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**PROPHETS OF *PONG*:
HOW NEWSPAPERS COVERED VIDEO GAMES BETWEEN 1972 TO 1976**

By

Joseph W. Collard

B.A. Linguistics, Stony Brook University, 2013

A THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Arts
(in History)

The Graduate School
The University of Maine
May 2022

Advisory Committee:

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An Abstract of the Thesis Presented
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After Magnavox released its Odyssey video game console in 1972, video games quickly became popular. By 1976, video games looked poised to be a mainstay of Americans' media environment. Newspaper articles played a role in this process, but that role has not been specifically examined. This thesis examines how newspaper articles covered video games during their commercialization in the United States from 1972 to 1976. It utilizes twelve newspapers over a five-year period to identify video game article frequency, geographical distribution, language use, value judgements, topic coverage, and frame use. The goal is to identify patterns and situate them within their historical context to understand how newspapers covered video games during this period and their role in video games' popularization.

This thesis concludes that newspapers played a clear role in the popularization of video games. Due to their unfamiliarity with video games, journalists over-relied on experts, resulting in coverage that was overwhelmingly positive, uncritical, and hyperbolic. Furthermore, organized interests, taking advantage of social anxieties, used newspapers to shape and control consumers' attitudes and behaviors regarding video games, whilst also ensuring capitalist control of the video game market.

DEDICATION

I would like to dedicate this thesis to my wonderful children, Adia, Odin, and Kaelen, and to my amazing wife Kim.

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INTRODUCTION

Deposit Quarter

The cover of the January 18, 1982 issue of *Time Magazine* displayed “GRONK! FLASH! ZAP! Video Games are Blitzing the World,” superimposed on a background of a coin-operated video game cabinet.¹ By 1982, ten years after their initial commercial release, video games had entered the American popular imagination. When video games were first commercialized during the 1970s, their fate had yet to be determined. They could have been just another technological fad, like the motograph, beepers, or Smell-O-Vision, interesting, even helpful sometimes, but eventually pushed to the margins or forgotten. Many people working in the coin-operated industry believed video game popularity would quickly peak and then sputter out in the seventies.² This was typical of new and exciting developments in the coin-op industry. Instead, video games grew into a popular and profitable industry. By 2020 in the United States, seventy-five percent of households had at least one video game player, and the industry earned \$40.9 billion, over three-and-a-half times as much as film’s \$11.32 billion in 2019.³ And while a diverse range of people presently enjoy video games, cutting across class, gender, age, and racial lines, this was not always the case. The demographics have changed over the years, from young college students and bar frequenters in the early 1970s to white-collar white workers in the early 1980s to white, middle-class boys by the late 1980s.⁴ The 1990s and beyond saw a

1. “GRONK! FLASH! ZAP! Video Games are Blitzing the World,” *Time Magazine* (New York, NY), January 1982.

2. Van Burnham, *Supercade: A Visual History of the Videogame Age, 1971-1984* (Cambridge, MA: MIT Press, 2003), 87.

3. *2020 Essential Facts about the Video Game Industry*, research report (Entertainment Software Association, 2020), 4; Simon Tripp et al., *Video Games in the 21st Century: The 2020 Economic Impact Report*, research report (Entertainment Software Association, 2020), 1, 38; *Film Industry in the U.S.*, research report (Statista, 2020), 11. Because of the effects of COVID-19, film’s 2020 revenues were only \$2.09 billion and not indicative of the industry during non-pandemic times.

4. Michael Z. Newman, *Atari Age: The Emergence of Video Games in America* (Cambridge, MA: MIT Press, 2017).

sweeping diversification of demographics as the technology, game mechanics, and storytelling capability of video games became more sophisticated.

In each of these periods, public and private discourse was taking place that facilitated how people decided what video games were, who they were for, and what their purpose was, and enabled their rise in popularity. Advertisements, marketing, word-of-mouth, magazines, personal experience, and the news all fueled such discourse. Newspapers played an essential role in this process, especially during the early years of the 1970s when video games transitioned from academic and commercial research labs into public spaces and private homes. One reason is because newspapers still played an prominent role in American's media ecology. While newspaper's influence was waning in the 1970s as television news viewership rose, newspapers still informed many Americans. In 1975, newspapers circulated almost four times as much per day than in 2020.⁵ Another reasons is that video games were not only new technology but a different sort of entertainment *and* a novel medium, and therefore newspapers were an important avenue for educating consumers.

This thesis examines how newspapers presented video games to Americans as they first became commercialized in the early 1970s. It explores what newspapers presented to Americans and thus how newspapers may have shaped social conversations surrounding video games. The goal is to explore coverage patterns as newspapers informed Americans about the various aspects of video games. Such exploration also broadens available studies of how the press presented new technologies, new forms of entertainment, and new media to the consumers. It also provides one more avenue in which to explore the cultural and social milieu of the time.

Exploring newspaper coverage serves other purposes as well. First, few critical studies focus solely on the initial years of video game commercialization. Second, newspapers

5. Statista Research Department, *Daily Newspaper Circulation in the U.S. and Soviet Union 1970-1989* (Statista, 1991-08-01); Amy Watson, *Paid Circulation of Daily Weekday Newspapers in the United States from 1985 to 2020* (Statista, 2021-07-01).

influenced societies and therefore helped shape society's perceptions about video games, even if minimally. Third, newspapers can help identify the forces that pulled video games into the mainstream during the 1970s. Lastly, newspapers offer a chance to trace the evolution of social thought surrounding video games.

This study's focus on newspapers also reflects the research limitations created by the COVID-19 pandemic. Gaining access to physical, non-digitized archival data was challenging. Because of travel restrictions, increased costs, and health risks, many scholars (myself included) could not visit archives.⁶ This has resulted in a dramatic increase in workload for archivists as they have had to digitize far-more physical artifacts than in years past.⁷ Getting digital items can take much longer than usual. Therefore, I needed archival resources that had already been digitized to a great extent and were accessible over the internet. This ensured I did not have to travel and thus avoid health risks while continuing my research in a timely manner. Already digitized newspapers fit these requirements well.

Using digital-only newspaper articles posed a few problems and limited my research. First, using newspapers excluded several other narratives surrounding video games. There may have been radio and television broadcasts, diary entries, photographs, business records, and other primary sources that would have provided important information. All such sources would have helped understand better the evolution and rise of video games, the motivations of actors, and their reception.

Second, digital-only sources meant relying on items that had undergone additional selection layers. Digitizing physical sources is a costly and labor-intensive process. Not everything can be digitized, leading to prioritizing certain materials over others. Such prioritization likely introduced other biases and gaps compared to physical-only sources, at least for newspapers whose entire run had not been digitized.

6. American Historical Association Council, "AHA Issues Statement on Historical Research during COVID-19," June 2020, accessed January 6, 2021, [https://www.historians.org/news-and-advocacy/aha-advocacy/aha-statement-on-historical-research-during-covid-19-\(july-2020\)](https://www.historians.org/news-and-advocacy/aha-advocacy/aha-statement-on-historical-research-during-covid-19-(july-2020)).

7. This is based on informal correspondences with archive staff.

Ball Will Serve Automatically: Media Theories

Several theories are used by researchers when exploring media, technology, and video games. These include agenda-setting and framing, how newspapers typically covered science and technology through the 1950s to the 1970s, the biases of communications, and the push theory of media adoption. These theories play an important role in understanding how newspapers operate and how they affect society and culture.

While studies over the past six decades have concluded that mass media has little effect on audience attitudes and opinions, they have consistently supported that journalists “significantly influence their audience’s picture of the world.”⁸ In other words, even though mass media organizations can’t force people to think in particular ways, they excel at getting them to think about specific subjects and within certain boundaries.

The first way that newspapers influence what people think about is through agenda-setting. Agenda-setting is how media organizations select which issues and events to cover. The more a newspaper covers a specific story, the more salient that story becomes in the minds of its readers, and the more likely the audience is to discuss that story as opposed to stories covered little or not at all. While the media has limited power to influence a person’s opinion, the same is not true of its ability to influence what people talk and think about. If news outlets do but one thing well, it is focusing audiences’ attention towards certain issues and events.⁹

As Maxwell McCombs and Amy Reynolds argue, this is not necessarily a deliberate attempt to control the public but instead is a byproduct of limited time, limited staff, and limited resources. These constraints result in a news organization selecting only a few stories out of many. Media organizations must minimize labor input by manufacturing stories as quickly and cheaply as possible to maximize profits. It is no wonder that over half

8. Jennings Bryant and Mary Beth Oliver, *Media Effects: Advances in Theory and Research* (New York: Routledge/Taylor and Francis, 2009), 1.

9. Max McCombs, “The Agenda-Setting Role of the Mass Media,” in *Mass Media Economics 2002 Conference, London School of Economics*, June 2002 (), 5.

of news stories come from external news sources, such as press releases, press conferences, briefings, and media influencers (such as politicians or other "important" figures).¹⁰

Intermedia influence, whereby news outlets print stories covered by other news firms, is another pressure that affects the agenda-setting process of media organizations. It is not uncommon to see smaller news agencies reprint larger, more prominent news agencies' stories, such as the *New York Times* or the *Associated Press*, sometimes with a more localized spin.¹¹ This is also true for video game reports in the 1970s. Depending on the year, several video game articles originated from a newswire agency such as the Associated Press (AP) or United Press International (UPI) or were reprints from national newspapers, such as those from the *New York Times*. And while the reverse of this process happens as well, in which a smaller, more local agency covers a story that a larger news agency then picks up and runs, I found no evidence suggesting this happened with video game coverage.

Edward Herman and Noam Chomsky have a more deliberate view of agenda-setting. They argue that other mediating factors determine what events and issues are covered beyond news organizations stressing their limited resources as little as possible. These include media ownership, advertising agencies, the need to appear objective and neutral, as well as the need to reduce negative public and commercial responses (called flak) and communist-appearing sympathies.¹² For Herman and Chomsky, agenda-setting is far more ideological than McCombs and Reynolds argue and is a more top-down process, whereby news workers have little freedom in what eventually makes its way into the papers.

Herbert Gans argues for a bit more freedom on workers' behalf. While he acknowledges that "[n]ews organizations are not democratic," he also notes that there is a constant struggle between news workers and their superiors.¹³ Workers must conform with the demands of their bosses, lest they cause too much trouble and are fired. Yet, superiors

10. Bryant and Oliver, *Media Effects*, 11.

11. Bryant and Oliver, 11–12.

12. Edward S. Herman and Noam Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media* (NY: Pantheon Books, 1988), 3–31.

13. Herbert J. Gans, *Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek, and Time* (New York: Pantheon Books, 1979), 85.

must provide workers with enough autonomy to appease their professional egos. Otherwise, they might quit, potentially publicize the organization's maltreatment of workers, and damage their ability to hire quality workers. Thus, superiors do not have absolute control, and this creates a constant tug-o-war between all parties at a news firm, and ultimately, this too, affects agenda-setting¹⁴

The agenda-setting process rarely operates entirely one way. It is not just pragmatic, ideological, or the result of labor issues. A morass of competing interests determines agenda-setting and thus is in constant flux. What is eventually reported are those things that survive wading through the muck. What determined the stories of one day are different than those determining the next.

Beyond determining *what* is covered, news agencies also determine *how*. Part of this process is known as framing, a core organizing idea or narrative that provides cues that audiences can use to interpret news stories. It is part of a broader theory of news presentation called "packaging." News "packages" are composed of several elements: information, symbols, arguments, and images. Encasing each package is the "frame" that encases the story a certain way. As David Tewksbury and Dietram Scheufele state, "A frame is what unifies information into a package that can influence audiences."¹⁵ Frames are distinct from the information inside each package yet are fundamental in how audiences interpret them. Succinctly put, frames may influence how people interpret the facts of a news story.¹⁶

Frames are created by how journalists describe news stories, what elements they include and exclude, and the very words, images, and metaphors they give to issues.¹⁷ Frames operate by "building associations between concepts."¹⁸ Think for a moment about news stories covering immigration issues. Does it refer to foreign migrants without the

14. Gans, *Deciding What's News*, 85–102.

15. Bryant and Oliver, *Media Effects*, 19.

16. Bryant and Oliver, 19.

17. Bryant and Oliver, 20.

18. Bryant and Oliver, 21.

appropriate paperwork as “illegal aliens” or “undocumented immigrants?” Is the article accompanied by a photo of an innocent-looking child or a brutish-looking adult? Is the article talking about a national security crisis or a humanitarian one? The way stories are framed affects how audiences come to understand them and the associations they build. Again, this does not imply that all audiences will interpret the news items the same way, nor does it imply that they cannot formulate oppositional opinions. But framing theory does suggest that news agencies put forth the information in specific ways for specific reasons. Identifying and understanding frames can help interpret how a news agency is attempting to influence readers, whether deliberate or not. Furthermore, as Dmitri Williams argues, “media frames matter because they are important benchmarks for the times.”¹⁹

Media frames also matter for this thesis because there is strong evidence that they influence reader perceptions about video games, especially non-gamer readers. A 2016 study by Anna Kümpel and Alexander Haas suggests that how media organizations frame video game stories affects readers’ attitudes about video games, gamers, and video game issues.²⁰ Furthermore, their study suggests that, in general, media framing of video games affects non-gamers to a greater extent than gamers.²¹ It is a recent study, and the subjects—college students—are far more familiar with video games than Americans were in the 1970s. Thus, the applicability to this thesis is tenuous. However, when coupled with communication studies on framing, there is little reason to believe that their results would not also apply in the 1970s. The more important question would be how much video game framing affected Americans in the 1970s. Based on Kümpel’s and Haas’ study and Dorothy Nelkin’s—discussed later—there is reason to believe that it would have impacted them to a

19. Dmitri Williams, “The Video Game Lightning Rod,” *Information, Communication and Society* 6, no. 4 (December 2003): 545.

20. Anna Sophie Kümpel and Alexander Haas, “Framing Gaming: The Effects of Media Frames on Perceptions of Game(r)s,” *Games and Culture* 11, nos. 7-8 (November 2016): 720–744.

21. Kümpel and Haas, 735.

greater degree. The technology was new, so most Americans would have been non-gamers and therefore would rely more on outside sources for information.

The process of determining *why* specific frames were used can be complicated. Different actors influence framing effects, and many decisions were either never recorded, are now locked behind corporate doors, or are otherwise inaccessible or difficult to access. It can be challenging to understand why specific framing options were chosen without access to internal documents, interviews, and other primary sources. In place of direct access to primary sources, utilizing historical and cultural contexts can provide additional insight.

Exploring newspaper coverage also provides insight into how American society understood video games in the 1970s, their rise to popularity, and their roles in shaping American culture. While this study primarily analyzes how newspapers covered the inchoate video game industry and its technologies, it is also a preliminary step in a broader analysis of how video games affected American society during that time. As such, it is influenced by the ideas of Harold Innis.

While there is much to unpack about his theories, the most important aspect of Innis' work to this study is his argument that “[c]oncentration on a medium of communication implies a bias in the cultural development of the civilization. . . .”²² For instance, he argues the penny press and the telegraph facilitated political disturbances in the Jacksonian age because they enabled the quick and cheap transmission of news. He also argues that radio contributed to the Depression in the early twentieth century because it introduced additional complicating factors into the “highly sensitive economy built up in relation to newsprint and its monopoly position in relation to advertising.”²³ Similarly, video games, as a new medium in the 1970s, may have contributed to social, political, or economic changes.

For instance, while the first commercial video game machines were analog and associated closely with television, they were also intimately entwined with digital computer

22. Harold A. Innis, *Empire and Communications* (Toronto: University of Toronto Press, 1972), 170.

23. Innis, 161–163, 163.

technology. By 1980, several video game consoles *were* computers, and many computers played video games, helping drive the personal computer boom of the 1980s. Several consumers bought personal computers to play video games, more so than any other purpose. As Newman argues, “While often imagined as useful in virtually infinite ways, early home computers were undoubtedly most often used not for supposedly productive purposes like accounting or data management, but for playing the same kinds of games available in arcades and on video game consoles.”²⁴ Ralph Baer, the inventor of the first commercial video game console, once wrote that “Anybody who denies that computers invaded the majority of homes via the video game console must have recently arrived from another planet.”²⁵

This suggests that video games were one of the driving forces behind America’s transition to digital technologies. Not only did their playfulness and entertainment value make accepting digital technology easier, it also made it easier to train workers for the future needs of capital. In such a role, video games were digital prophets in an analog world, helping to usher in an age of personal computers, smartphones, the Internet, social media, and the dark web. Before the rise of the dot-coms, there was *Pong’s* bouncing dot, and some people, as they played with the video game machines, sensed changes in themselves. For instance, in 1974, one player stated that video games “appear to be the first basic gropings[sic] between man and machine.”²⁶ It was as if video games inaugurated humankind’s acceleration towards a technological singularity, a sociobiological evolution in which humans and machines merge into one. Others felt as if video games were an extension of humanity itself. As one player remarked, “There are times when I feel an intangible communion with the machine. The paddle becomes an extension of my knob, which becomes an extension of me.”²⁷ Such McLuhan-inspired comments suggest the claim

24. Newman, *Atari Age*, 116.

25. Ralph H. Baer, *Videogames: In the Beginning* (Rolenta Press, 2005), 2.

26. Eric Sauter, “Fighting a Spacewar in the No-Name Lab,” *Boston Globe*, April 1974, C6.

27. Peter Cabriolet, “‘Pong’—The Game With a College Education,” *Boston Globe* (Boston, Mass., United States), June 1974, C18.

that video games were beginning to impact society in ways that Innis would have anticipated of a new medium. Newspaper articles from the 1970s support such a claim. Johan Huizinga, a cultural historian who wrote about playing and its central role in the creation and recreation of society and culture, would have expected this as well, as he believed how society plays today in many ways reflects how society lives tomorrow.²⁸

But before video games could begin to change society, the medium first needed to be adopted by society. As Marshall T. Poe argues, the process of media adoption is never accidental. A medium is always pulled into society precisely when it is, due to identifiable reasons. This may sound simplistic and obvious, but he is pushing back against arguments that a medium's rise to popularity "just happens," that it is unavoidable due to technological progress, or that it happens by chance. His "pull theory of media adoption" is summed up in the following proposition: New Economic Conditions → Technical Insufficiency → Increase Demand from Organized Interests → New Media Technology.²⁹ This proposition is also affected by two other factors, "the timing of adoption and the nature of the technology adopted."³⁰ In other words, new economic conditions lead to a technical insufficiency of sorts with the current media technology. Eventually, organized interests begin to demand solutions to these problems, usually found within already existing—but mostly ignored—media technologies, although new media technologies are sometimes created. The timing of adoption can be slow (as in ancient times) or quick (as is often the case in present times), and the ease of use and the ability for people to enjoy them also affect adoption.³¹

For example, in 1857, the first device to record sound was Edouard-Leon Scott's phonograph. Yet recorded sound did not begin to be pulled into society until the 1880s and 1890s. It was not until the 1920s that people could find gramophones and records in

28. Johan Huizinga, *Homo Ludens: A Study of the Play-Element in Culture*, ed. Karl Manheim (London: Routledge & Keegan Paul Ltd., 1949).

