diversity of games, the largest cash prizes, the greatest level of visibility, and the most fame go to those who distinguish themselves through games like these: first-person-shooter games that are often war themed. The large prize purses offered in video game tournaments are often sponsored directly by the game companies; a large purse ensures that the tournament will draw wide participation and generate publicity. It also helps ensure that the most competitive, and by extension, highest profile, gamers will choose to play a particular game. The overrepresentation of first-person shooter games in competitive play likely reflects several factors. First-person-shooter games remain dependable top sellers, and the investment represented by a tournament purse helps distinguish. Further, the significance of first-person-shooters in tournament play is self-perpetuating, as games similar to those already played at high-level tournaments seem particularly ripe for

tournament play. After all, game companies and tournament organizers could reasonably assume that a cohort of champions interested in *Doom* might reasonably be expected to show an interest in playing freshly released games in the same genre.

Finally, even as video gaming has spread, the cost of gaming continues to be a significant factor in determining who games and how. While Wendel's success narrative involves him clearing out the \$500 in his bank account to compete in his first tournament, the cost of gaming remains significant, particularly with regards to computer games that require sophisticated graphic cards and other specialized equipment in order to operate properly. Just as young gamers in the 1970s relied on disposable income to play arcade games enough to advance their skill, today's gamers require adequate resources to obtain high-end computers that meet the required specifications of certain games. As games feature more sophisticated graphics and require faster operating speeds, adequate computer equipment for gaming is a shifting target, requiring steady upgrades. While console systems are generally less costly than computers, games for both of these systems frequently cost in excess of \$50 at release. Even as video gaming has become more widespread, the financial barriers to participation in top-end gaming remain significant. Historically, as now, not all competitive gamers are wealthy, but most live at a comfortable enough level that the cost of gaming – both the financial cost and the cost in terms of leisure time – is not a barrier to entry.

While I have focused throughout this dissertation on representations of competitive video gamers, specifically arcade gamers, during video gaming's early commercial history, I conclude by pointing to Wendel as a means of demonstrating how

salient codes of representation developed in coverage of early gamers remain even in the face of radically diversified gaming practice. Throughout this dissertation, I have argued that popular narratives of arcade gaming served to consolidate ties between digital media technologies, masculinity, youth, capitalism, and violence. This consolidation remains at the very heart of popular ideas of gamers and gaming. Jonathan Wendel's Fatal1ty brand, bears the fingerprints of this constellation of ideas. Wendel, the "cyber athlete" or "E-Sportsman" is enabled by computer technologies which he also sells; his youth is highlighted in popular and in official profiles; and, the games he plays revel in violence both militarized and otherwise. Further investigation of the ways in which these ideas have shaped and limited gaming bear careful consideration. Even as arcade culture has narrowed to serve as a niche entertainment, video gaming has expanded greatly through the console and computer markets, as well as through phone-based mobile games and other platforms. In this expansion, video gaming has diversified, but many of the ideologies embedded in early game practice persist and have troubling implications for issues of representation, inclusivity and access.

Changes to the video gaming landscape have not erased the gaming culture that developed with the arcades in the 1970s and 1980s, and much has persisted in the broader gaming culture. Continuities in gamer identity – the extension of athletic competition as metaphor for gaming, the insistence on gamers' intelligence and entrepreneurialism, the focus on violent games as representative of the medium – stem from an existing constellation of ideas and identities cultivated in and around the video game arcade. The public careers of contemporary professional gamers like Wendel demonstrate the ongoing

resonance of gamer identities forged during the earliest years of public video gaming. Further, they demonstrate the extent to which gaming culture at the highest levels of competitive play reflect inequities of access and participation. Even as the video game industry has shifted and the audience for video gaming has expanded to include Americans across demographic categories, narrower notions of what gaming can and should look like continue to shape popular narratives of gaming and sustain a gaming culture that is limited and exclusionary.

That this narrowness of gaming at a cultural level has continued despite a broadening of gaming practice and an expansion of access to gaming is particularly troubling, and highlights the extent to which video gaming as a culture can reflect significant prejudices. Current statistics suggest that most people play video games with 72% of American households playing video or computer games in 2011.²⁷³ The spread of gaming from young male obsession to a nationalized experience of media culture has coincided with changes in the industry, including an increase in affordable video game consoles, the proliferation of home computers, and the rise of social media games played through platforms like Facebook. However, these shifts have not eliminated the common perception of the gamer as a young white man with a penchant for technology and an impulse for entrepreneurial pursuits, nor have they unseated violent video games from their position as the most visible of popular games. This remains true despite evidence suggesting that teen boys make up just 13% of contemporary gamers; further, the average

²⁷³ Entertainment Software Association, "Essential Facts about the Computer and Video Game Industry: 2011 Sales, Demographic and Usage Data," 2011, accessed December 6, 2011, http://www.theesa.com/facts/pdfs/ESA_EF_2011.pdf.

age of a gamer is 37 with 29% of gamers being over age 50, and women and girls making up 42% of game players.²⁷⁴

The overt celebration of young male achievement and the elevation of violent games as “hardcore” in the face of this diversification in gameplay and in gamer identity may be an instance of retrenchment, an attempt to protect some part of gaming as an elite male enclave as this status is increasingly challenged. I am careful to point out, however, that this set of issues is not inherent to video gaming itself; to assume otherwise is not only technologically deterministic, but flies in the face of significant evidence that cultural factors – within the gaming industry at the level of production, in the gaming community at the consumer end, and in a broader culture which too often associates particular digital technologies with areas of male expertise – overtly shape video gaming participation and practice.

Much has changed in the gaming industry over the decades from the industry crash of 1983 to the present, but the ongoing significance of notions of gaming culture first deployed prior to the crash warrant careful consideration. The assumed maleness and youth of gamers has had profound implications for public discourse around gaming. This limiting discourse has helped bolster sexist and ageist assumptions about gaming and gamers, and has served to justify exclusionary practices in gaming communities. These practices are sufficiently prevalent to be a source of tension among gamers, and have sparked creative responses from some community members. Amber Yust, for example

²⁷⁴ Entertainment Software Association, *2009 Sales, Demographic and Usage Data: Essential Facts About the Computer and Video Game Industry*, accessed October 4, 2011, http://www.theesa.com/facts/pdfs/ESA_EF_2009.pdf

developed Commentless Kotaku, a browser extension that blocks the user from viewing comments on popular gaming site Kotaku, which are known to frequently descend into sexism and homophobia.²⁷⁵ J. Haniver, a 23-year old woman who plays a number of first-person-shooter games, records in-game conversations with male players and posts them online at Not in the Kitchen Anymore. Haniver's site directly confronts the types of stereotypes employed in in-game chatter:

It's a stereotype that all female gamers are: fat, ugly, lonely, bad at video games, and should be in the kitchen, making a sandwich. And that's essentially the focus of my blog - the dated, hostile, and sometimes downright weird reactions men, and occasionally even other women, have to interacting with females in an anonymous setting that is considered to be male dominated (online video games, specifically first person shooters). ... By exposing this type of behavior, I'm hoping to raise awareness- and possibly push people to remember that it's a real live person on the other side of that microphone.²⁷⁶

Haniver's project has resulted in an extensive and often troubling catalog of verbal abuse.

Further, the overt focus on violent games as the most competitive and difficult of games, even as they make up a fraction of the games available on the market, has provided fodder to critics who reiterate C. Everett Koop's early assertion that there is nothing positive in video games. Critics who focus on violence in video gaming can rightly be accused of myopia in dismissing an entire media form. However, the industry's disproportionate promotions effort for violent games like the first-person-shooter franchises favored by many high profile professional tournaments provides significant

²⁷⁵ "Commentless Kotaku," accessed January 15, 2012, <https://chrome.google.com/webstore/detail/kdknjnbdljpfidloehifdgmoaibhoof>

²⁷⁶ J. Haniver, "About," *Not in the Kitchen Anymore*, accessed January 15, 2012, http://www.notinthekitchenanymore.com/p/what-this-blog-is-about_27.html

Evan Narcisse, "One Female Gamer Records a Warfare in Words," *Kotaku*, November 8, 2011, accessed January 15, 2011, <http://kotaku.com/5857333/one-female-gamer-records-a-warfare-in-words>

justification for this perception, as do the sales figures for these games, which frequently rank among annual top sellers.

Increasingly, statistics about video game players and video game sales bear out the notion gendered and age-based perceptions of video gaming represent cultural biases more than they reflect day-to-day gaming practice. Further, these biases have roots in the earliest years of industrial history, and find clear expression in coverage of early video games and in popular narrative representations of early gamers. Their persistence drives home the importance of considering the historical context that generated these limited ideas of who games and what video gaming represents. We are still confronted with notions of masculinity, technology, computer culture and video gaming that find clear expression in early video gaming culture. These ideas remain integral to video gaming culture, and, as I argue through this work, have become widely deployed throughout culture as computerization, digital media, and video gaming have reached wide dispersal.