29. Marshall T. Poe, *A History of Communications* (New York, NY: Cambridge University Press, 2011), 10.

30. Poe, 10.

31. Poe, 10–11.

most industrialized societies. As Poe argues, pulling recorded sound into society occurred during this period because it experienced a shift from mercantile capitalism to industrial capitalism, from a focus on transporting goods between markets to an emphasis on making and selling goods, especially new products for unrecognized demands. This new economic system enabled engineer-entrepreneurs such as Thomas Edison, Emile Berliner, and Guglielmo Marconi—the organized interests—to create the technology and the companies to support them, to fill a technical and economic insufficiency, in this case, the ability to record sound. They were then able to drive demand for recorded sound because industrial capitalism required tremendous input by workers, which left them with little time or energy to engage in traditional social and cultural activities, such as song, dance, and stories. Such alienation created a latent hunger in people that could be met with recorded sound at any time, regardless of their schedule or tiredness. That recorded sound was easy to use helped facilitate its quick spread. All this worked in tandem, along with the rise of welfare states and cultural liberalism, to pull recorded sound into mass use.³²

A similar process occurred for video games and newspapers were critical in their adoption. However, newspapers went beyond just informing consumers about video games or popularizing them. They also were critical in establishing a political economy around them that adhered to capitalist demands. Furthermore, they ensured the commodification of the leisure habits of Americans, a process dating at least as far back as the late nineteenth century with amusement entrepreneurs like J.J. Coburn and Horace Bigelow.³³

Avoid Missing Ball for High Score

The structure of the remaining thesis is as follows. I explore existing video game and media research in chapter one. The goal is to situate the study within the broader historiography of these two fields. I also detail the methodology used to conduct my analysis. In chapter two, I examine the history of video games from the 1950s to the early

32. Poe, *A History of Communications*, 157–160.

33. Roy Rosenzweig, *Eight Hours for What We Will* (Cambridge, MA: Cambridge University Press, 1983).

1970s to better understand the social, political, economic, and technological milieu in which video games were developed. An analysis and discussion of how newspapers covered video games from 1972 to 1976 comprises chapter three. Finally, I connect my study back to the historiography of video game and media history before providing concluding remarks in chapter four.

CHAPTER 1

PLAYING THE PAST: THE GLITCHY BUSINESS OF RESEARCHING VIDEO GAMES

Historiography

To date, journalists and video game enthusiasts have overwhelmingly written the history of video games. While these works have merit, especially in providing detailed information about key people, products, businesses, as well as timelines, photos, blueprints, and interviews, they are usually documentary and mostly uncritical.¹

Furthermore, much of video game historiography has favored participant narratives written several decades later instead of contemporary sources such as trade publications, newspapers, or courtroom testimonies.² This has led to a state whereby much of the history of video games—academic and otherwise—has been based on inadequate, flawed, and sometimes wrong information. Even today, too many “[j]ournal articles and monographs are still largely drawing from the same narrative sources developed 10-20 years ago. . . . The result has been a body of well-meaning and often commendable literature that nevertheless often falls down on accuracy. . . .”³ Early historical video game research is improving as the above issues have increasingly been addressed. There have been more critical, primary-source-based analyses in the past two decades. For instance, both Jonathan Clemens and Michael Newman explore the evolution of coin-operated amusements from the late-1800s until 1972 to understand how they influenced video games and video game businesses in the 1970s and 1980s. Both offer cultural analyses that

1. The following books are some of the most often cited sources in video game histories that fit the above description: *Zap: The Rise and Fall of Atari* by Scott Cohen, *Phoenix IV: The Fall & Rise of the Videogame Industry* by Leonard Herman, *The Ultimate History of Video Games* by Steven Kent, *Supercade: A Visual History of the Videogame Age 1971-1984* by Van Burnham, and *High Score: The Illustrated History of Electronic Games* by Rusel DeMaria, *Atari Inc. Business is Fun* by Marty Goldberg and Curt Vendel, and Ralph H. Baer’s *Video Games in the Beginning*.

2. Alexander Smith, *They Create Worlds: The Story of the People and Companies that Shaped the Video Game Industry, Vol. I: 1971-1982* (Boca Raton, FL: CRC Press, 2020), xiv.

3. Smith, xiii.

examine how old-fashioned nickelodeons, arcades, electro-mechanical games, and especially pinball shaped how people conceptualized video games and their attitudes towards them. Newman especially highlights how negative and positive associations with these arcades played integral roles in how video games came to be understood by Americans once commercialized in the 1970s and 1980s.⁴ Their work was crucial in helping me situate newspaper articles dealing with video games within broader historical phenomena that is not apparent from reading the articles themselves.

Newman also explores the emergence of video games in the United States in the 1970s and 1980s and how they transitioned from a culturally-neutral media technology open to anybody to a culturally-closed one dominated by white, middle-class, young males. He utilizes mostly advertisements and marketing materials—commercials, game brochures, store catalogs, magazine photos, trade magazines, and sometimes press coverage as his primary sources.⁵ This part of his analysis was essential in understanding that Americans in the 1970s viewed video games as more than just television peripherals.⁶ As he argues, “video games were presented as improvements on TV, ways of solving the older medium’s putative problems of passivity and low cultural values. . . . By presenting video games as participatory, champions of the new medium showed their potential to redeem television from its status as a plug-in drug.”⁷

Henry Lowood approaches the same history but from a history of technology perspective. His work examines the technological “lineage leading from *Spacewar!*[1962] through *Computer Space* [1971] to *Pong* [1972],” tracing how later games and the technology needed to run them built upon these earlier ones.⁸ He also traces how different business and hacker subcultures influenced video games’ evolution and their impact on

4. Newman, *Atari Age*; Jonathan Scott Clemens, “Defining Play: Producers, Mediators, and Users in the History of Video Arcade Games, 1971-1985” (Ph.D., University of Minnesota, 2015).

5. Newman, *Atari Age*.

6. Newman, 10.

7. Newman, 15.

8. Henry Lowood, “Videogames in Computer Space: The Complex History of Pong,” *IEEE Annals of the History of Computing* 31, no. 3 (July 2009): 15.

some of the most influential people involved in the commercialization of video games, such as Nolan Bushnell, co-founder of Atari. These influences also impacted computer and engineering development. Lowood also examines how video games transitioned out of private labs and into public spheres and their shifting manifestations, sometimes analog, other times digital. His work was essential to this study because it explains the technology behind video game development, the motivations of its pioneers, and because it stresses video games' deep relationship with computers despite their close association with television.

More recently, Alexander Smith released the monograph *They Create Worlds: The Story of the People and Companies That Shaped the Video Game Industry, Vol. I: 1971-1982*. His goal is to fix historical inaccuracies prevalent in video game history. While his work is still mostly documentary and only sometimes critical, it sets a new standard in video game research. He prioritizes primary sources over decades-old participant narratives and other unverifiable stories, utilizes rigorous historical methodologies, and provides an incredible amount of breadth and depth. Because of its thoroughness, its accuracy, and intense focus on primary sources, this thesis relied heavily on it for historical background.

Despite Smith's and the others' works, there is still much research to conduct. Most of the early video game histories tend to be very early, focusing on the pre-history before the 1970s or later, focusing on video games once they had begun to enter popular culture in the late 1970s. Few focus on the initial formative years of the industry. Given the field's state, there is still a great need to do basic historical research on video games for 1972-1976. While critical analyses are essential, any conclusions are tentative without an accurate historical record. While providing some critical examination, this study also contributes additional, primary-sourced historical details similar to Smith's work.

Because of the above issues, it is not surprising that little work has been done specifically on how newspaper organizations have covered video games in their early years. One study by Dmitri Williams in 2010 explores how media framed video games from 1970

to 2000. It is a quantitative analysis that incorporates a few qualitative elements to contextualize why the media framed video games in specific ways in different periods. He places those frames within a broader media history context to show that video games “passed through marked phases of vilification followed by partial redemption,” similar to other technologies when first introduced.⁹

Methodologically, he explores *US News & World Report*, *Newsweek*, and *Time*, since he reasons these three widely distributed magazines offered similar coverage as other media outlets.¹⁰ He goes on to later argue that “[f]uture research should delve more deeply into particular eras and provide further historical analysis.”¹¹ Taking this to heart, this thesis keeps to a smaller timeline and focuses on newspapers with national, regional, and local distributions since video games rarely, if ever, were covered by national news magazines during their initial years of commercialization, and because daily newspapers were still an important source of news for Americans in the 1970s.

Like Williams, Brian McKernan explores how the *New York Times* covered video games from 1980 to 2010. He notes that despite video games’ demographic expansion in the 2000s, they were often still seen as a social threat while simultaneously increasingly portrayed as legitimate art forms.¹² His study is more qualitative than Williams and adds much-needed scholarship into how technology is socially constructed. His conclusion about how the *New York Times* tended to cover video games in hyperbolic terms is particularly interesting. They overwhelmingly portrayed video games as either a threat or a benefit to society. For example, in the 1980s, the *Times* claimed video games would intellectually stunt future generations in some articles while also claiming that they would improve various skills in others. In the 1990s, the *Times* ran several articles linking video game

9. Williams, “The Video Game Lightning Rod,” 543.

10. Williams, 529.

11. Williams, 545.

12. Brian McKernan, “The Morality of Play: Video Game Coverage in The New York Times From 1980 to 2010,” *Games and Culture* 8, no. 5 (September 2013): 308.

violence to violent acts while also running articles glorifying their educational benefits.¹³ Not surprisingly, my exploration into newspaper coverage uncovered hyperbole as well.

Graeme Kirkpatrick conducted a thematic discourse analysis of three of the most popular computer magazines in the United Kingdom from 1981 to 1995. He pinpointed when and how video games shifted from being gender-neutral to one highly coded as male. He concludes that computer games became dramatically more associated with masculinity and violence between 1987 to 1989 and that British gaming magazines were essential facilitators of this process.¹⁴ The video game crash in the United States during the early 1980s left space in other countries for video games to develop independently. In the United Kingdom, computer gaming separated from video gaming, creating new cultural practices, institutions, values, and terminology.¹⁵ At a time when physical prowess was becoming far less important in white-collar office work, men in the United Kingdom used computer games to re-exert their masculinity.¹⁶ “It was in the context of establishing itself as a discrete realm within and against the technical milieu that gaming acquired an idea of itself as avowedly masculine.”¹⁷

Most applicable to my study is how Kirkpatrick analyzed the rhetorical constructions found within these popular print media to chart the construction and spread of a gaming subculture in the past. Kirkpatrick used one guiding question about “how a female interested in computer games in the early 1980s might have felt if the magazines were her chosen way to develop that interest.”¹⁸ He used this question to filter and track magazine content, “making it possible to chart changes in tone and emphasis that characterize the development of gaming discourse concerning the question of gender and female

13. McKernan, “The Morality of Play: Video Game Coverage in The New York Times From 1980 to 2010,” 314–321.

14. Graeme Kirkpatrick, “How Gaming Became Sexist: A Study of UK Gaming Magazines 1981–1995,” *Media, Culture and Society* 39, no. 4 (May 2017): 454.

15. Kirkpatrick, 454–455.

16. Kirkpatrick, 464.

17. Kirkpatrick, 464.

18. Kirkpatrick, 456.

participation.”¹⁹ He used this to infer structural changes, which he could then test against broader contexts.²⁰ Similarly, one question used to determine article suitability for this thesis was, “What is the likelihood that the average newspaper reader would read this article, and to what extent was it likely to inform them about some aspect of video games?” If the answers to these were at least somewhat likely, they were included.

The historiography of video games reveals how historical research has expanded in the last few decades. Researchers now know much more about video games’ early history and their history once they had been more firmly established in the late 1970s. Furthermore, researchers today have new insights and methodologies from which to draw. The same cannot be said of those early first few years of commercialization of video games. There is still much unknown and much work to be done.

Part of that work includes understanding how newspapers chose the stories to cover and how they covered them in the sixties and seventies because readers relied on them to make sense of new information in these fields.²¹ Herbert Gans provides a sociological study on how television and magazine news agencies in the late sixties and early seventies decided what to publish as news.²²

He concludes that story selection is a dual judgment process of determining story availability and suitability. It is a constant tug-of-war between these two judgments, which are affected by power structures, money, deadlines, and limited print space. All of these are guided by decisions about a story’s source, substantiveness, value, impact on the organization, impact on commercial interests, audience reception, and the organization’s formal positions on issues.²³

For instance, what one writer finds suitable, an editor may not. In the end, the editor will probably get their way, because “[n]ews organizations are not democratic; in fact, they

19. Kirkpatrick, “How Gaming Became Sexist: A Study of UK Gaming Magazines 1981–1995,” 457.

20. Kirkpatrick, 457.

21. Williams, “The Video Game Lightning Rod,” 526.

22. Gans, *Deciding What’s News*.

23. Gans, 81–82.

are described as militaristic by some journalists, and the top editor or producer, and his assistants, have the power to decide what gets into print or on the air, at what length, and in what order, subject only to suggestions or vetoes from news and corporate management.”²⁴ Above management are the corporate and news executives, who have the power to affect story selection via personnel and budget decisions, via policy, and supervision. Often, this is done to protect the firm’s political and commercial interests.²⁵

Despite this, journalists often feel as if they have freedom from interference. They are generally given liberties to write and cover the pieces they want. But as Gans argues, this process is illusory, since suggestions from superiors are usually followed as if they were orders. The editing process culls any remaining unwanted material.²⁶ Furthermore, Gans suggests that the more important a story is, the less freedom a journalist has in writing, and usually involves more interference from superiors. Yet, if superiors interfere too much or suggest too often, they risk losing quality workers.²⁷ Such labor conflict is an ever-present part of the stories that appear in the newspaper.

The stories that are eventually printed are also affected by more mechanical functions. Several stories each day are potential news items, but not all of them make it into the newspaper. The process by which this occurs follows a similar pattern regardless of agency; stories are suggested for coverage (often by reporters), stories are selected (often by top editors), and stories are designed (often by writers).²⁸

But what considerations do these workers take in determining what to cover, what to publish, and what to write? There are several, but Gans places them into two main categories; a story’s perceived importance and appeal.²⁹ “Important stories” are stories that “must” be reported and are usually measured by one or more of the following: rank in governmental and other hierarchies, impact on the nation and the national interest, impact

24. Gans, *Deciding What’s News*, 85.

25. Gans, 94–96.

26. Gans, 101–102.

27. Gans, 102–103.

28. Gans, 87–88.

29. Gans, 146–147.

on a large number of people, and significance for the past and future (especially the future).³⁰

“Interesting stories” are people stories, and are included for two main reasons. First, “important news is often ‘bad’ and must be balanced by interesting stories which either report ‘good’ news or are light.”³¹ Second, “interesting stories are timeless, so . . . they can be used when last-minute replacements are needed.”³²

There are a few other considerations that news workers evaluate when selecting stories, although to varying degrees. They must consider a story’s novelty and quality. Stories that have been covered a great deal or are of poor quality are less likely to be published. Workers also need to balance positive and negative stories, lest they become too depressing or overly optimistic. Last, workers must ensure the newspaper outperforms competitors.

While Gans’ study provides much insight into news agencies’ decision-making processes, Dorothy Nelkin’s 1987 study explores how print media covered science and technology during the sixties and seventies in the United States. Her goal was to understand how news organizations informed the populace about science and technology, the pressures media organizations faced that shaped the creation of science and technology news, and the scientists and technology companies that influenced such coverage.³³ While she does not cover video games in her study, many of her conclusions still apply.

Her analysis distilled the following general characteristics in science and technology reporting during the 1960s and 1970s. First, print media often framed science and technology news similarly. Despite news diversity—national, regional, and local—science and technology articles tended to focus on the same issues, use the same sources, and interpret sources and frame articles similarly.³⁴ For example, when covering scientists, the press often portrayed them as “socially removed, apart from, and above most normal

30. Gans, *Deciding What’s News*, 147–155.

31. Gans, 155.

32. Gans, 155.

33. Dorothy Nelkin, *Selling Science: How the Press Covers Science and Technology* (New York, NY: W.H. Freeman, 1987), 8–10.

34. Nelkin, 9.

human preoccupations” like wizards or superstars.³⁵ The press would often obfuscate the process of science and therefore shroud it in mystique as if its adherents were taking part in a divine ritual.³⁶

Second, new technology coverage tended to be utopian, often framed in hopeful terminology. In the 1970s especially, computer technology was often framed as the solution to many problems. Thus, newspapers often published articles with phrases such as ‘dawn of a new era,’ ‘the wave of the future,’ or ‘the force for revolutionary change.’³⁷ During the 1970s, people that worked in computer technology were often labeled as pioneers, missionaries, gurus, and apostles. Silicon Valley could perform “man-made miracles” and “economic magic.”³⁸

Third, technology news tended to be promotional.³⁹ Media coverage often projected “a sense of awe about the power of technology” and promoted it as “the cutting edge of history” and “as the new frontier.”⁴⁰ As Nelkin states, “Many journalists [were], in effect, retailing science and technology more than investigating them, identifying with their sources more than challenging them.”⁴¹ Thus, the press tended to be easily manipulated by tech companies. “By its frequent promotion of computer applications and its use of corporate sources of information on high-technology products, the press unreflectively accept the assumptions of an aggressive industry seeking an expanded market.”⁴²

The second and third characteristics often lead to the fourth characteristic of new technology coverage, disillusionment. New technologies often fail to deliver as expected because the press oversells the technology and only periodically addresses issues of concern. This leads to disappointment and disillusionment in the populace. This is a similar pattern

35. Nelkin, *Selling Science*, 12.

36. Nelkin, 31–32.

37. Nelkin, 35.

38. Nelkin, 35.

39. Nelkin, 173.

40. Nelkin, 34.

41. Nelkin, 175.

42. Nelkin, 36.

pointed out by Williams as well. Once such disillusionment occurs, the media is quick to reverse course, and its promotional and utopian coverage turns negative and dystopian.⁴³

Being one of the few works that dealt explicitly with media coverage of technology in the 1970s, Nelkin's insights were crucial in my analysis. So was Steve Wurtzler's examination of recorded audio in the 1920s and 1930s because he also provides insights into how newspapers introduced new technology to American society. Most relevant for this thesis is his discussion about consumer pedagogy. Consumer pedagogy refers to the rhetorical strategy various organizations (usually businesses) use to provide consumers with information about new technologies to instruct them on their uses and shape their attitudes towards them, usually to drive sales.⁴⁴

For example, when telephones became more popular in the late nineteenth century, *Scientific America* ran a behind-the-scenes article in which a reporter described his visit to a telephone company. He explained corporate telephone procedures and the people working there, helping to demystify the new technology.⁴⁵ Similarly, in the 1910s and 1920s, AT&T initiated a public relations campaign to "engineer consumers' perceptions and experiences of acoustic technology."⁴⁶ Part of this process included establishing telephones' acceptable uses as well as the economic and political structures that would support the technology.

Wurtzler also analyzes another critical aspect of consumer pedagogy, normalizing the political economy around new technologies. "More than promotions for a new device and product line, these announcements offered to consumers ways of making sense of technological change, and they sought to make an emerging political economy of media seem natural and inevitable."⁴⁷ Organized interests often used newspaper articles to ensure the ways in which recorded audio technology was produced, distributed, and sold, benefited themselves. In the United States, new technology was nearly always molded to fit

43. Nelkin, *Selling Science*, 52.

44. Steve Wurtzler, *Electric Sounds: Technological Change and the Rise of Corporate Mass Media* (New York: Columbia University Press, 2007), 72, 88.

45. Wurtzler, 70–71.

46. Wurtzler, 71.

47. Wurtzler, 74.

capitalist ideology and structures. By running articles with consumer pedagogy, it is clear that newspapers played, and continue to play, a role in pulling new media and technology into society.