However, while the values of the video game arcade have become widely deployed across contemporary culture, they are also readily recognizable in a video game industry, and in gaming media that celebrate a particularly narrow idea of what competitive gaming means and what competitive gamers look like. These ideas and values remain particularly concentrated in video gaming culture. That Jonathan Fataality Wendel has become a posterboy for competitive gaming is far from surprising; as a young man with viable claims to athleticism, tech savvy and intelligence, he is a clear successor to gamers like those celebrated in *Life Magazine*'s 1981 year-in-pictures issue.

Given how widespread gaming has become across gender and age, perhaps the line of succession should not be so clear. Further, given the recent history of instability and overspeculation in the technology sector discussed in chapter five, perhaps the celebration of technological savvy and entrepreneurial impulses should be less enthusiastic. While films like *The Social Network* (2010) certainly point to anxieties about the social desirability of the skills and characteristics that enable success in the tech sector, these criticisms are countered by the tales of financial success often embedded within the same narratives. The outpouring of public grief and admiration expressed at the 2011 death of Apple co-founder Steve Jobs certainly speaks to the continued significance and admiration heaped on technologists of a certain stripe. In the case of Jobs, a notorious record of verbally abusing employees and willfully allowing the exploitation of workers at the factories contracted to manufacture Apple products did little to dampen enthusiasm.²⁷⁷

While gaming has evolved, popular narratives of gaming continue to focus on and celebrate the achievements of certain types of gamers and to value certain types of games. The valuing of first-person-shooter games as “hardcore” is fueled in part by industrial intervention through advertising and public relations efforts. Further, these types of games, while often costly to produce because of their technical demands, also

²⁷⁷ “Steve Jobs: A genius but a bad, mean manager,” *Inquirer*, October 25, 2011, accessed January 15, 2012, <http://technology.inquirer.net/5713/steve-jobs-a-genius-but-a-bad-mean-manager/>

Mike Musgrove, “Sweatshop Conditions at iPod Factory Reported,” *Washington Post*, June 16, 2006, accessed January 15, 2012, <http://www.washingtonpost.com/wp-dyn/content/article/2006/06/15/AR2006061501898.html>

“You are NOT allowed to commit suicide: Workers in Chinese iPad factories forced to sign pledges,” *Daily Mail*, May 1, 2011, accessed January 15, 2012, <http://www.dailymail.co.uk/news/article-1382396/Workers-Chinese-Apple-factories-forced-sign-pledges-commit-suicide.html>

hold the highest promise of financial return. In 2010, five of the ten top-selling games (*Call of Duty: Black Ops*, *Halo: Reach*, *Red Dead Redemption*, *Call of Duty: Modern Warfare 2*, *Assassin's Creed: Brotherhood*) carried a mature rating, largely for violence; while the industry is quick to note that violent games make up just a fraction of the games on the market, these games tend to sell disproportionately well.²⁷⁸ And, as in the case of *Death Race* discussed in Chapter 3, the controversy generated by violent games often helps to drive sales.

If most people play games, then the landscape of gaming should reflect some of that diversity at least in terms of the gender, race, and age of notable gamers. However, diversity remains a nettlesome and troubling topic in gaming at several levels. Writing about sexism in game design, cultural critic Latoya Peterson notes that contemporary video gaming offers only four playable black female characters.²⁷⁹ While white women may be more broadly represented onscreen, the hypersexualization of these women characters presents its own set of issues. On-screen gender inequities are echoed and possibly fueled by a dearth of women working in both the game design industry and as gaming critics. For example, while widely read gaming blog Kotaku does publish the work of two women contributing columnists, the site's nine other regular staff members, including the entire editorial board, are men.²⁸⁰ The fifteen-member staff on the masthead

²⁷⁸ Entertainment Software Association, "Essential Facts about the Computer and Video Game Industry"

²⁷⁹ Latoya Peterson, "The Tits Have It: Sexism, Character Design, and the Role of Women in Created Worlds," *Kotaku*, October 20, 2011, accessed December 5, 2011, <http://kotaku.com/5851800/the-tits-have-it-sexism-character-design-and-the-role-of-women-in-created-worlds?tag=opinion>.