Methodology

The analysis in chapter three utilizes news articles that appeared between the years 1972 to 1976. These years mark the commercialization of video games and their initial surge in popularity and use. These were also the years of the first generation of home and coin-operated video game machines which mostly lacked microprocessors. Beginning in 1977, there was a major market crash that led to significant changes in the video game field. Some major corporations got out and newer ones emerged. Video game technologies started to increasingly rely on microprocessors. With new talent and new technologies, game play itself began to change and diversify. This all led to different perceptions among the American population. Therefore, I consider 1972-1976 as its own era in video game history, where they began to enter the mainstream, but were still not considered part of popular culture. These were the crucial initial years in which America came to understand what video games were, what they were for, and why.

Second, I gathered articles from twelve news organizations. I wanted to ensure that a diverse mix of interests were represented, to better get a generalized view of video game coverage. I gathered articles from newspapers that tended to cover more regional stories and others that focused on more national ones. Some had more general coverage while others were more business or politically oriented. I also incorporated newspapers that had large distributions and others that were smaller. The specific newspapers I used and the reasoning for their selection are as follows:

- *The Boston Globe* - large circulation with national coverage. In the 1970s, Massachusetts was one of the major centers for electronic research.⁴⁸

48. John Robinson, "Once Shocking, Game of Gotcha Now Electrifying," *Boston Globe*, February 1974, 54.

- *Chicago Tribune* - large circulation with national coverage, based in north-central United States.
- *Dallas Morning News* - medium circulation with more regional focus, based in south-central United States.
- *Los Angeles Times* - large circulation with national coverage, based in western United States.
- *New York Times* - large circulation with national coverage, based in eastern United States. Regarded as a newspaper of record.
- *San Francisco Examiner* - large circulation with regional coverage in western United States. In the 1970s, San Francisco was one of the major centers for electronic research; part of Silicon Valley.
- *Wall Street Journal* - large circulation with national coverage based in north-eastern United States. Has business and financial focus. It also considers itself as a newspaper of record.
- *Washington Post* - large circulation with national and regional coverage, based in eastern United States. Has political focus.
- *Santa Cruz Sentinel* - small circulation with regional and local coverage based in western United States. Not part of Silicon Valley.
- *The Sun-Telegram* - small circulation with regional and local coverage based in San Bernardino County, California in western United States. Not part of Silicon Valley.
- *The Arizona Republic* - larger circulation with regional and local coverage, based in south-western United States.
- *The Pensacola Journal* - medium circulation with regional and local coverage, based in south-western United States. A middle-market newspaper.

Third, I used the following terms in my search: television game, telegame, tele-game, tele-tennis, electronic game, video game, videogame, atari, pong, nolan bushnell, arcade, syzygy, video entertainment system, electronic paddle tennis game, action game, electronic entertainment, electronic game simulator, ball-and-paddle, ball and paddle, enterpex, apollo 2001, fairchild, coleco, telstar, computer space, spacewar, al alcorn, alan alcorn, nutting associates, electrotennis, bally, odyssey, colecovision, vectrex, ping-pong, table tennis, tv game, and computer game.

I discarded stories that could not generally be classified as an article, editorial, or review. This included advertisements, because they have already been explored by other researchers.⁴⁹ There is one caveat to this, though. I did include any marketing or advertising that looked like it was an article, editorial, or review. There were several stories that on the surface look like regular articles but upon further examination were little more than marketing disguised as news. Because readers may have read them as articles, I include them.

Fourth, I determined each newspaper's level of coverage. If stories had a specific local or regional bent (i.e., covering a local event or business, etc.) it was labeled as local. If an article was from the AP or UPI, or if it had no local or regional spin and was from a national newspaper, I labeled it as national. If an article had no obvious local or regional bent, but appeared in a local or regional newspaper, I labeled it as such.

Lastly, because newspaper articles are a type of discourse, I chose a discourse analysis framework to assist in understanding the contents of each article. This thesis is not a discourse analysis, though. It establishes general coverage patterns to explore how newspapers presented video games to the general public. To do a discourse analysis of all the articles collected would be far beyond this project's scope.

With that in mind, I employ James Paul Gee's cultural discourse analysis model. It is a highly flexible framework, allowing for *ad hoc* modifications. I adapted it to be more

49. Newman, *Atari Age*; Clemens, "Defining Play."

newspaper specific. His framework is also sensitive to external contextual factors affecting a reader's reading. As he states, "[M]eaning is not general and abstract, not something that resides in dictionaries, or even in general symbolic representations inside people's heads. Rather, it is *situated* in specific social and cultural practices, and is continually transformed in those practices."⁵⁰ Methodologically, his theory provides six aspects to focus on when investigating any communicative act. First is a semiotic aspect, including sign systems and ways of knowing. The second is an activity aspect, which is the activity engaged in while a person is reading. The third is a material aspect which includes the place, time, and nearby objects while reading. The fourth is a political aspect which consists of the distribution of "social goods," such as power dynamics, socioeconomic status, race, *et cetera*. The fifth is a sociocultural aspect which includes all the "personal, social, and cultural knowledge, feelings, values, identities, and relationships" while reading."⁵¹ The sixth and last aspect is a connection aspect which is all the relevant links to past and future to the present interaction.⁵²

Not all of these aspects need to be addressed when using his model. Gee believed that a person should use what they want and leave out the irrelevant. They are more guidelines for thinking about discourses than strict areas that a person must answer. The strength of Gee's model is the ease in which historians can utilize it for historical questions and its ability to get at how news stories were framed, their contents, and the context surrounding them.

Taking Gee's questions, with some inspiration from McKernan's methodology, I created five specific areas to conduct my analysis. These areas cover one or more of the elements included in Gee's aspects, some more than others. The first area is an article's *level*. This is the article's geographical focus, be it local, regional, or national. Local coverage tended to target the audiences of and cover stories originating from smaller geographic regions,

50. James Paul Gee, *An Introduction to Discourse Analysis: Theory and Method* (London: Routledge, 1999), 63.

51. Gee, 62.

52. Gee, 82–83.

such as towns or counties. Regional coverage could be much broader, focusing on several countries or states. National coverage operated and concentrated across the United States.

The second area addresses an article's *topic*. Topic here means the core idea or ideas that an article describes or discusses. So, for instance, a topic might be the release of a new video game console or the purchase of a major video game corporation by a prominent media conglomerate. In general, a topic is separate from the value judgments an article may make.

Whereas several articles might cover the same topic, they could approach it differently. *Framing*, the third area, is one of those ways. Framing refers to the imagery, tone, metaphors, and other language used in covering a story. For example, a similar topic, such as purchasing a major video game company by a prominent media conglomerate, might be a "pact" or a "takeover" depending on how it is framed, each painting a different picture of the same topic.⁵³

Values are another way articles can cover the same topic differently and are the fourth area. Whether intentional or not, various aspects in a story are valued while others are devalued. So, for instance, in 1976, two articles discussed the release of a home version of Atari's *Pong*. One article valued the ease of use in connecting the game to a TV set.⁵⁴ The other article devalued what the writer believed was the fad-like nature of video games.⁵⁵ Depending on the newspaper chosen, a newsreader would have experienced a different interpretation of video games.

The fifth and last area the analysis addresses is an article's *context*. Contexts, in this case, are any relevant social, political, and technological issues surrounding an article's creation. These allow a researcher to situate them within their broader historical milieu and better interpret them.

53. Clare M. Reckert, "Warner Signs Pact to Purchase Atari," *New York Times*, September 1976, 43; "Warner Communications Completes Atari Takeover," *New York Times*, October 1976, 79.

54. United Press International, "Sit-down Tennis, Anyone?," *Dallas Morning News*, November 1975, 2.

55. "Pong in the Home, and Courts," *New York Times*, November 1975, F17.

Sorting the articles into these five areas serves three purposes. First, as Gee suggests, this helps get to the most pertinent information. Second, this sorting streamlined the analytical process. Going through all of Gee's questions is a tall order, even for one article, let alone many. Minimizing the areas to focus on facilitated a quicker and more manageable research process. Last, condensing the questions made them easier to conceptualize and use as a framework. This makes it easier to understand each article and compare them.

CHAPTER 2

AND THEN THERE WAS *PONG*: VIDEO GAMES FROM THE 1950s TO THE EARLY 1970s

Many histories of video games begin with the arcades of the 19th century. This is because video game arcades in the 1970s inherited much of the social and cultural baggage surrounding their older counterparts, including the belief that they were dens of inequity filled with gambling, drugs, alcohol, and prostitution. But such issues did not come to the fore until the later part of the 1970s when video game arcades became separate entities. Before then, people often found video games in bars, hotel lobbies, and other places of public amusement, including pinball arcades. Like the early years of film, which were only a small part of vaudeville acts, video games did not initially merit their own public spaces. Because of the infancy of the video game industry at the time, negative associations appear to have played only minor roles in video game adoption between 1972-1976. Therefore, this essay says little about this part of video game history.

Instead, it begins in the 1950s. The United States was still recovering from World War II, one of the lowest points in western history, and the horrors of fascism and atomic bombs were still fresh. The specter of communism rose once again to haunt American shores and, with it, McCarthyism. In its struggle for global hegemony against the USSR and to prove the merits of capitalism and democracy to itself and the world, the United States began embracing mass consumption once again, a process put on hold during the Depression and World War II. Many Americans believed “affluence would spread through a prospering economy rather than extensive redistribution of income,” and that this would solve the economic and social woes afflicting the United States.¹ Mass consumption, enabled by many Keynesian New Deal programs initiated by the Frankling D. Roosevelt

1. Lizabeth Cohen, *A Consumers' Republic: The Politics of Mass Consumption in Postwar America* (New York, NY: Vintage Books, 2004), 144; Howard Zinn, *A People's History of the United States* (New York, NY: HarperCollins, November 2015), 528.

administration, such as the G.I. Bill, led to unprecedented economic prosperity, although the benefits from such programs were far from being equally (or equitably) shared by all.²

Television, a technology medium that had existed for decades but had lacked a significant push in the United States, benefited greatly from this new consumer culture. Only three percent of Americans' owned a television in 1948. By 1952 this number had reached forty-five percent. It was ninety percent in 1959.³ In turn, television perpetuated a consumer culture with its constant onslaught of advertisements, fundamentally altering America. As Mary Ann Watson argues, television was central to reorienting American culture and shifting American values.⁴ Like many new media technologies, it started with utopian ideals. During its American debut at the 1939 World's Fair, the president of the Radio Corporation of America (RCA) and eventual founder of the National Broadcast Corporation (NBC), David Sarnoff, exclaimed to a crowd, "Television is an art which shines like a torch of hope to a troubled world. It is a creative force which we must learn to utilize for the benefit of mankind" ⁵

By the mid-1940s, the U.S. population was spreading out due to suburbanization and, as a result, access to public entertainment centers in urban areas became more difficult. Television promised to bring a movie theater-like experience to their homes. It also promised to operate as a public meeting space of sorts, a place where people could receive information about current events, the hottest new consumer items, as well as be entertained.⁶ Some claimed that not only would television be healthy for democracy, which thrives best by an informed public engaged in discussing ideas, but that it would

2. Zinn, *A People's History of the United States*, 528–531; Jill Lepore, *These Truths: A History of the United States* (New York, NY: W. W. Norton & Company, October 2019), 527–530.

3. Lepore, *These Truths*, 559.

4. Mary Ann Watson, *Defining Visions: Television and the American Experience in the 20th Century* (Malden, MA: Blackwell Publishing, 2008), 7.

5. Tim Wu, *The Master Switch: The Rise and Fall of Information Empires* (New York, NY: Vintage Books, 2011), 152.

6. Watson, *Defining Visions*, 255.

help to reconnect people, a much-needed salve after World War II wreaked havoc on family and social ties.⁷

The United States in the 1950s also saw the continued growth of a cold war liberalism in which conservative, aggressive foreign policies coalesced with liberal domestic welfare politics to form a bipartisan consensus held together by strong anti-communist and anti-radical sentiments.⁸ Influenced in part by the Korean War and the Soviet Union's burgeoning space program, this consensus approved of a heavy investment in computer and defense technology, more so than it already had. Several universities, research organizations, and private defense contractors quickly utilized the newly appointed government money to fund computer research and development.⁹ Soon, new computers with better technical specifications were birthed, most based on the same architecture as the Electronic Numerical Integrator and Computer (ENIAC). In 1958, the United States created the Advanced Research Project Agency (ARPA).¹⁰ This further cemented the military-industrial complex as part and parcel of the US *modus operandi*, as it helped to facilitate research between universities, businesses, and government agencies.

Although the United States had several technological breakthroughs in the late-1940s and early-1950s, Britain dominated computer research and development during this time. They created Colossus in 1944, the world's first electronic digital computer. It was soon followed by the Manchester Mark 1 in 1949 and the Pilot ACE (Automatic Computing Engine) in 1950, the first computers for which games were designed—although not as a primary focus. However, engineers and programmers could never get the games to work on either without extensively rewriting the code. It was not until the Ferranti Mark 1 in 1951 that a game was played on a digital computer for the first time and approximated modern conceptions of a video game. A human and the Ferranti Mark 1 played checkers, with the

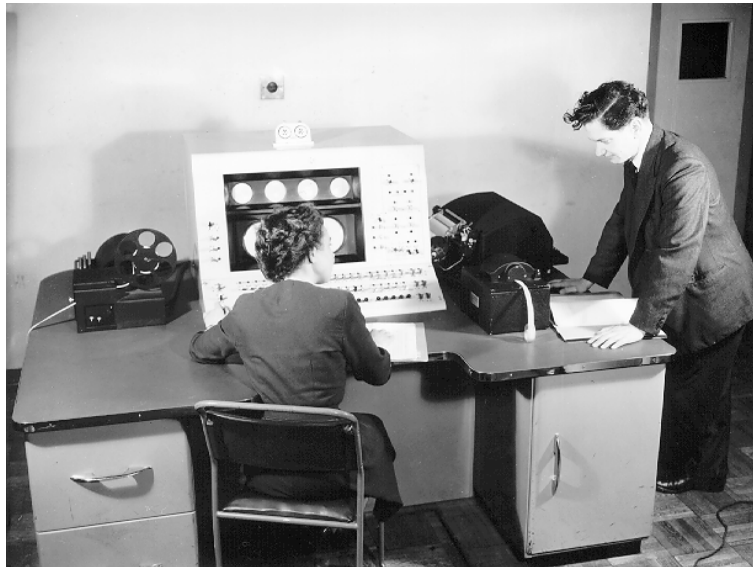
7. Watson, *Defining Visions*, 26.

8. Zinn, *A People's History of the United States*, 427.

9. Smith, *They Create Worlds*, 9.

10. Lepore, *These Truths*, 587.

Figure 2.1: Photo of Ferranti Mark 1 with paper-tape reader on left and teletype interface and 5-hole paper tape punch on right.



(Source: University of Manchester, School of Computer Science)

computer's moves being displayed on a teletype interface (See Figure 2.1).¹¹ The United States accomplished a similar feat the following year on the IBM 701, again, with a checkers program.¹²

Despite Britain's early advancements, the realities of a devastated Europe post-WWII curtailed its computer manufacturing as it focused spending on recovery efforts. This allowed American companies to step in and seize international markets.¹³ For the next few decades, computer research and development would be led by the United States and focused mostly on commercial and military interests. Despite this, engineers and mathematicians repeatedly co-opted the machines to solve problems more interesting to themselves. These were often games such as tic-tac-toe, billiards, nim, or craps.¹⁴ By 1958, computer chess games had become much more sophisticated, even beating human counterparts, though usually only novices.¹⁵ Whether intentional or not, these laborers

11. Smith, *They Create Worlds*, 6–8.

12. Smith, 11.

13. Smith, 9.

14. Smith, *They Create Worlds*, 10, 12–15, 38; Leonard Herman, *Phoenix IV: The History of the Videogame Industry* (United States: CreateSpace Independent Publishing Platform, 2016), 1.

15. Smith, *They Create Worlds*, 15.

subverted “communications and information technologies created for the military-security state . . . into playful expressions of digital delight.”¹⁶

Yet, up until this point, the games that appeared could only tentatively be called video games. Many displayed results on teletype, arrays of small light bulbs, and rarely ever on cathode ray tube (CRT) monitors. As Smith argues, these programs “were not intended primarily to entertain: they were developed to introduce the general public to the capabilities of modern computing technology through an interactive experience designed to hold their interest.”¹⁷ This began to change in 1958 when Willy Higinbotham debuted his *Tennis for Two* at Brookhaven National Labs (BNL), where peaceful applications for nuclear technology were being conducted on behalf of the U.S. government. His game utilized an oscilloscope as its display (see figure 2.2). Also, unlike previous games, *Tennis for Two* was designed specifically to entertain the general public instead of computer scientists, mathematicians, or engineers.¹⁸ Alas, Higinbotham had no commercial interests, and so the game expanded no farther than BNL’s campus.¹⁹ Video games as we know them today would not begin to appear until the 1960s, driven largely by hacker culture and the real and perceived failures of television.

By the mid-1960s, over ninety-four percent of the U.S. population owned at least one television. Yet, the 1950s technological promises about television had mostly failed to materialize.²⁰ While some folks found edifying and thought-provoking programming that could connect families and society through active and lively discussions, some of the most outspoken critics believed that television programming was mostly passive “lowest-common-denominator mass entertainment.” Often, these critics directed their ire towards the monopoly control by NBC, the Columbia Broadcasting System (CBS), and the

16. Nick Dyer-Witheford and Greig de Peuter, *Games of Empire: Global Capitalism and Video Games* (Minneapolis, MN: University of Minnesota Press, 2009), 10, Book.

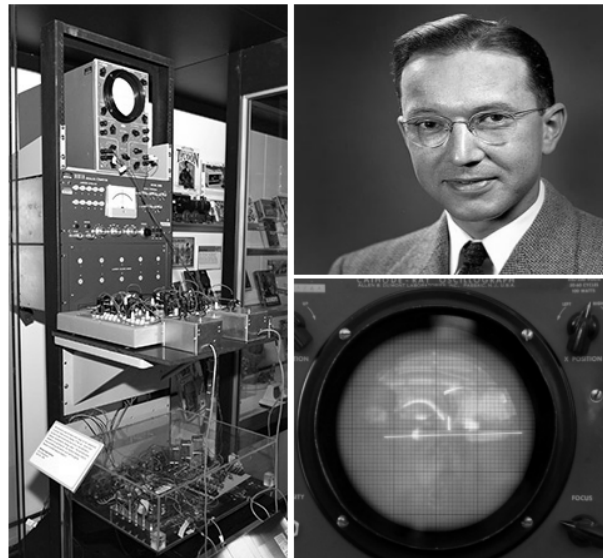
17. Smith, *They Create Worlds*, 39.

18. Smith, 39.

19. Smith, 40–42.

20. Cohen, *A Consumers’ Republic*, 302.

Figure 2.2: Left: Re-creation of the original *Tennis For Two*, Top-Right: Willy Higinbotham, Bottom-Right: Oscilloscope displaying *Tennis for Two*.



(Source: Brookhaven National Laboratory)

American Broadcasting Company (ABC).²¹ Some agreed with Newton Minow, the then chairman of the Federal Communications Commission, and believed television was a “vast wasteland” of “game shows, formula comedies about totally unbelievable families, blood and thunder, mayhem, violence, sadism, murder, western bad men, western good men, private eyes, gangsters, more violence and cartoons. And endlessly, commercials—many screaming, cajoling and offending. And most of all, boredom.”²² Perhaps supporters of such sentiment failed to realize Minow was actually calling for more diversified television programming.

Regardless, they believed that television failed to unite an increasingly geographically dispersed America by acting as a public meeting space of sorts or a stand-in for a traditional community. Instead, they believed television began to erase them.²³ Communities spent less time together and more time in the privacy of their own homes. By the mid-1960s, Americans were spending around five hours a day in front of their television

21. Paul Starr, *The Creation Of The Media: Political Origins Of Modern Communications* (New York, NY: Basic Books, March 2004), 384.

22. Newton M. Minow, “Television and the Public Interest,” American Rhetoric Online Speech Bank, May 1961, accessed July 7, 2021, <https://www.americanrhetoric.com/speeches/newtonminow.htm>.

23. Newman, *Atari Age*, 48.

screens.²⁴ Television also was a key component in segmenting markets, which only atomized American society further.²⁵

In the 1960s, television was increasingly seen not only as a threat to societal well-being but to democracy as well. People began echoing the decades earlier fears of the power of radio, believing that television had become the newest tool of propaganda used by state and corporate elites, who sought to control the public via its hypnotic powers.²⁶ For those that believed this, that so many spent so much time in front of the television instead of discussing current events and ideas with one another only supported such a view. How could any of this be good for democracy?

Now, that is not to say that all people held such pessimistic views. A great deal of literature shows that television audiences, even at their most passive-appearing moments, were actively engaged while watching shows. However, one can hardly blame pessimists in the 1960s. Television programs were a stream of constant commercials and violence, whether the programming was informational or entertainment. For instance, domestically, there were over twenty major race riots throughout the 1960s, the most of any decade in American history. On-screen, people saw cops beat and gas protesters on the bridge in Selma, Alabama.²⁷ They saw black businesses vandalized and set ablaze and entire city blocks in ruins throughout the United States.²⁸ They saw Martin Luther King Jr. as he lied in state.²⁹

Internationally, Americans witnessed Vietnam, often considered the first television war. Before it, radio was the prime medium for news broadcasts, although many Americans watched newsreels during World War II.³⁰ While Americans could have seen a bomb

24. Cohen, *A Consumers' Republic*, 302.

25. Cohen, *A Consumers' Republic*, 302; Newman, *Atari Age*, 47.

26. Newman, *Atari Age*, 47.

27. "CBS News Special Report - Selma: The City and the Symbol," CBS, March 1965, accessed July 9, 2021, <https://www.youtube.com/watch?v=M4yaH5Q4a8k>.

28. "What Happened to the Riot Report," CBS, April 1968, accessed July 7, 2021, <https://www.youtube.com/watch?v=v8E1sCZH3YE>.

29. "Martin Luther King: Assassination & Aftermath," CBS, April 1968, accessed July 7, 2021, <https://www.youtube.com/watch?v=DooK9SY9DE4>.

30. Watson, *Defining Visions*, 15.

dropped from a fighter plane or an artillery volley launched from a naval battleship, it was rare for them to see the human cost up close. Some graphic footage appeared on television news during the Korean War, but television's crudeness and elementary technological capability rendered it less gruesome. Because television news was still in its infancy and few Americans owned televisions, its market reach was limited.³¹ It was also often sanitized for the broadest market appeal. This all changed by the Vietnam War. It was not uncommon for Americans to see the horrors of the war in graphic detail. They saw Nguyễn Ngọc Loan execute Nguyễn Văn Lém. They witnessed "Viet Cong terror" when the U.S. embassy in Saigon was attacked during the Tet Offensive.³² They watched the impact on civilian lives as the Vietnamese struggled to maintain threads of normalcy during the conflict.³³

With increasingly negative and less-filtered images broadcast into their homes, it is no wonder people in the 1960s were losing faith in television. Furthermore, American society and the issues it faced were too complex to unite a nation as radio did during WWII.³⁴ Too many promises were made on television's behalf, and it could not deliver.

It was in this backdrop of political and social unrest that the Tech Model Railroad Club (TMRC) developed the first modern video game. Established in 1947 at the Massachusetts Institute of Technology (MIT), the TMRC is often considered the first hacker group. It attracted engineers, programmers, and other tinkerers interested in building an elaborate model railroad.³⁵ A small subset of its members were in charge of developing and maintaining the electrical components that controlled its various systems. This group was called the Signals and Power subcommittee (S&P), and its members were heavily involved in learning electronic technology.³⁶ This often involved discovering a "hack," a creative or

31. Watson, *Defining Visions*, 231-232.

32. "Viet Cong Terror: A Guerrilla Offensive," NBC, January 1968, accessed July 7, 2021, <https://www.youtube.com/watch?v=L8HolJpo3pM>.

33. "Vietnam Report by Walter Cronkite," CBS, February 1968, accessed July 7, 2021, <https://www.youtube.com/watch?v=3Toy2wFBkmg>.

34. Watson, *Defining Visions*, 6, 234.

35. Clemens, "Defining Play," 33.

36. Smith, *They Create Worlds*, 47.

ingenious solution to a problem using existing technologies.³⁷ As Smith argues, “For the members of S&P, there was no higher calling than that of the ‘hacker.’”³⁸

In 1961, a newer, cheaper, and more powerful computer—the Programmed Data Processor-1 (PDP-1)—was donated to MIT by the Digital Equipment Corporation.³⁹ Before its arrival, three S&P members, J. Martin Graetz, Wayne Wiitanen, and Steve Russell learned of the donation, and quickly began brainstorming a demo for it. They wanted the demo to push the computer to its limits, be dynamic, and most importantly, be entertaining. Since all three were science fiction fans, they quickly settled on developing a game centered on space combat.⁴⁰ In April of 1962, *Spacewar!* was finished and was publically debuted in May at MIT’s annual open house.⁴¹ It was a two-player game in which each player tried to shoot the other’s ship. It was by far the most complicated computer game to date. In fact, despite being the first modern video game, it was one of the most complex for years to come.⁴² It could track ship velocity, a star’s gravitational pull, and even displayed an accurate star map as a background (see figure 2.3).

It was also the first game to spread beyond the walls from which it was developed. This is primarily due to advances in computer technology which allowed software to be ported across systems much easier. Soon after that, programmers could be found across the country tweaking *Spacewar!*: adding and removing gameplay elements, and changing settings and controls to create a more personalized version of the game.⁴³ Despite its popularity, though, TMRC members never attempted to commercialize the product. Machines capable of running it were too expensive to justify it.⁴⁴ Therefore, the game remained in computer labs, away from most of the public. *Spacewar!*’s limited public reach belied its significant impact, inspiring a new generation of programmers and engineers to

37. Clemens, “Defining Play,” 33.

38. Smith, *They Create Worlds*, 48.

39. Smith, 49.

40. Smith, 51.

41. Clemens, “Defining Play,” 35; Smith, *They Create Worlds*, 54.

42. Clemens, “Defining Play,” 35–36.

43. Lowood, “Videogames in Computer Space: The Complex History of Pong,” 7.

44. Clemens, “Defining Play,” 37–39.

Figure 2.3: Photo of two men playing *Spacewar!*.



(Source: Computer History Museum)

find new, innovative ways to create video games on computers. Among these new programmers was Nolan Bushnell, co-founder of Atari Inc.⁴⁵

Bushnell was tech-savvy, even at a young age. He was a licensed HAM radio operator by the age of eleven, and in his teens, he worked as an appliance and television repairman. While pursuing an electrical engineering degree at Utah State University in 1963, he started working at the Lagoon Amusement Park. Here, he was introduced to the world of coin-operated, electro-mechanical entertainment and its engineering sophistication and commercial potential. In 1969, he moved to Silicon Valley and started working for the Ampex Corporation. Through connections from one of the Japanese *Go* clubs in the area, Bushnell was able to get access to the Stanford AI Lab. Here, Bushnell saw *Spacewar!*.⁴⁶

He quickly realized the commercial potential for the game, but like its creators, he could not overcome the high costs of computers. Unlike others, though, this did not deter him. He enlisted the help of Ted Dabney, another engineer at Ampex, and together they went about trying to design a cost-effective way to get a game like *Spacewar!* to market. Soon they formed Syzygy Co. and began tweaking their designs and trying to find funding.

45. Smith, *They Create Worlds*, 59.

46. Smith, 66–69.

They eventually landed on the concept of using a single computer to time share video games between multiple users simultaneously. While this seemed economically feasible, they had yet to get a working prototype by the end of the 1960s.⁴⁷

What Bushnell and Dabney were unable to do by the end of the decade, Ralph Baer did with spectacular results. Taking advantage of the GI Bill legislation passed after World War II, Ralph Baer earned his Bachelor's degree in television engineering in 1949. As early as 1950, he was already trying to figure out how to put a game on television. He was able to get as far as making a checkerboard pattern on the screen, but not much more. As a low-level worker, he was told to stop such projects and focus on just designing televisions.⁴⁸ In 1958, he began working for the New Hampshire-based Sanders Associates, a defense contractor specializing in electronic warfare that had benefited greatly from the increase in defense spending. In 1966 Baer was promoted to manager of the Equipment Design Division. On September 1, he outlined four pages of notes detailing how to play games on television, something he referred to as "TV gaming."⁴⁹ This is often considered the genesis of video games as we know them today.

Two years passed. In that time, Ralph and his team created seven prototypes, almost secured a cable distribution deal to display background images for his games, and survived an economic recession. The result was the Brown Box (See figure 2.4).⁵⁰ Not only was it able to play a game on television, but it could play multiple games, including *Ping-Pong*, *Handball*, *Hockey*, *Soccer*, *Football*, *Volleyball*, *Target Shooting*, *Golf Putting*, and *Checker Games*.⁵¹ Despite its sophistication and near-production ready design, few companies seemed interested in manufacturing and licensing the Brown Box, including Sanders Associates, who had funded the entire project.

47. Smith, *They Create Worlds*, 70–71.

48. Baer, *Videogames*, 3.

49. Smith, *They Create Worlds*, 142; Baer, *Videogames*, 18–19.

50. Baer, *Videogames*, 27–54.

51. Baer, 54–55.

Figure 2.4: Photo of the Brown Box with program cards.



(Source: National Museum of American History, Behring Center)

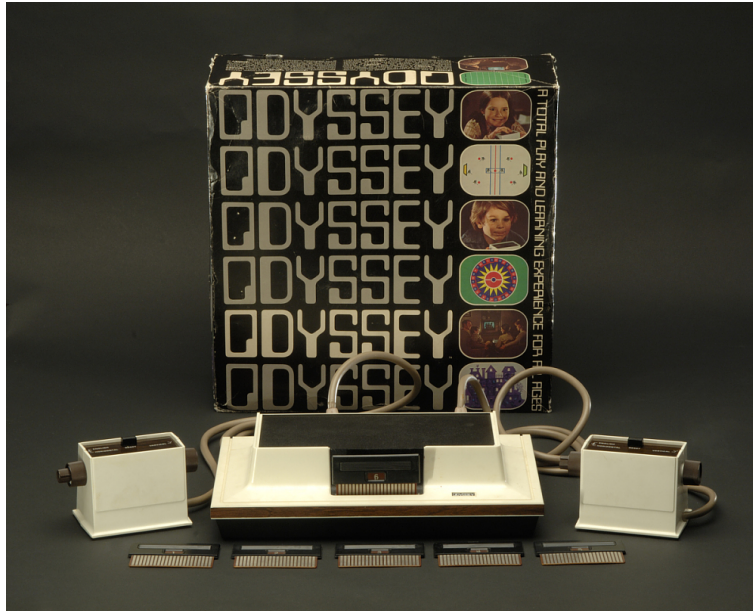
As a cultural and technological shift developed in the 1970s, such reluctance transformed into enthusiasm. Despite its earlier promises and incredible popularity, many Americans saw television as inherently passive, one-way, and top-down. Here was a perfect storm of technical and cultural deficiency to prompt inventors, innovators, and other organized interests to step in and attempt to “fix” or “improve” television. Rapidly, consumers could find tape decks, cameras, two-way televisions, and cable and satellite technologies, which promised them more control over their television experiences.⁵² Video games were part of this larger technological and cultural phenomenon.

In January 1971, Baer finally licensed his Brown Box to Magnavox, whereby an internal development team made minor cosmetic and component changes. Magnavox also changed the name to the Odyssey and released it to the public in September 1972, retailing for \$99.95 (see figure 2.5). The first shipment of consoles quickly sold out, but sales had slowed significantly by the end of the year, reaching only 69,000 of the 140,000 units it had manufactured.⁵³ Several factors led to keeping these numbers down. First, the system was too expensive. Second, the Odyssey could only be purchased at Magnavox stores, limiting

52. Newman, *Atari Age*, 61, 67.

53. Smith, *They Create Worlds*, 153.

Figure 2.5: Photo of the Magnavox Odyssey



(Source: National Museum of American History, Behring Center)

its market reach. Third, Magnavox's advertisements and sales associates incorrectly suggested that people could only play the Odyssey on Magnavox televisions.⁵⁴ Together, these factors resulted in fewer people purchasing the console. Sales were poor, and Magnavox considered halting production of its systems, but recent customer and retailer feedback prompted them to continue.⁵⁵ By 1975, when Magnavox halted production of the Odyssey completely to focus on developing newer consoles, they had sold around 350,000 units.⁵⁶ While not as successful as they had hoped, its importance cannot be understated, as, just like *Spacewar!*, its impact went further than just its sales numbers. The Odyssey introduced an unparalleled interactive media experience to many Americans, which would have profound impacts on generations to come. Even *Pong* (1972), though far more popular, was inspired by the Odyssey's *Table-Tennis* game.⁵⁷

54. Smith, *They Create Worlds*, 150–153; Herman, *Phoenix IV*, 11–12.

55. Smith, *They Create Worlds*, 153.

56. Baer, *Videogames*, 91.

57. Smith, *They Create Worlds*, 152–153.

While Ralph Baer and Magnavox worked hard getting the Odyssey finalized and pushed to markets, Nolan Bushnell and Ted Dabney struggled to complete a game concept, let alone a commercially viable working prototype, like *Spacewar!*. By April of 1971, though, Bushnell and Dabney managed to impress the coin-operated game manufacturer Nutting Associates, which hired Bushnell as their new Chief Engineer.⁵⁸ Ted Dabney was hired three months later.⁵⁹ Part of Bushnell and Dabney's contract with Nutting Associates stipulated that their firm Syzygy Co. would continue to receive a five percent royalty on sales on the game.⁶⁰ Now, both men had the time and financial backing to complete their video game.

As the game came to be known, *Computer Space* began a limited release to bars and taverns in November of 1971. By February 1972, the machine was already seeing decent returns. Despite this, many distributors saw it as gimmicky and did not care to purchase it. Furthermore, the game failed to appeal to much of its user base. While popular among more tech-savvy individuals, working-class people found the rules long and complicated, the controls complex, and the gameplay too difficult (see figure 2.6). Sales began to stall. Ultimately, Nutting failed to sell all of its 1,500 units.⁶¹

Still, *Computer Space* managed to earn a respectable amount, and Nutting Associates was willing to continue developing video games.⁶² Regardless, Bushnell and Dabney decided to cut ties with Nutting Associates and run Syzygy as a firm that designed and engineered games and licensed them to coin-operated machine manufacturers for royalties. During incorporation procedures, they learned the name Syzygy had been taken. Choosing a word from Bushnell's favorite game of *Go*, Atari was officially incorporated on June 9, 1972. By the end of June, Atari held a contract to develop two games for coin-op manufacturer Bally and a two-player version of *Computer Space* for Nutting Associates.

58. Smith, *They Create Worlds*, 73, 127.

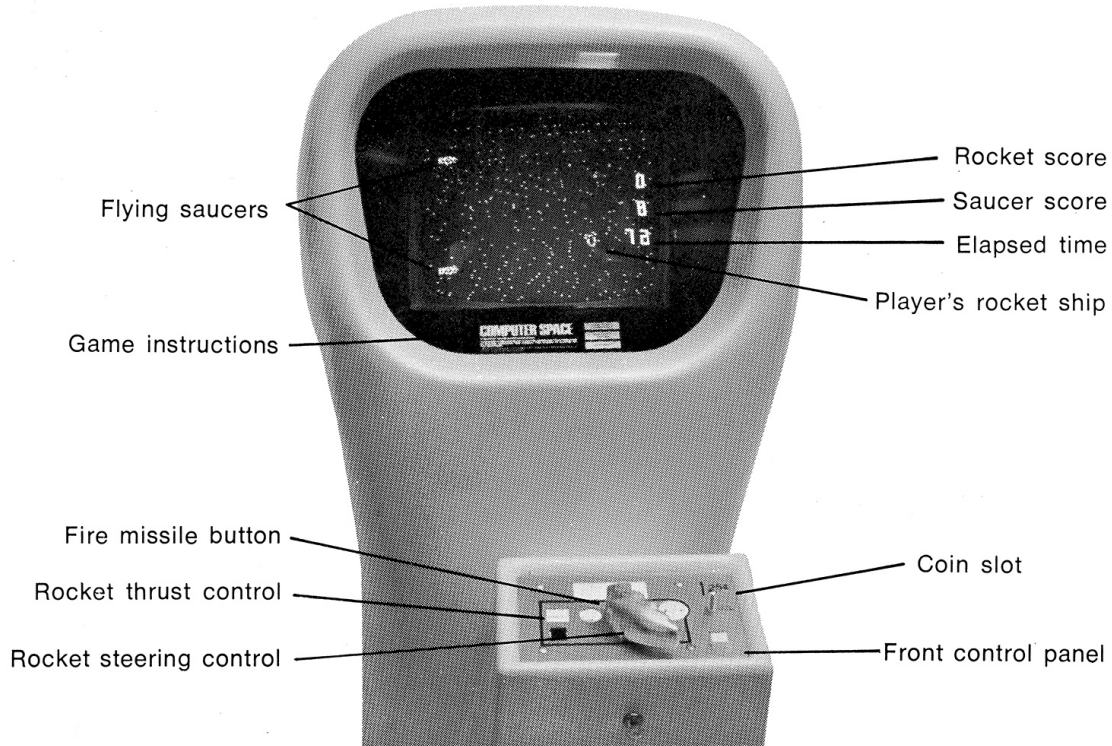
59. Marty Goldberg and Curt Vendel, *Atari Inc: Business Is Fun* (Carmel, NY: Syzygy Company Press, 2012), 39.

60. Goldberg and Vendel, 36.

61. Smith, *They Create Worlds*, 129, 135.

62. Smith, 156.

Figure 2.6: Close-up of the *Computer Space* cabinet on the back of a flyer.