²⁸⁰ "About," *Kotaku*, January 12, 2011, accessed December 5, 2011. <http://kotaku.com/about/>

at *Game Informer* includes just one woman.²⁸¹ A 2005 survey conducted by the International Game Developers Association found that just 11.5% of respondents were women.²⁸² However, at the same time, the Entertainment Software Association reported that women comprised 40% of video gamers.²⁸³

Representations of competitive gaming have helped sustain and propagate images of gaming as young male enclave even in the face of overwhelming statistical evidence demonstrating the significant number of women's participating in gaming culture. While the early video game arcade served as a point of articulation for emergent cultural values, the persistence of the video game arcade as privileged cultural site demonstrates an ongoing commitment to these values. Video game arcades continue to offer a highly visible arena for public gaming, but *Guitar Hero* tournaments in bars, Wii sports sessions in retirement community rec rooms, and even Facebook wall posts updating friends and family of individuals' activity in games like Farmville demonstrate the ongoing role gaming has in public media practice and contribute to the ubiquity of video and computer gaming. Despite these shifts in gaming practices and the diversification of gamers, media representations continue to draw attention to the rarified world of competitive gaming and continue to celebrate the achievements of young, white men, deploying a language of success and competence cultivated in the early years of the industry. To make sense of

²⁸¹ "Game Informer Staff," *Game Informer*, accessed December 5, 2011, <http://www.gameinformer.com/p/staff.aspx>.

²⁸² Wailin Wong, "Women missing from video game development work force: Although many women are gamers, few think to make a career out of their hobby," *Chicago Tribune*, August 5, 2010, accessed December 5, 2011, http://articles.chicagotribune.com/2010-08-05/business/sc-biz-0806-women-gamers-20100805_1_international-game-developers-association-game-development-gaming-world.

²⁸³ Wailin Wong, "Women missing from video game development workforce."

the contemporary culture of video gaming requires careful consideration of the historical trajectory which has so bound gaming to a now naturalized set of values and practices.

From 1972 to the present, much has changed in video gaming. The reshaping of the industry hastened by the 1983 market crash significantly shifted the development of gaming, and increasingly sophisticated media technologies have allowed for more cinematic gaming experiences in arcades and on home consoles and for the spread of gaming to mobile media platforms like cellular phones and tablet computers. Gaming has also become increasingly widespread, aided in part by the ongoing involvement of early adapters who continue to play classic games or who have followed emerging trends and furthered by deliberate efforts by the industry to expand markets. The proliferation of high-speed internet access has also impacted gaming, allowing for advances in massive-multiplayer-online-role-playing games like Blizzard's highly successful *World of Warcraft* (1994), which has over 10 million subscribers.²⁸⁴

However, even in the face of these changes to the landscape of video gaming, much of the medium's history persists and affects gaming at the level of production and day-to-day practice. In excavating the origins of popular notions of gamer identity and investigating the cultural, economic, and political values embedded in it, my research works to historicize and unsettle narratives which too frequently assume that the maleness of gaming is somehow innate. In asking what the values of the video game arcade were and are and pointing to the ways in which these values are still deployed, this

²⁸⁴ Frank Cifaldi, "World of Warcraft Loses Another 800K Subs In Three Months," *Gamasutra*, November 8, 2011, accessed January 15, 2012, http://www.gamasutra.com/view/news/38460/World_of_Warcraft_Loses_Another_800K_Subscribers_In_Three_Months.php

project also points to the significance arcade video gaming – often remembered as a moment in pop culture history – has had for the development not only of video gaming, but of digital culture more broadly.

The rise of video gaming as mass medium in the period from the early 1970s to the present coincides with and has been shaped by significant upheavals in cultural and economic values; during this same period, video gaming functioned as an early training course in these emergent values and in the technical skills prized in the new service-based economy. Video gaming's early history is inextricably bound to these changes, and popular coverage of video gaming became a point of articulation for emergent values and for anxieties about the same. To consider the video game arcade is not only to consider an important stage in the history of video gaming, but also to consider the cultural history of key transitions in the United States. The arcade persists, but so do its values, at play in contemporary video gaming and at work through the structuring of labor and markets.

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Vita

Carly Ann Kocurek received a Bachelor of Arts Degree in English and History from Rice University in Houston, Texas in 2004 and a Master of Arts Degree in American Studies from the University of Texas at Austin in 2006.

Permanent E-mail: carlykocurek@utexas.edu

This dissertation was typed by Carly Ann Kocurek.