(Source: Video Game History Foundation)

They quickly found themselves overwhelmed and decided to hire Al Alcorn as a third engineer.⁶³

Back on May 24, 1972, Bushnell attended a Magnavox Odyssey demonstration. There, he was able to play *Table Tennis*. At the time, he found the ball-and-paddle game too simplistic. Still, after hiring Alcorn, Bushnell thought having him design a version for Atari would be a great way to get Alcorn acquainted with designing video games. To motivate Alcorn, Bushnell lied and told him that Atari had a signed contract with General Electric to provide a table tennis game that people could play on television. While Bushnell saw this as a training exercise, Alcorn did not. Three months later, Alcorn had finished *Pong*. All three found the game fun and addictive and, even though it was supposed to be a throw-away project, decided to market-test it. They installed it at a local tavern called

63. Smith, *They Create Worlds*, 159.

Andy Capp's. Two weeks later, they had to repair the machine because the coin-collector was full, and quarters were spilling out onto the circuit board. *Pong* was a local hit.⁶⁴

Pong was announced to the public in November 1972 and released nationwide in March 1973. By June 1973, sales were \$3.2 million, of which \$600,000 was profit.⁶⁵ *Pong* was an astounding success. Part of its success was its simplicity. Unlike the Odyssey, players did not have to manage cords, batteries, overlays, nor need the technical proficiency to connect it all. *Pong* was also much cheaper. The Odyssey cost \$99.95, whereas a game of *Pong* cost \$0.25. Furthermore, unlike *Computer Space*, *Pong's* rules, controls, and gameplay were simple (see figure 2.7). *Pong* was also easy to access. By 1976 people could find the game in bars, hotel lobbies, restaurants, malls, and other public amusement centers.⁶⁶

Together, the Magnavox Odyssey and Atari's *Pong* helped spark an entire industry, and soon video games spread like wildfire. In 1975, Atari created a scaled-down version of *Pong* that could be played in homes, called *Home Pong*. It quickly sold out.⁶⁷ The Odyssey did even better, selling more units than any other ball-and-paddle system.⁶⁸ By 1976, video games had sold over 3.5 million units and were generating \$242 million a year.⁶⁹ Americans seemed to want video games. Some corporations did too. In October 1976, Warner Communications purchased Atari. As a media conglomerate looking to expand its entertainment businesses further, video games seemed promising, and none as promising as Atari.⁷⁰ With such major corporations involved, the video game industry was on the verge of starting a new chapter.

And it did, though not for the best. The video game industry climaxed towards the end of 1976 and then crashed in 1977. Several factors led to this. First, game-playing trends began to change. As chip technologies advanced, a second generation of technologically

64. Smith, *They Create Worlds*, 160–163.

65. Smith, 168–169.

66. Smith, 179, 185.

67. Smith, 213.

68. Smith, 215.

69. United Press International, "TV Games Probed," *Reading Eagle* (Reading, PA), December 1976, 22.

70. Smith, *They Create Worlds*, 338–340.

Figure 2.7: A *Pong* cabinet, circa 1972, and a close up of directions plate



(Source: Pong Museum)

superior video game consoles capable of offering better and more varied games arrived on the market. Yet, these consoles hurt the industry because they were still mostly focused on ball-and-paddle games. Also, the introduction of microcomputers led to an increasing consumer shift from playing video games on home consoles to playing video games on microcomputers.⁷¹ Business preferences also shifted, and cabinet operators became more selective about which equipment they would purchase. It also did not help that the

71. Smith, *They Create Worlds*, 224.

secondary market for used games shrank or that pinball had become wildly popular as Americans increasingly accepted it as a legitimate form of entertainment.⁷²

The most significant factor, though, was market saturation. After video games' introduction, the demand for video games rose sharply. Atari and Magnavox could not satisfy it on their own. Several unauthorized manufacturers gladly filled the gap between supply and demand. Soon ball-and-paddle clones flooded the market.⁷³ Of the 310,000 video game consoles sold in 1975, almost all of them were ball-and-paddle systems.⁷⁴ Because of the crash many video game manufacturers either shut down or left the business altogether.⁷⁵ The result was that the companies that remained tended to be more innovative and willing to try new things. They started developing games outside of the ball-and-paddle formula to a greater extent, such as racing, artillery, and western games. Though 1976 seemed like video games had reached their high point, and 1977 could have been the end, the industry's golden years were still ahead.

None of video games' successes would have been possible, though, if there had not existed a latent desire that they could fill. Nolan Bushnell and Ralph Baer were products of television's real and perceived failures. These failures were essential for motivating them to create video games. Baer once asked "What the hell can you do with a TV set besides turn it on and change channels?"⁷⁶ He wanted people to use their television "for something other than watching network fare" and their "stupid network programs."⁷⁷ Nolan wanted to make television "not just spectator-oriented but participatory."⁷⁸ Among these newer technologies, video games characterized more than the other technologies what it meant to be active and participatory.

72. Smith, *They Create Worlds*, 300–301.

73. Smith, 167–182.

74. Smith, 215.

75. Smith, 181.

76. Peter Ross Range, "The Space Age Pinball Machine," *New York Times*, September 1974, 332.

77. Baer, *Videogames*, 3; Tristan Donovan, *Replay: The History of Video Games* (East Sussex, UK: Yellow Ant, 2010), 8.

78. Newman, *Atari Age*, 62.

The ability to give a sense of control is one reason video games quickly became popular. While the 1960s was chaotic, volatile, and rapidly changing, there was still a general feeling amongst Americans that the mechanisms of democracy worked, and therefore the system could be changed. Some believed that the system worked too well in 1960s, and that it “had brought too much democracy. . . .”⁷⁹ This is most evident in the legions of protests around the country and the hope of the participants to make meaningful change. However, by the election of Richard Nixon in 1968, a new tide of antiliberalism had begun to take hold. By the early 1970s, many Americans had lost trust in the democratic mechanisms of government. After Nixon’s resignation in August of 1974 due to the Watergate scandal, one poll showed that over eighty percent of American’s believed that “the people running this country (government, political, church and civic leaders) don’t tell us the truth.”⁸⁰ In 1975, another poll showed “a substantial decline in optimism about the future.”⁸¹ By 1976, there was a great deal of voter apathy and government skepticism; only 53 percent of eligible voters participated in the presidential election—13 percent less than in 1963.⁸²

The 1970s also experienced other major crises as well. The Organization of the Petroleum Exporting Countries (OPEC) enacted an oil embargo in 1973 that resulted in “the cost of gasoline [increasing] by a factor of five,” which also drove up “the price of other goods.”⁸³ There was also stagflation—a potent mix of slow economic growth and productivity, high unemployment, and growing inflation.⁸⁴ The United States was defeated in Vietnam in 1975.⁸⁵ The Equal Rights Amendment (ERA), first introduced in 1923 and promised equal rights for women, looked well on its way to being ratified in 1977, only to fail shortly thereafter due to a rising conservative backlash and increased political polarization.⁸⁶

79. Zinn, *A People’s History of the United States*, 558.

80. Zinn, 550.

81. Zinn, 557.

82. Zinn, 564.

83. Lepore, *These Truths*, 657.

84. Cohen, *A Consumers’ Republic*, 388; Lepore, *These Truths*, 657.

85. Zinn, *A People’s History of the United States*, 550.

86. Lepore, *These Truths*, 402–403, 647–668.

Thus, two hundred years after the founding of the United States of America, many citizens felt that the system was dysfunctional and unmanageable and that they were powerless to change it. Coupled with increased consumerism and dissatisfaction with television, a latent desire for solutions made fertile the field in which video games could grow. From 1972 to 1976, a few entrepreneurs worked to pull video games into society by innovating decades-old technology to address these latent-desires. By 1976, they had succeeded, and video games had become a part of many Americans' media environment and looked poised to stay that way.

CHAPTER 3

PRINTING PIXELS: VIDEO GAME COVERAGE FROM 1972 TO 1976

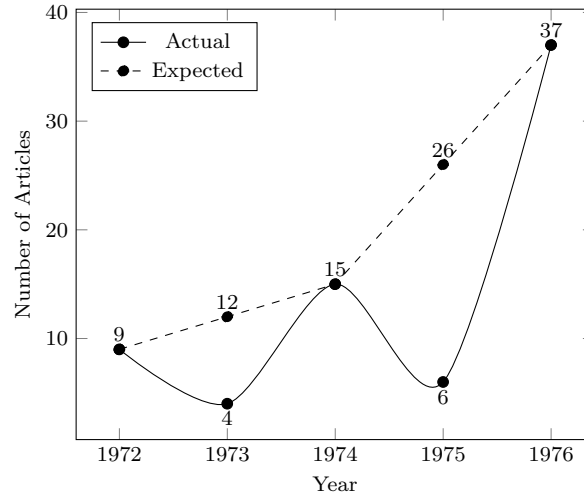
Structural Analysis

What follows is a social-scientific approach to studying history, in which quantitative analysis precedes qualitative observations. The process begins by presenting and explaining data, followed by applying historical analysis to interpret it. This chapter provides a structural analysis of coverage, which explores the physical-type elements of articles, such as geographical distribution or year-by-year coverage patterns. Also, this chapter analyzes textual elements, such as language, values, topics and frames.

Searching five years' coverage for twelve newspapers yielded tens of thousands of articles. Most were irrelevant or false positives, mainly because "ping-pong" and "ping-pong diplomacy" were hot topics in the early 1970s. After culling these, over seventy articles remained that referenced video games in ways that met the research parameters. The *San Francisco Examiner* had the highest number of articles at twenty-six, followed by the *New York Times* at twenty-five. Thus, a reader of these newspapers averaged just over five video game articles a year. Readers of other newspapers would have read even fewer. This is remarkably less than anticipated and is the first structural aspect of note about video game coverage during these early years.

This calls into question the impact of video game coverage. If readers only read about them fewer than five times a year, to what extent did such articles affect them? It is an important question and one that deserves much more research. However, this paper is not immediately concerned about the impact of coverage, so only a few remarks will suffice. First, a small quantity does not necessarily equate to a small impact. A handful of articles can have a relatively significant impact. If there were constant coverage, another article would be white noise to the incessant chattering. Because such articles were few and far between, this may have made them more impactful.

Figure 3.1: Amount of Coverage by Year



The lack of articles also poses a problem for this analysis. Because the article numbers are minimal, the following analyses and conclusions are tentative. More data and further study will be needed to verify or falsify these findings.

The second structural aspect to note is that the number of times newspapers covered video game stories each year rose and fell in a sinusoidal pattern. (See the solid line in figure 3.1). The amount of coverage in 1972 is higher than in 1973. Coverage in 1974 is higher than in 1975. 1976 experienced more coverage than all previous years combined. Some of this patterning can be explained. In 1972, Magnavox made several public announcements about the Odyssey, most likely part of a larger marketing strategy. As one of the largest TV manufacturers in the United States at the time, newspapers covered these announcements because, in agenda-setting terms, they were media influencers.

The coverage in 1973 and 1975 is harder to explain. A growing number of articles each year would have been expected, because of the steadily rising popularity of video games and their increasing presence in private and public spaces, as witnessed in 1974 and 1976 (see dashed line in figure 3.1). However, there was less coverage in 1973 and 1975.

In 1973, only one newspaper—the San Francisco Examiner—published articles relating to video games. It is unclear why this is. One possibility is that there were few manufacturer

announcements in 1973 and, therefore, little video game coverage, especially since video game coverage tends to follow manufacturer announcements (discussed below). This may have stemmed from video game manufacturers' inability to meet consumer demand. Why make announcements that might drive demand they could not meet? Another possibility is that journalists did not find video games interesting enough to cover those years. Both of these points could be true of 1975 as well.

1974 can be explained in some ways but is problematic in others. We know that the video game industry had explosive growth after 1972. More companies were making video games by 1974, which resulted in more video game announcements in general. Despite this, these companies were not always media influencers, so not all reporters would have covered their announcements. Therefore, to what extent the increased number of manufacturers had on the amount of video game coverage is unknown. Video games' rise in popularity might be another explanation. While they were more visible in home and public spaces, this did not necessitate more coverage. Newspapers are typically inclined to cover stories on popular subjects. However, the link between popularity and coverage is still not known. Such a claim at this point, while reasonable, is tentative. So, while increased video game manufacturer numbers, popularity, and presence could explain a rise in coverage, it is not a definitive answer. Furthermore, if these were true, then why did the years 1973 and 1975 see a decline? There have to be other phenomena that better explain the distribution patterns we see.

1976 is easier to explain, as several higher-profile incidents involving video games occurred. Magnavox was suing several manufacturers for patent infringement, including Atari.¹ There was also a new concern that video games could potentially damage televisions and several organizations began investigating it, including the Canadian Department of Consumer and Corporate Affairs, the California Consumer Affairs

1. "Magnavox Settles Video Patent Suit," *Chicago Tribune*, June 1976, C9.

Department, the Federal Trade Commission (FTC), and the Federal Communications Commission (FCC).²

1976 was also a breakout year for video game markets. While quite successful in previous years, in 1976, video games were the most popular, had the greatest market reach, and were poised to earn the highest profits. The industry was estimated to make nearly \$250 million that year, despite a microprocessor supply shortage amidst difficulty meeting the already existing demand and an economy still struggling with stagflation.³ Atari alone anticipated \$80 million in sales.⁴ Warner Communications, wanting in on the video game craze, purchased Atari for \$28 million.⁵ The purchase was significant in the history of video games, as it would have profound impacts on Atari. At the time, though, such purchases were not unusual. In the late 1960s and throughout the 1970s, conglomeration was common as corporations diversified their holdings to protect profits and stakeholders against unpredictable and sometimes highly destabilizing market changes.

Part of 1975's explanation is related to significantly decreased television sales. It was a year in which television manufacturers struggled to remain profitable.⁶ If Magnavox shifted their focus to promoting television instead of their other products, they might have made few video game announcements. As one of the largest video game manufacturers, this would have likely led to less video game coverage by newspapers. However, there were more video game manufacturers at this point, and Atari had also entered the home market. Furthermore, public announcements act as cheap and often free marketing, so ceasing announcements in one area to focus on another seems unlikely.

2. Leonard Wiener, "Video Games on Too Long May Hurt Set," *Chicago Tribune*, December 1976, C9; Associated Press, "Video Game Damage to Tube Denied," *Sun-Telegram* (San Bernadino, CA), December 1976, A5; "Video Games May Hurt TV, State Says," *Los Angeles Times*, December 1976, B29; Leonard Wiener, "CB Radios Bring Static to FCC," *Chicago Tribune*, June 1976, C9.

3. Cohen, *A Consumers' Republic*, 388; Lepore, *These Truths*, 657.

4. Mary Knoblauch, "News for You: Home Video Games Are a Smash," *Chicago Tribune*, November 1976, A1; Maria Karagianis, "Invention's the Name of Their Game," *Boston Globe*, February 1976, 23; Michael Edgerton, "Phenomenal Growth Is Name of Game for Video Skill Devices," *Chicago Tribune*, June 1976, A17; *Chicago Tribune*, "Magnavox Settles Video Patent Suit," 11.

5. *New York Times*, "Warner Communications Completes Atari Takeover," 79.

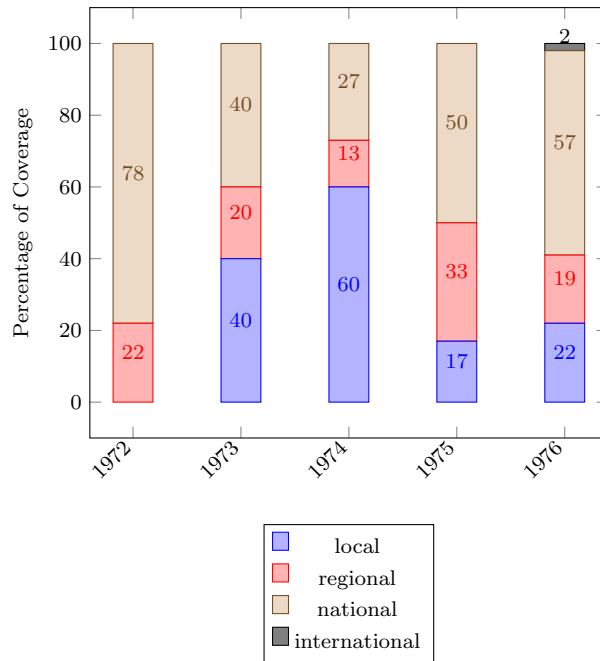
6. "Zenith President Explains 'Chaos' in TV Industry," *Chicago Tribune*, November 1975, 15.

Another explanation, similar to 1973, is that video games were so popular that manufacturers had difficulty meeting demand. As such, there was little need for media coverage. Less demand would have been a boon, as it would have given manufacturers a bit more breathing room while they scrambled to meet existing demand. Eventually, too much demand and the inability to meet it made room for ball-and-paddle clone makers to rush in and meet the excess demand. By 1977, the market was saturated and was one of the major factors in the video game market crash of 1977.

The third noteworthy aspect of video game coverage is that it was overwhelmingly national its first year and became more local by 1974, only to become overwhelmingly national again by 1976 (see figure 3.2). Deciphering this trend is complicated, but the first year is easier to explain. A major American corporation was releasing a new technology, and they wanted everyone to know about it. They had the financial and business clout to make their announcement national. Because their product was aimed at consumers everywhere, and because they were a media influencer, this is expected. The same is not valid for Atari, whose initial products were found in arcades only. While one might assume that Atari would have tried some form of a media campaign to help drive sales, there were zero regional or local stories for coin-operated video games. The most likely explanation is that Atari used different channels to market their machines, especially since their primary clientele were not consumers but distributors and operators. Atari probably published more in coin-operated trade publications. They were also a new and small company and thus lacked the business clout to get cheap or free national coverage. They were not media influencers by any stretch of the imagination. Therefore, in 1972, Magnavox was the only video game company being covered, and as a national company, their announcements were mainly nationally covered.

However, 1973 and 1974 are more challenging to explain. More companies entered the industry, Atari became wildly successful, and the Odyssey sold respectably, given that inflation was still on the rise. I would have expected these companies to try and reach a

Figure 3.2: Local, Regional, and National Distribution by Year



larger (i.e., national) audience. Perhaps they did via advertising or other means, but not utilizing newspaper coverage. That remained more regionally and locally focused.

There are at least two probable explanations for the gap between national and local coverage in 1973 and 1974. First, national news organizations did not find video games newsworthy. Though they were a new and popular media technology, they were often viewed as toys and may have merited little attention.⁷ That major media influencers like Magnavox released few announcements did little to garner more national attention. Magnavox had no announcements in 1973, and the only coverage in 1974 was about them suing several video game manufacturers for patent infringement.⁸

Second, video game coverage was more local because it was a more local activity. Video games were found in homes and nearby public amusement spaces. Since local and regional newspapers are more apt to cover local events, video game coverage followed suit.

7. Knoblauch, “New for You,” A1.

8. “Magnavox Sues Firms Making Video Games, Charges Infringement,” *Wall Street Journal*, April 1974, 15.

Textual Analysis

While the structural analyses are important, they only reveal part of the story of how newspapers covered video games. Textual elements reveal another part. The following section provides a textual analysis of newspaper coverage, exploring the content found within. The goal is to track how the language, values, topics, and frames newspapers used changed over time. Such changes provide a lens to observe American society in the seventies as they responded to economic, political, social, technological, and other stresses.

Presently, the terminology surrounding video games is firmly established. Virtually anywhere you go in the United States, people refer to them as “video games” This was not always the case. In the 1970s, the language used to discuss, describe, and refer to them was diverse. Table 3.1 charts the frequency of words or phrases used to refer to video games by newspapers and the spaces those games appeared in, such as in homes or public places.

As Table 3.1 reveals, language diversity used by newspapers to refer to video games in 1972 was small. This is not unexpected. Video games constituted a new consumer technology, and most people had little knowledge about them. Therefore, language use was primarily driven by Magnavox and its marketing efforts. In their earliest public announcements, Magnavox referred to them as “electronic game simulators.” The press echoed this. Atari appears not to have had much of an impact on language use the first year, at least regarding newspaper use.

Regardless, language use began to change beginning in 1973. “Electronic game simulator,” used to refer to home systems in 1972, dropped from coverage. Instead, terms for video games found in public spaces became more frequent as coin-operated video games became the focus of attention. 1973 was the breakout year for *Pong*, and newspapers may have been more captivated by that phenomenon over the *Odyssey*.

In 1974, though, the language used by newspapers to refer to video games diversified. It grew from three terms in 1972 and 1973 to ten in 1974. One explanation is that journalists began incorporating terminology borrowed from consumers and other sources besides

Table 3.1: Video Game Terminology by Year and Space

1972		
Term	#	Space
video game	1	home
electornic game	1	home
no term	2	home
electronic game simulator	5	home

1975		
Term	#	Space
coin-operated electronic video machine	1	public
space age pin-ball machine	1	public
electronic ping-pong	1	home
game	2	home, computer

1973		
Term	#	Space
arcade game	1	public
electronic ping pong	1	public
electronic tennis	1	public
no term	1	public

1974		
Term	#	Space
commercial display game	1	public
tv screen game	1	public
computer display game	1	computer
game simulator	1	home
electric pong	1	public
video electronic game	2	public
electronic game	2	public
coin-operated video game	2	public
video game	2	home, public
coin-operated game	4	public

1976		
Term	#	Space
tennis played on an electronic screen	1	public
coin-operated tennis and ping-pong	1	public
computer video ping pong	1	public
electronic machines	1	public
electronic paddle tennis game	1	public
television type screen game	1	public
electronic television game	1	home
electronic version of table tennis	1	home
television video game	1	home
toy	1	public
tv screen game	1	home
video skill device	1	home, public
computer game	2	public, computer
electronic game	2	home, public
home video game	2	home
TV game	2	home
coin-operated video game	3	public
electronic video game	3	home, public
game	3	public, computer
video game	13	home, public

media influencers. This is not unexpected, as newspaper coverage was more local and regional during this time. Since there was little national coverage in 1973 and 1974, people were left to develop a language around video games themselves. For many people, word selection was most likely shaped by their interactions with video games, machine owners, and friends in public and private spaces.

Another explanation for the increase in terminology by 1974 stems from video games' expansion to new locations across the United States. As video games spread into new areas, new language was invented or old language altered, leading to diversification.

A third explanation is that language diversification partly occurred due to increased computer video game coverage. More language was needed as people required a way to distinguish home, computer, and coin-operated video games.

Language use by 1974 also suggests two seemingly contradictory semantic phenomena. On the one hand, the language used to identify games played at home and those played in public had diverged. Terms, such as “coin-operated game,” “commercial display game,” and “electronic pong” were only used for public games, whereas “game simulator” was used only for games played at home. This suggests that journalists, and the public, saw home and coin-operated video games as two distinct technologies.

On the other hand, we also see home and public video games’ language begin to blend. What were referred to in more distinct terms in 1972 and 1973 were now being used across spaces. Increasingly, “electronic game” could refer to a home system or public one. The same is true of “video game.” While there was still a distinction between home or coin-operated video games, the boundary between the two was starting to become more porous in the minds of consumers, and the technology was merging into a more unified social and technological concept.

1975 is harder to generalize. The data were minimal and too diverse. Yet, by 1976, another set of opposed phenomena began to occur simultaneously. First, the terms newspapers used to reference video games continued to diversify, even more than in previous years. However, newspaper language also began to coalesce around the term “video game.” Over fifty-nine percent of the articles in 1976 referenced them as such.

The linguistic diversification phenomenon suggests that newspapers continued to use regional parlance for video games, like in previous years. The coalescent phenomenon suggests that linguistic normalization began to occur as coverage became more national. The data from figure 3.2 supports this. While 1972 to 1974 saw a shift from national coverage to local coverage, 1974 to 1976 showed increasing national coverage, from twenty-seven percent to fifty-seven percent.

Several high-profile incidents most likely caused both coverage and language shifts. Thirteen of the twenty-two articles in 1976 that specifically refer to “video games” covered Magnavox’s patent suits against Atari, Warner Communications’ purchase of Atari, or the

investigation into the possibility that video games could cause permanent television damage. Of those thirteen articles, eight were about the FTC. Because the most prominent stories were national, so too was its coverage. And because newspapers tended to use the language of their sources, the language was national. Thus, in 1976, newspapers may have caused linguistic normalization around the term “video game.” Why national institutions like the FTC used the word “video game” is unknown.

Language use also reveals other patterns. It shows a growing trend for newspapers to associate video games and computers. Though rare, the data indicates that reporters sometimes referred to home and computer games as “games” or public and computer games as “computer games.” Though tentative, this suggests that by 1976, home, public, and computer games were to some extent merging into a single, broader category.

The terminology used also supports claims by other authors of the close association of video games with television. By 1976, of the twenty terms used to refer to video games, over half used terminology borrowed from television. These include apparent references, such as “television” or “TV,” and terms such as “video” and “screen.”

Lastly, the words and phrases used suggest newspapers heavily borrowed terminology from others. Regional and local coverage tended to adopt the terminology of local businesses and consumers, while national coverage adopted the language of larger corporations and state-sponsored organizations. This type of coverage also supports Nelkin’s argument that newspapers often relied on experts for details regarding technology. Extending her analysis, it seems they also relied on them for vocabulary. Sometimes these experts were actual experts. In the case of video games, these were occasionally regular people with more familiarity than the reporter, such as arcade frequenters.

The words newspapers used, whether “electronic game simulator,” “video skill device,” “video game,” or something else entirely, held neutral connotations. They lacked apparent value judgments. However, most newspaper coverage valued specific aspects of video games while devaluing others. The next few paragraphs explores the video game characteristics,

features, possibilities, and other elements valued and devalued by newspapers each year. They also explore these element's salience. Figure 3.3 charts various characteristics that were valued and devalued from 1972 to 1976.

During 1972, newspapers valued video games' active nature more than its other characteristics. Indeed, many of the subsequent characteristics valued—its transformative powers, technological sophistication, ability to bring families together, and entertainment diversity—are directly related to the activity value. Several articles that year proclaimed that video games could transform passive television viewing into an active one. They could restore the institution of family night, which some believe had been damaged from the passivity of television. This is because they provided a “fine chance for mother and son, father and daughter to use the television set” in ways passive television supposedly did not allow.⁹ It offered a “dozen different games” to entertain and allowed players to “control what appears on the TV screen,” a welcomed break from the onslaught of advertisers.¹⁰ Consumers were no longer bound to the networks' control. All of this, of course, because it was a “21st-century games package” which somehow solved television's problems.¹¹

While manufacturers espoused the revolutionary power of video games to address such issues, they were a far cry from a meaningful solution. A peripheral device, no matter how revolutionary, could have fixed those. Despite claims to free people's entertainment from network control, video games simply shifted control to new corporations.

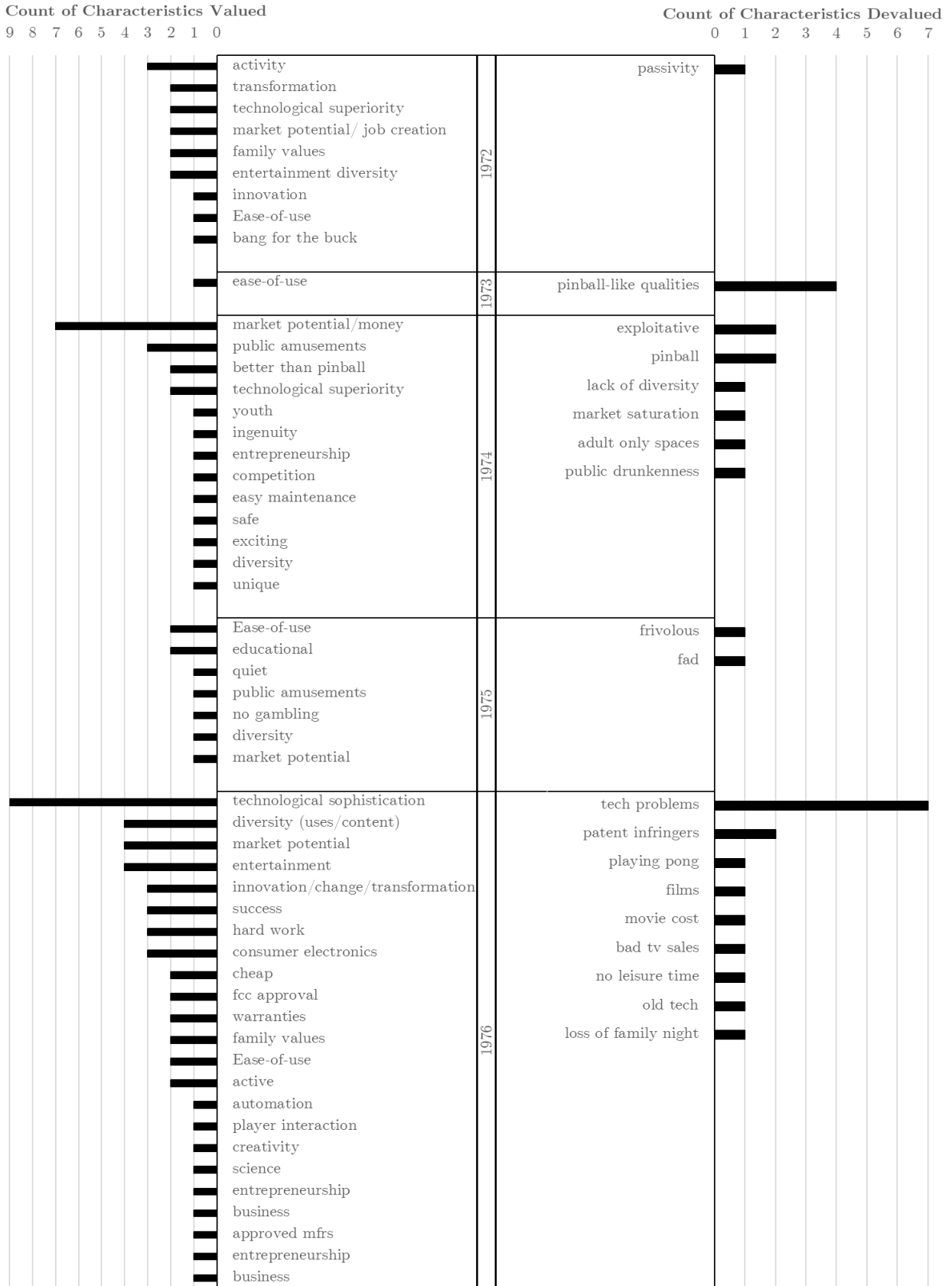
These values, coupled with the fact that Magnavox was the only video game company with newspaper coverage in 1972, suggest that Magnavox intentionally tapped into the social anxieties of the United States to promote the Odyssey. Because the technology was new and Magnavox was a media influencer, newspapers echoed them with minimal scrutiny. Therefore, for that first year at least, newspapers operated as little more than mouthpieces for Magnavox.

9. “Series of Electronic Games Hooks Up to Television Set,” *Dallas Morning News*, December 1972, 6.

10. Roger Verhulst, “The Game Room: Last-Minute Gift Suggestion: \$99.95,” *Chicago Tribune*, December 1972, A1.

11. Verhulst, A1.

Figure 3.3: Characteristics Valued and Devalued



1973's values are a bit harder to tease out. There were few articles and they were all from the *San Francisco Examiner*. From the sliver of data present, we see that newspapers devalued more elements than valued. Most of the characteristics devalued were also related to pinball, such as frivolity, hustling, arcades, and loitering. All of the negative articles related to coin-operated video games.

This further supports claims that during their early years, video games in general, but especially coin-operated video games, inherited some of the negative attributes associated with pinball. But with little data, it's hard to determine if the *San Francisco Examiner* was the rule or the exception.

That there was negative coverage in 1973 also suggests that newspaper coverage had shifted from operating less as mouthpieces for corporations and instead become at least somewhat more critical. Again, this is probably related to coverage becoming more local and regional and thus reflecting the voices of the people. This is similar to how more regional and local stories adopted video game terminology from regional and local areas.

The top characteristics valued in 1974 were its market potential and public amusements. These two characteristics are closely intertwined. By 1974, coin-operated video games as a public amusement were beginning to shed their negative associations with pinball as people came to see them as a distinct form of entertainment. Cabinet manufacturers, distributors, and higher-level operators took advantage of this phenomenon, along with the rising popularity of video games, to implement several aggressive local marketing campaigns, often in the form of articles, to convince readers to invest in the coin-operated video game business. For just a little investment, they promised, the machines could provide “yields of well over \$100 a week.”¹²

Several articles also dealt with the money made by the larger video game manufacturers such as Magnavox and Atari. These articles typically appealed to values closely aligned with capitalism, such as entrepreneurship, competition, ingenuity, and technological

12. Stephen J. Sansweet, “Sophisticated Cousin Of Pinball Machine Entrances the U.S.: The Electronic ‘Video Game’ Is Quiet, Very Profitable And Is Seen in Best Places,” *Wall Street Journal*, March 1974, 1.

sophistication. Only some told readers that “[t]he next time [they] put a quarter in [their] local Pong[sic] machine” they should “ruminate over the fact that it will make its inventor . . . \$1 million.”¹³ In general, video games were being marketed as a good, clean, public amusement that also happened to be lucrative.

Why so many articles valued the market potential of video games, both locally and nationally, is unknown. The stagflation of the seventies may have played a role. What appeared to be easy money could have been tempting for those experiencing unemployment, stagnating wages, and other economic difficulties. Even if not, the number of such articles suggests a coordinated push by interested parties to get more people to play video games and become part of the industry, either as owners or as investors.

In 1975, the financial push dropped, and instead, newspaper coverage valued characteristics associated with ease-of-use and education, but only slightly more than others. The only apparent trend was the continuing separation of video games’ image from pinball’s. Video games had “a noiseless advantage over a regular pinball machine,” and the “only betting is done between individuals.”¹⁴ A new form-factor integrated video games into cocktail tables and facilitated their inclusion into more upscale facilities, such as high-end restaurants.¹⁵ Such spatial, tactile, and aesthetic changes worked in tandem to improve coin-operated video games’ image. While newspapers’ valuing of these characteristics may have played a role in enhancing video games’ image, some still devalued video games’ supposed frivolousness and their potential to be a fad.¹⁶

By 1976, technological sophistication was valued by newspapers above all others, and several of the other characteristics valued that year were related to it. For instance, video games offered a diverse experience. There were many types to play, people could play them in different locations, and people played them for varying reasons. They could be different

13. E. S., “All About Pong,” *Boston Globe*, April 1974, C11.

14. Margaret A. Kilgore, “Tennis Anyone? How About If It’s Played From Barstool?,” *Los Angeles Times*, January 1975, F11.

15. “A Lucrative Business: Electronic Video Games in Best Places,” *Dallas Morning News*, November 1975, 17.

16. *New York Times*, “Business Roundup,” F17.

things to different people, meeting their needs when and where they wanted. For one mother, video games were a clean-cut and fun activity she could do with her children and were cheaper than going to the movies.¹⁷ For legislators, playing video games became another tool to facilitate after-hour negotiations.¹⁸ Also, the video game industry constantly tried to create new experiences for consumers, as evidenced not only by the creation of new games but their attempt to bring them into new spaces, such as the cocktail lounges mentioned before. These new experiences were possible because of video games' technological sophistication.

Despite this, video games also suffered from technical problems. Despite all the references to their technological sophistication, in 1976, several agencies began investigating claims that video games could potentially cause permanent damage to television sets. While newspaper stories about this rose, so did the number of articles proclaiming video games' technological sophistication. And while it may be tempting to claim the two were interrelated, it may not be so clear-cut.

Video games have always had a history closely intertwined with modernity and technological progress. This can be seen from its inceptions in computer labs. People made games to push technology and see what it could do. By 1976, the microprocessor had gained more popularity in the consumer electronics industry and with consumers. By 1976 standards, the video games of 1972-1975 were beginning to be outdated. Many still lacked processors and dedicated memory. Thus, to stay relevant, ahead of their competition, and more than a fad, many video game manufacturers continued to push the technological envelope further. They needed more types of games and systems. They needed better graphics, better sound, and better interfaces. Thus, it is no wonder that newspapers tended to value the technological sophistication of video games because they *were* cutting-edge. So, while newspapers may have echoed some of the talking points of

17. Rosalie Muller Wright, "A Family of Budding Pinball Wizards," *San Francisco Examiner*, January 1976, 42.

18. Fred Barbash, "Legislators in Annapolis Pong' Away After Hours," *Washington Post*, February 1976, B1.

manufacturers to combat the technical problems facing video games, there were other reasons to value such a characteristic.

There may have been a greater focus on video games technological sophistication in 1976 as it became more evident that technological progress in many other areas of American life had slowed, and its effects felt less. As Lepore argues, “Delivering electricity, gas, telephone, water, and sewer . . . to every home in the United States, a project completed by about 1940, had ended isolation and produced astonishing improvements in living conditions and economic output. . . . But few inventions after 1970 produced such vast changes; instead, they offered slow, steady improvement.”¹⁹ To be sure, there were still technological improvements being made, but many of them were not “near” to most consumers. These advancements were in laboratories or used in service to corporate and government operations, places closed off and out of reach for most Americans. People did not see them often, let alone interact with them. Whereas past improvements were near and thus observed and felt, technological progress seemed distant and lagging in the seventies. However, video games were a technology that was near; Americans could find them at local pubs, airports, hotels, penny arcades, and homes. Thus, video games were evidence to which Americans could point and declare, “Here ‘lies that great growling engine of change – technology!’”²⁰ Newspapers understood the value of technology for their readers and strategically used it to entice readers.

Beyond valuing and devaluing a myriad assortment of characteristics, newspapers also covered many topics. Figure 3.4 charts several broad topics newspapers covered between 1972-1976. While many articles’ topics were more specific than what appears in the chart, classifying them into broader categories made it easier to analyze patterns and compare them. For instance, though they seem to be dissimilar, both the article covering a mother’s experience playing video games with her children and the article covering Washington’s

19. Lepore, *These Truths*, 657.

20. Alvin Toffler, *Future Shock* (New York, NY: Bantam Books, 1970), 25.

politicians' nightlife discuss the ways people used video games.²¹ They were not articles about how people could use them, what people should use them for, and where. They were not information about the industry. They were specific to how various people experienced video games and therefore were categorized as such. Similar processes informed all of my broad topic categorizations.

Figure 3.4: Topics by Year

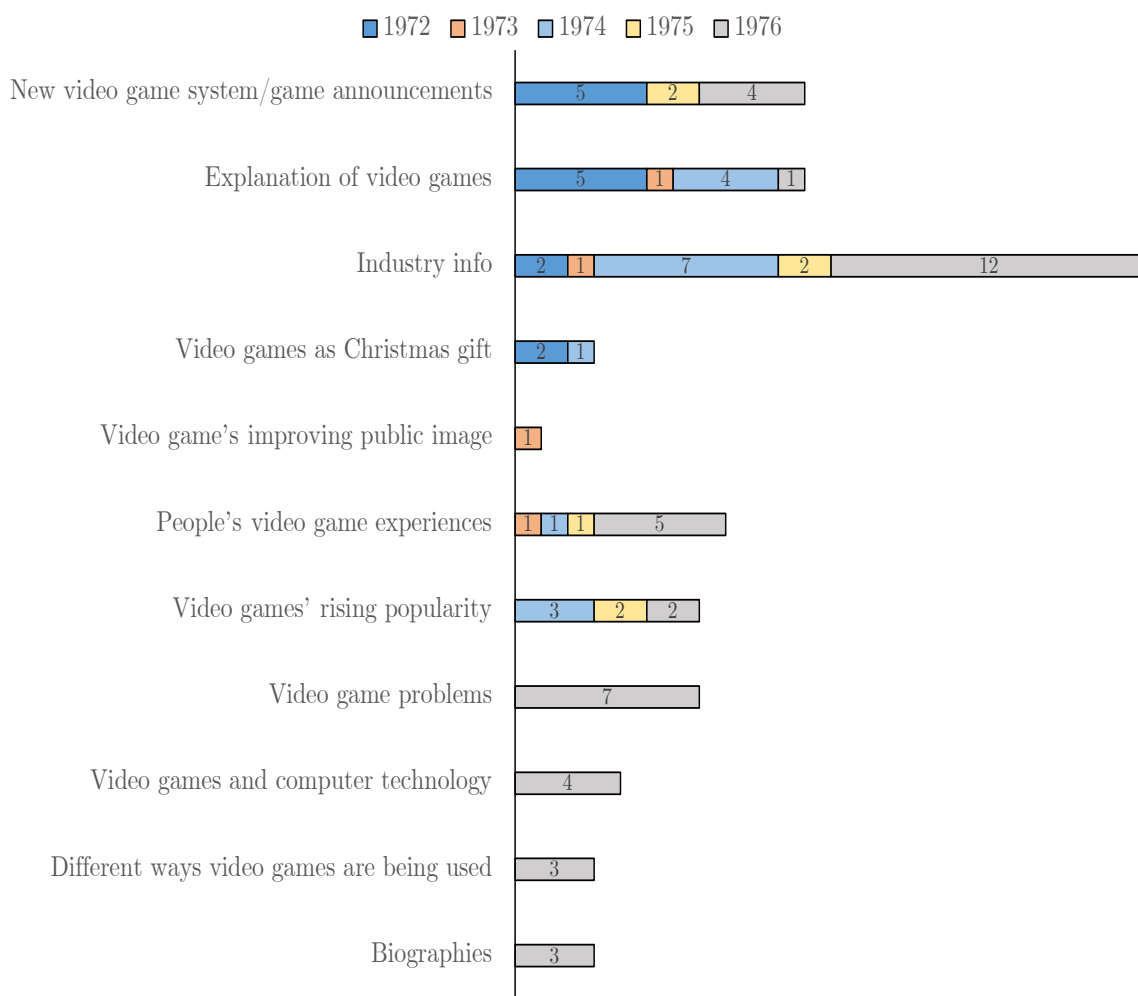


Table 3.4 reveals that video game explanations and system announcements were the major topics in 1972. This is not unexpected, as 1972 was the first year video games were

21. Wright, "A Family of Budding Pinball Wizards," 42; Barbash, "Legislators in Annapolis Pong'Away After Hours," B1.

made available to consumers. They were a new and unfamiliar technology for most, and Magnavox needed to ensure that consumers knew that these systems existed, their purpose, who they were for, and where to purchase them. All five articles announcing the Magnavox Odyssey also devoted a significant amount of space explaining video games. The two articles suggesting the Odyssey as a Christmas present also devoted some space to briefly explain what they were and why they would make good gift purchases. The data indicates that video game newspaper coverage in 1972 focused on educating Americans about video games, most likely to promote sales.

Deciphering patterns for 1973 is a bit more complicated because there were few articles. Only the *San Francisco Examiner* wrote about them and it covered each topic in equal parts. While 1973 did continue to provide industry information and explain video games, there were no new system announcements and no mentions of it being a Christmas gift idea. Interestingly, newspaper coverage did expand to include articles about video games' improving public image and people's video game experiences.

Figure 3.4 shows that newspapers shifted significantly to covering industry information in 1974. This information mainly consisted of lawsuits, business acquisitions, or market statistics. It also often had a promotional spin to it as well. Unlike 1972, though, promotional material seemed to be aimed at investors and entrepreneurs instead of consumers, stressing the importance of getting into the industry quickly. This promotional aspect is also directly linked to articles that explained video games and those that covered their rising popularity. They worked in tandem to stress that the video game market was booming and that anyone with good business sense should get involved, whether as an investor or operator.

The data suggest that 1974 was a critical year for enticing more people to invest in the industry. This most likely was not something newspapers did consciously. Instead, it is reasonable to assume that organized interests used them to their advantage to drive capitalization. This would explain in some part the large number of industry information

stories newspapers wrote. It could also explain why many articles explained video games and stressed their popularity. Indeed, there were several articles in which the main topics of their stories bundled all three.²² For those who had no interest in investing in the industry, these articles still operated to educate consumers about video games while also generating publicity around them.

Teasing out patterns from 1975's data revealed two things of note. First, newspapers continued writing about the rising popularity of video games. This suggests that newspapers in 1975 continued to either create or propagate video game publicity. Second, zero articles attempted to explain to readers what video games were and this indicates that by 1975 newspapers assumed many Americans understood what video games were and therefore felt no need to educate them further. The data for 1976 also support this conclusion, as only one article explained video games that year.

In 1976, newspaper topics overwhelmingly concentrated on industry information, followed by video game problems and people's experiences with them. Initially, this included video game problems as part of industry information, as it often appeared in consumer alerts and business sections. However, the large number of articles was significant enough to categorize it separately.

One pattern that emerged in 1976 was the incredible spike in industry information coverage—500 percent, not counting articles dealing with video game problems. The sudden increase may have reflected video games had crossed a cultural and financial threshold. Newspapers felt that consumer interest was high enough to warrant increased coverage about industry goings-on. This may have been a generalized interest—consumers were just curious—but it most likely stemmed from more specific interest from business owners, investors, and other financial professionals. The value analysis from earlier supports such a claim. Industry information would help readers make more informed decisions about where

22. James Brachman, "New Electronic Games: Pong & Flying Saucers," *San Francisco Examiner*, February 1974, 17; Robinson, "Once Shocking, Game of Gotcha Now Electrifying," 54; Sansweet, "Sophisticated Cousin Of Pinball Machine Entrances the U.S.," 1; Stephen Curwood, "Electric Pong Is Not a Rock Group," *Boston Globe*, April 1974, 79.

and how to spend money, whether purchasing a new console, a new video game arcade, or company stocks.

1976 also saw an increase in video game articles referencing new computer technology, often concerning a new and improved game, home console, or arcade machine being worked on or soon to release. Video game manufacturers most likely benefited by having their products associated with cutting-edge technology, especially if Americans felt that technological progress was slow in the seventies. Furthermore, video games could improve computers by making them more exciting and fun.²³ By 1976, their relationship seems to have been symbiotic. This close relationship could explain why journalists increasingly began to reference computers when discussing video games. It might have also been the case that because newspapers covered the two technologies simultaneously, consumers progressively conflated the two; video games were now part of the high-tech computer industry, and computers were expected to play video games. Past research has shown that by the early-1980s, video games were the primary use for home computers in the United States,²⁴ and newspaper coverage in 1976 may have played a role in that process, even if minimal.

The topics covered in 1976 also suggest that newspapers operated to expand consumers' notions of what they could use video games for. Some articles addressed this topic directly, such as installing a six-sided video game machine at a local bus station.²⁵ This would provide entertainment for passengers as they waited for their departure. Other articles explored this indirectly, especially when covering people's video game experiences. For instance, unlike previous years in which video games could bring families together in the home, video games could now bring families together outside the home.²⁶ Video games could also be part of a politician's social life, where negotiations often took place outside

23. "Surging Home Computer Market," *San Francisco Examiner*, August 1976, 49–50.

24. Newman, *Atari Age*, 116.

25. Larry Kramer, "BART Wants You to Have Fun While You Wait," *San Francisco Examiner*, October 1976, 3.

26. Wright, "A Family of Budding Pinball Wizards"; "Bad Old Days Recalled by 'Travelers' at Convention Here," *San Francisco Examiner*, June 1976, 52.

working hours.²⁷ Lastly, 1976 saw some of the first biographies of those considered the fathers of the video game industry, Nolan Bushnell and Ralph Baer. That newspapers felt covering these two men was worth the precious space reinforces the claim that video games had become more popular in 1976. It also suggests that consumers desired, to some extent, a deeper understanding of video games.

That newspapers shifted from introducing video game technology and trying to explain them in 1972 to covering other, arguably more consequential topics by 1976 suggests that video games had reached a watershed moment. Perhaps 1976 was when video games became grounded into the American social psyche, cementing their place in American life and culture. Before 1976, their future was precarious and uncertain. After 1976, it appeared as if this might no longer be the case.

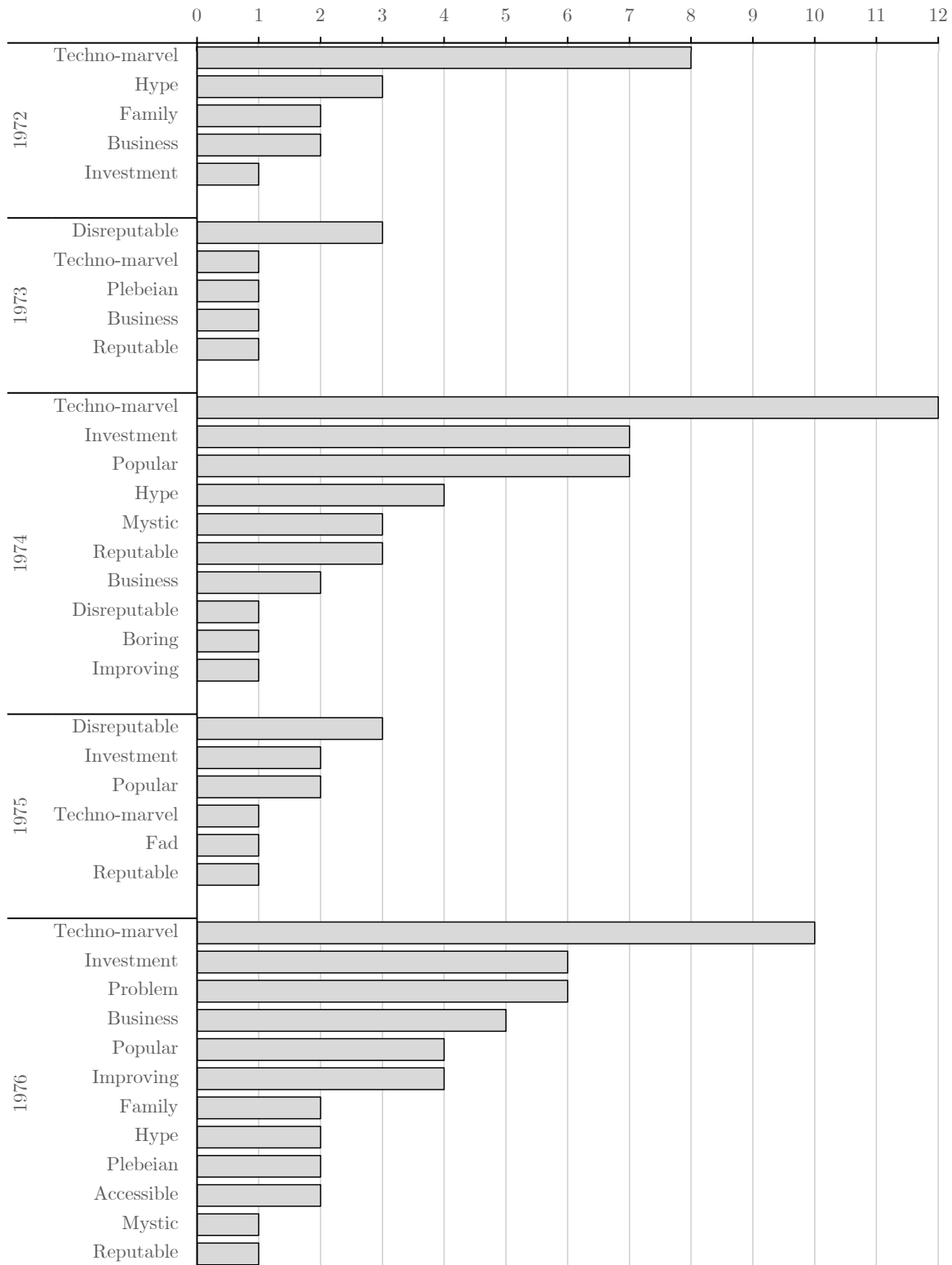
Moving beyond the topics presented to readers, exploring frames allows for a different examination of how newspapers presented video games to their audiences. Two different analytical methods were coupled to achieve this. The first was identifying and counting keywords and phrases that carried salient connotations that described video games, such as “transformative,” “scheme,” or “boring.” This method provided a quantitative way of determining how an article was framed. The second method was qualitative, matching the words from the first method to the overall message and feel of the article. For example, if an article used words such as “active,” “techno-potential,” “transformative,” “sophisticated,” or “electronic age,” and the article was describing the technological wonders of video games, it was classified as “techno-marvel.” Using these two methods, fifteen unique frames were identified, which can be found in table 3.5.

The first frame I identified was the *accessible* frame. Articles with these frames discussed how video games were easily accessible.²⁸ Video games were considered accessible because they could be cheap entertainment and thus usable by a wider swathe of the population. While home consoles were much more expensive, public video games were

27. Barbash, “Legislators in Annapolis Pong’Away After Hours.”

28. Accessible being interpreted at its broadest meaning.

Figure 3.5: Frames by Year



not. At twenty-five cents per play, they were entertainment that welcomed the working class and poor. Another reason video games were considered accessible was that they did not take great skill or physical ability to play. This appealed to those who may have been shunned from other able-bodied sports and games. As one journalist stated, video games were a “great equalizer; after a little experience and concentration, women can play them as well as men.”²⁹ Another journalist reported that video games “put more stress on quick reactions and hand-eye coordination than strength or physical conditioning.”³⁰ Thus, video games facilitated a more inclusive agonistic social space. Also, video games could be played at home, which allowed access for folks who were unable to, or chose not to, play them in public spaces, whatever the reason.

Articles with the *boring* frame covered how video games were dull, stale, or lacking diversity. Interestingly, the first, and only, time this frame appeared was in 1974, and only once.³¹ As early as 1974, people had already identified one of the significant problems that would eventually lead to the video game crash of 1977. This article is also one of the few times video game news coverage was negative.

The *business* frame identifies stories that framed video games in neutral, business-like terminology. There was little to no use of words or phrases with strong positive or negative connotations, and often were short. They nearly always covered information about the video game industry and were usually found in the business sections of newspapers. For example, a staff reporter at the *Wall Street Reporter* wrote an article in 1976 that covered Warner Communications’ purchase of Atari for \$28 million.³² This story was stereo-typical of articles using business frames. It was short, less than eighty words, used few adjectives, and used easily verifiable facts. Though such articles often covered information about media influencers, they rarely felt promotional.

29. Range, “The Space Age Pinball Machine,” 332.

30. Phil Finch, “Beware Those Sinister Pong Hustlers!,” *San Francisco Examiner*, December 1973, C2.

31. S., “All About Pong,” C11.

32. “Purchase of Atari Inc. Completed by Warner Communications Inc.,” *Wall Street Journal*, October 1976, 22.

I also identified a *disreputable* frame for articles that framed video games as frivolous, as a distraction from more fruitful endeavors, or as a scheme. These articles were among just a handful that was critical of video games. Usually, these articles showed strong associations with pinball, which reflected the authors'—and most likely American society's—struggle to understand what video games were and their place within society, as well as the struggle to understand them as a distinct form of entertainment. For instance, in his article *Beware Those Sinister Pong Hustlers*, Phil Finch laments that “[w]asting time is now in vogue” and seems to be disheartened that public amusement devices have become more sophisticated and respectable. His article suggests that video games are little more than extensions of pinball and its kin. Whether intentional or not, Finch utilizes old pinball tropes by associating video games with alcohol, promiscuity, and hustling.³³

Articles with the *fad* frame discussed how video games were a passing trend. That the fad frame appeared only once is somewhat interesting because such an idea was not unusual in the public amusement industry. Fads plagued it. New games would often come and go, as people grew tired of old games and desired new ones. Because of video games' strong association with the public amusement industry, one would have thought journalists would have expressed this sentiment more than just once, especially in those years in which more critical coverage appeared.

I used the *family* frame for articles covering video games in family-friendly terminology. Some articles discussed how video games could bring back the familial interactions that television purportedly disrupted since it was more active and thus required more communication between participants.³⁴ Other articles explored how video games provided good, clean family fun.³⁵ Sometimes, this was contrasted to television's “vast wasteland” and could allow something other than what “General Sarnoff intended.”³⁶ Video games, at least in their early years, rarely contained the violence, foul language, and other suggestive

33. Finch, “Beware Those Sinister Pong Hustlers!,” C2.

34. “Popular Game-Time Returns,” *Los Angeles Times*, December 1976, L2.

35. Wright, “A Family of Budding Pinball Wizards,” 42.

36. Tom Shales, “Watching the Tube—Not the TV,” *Washington Post*, December 1976, 109.

elements that others critiqued television for. Therefore, video games at least held the possibility for more positive family interactions. Despite this, the family frames only appear in 1972 and 1976, and in equal measure. Why it disappears entirely from 1973 to 1975 is a mystery.

Perhaps people did not associate the two until video games had gone through a period of domestication, a process whereby video games were “made safe, familiar, and predictable” and integrated into “the routines of middle-class family life.”³⁷ If we interpret the two frames appearing in 1972 as echoes originating from Magnavox and therefore not reflective of the average American, then such a gap is erased. What appeared to be a gap was no gap at all. Instead, after four years of domestication, video games had finally reached the stage whereby journalists themselves, not media influencers, associated video games with family life. In other words, in 1972, video games were too new to be considered safe for families and thus integrated into family life, despite announcements otherwise, but by 1976, they were. If this was indeed the case, then advertisements showing families playing video games between these years can be interpreted not only as marketing but as attempts by the industry to domesticate video games “as a medium with widely shared and stable meanings and purposes.”³⁸

Articles with the *investment* frame cover how video games were a good investment. They often described video games as “innovative,” “successful,” and a “money maker.” Journalists never critiqued the validity of these statements in the newspapers, so the soundness of such claims was only tentative. Although never explicitly stated, many of these articles targeted potential operators at a local level. These were the public amusement trade go-betweens that purchased video game cabinets from manufacturers and distributors and placed them in various locations, such as laundry mats, cocktail bars, hotels, and arcades. For example, a 1974 article written in the *San Francisco Examiner* seems primarily informational, discussing what *Pong* and other video games were. The last

37. Newman, *Atari Age*, 76.

38. Newman, 76.

few paragraphs discuss the “business viewpoint.” Here, the article stresses that video games “cost less to operate than the electromechanical pinballs,” that “Atari games have taken in as much as four times the amount of the pinballs,” that owners could make “\$120 per machine per week,” and that Atari is “hard at work planning an additional 40 games.”³⁹ Such statements, often put in towards the end of articles, suggest more intent than just informing the public. While such articles were locally focused, some operated more broadly. For example, one journalist wrote in the *Chicago Tribune* that the “growth of Atari, Inc., a manufacturer of both the home and coin-op games, indicates the high level of activity in the field. The 4-year-old company, based in Los Gatos, Cal., had sales of about \$40 million last year, and a company spokesman said ‘about double that’ seems possible for 1976.”⁴⁰ Such articles seemed to appeal to investors across the nation and may have operated to garner interest and thus funnel capital into the industry.

The *hype* frame identifies articles that covered video games in tantalizing terminology. Such articles often described video games as an “exciting,” “interesting,” or “unique” form of entertainment. They often made hyperbolic and other unsupported statements. Video games were “irresistible,” despite many not purchasing or playing video games. They were “educational tools,” despite rarely exploring how.⁴¹ They were conduits for active entertainment, without ever questioning what it meant to be active, nor the meaningfulness of that activeness.⁴² While appearing as information-bearing articles, the uncritical, hyperbolic, and highly positive analyses, language, and coverage operated instead to garner publicity for video games. Yet, although these articles may have been overly-hyped and promotional, they still reflected a common sentiment. For many Americans, video games *were* novel, both as entertainment and technologically, and thus *were* unique, exciting, and interesting.

39. Brachman, “New Electronic Games: Pong & Flying Saucers,” 17.

40. Edgerton, “Phenomenal Growth Is Name of Game for Video Skill Devices,” A17.

41. Verhulst, “The Game Room,” A1.

42. “Magnavox Unveils Tv Game Simulator,” *New York Times*, 1972, 69; *Dallas Morning News*, “Series of Electronic Games Hooks Up to Television Set,” 6.

Articles with the *problem* frame discussed how video games were problematic. Most of the articles in which this frame appeared were related to FTC's investigation into video games' potential to damage television sets or the FCC's investigation into video games' ability to cause signal interference for televisions and radios. Some articles framed these as minor problems that *could* occur, but in which proper precautions should prevent.⁴³ Other articles treated these problems as more serious issues, stressing the FCC's and FTC's investigations, the manufacturer's evasiveness in admitting to the problem, or their unwillingness to cover damages by their products.⁴⁴

I use the *mystic* frame for articles that framed video games in spiritual or religious terms. This did not happen often, but in 1974 and 1976 there were a few occasions in which journalists associated video game engineers to wizards, arcades to temples, and video games in other religious imagery. For instance, one news story relates the opening of a two-story game room to establishing a temple. Its owners and frequenters are called "practitioners," and it refers to *Pong* clones that line its walls as the "sons of *Pong*."⁴⁵ Such statements support Nelkin's observations that science and technology articles often utilize religious and other mystical tropes.

The *plebeian* frame identifies articles that framed video games negatively as working class. In such articles, video games were for the uneducated, the poor, and those with unsophisticated tastes. They are something people did instead of reading.⁴⁶ They were little more than a sophisticated scheme to dupe the stupid out of their hard-earned money and waste their time.⁴⁷ Interestingly, these frames only appear in 1973 and 1976. 1973 had highly local and overall negative coverage, and 1976 was more national.

43. Carol Kendrick, "TV Games Can Leave Permanent Image on Your Picture Tube," *Santa Cruz Sentinel* (Santa Cruz, CA), December 1976, 10; Wiener, "CB Radios Bring Static to FCC," C9.

44. Joe Baker, "Caution: Video Games Can Be Hazardous to Your Tube," *Sun-Telegram* (San Bernardino, CA), December 1976, B5; Associated Press, "Video Game Warning Issued," *Santa Cruz Sentinel* (Santa Cruz, CA), December 1976, 27; "FTC to Probe 'Shadowy' Video Games," *Chicago Tribune*, December 1976, B10.

45. Alan Solomon, "Two-Story Temple for the Practitioners of 'Pong'," *Chicago Tribune*, May 1974, B1.

46. Glenda Daniel, "On the Road in Roberta's Semi," *San Francisco Examiner*, July 1973, 26.

47. Finch, "Beware Those Sinister Pong Hustlers!," C2.

Articles with the *popular* frame discussed video games as popular or increasingly popular amongst consumers. Unlike the hype frame, which was typically a top-down strategy to increase publicity, the popular frame was more of a bottom-up approach—or at least the semblance of one—to show the people’s sentiment. These articles often reported on how video games were “making [their] way into taverns, cafés, penny arcades, and recreation areas of all kinds,” or how “Americans took to these new space-age diversions with all the hesitancy of children in a candy store.”⁴⁸

Some articles used the popular frame as a marketing strategy. For example, the 1974 article “Electric Pong is not a Rock Group” covers a *Pong* tournament at a local bar. It talks about how the “game is appearing in bars and lobbies throughout the country in growing numbers.” The rest of the article describes the tournament and its participants in a fun, lighthearted tone. But not before ending with a few paragraphs about the money to be made in video games.⁴⁹ Thus, this article was not just a report on video games’ growing popularity, but also an attempt to drive sales or raise industry investment. Further supporting this notion is that the popular frame only began appearing in 1974, the same year a markedly increased effort to draw investment into the industry. Of the thirteen articles that used the popular frame, ten—nearly 77 percent—commented, in some form, on the market potential and money to be made.

The *reputable* frame identifies articles that covered how the image of video games was improving. Sometimes these articles closely associated it with intelligence and education. At other times with safety and wholesomeness.⁵⁰ Sometimes these articles pointed out that video games were “seen in the best places—places where a pinball machine would never be seen.”⁵¹ These articles echo the rising status of video games in the social practices and cultural thoughts of America.

48. Cabriolet, “‘Pong’—The Game With a College Education,” C18.

49. Curwood, “Electric Pong Is Not a Rock Group,” 79.

50. Range, “The Space Age Pinball Machine,” 332; Dotty Griffith, “Teaching Teachers to Teach Electronic Brains,” *Dallas Morning News*, June 1975, 12; Wright, “A Family of Budding Pinball Wizards,” 42.

51. Kilgore, “Tennis Anyone?,” F11; Range, “The Space Age Pinball Machine,” 332.

I use the *techno-marvel* frame for articles that analyzed video games as a technological wonder. Such articles utilized words and phrases such as “sophisticated,” “transformative,” “techno-potential,” “evolution,” “space-age,” and “limitless.” These articles often aligned video games with progress and a sort of technological utopian future, “which in America is all electronic.”⁵² In some shape or form, video games could make the world a better place. Not only could video games fix some of the supposed issues that plagued television, but they improved entertainment, traditional sports, family night, and play.

One reason for such beliefs was due to video games’ newness. They were novel and unfamiliar, so people projected a myriad of meanings and possibilities onto them. Another reason was due to America’s cultural imagination. Fueled by Cold War fears of global communist supremacy, a capitalist ethos of technological investment, the space race, science fiction books, television shows, and films, American society was obsessed with technological progress. As discussed earlier, a felt lack of progress fed this in part. Video games were but one manifestation of the zeitgeist of the 1970s. Organized interests purposefully appealed to these feelings. For instance, to associate it with advanced visual effects and technological sophistication, Magnavox borrowed the name “Odyssey” from Stanley Kubrick’s 1968 film *2001: A Space Odyssey*.⁵³

Another reason for framing video games as a technological wonder is due to the promotional nature of the years in which techno-marvel frames appear. Little challenged the techno-marvel narrative because video games had yet to be around long enough to reveal their shortcomings. That is not to say there were no articles that challenged video games. There were some, and in fact, a pendulum swing between techno-marvel and disreputable frames appears in the data. In 1972, there were more techno-marvel frames than any other, and disreputable frames were non-existent. In 1973, disreputable frames were the highest, and techno-marvel frames were among the lowest. In 1974, this reversed, reverses again in 1975, and reverses one last time in 1976, with disreputable frames

52. Robinson, “Once Shocking, Game of Gotcha Now Electrifying,” 54.

53. Range, “The Space Age Pinball Machine,” 332.

disappearing altogether once again. It is unclear why this happens, though 1973 and 1975 had more local coverage and fewer investment frames, and this could be one explanation. Because there was a distinct lack of media influencers in the articles, alternative views had a better chance of being covered. 1974 does not fit this pattern because, despite having the highest amount of local coverage, it was also a highly promotional year. The video game industry heavily targeted local investors, acting akin to consumer pedagogy, but for those with access to capital. Because of its promotional nature, techno-marvel frames are overly represented in the data that year.

There is much more that researchers could explore with frames because, just as Williams declared, media frames offer much insight into a period.⁵⁴ But as this entire chapter has shown, all aspects of newspaper coverage are important when reconstructing cultural beliefs and social interactions. Even though newspapers may be skewed towards certain viewpoints, they still act as a compass in which historians can orient themselves when few primary sources exist. Once they get their bearings, mapping thoughts, processes, issues, stresses, amazement, fear, and a host of other cultural and social issues become more manageable. It also makes interpreting the past more accurate, hypotheses better testable, and conclusions more solid, something video game history still greatly needs.

54. Williams, "The Video Game Lightning Rod," 545.

CHAPTER 4

CONCLUSION

Playing the Past

Although chapter three offered in-depth structural and textual analyses, it only periodically connected them to broader video game historiography or methodology. This last chapter addresses this by connecting the analysis back to eight issues discussed in chapter two. It then offers closing remarks.

First, video game stories generally fell into two of Gans' categories, "interesting stories" and "important stories." Interesting stories were "people" stories that rarely addressed politics, the nation, the national interest, or events impacting many. Nor did they hold much significance to the past or future. Therefore, they ranked lower than important stories.

However, many articles also covered the significance video games could hold for the future. The years in which there was the most video game coverage—1972, 1974, and 1976—also correlate with the number of articles appealing to video games' sense of future-ness. This pattern supports Gans' claim that future stories outrank interesting stories. It also helps us to understand better the distribution of coverage. When video game stories deal with the future, they were promoted from just interesting stories to future stories and thus were more likely to be published.

At least two scenarios can further explain the lack of video game articles in 1973 and 1975. First, video game stories were mainly interesting and were not published because other stories took precedence or there was less bad news that needed to be balanced out. The second scenario is that video game stories were important stories but fell to the wayside because of other, more urgent important stories. Perhaps it was a combination of both. However, historians would need access to internal documents to determine various newspapers' motivations.

Second, video game coverage from 1972 to 1976 was overwhelmingly positive and uncritical, supporting Nelkin's argument that journalists often cover new science and technology uncritically. Journalists' limited knowledge about video games caused them to overly and uncritically rely on others, which made them prone to manipulation. Newspapers functioned as megaphones for the video game industry, where they were given a disproportionate amount of say. Eventually, a backlash against video games would rise as they failed to live up to such uncritical and hyperbolic claims.

However, even during video games earlier years, newspapers may not have been as uncritical as they first appear, at least not because of inexperience with video games. Gonzo journalism was on the rise. It was a reporting style popularized by Hunter S. Thompson in the early seventies in which reporters dropped notions of objectivity. Instead, fact and fiction mingled together to tell an exciting story as the reporter experienced or interpreted the events covered within.¹ Therefore, to what extent reporting trends affected video game journalism must be considered.

Third, video game coverage in the 1970s supports Poe's pull theory of media adoption. His theory states that for a new medium to be pulled into wide use by society, there first must be a new economic condition that leads to a technical insufficiency. Then, organized interests begin to demand solutions. If none are available they create them. If the medium performs well enough, society will adopt the new media technology.²

In the case of video games, the new economic condition was the stagflation of the late 1960s, which persisted throughout the 1970s. Destabilization of the economy combined with major political issues, such as Watergate and the defeat in Vietnam, to create a social malaise whereby Americans increasingly lost faith in their government and the mechanisms for making meaningful change. This resulted in social feelings of political and economic powerlessness. Similar sentiments were levied against television as well. Television's

1. Steven Hoover, "Hunter S. Thompson and Gonzo Journalism: A Guide to the Research," *Reference Services Review* 37, no. 3 (January 2009): 326.

2. Poe, *A History of Communications*, 10.

uni-directional and perceived passive nature made many consumers feel powerless to fix television's problems, real or not. People's inability to elect network presidents or corporate representatives to voice their concerns only exacerbated these feelings. Thus, a desire for control and activeness formed in response to both economic and technical inefficiencies.

Seizing upon social feelings of powerlessness and passivity, organized interests—which included Magnavox and Atari—utilized already existing technology, and begin manufacturing video games to address some of the technical, and social, deficiencies of the times. They developed, employed, disseminated, and advertised video game technologies in several ways. The newspaper was one tool leveraged in this process. Several articles, especially in 1972, directly addressed the longing for a sense of control and a more active entertainment experience. Observe the following quotes covering the release of the Odyssey:

“[The] game simulator, called Odyssey, is an educational and entertainment tool that transfers television from passive to an active medium.”³

“. . . there may well be a profound satisfaction in being able, for a change, to control what appears on the TV screen, and to do so without any words at all from our sponsor.”⁴

“Now, for the first time, TV viewers can interact with their sets, and relate to them in a positive, active way, not just as passive viewers”⁵

These articles were corporate announcements thinly disguised as marketing attempts. But more than that, they show the coordinated effort to manufacture demand by directly addressing social anxieties of the time.

Such efforts by organized interests succeeded, and they pulled video games into society by 1976. Furthermore, their rate of adaption was a “clear function of natural ease-of-use

3. *New York Times*, “Magnavox Unveils Tv Game Simulator,” 69.

4. Verhulst, “The Game Room,” A1.

5. *Dallas Morning News*, “Series of Electronic Games Hooks Up to Television Set,” 6.

and enjoyment.”⁶ Video games were quickly pulled into society in the 1970s because they were easily accessible, easy to use, and many found them fun. And they thrived, so much so that the medium survived catastrophic market failures in 1977 and 1983.

Fourth, newspaper coverage in the early years of video games shows the importance of including and analyzing more local coverage. Past studies utilizing video game newspaper coverage have focused heavily on national sources and stories. As this study has shown, some years barely had any national coverage. This means narratives have been overlooked, especially those that tended to be more critical of video games and their manufacturers. Some of the most exciting and enlightening articles originated from a more local level. If this is the case, then using national-level news only, at least for video games, can overlook potentially important and nuanced information.

Fifth, newspaper coverage in those first few years suggests that video games had yet to close around any specific demographic, just as Newman argued. They were for men, women, adults, children, the abled, the differently-abled, engineers, truck drivers, pub-goers, cocktail restaurant frequenters, salespeople, senators, the rich, and the poor; in short, anybody. This is evident in the numerous characters and stories throughout the news articles. Yet video games were manufactured and developed in overwhelmingly white-collar, techno-masculine spaces by men. Furthermore, the content of the games centered around more masculine-associated themes, such as combat and competition. It would not be until the release of *Pac-Man* in the 1980s that a company would develop video games to appeal to women specifically. With such masculinity built into the development process and in its content, it is little wonder video games eventually became male-dominated in the eighties.

Sixth, coverage of video games reveals organizations used newspapers as a tool in their consumer pedagogy. Just as Wurtzler argued about electric sounds, newspapers introduced and taught consumers what video games were, what they were for, and how to operate them. Organizations also used newspapers to police consumer encounters with video

6. Poe, *A History of Communications*, 11.

games.⁷ These interests also intentionally sought to solidify capitalist political and economic structures in the manufacturing and use of video games. Arcades were to be run by operators and home consoles were to be purchased from retailers. Both arcades and retailers were to be supplied by distributors who purchased from manufacturers.

Coverage also reveals two models of organizational control, the traditional corporate model and the innovator corporate model. Magnavox employed the conventional corporate model, which included highly organized and strict management and production, leading to slower innovation yet minimizing risk. Atari used the innovator corporate model, in which an innovator (akin to Poe's engineer-entrepreneur) was usually in charge. Manufacturing was less organized and worker management was laxer than the traditional corporate model, but innovation was higher. Nolan Bushnell and Atari may have been precursors to the personalities and models of corporate organization and management seen in the e-business startups in the 1990s and 2000s. Some of these startups' owners, such as Steve Jobs, were former employees of Atari. However, by 1976, the traditional corporate model became predominant, as Warner Communications purchased Atari, and video game production became less innovator-entrepreneur led.

Seventh, my study supports Newman's argument that television and video games were strongly associated in consumers' minds, especially during video games' first few years. Newspapers repeatedly referenced this relationship. However, over time this association was employed less. Instead, newspapers increasingly associated video games with computer technology. The integration of computer hardware into video game systems and video game software into computers eventually became more commonplace than the relationships between television and video games. At least, as long as video games were not damaging televisions.

Eighth, my thesis supports McKernan's argument that video game coverage tended to be hyperbolic. Newspapers filled coverage with exaggerated claims such as video games

7. Wurtzler, *Electric Sounds*, 72.

ushering in a television revolution, that it brought Las Vegas to your living room, that they were so realistic that a person could almost smell them, or negatively, that one should beware of the sinister *Pong* hustlers!⁸ Whether positive or negative, such dramatic claims abounded throughout coverage.

Game Over: Deposit Quarter to Continue

Though new and unfamiliar in the early-1970s, video games are now firmly cemented into American society. This thesis primarily explored part of the process by which this phenomenon occurred, newspaper coverage. Such an approach adds more primary-source-based analyses to current video game historiography, and tests video game and media hypotheses, such as Poe's theory of media adoption and Nelkin's theory on new technology newspaper coverage. Finally, this approach explores newspaper's role in the rise and acceptance of video games into mainstream American culture.

As this study shows, newspapers played a clear role in introducing video games to consumers, a pattern that reaches at least as far back as the introduction of electronic sound. Newspapers operated as a tool that organized interests employed to shape and control people's attitudes and behaviors surrounding new technologies. Furthermore, they used them to ensure society built a specific political economy around their manufacture and use.

Prior to 1972, video games cost nothing more than time and labor, the code was freely shared (were feasible), and could be run on several programmable systems. They were open, and could become anything for those who desired it. After 1972, though, video game creation and alteration increasingly became closed behind developers doors, distribution channels were narrowed, and home consoles or arcades became the appropriate places for

8. Stephen Fox, "Television Revolution Coming," *Dallas Morning News*, January 1976, 4; Sandra Rivard, "It Turns a Television Into a Game Treasure," *Pensacola Journal*, December 1972, D; Wright, "A Family of Budding Pinball Wizards," 42; Finch, "Beware Those Sinister Pong Hustlers!," C2.

exhibition. Video games became less about creating something to play for one's self, and more about consuming others' visions of play.

This is reflected in more national coverage. Years in which there was the most coverage coincided with the years that were also the most national and filled with the most manufacturer announcements. When there was little national or manufacturer news, stories shifted to regional and local levels where the language around video games began to diversify, as Americans experienced video games on their terms rather than some corporation's. By 1976, though, video games became a more national affair again. As video games fell victim to market saturation, corporate conglomeration, governmental investigation, and innovation collapse, their bright future began to dim. Yet, because video games were an active medium, they fulfilled U.S. society's desire for control, regardless of how artificial. By 1976, video games and the industry surrounding them were strong enough to begin the next stage in their development.

But, as the late 1970s and early 1980s would prove, video games place in society was anything but guaranteed. There would be several market crashes that would permanently change the landscape. Several major players in the 1970s would cease video game development and production altogether, while unknown companies would sweep in and become the new major players. Newspaper coverage, in a process that parallels those observed about radio, television, and the internet, would become progressively negative as journalists and Americans discovered video games' inability to fix social issues. Too many laudatory and uncritical proclamations were made on their behalf, ones which video games could never deliver upon. Once society realized this, newspapers were quick to reverse course and suddenly video games were the villains, the ones tearing families apart, making society more violent, and dumbing down the children.

Yet, against such odds, video games not only survived, they thrived. They evolved from a new form of entertainment to a powerhouse in modern political economies. Far more than just a way to commodify leisure, video games quickly became a tool to train,

discipline, and convince citizens of capitalist visions of the global future. Whether it was intentional or not, what started as a new way to play helped transition an analog society to a new way to live, digitally. And from some indications, such as Facebook's newest product Meta, video games may be used again push society to yet another modality of living, virtually. For how we play today, affects how we live tomorrow.

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